Since 1965, Moore’s law - the doubling of computer chip performance every two years - has driven a cycle of Information Technology (IT) innovation, one in which computers were regularly upgraded to speed-up the applications that ran on them.

Over this time, software upgrades frequently lagged behind ongoing improvements in the processing speed and memory of the computers on which they ran. This pattern of change enabled computer programs to operate faster and handle ever-larger data sets. Ongoing evolution in the capacity to store, analyze and retrieve data created IT platforms that many industries adopted to reengineer their business processes. In health care, these IT platforms supported an initial wave of IT-related health care transformation that was associated with the electronic health record (EHR).

Over the past five years, the migration of computer capability and associated software applications onto other devices has spawned an exciting new phase of innovation across various industries and sectors of the economy - one with greater impact and a faster pace of change. The humble telephone, once tethered to a copper telephone line and solely supportive of voice communication, has evolved into wireless, Internet-enabled Smartphones. Smartphones are devices that are now telephones, media players, global positioning systems, calculators, social networking portals, videoconferencing systems and cameras. Smartphones are a disruptive technology, one that is unsettling existing IT platforms, as they connect directly with consumers and link them with an expanding array of virtual services.
PTSD Mobile App released by VA, DOD

The Departments of Defense (DOD) and Veterans Affairs (VA) have released a new app aimed at helping those with post-traumatic stress disorder. The app, called PE (for prolonged exposure) Coach, is free on Apple and Android mobile devices. It was developed by psychologists at the DOD’s National Center for Telehealth and Technology, known as T2, and the VA National Center for PTSD, and is specifically geared to help patients with their therapy.

"PE Coach is a helpful tool that assists our service members and veterans who are between visits and in treatment for post-traumatic stress disorder," Jonathan Woodson, M.D., assistant secretary of defense for health affairs said in a statement. "We have shared this app with our military health care providers as well, and hope that many individuals who are receiving PE therapy will find it useful."

Prolonged exposure therapy can help patients process a trauma memory to reduce the distress and avoidance caused by the trauma. The patient revisits the memory with a therapist and as the memory is emotionally processed, anxiety decreases. It can also be used to help the patient avoid situations that trigger memories of the trauma.

Medical devices are becoming interconnected in ways that make it increasingly difficult to distinguish them, and the functionality they provide, from the IT and telecommunication infrastructure that support them.

Smartphones promise to bring a pervasive interconnectivity of many health care technologies. They have the potential to support patients and clinicians’ as nodes on care delivery networks, ones that will connect the various players in new ways. When they do, this will recalibrate the relationship between patients, clinicians and caregivers.

Most of us can see what the upcoming convergence of information and telecommunication technologies across the continuum of care will bring. Visioning what this change might look like is not the difficult part, because there are already many analogous examples of this in other industries.

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Today’s Change for Tomorrow’s Innovation (continued)
Adam Darkins, MD, MPH, FRCS

Wider implementation of computer processing capability and networking into health care is extending to medical devices such as syringe pumps, patient monitoring systems in operating rooms and intensive care units and devices that monitor people with chronic disease in their own homes (home telehealth). A marriage between medical devices and IT is changing the location of care, and can radically transform how health care is delivered, as we are seeing with our telehealth programs in VA.

The difficult part is determining how this change will take place, and how to make it happen.

With a rapidly evolving ecosystem, one in which people are constantly connected via electronic devices, we are seeing a shift in the focus of change away from the past “Moore’s Law’s” emphasis on computer processing, memory and data storage, and toward a new world driven by applications running on Smartphones and Computer Tablets. These new technology platforms, and their associated applications, offer possibilities for a future health care system in which clinicians can rapidly search and organize clinical data, enabling therapeutic choices to be communicated virtually to patients and caregivers over multiple technology platforms, thereby placing an ever-greater emphasis of patient self-management and shared decision-making.

These same technologies will enable patient and clinicians to poll expert groups and peers to validate the choices they make. Exponential growth in the functionality of a range of new technologies, and how these are applied to health care, presents challenges as well as opportunities.

VA has an exemplary history of translating health care innovations into ongoing health care transformation, and in doing so updating how it achieves its mission of caring for those that have born the battle. Health care challenges that VA faces as a result of innovations in the field of battle demand reciprocal innovations in how individual patient care and population health needs are met.

In response to these challenges VA, as
Today’s Change for Tomorrow’s Innovation (continued)

other leading health care systems, is establishing innovation programs. The reason for establishing these programs is to get ahead of change and help reduce the cycle time for introducing new innovations into the general health care industry from its current 15 years, to faster times that equate to those seen when implementing IT and telecommunications technologies in other industries.

Telehealth is a proven innovation that is being successfully implemented and as it is, the underlying IT and telecommunications technologies that support it are evolving and converging. Further innovation is needed to ensure its foundations remain solid and support the wider systems of virtual care it will become a part of. The question is therefore how this wider agenda for innovation is organized and systematized in the future? For those of us involved in telehealth, this is a future we have to embrace and contribute toward.

VA is currently developing a strategy for virtual care, one that integrates the various modalities of care into a uniform vision of how it will connect with Veterans in new ways based upon the opportunities that leading edge technologies are presenting.

VA has a track record of creating the necessary vision, providing leadership, forging the critical internal and external collaborations that drive change and translating uncertainty about technology-mediated care platforms into tangible realities, in which excellence of care to Veterans is clearly embodied. We can anticipate an ongoing need to innovate as part of how we do business.

Yet, if change is to be a constant for us, the compass we need to steer our course is how innovation improves and enhances the care of Veterans.

I believe that it is vital that those who are closest to the delivery of care are engaged throughout the cycle of innovation to ensure the required outcomes for Veterans are realized, and to provide an active feedback loop to catalyze further change.

Whats not in a Name? - VHA Office of Telehealth Services

The Department of Veterans Affairs has been working to define and clarify the role of “Office” groups and “programs.”

In an effort to add clarity to official nomenclature, we have been asked to drop “Office” from our title. The Office of Telehealth Services has shortened our name to simply “Telehealth Services.”

Because our name is so much shorter, there will be no shortened initials, so we won’t be called “TS” - the name should always be spelled out as “Telehealth Services”.

So what do we call ourselves? If the context is external we are “VA Telehealth Services”. If the context is internal we are called “VHA Telehealth Services” and in day-to-day communications we are called “Telehealth Services”.

The issue is therefore not innovation per se, but how the systematic evaluation and implementation of the best of breed of new health care solutions takes place. Solutions that must be selected from within portfolios of other competing innovations and developed to ensure they are on robust and sustainable infrastructures that are safe and effective for delivering care outside traditional bricks and mortar settings.
Veterans can now receive real time care through VA Telehealth in their home. This is exciting news for Veterans and VA providers. Access to care has now become easier using technology. Instead of the Veteran traveling to the provider location to be seen, the Veteran can be seen in the privacy of their own home.

VHA is implementing Clinical Video Telehealth into the Home as a tool to increase Veteran connectedness to services as part of a continuum of care. For now, the technology primarily includes the videoconferencing software Jabber and desktop or laptop computers.

Clinical Video Telehealth into the Home will eventually include a range of clinical services to enhance Veteran access to care, offer Veterans an opportunity to exercise their preferences for the site of care delivery, participate in shared decision-making and engage in self-management.

If a provider is considering using Clinical Video Telehealth into the Home, the first step is for them to contact their Facility Telehealth Coordinator to assist and direct them in this endeavor.

Clinical Video Telehealth into the Home is being implemented in a step-wise progression, so each VISN will be defining priority areas for implementation.

The Facility Telehealth Coordinator will assist the providers as well as direct them to the appropriate Telehealth Leadership (VISN Telehealth Manager, Clinical Video Telehealth into the Home Coordinator and the Telehealth Clinical Technician) and support staff for Clinical Video Telehealth into the Home as applicable.

Let’s take a brief look at some of the nuts and bolts needed for Clinical Video Telehealth into the Home to be successful. The provider must assess the Veteran and identify him or her as a candidate for this type of care. Next, the Veteran is informed.

1) The Veteran must have access to a telephone in addition to the computer equipment.

2) The Veteran or caregiver must be capable of using the equipment, the PC and webcam with technical sufficiency.

3) The Veteran or caregiver has sufficient sensory capacity to see and hear the encounter.

4) The computer must be located in an area with confidentiality and privacy acceptable to both the clinician and the Veteran.

Some of the suggested Clinical Video Telehealth into the Home Services include but are not limited to:

• TeleMental Health
• TeleRehabilitation Services
• TeleSpinal Cord Injury Services
• Home Based Primary Care

(Continued Page 7)
Imagers Curriculum
Prerequisite Studies

Store-and-Forward Telehealth Imagers curriculum includes prerequisite TMS Courses, remote courses via LiveMeeting, and face-to-face techniques and skills-based intensive training.

TMS Prerequisite Courses
- Introduction to Telehealth in VA (all Imagers)
- Diabetes Mellitus and Diabetic Retinopathy (TeleRetinal Imagers)
- TeleRetinal Imaging (Video: TeleRetinal Imagers)

Core Curriculum:
Remote Presentations
- Basic Anatomy
- Terminology
- Consult Pathways and Templates
- Completing the Encounter
- Responsibilities of the TCT Imager

Image Capture, Skills-Based Techniques
- Camera Features and Setup
- Exposure
- Field Composition
- Care of the Camera
- Image Protocols
- Patient Setup
- Vista Imaging Capture and Display
- Imager Competency

Competency Evaluation
- Patient Safety
- HIPAA
- Workflow
- Image Deletion
- Conditions of Participation
- Scope of Practice

Patient Education
- Diabetes (TeleRetinal Imagers)
- National Standards & Protocols (TeleDermatology)

Clinical competency is a critical element of patient care. Competency is integral in providing safe, efficient and comprehensive care to the patient in an environment that ensures privacy and dignity. Competency takes on many forms, and in the case of Store-and-Forward Telehealth, there are many facets that often go beyond the human element in providing care.

How we measure competency in a Telehealth environment is often dictated by the type of care we are providing and at the same time the clinical applications and technology that are required to deliver that care. When we think of competency, we often think of a set of skills-based techniques, but in the case of telehealth, we must go beyond this realm. In Store-and-Forward Telehealth, for example, clinical competency begins with training, and while all of our trainees are almost assured of achieving entry level competency, our challenge as a Training Center is to ensure ongoing and sustained competency.

Initial Training
To date, Store-and-Forward Telehealth encompasses two main applications: Teleretinal Imaging and Teledermatology. Alternately, Teleretinal and Teledermatology readers are certified through a self-study Talent Management System course. For the Teleretinal program, in addition to the TeleReader training, Readers must complete a clinical competency examination that involves making an accurate diagnosis in ten cases of diabetic eye disease. Ongoing competency is achieved bi-annually through a Talent Management System clinical competency examination and each Reader is automatically notified by the Store-and-Forward Training Center every two years. Failure to successfully complete the examination can result in loss of certification or may require remedial guidance or instruction.

On the other hand, Store-and-Forward Telehealth Imagers are trained either directly by the Store-and-Forward Telehealth National Training Center Staff in Boston, or as more often the case recently, in the field, typically at their local station, by a cadre of Master Preceptors. Imager training for both telereti-
nal and teledermatology takes a minimum of one and a half days, and we insist on a 1:3 instructor to trainee ratio. We have determined that this ratio is optimal for a quality learning experience and we employ a comprehensive competency checklist to evaluate skills and knowledge during the course of the program. There are many elements to the checklist and individuals are offered remedial sessions for any topic or techniques-based area where they find difficulty. Once the Imager candidate successfully completes the training, we ensure that they have achieved entry level competency.

Store-and-Forward Telehealth Training Curriculum

We are often asked “why does it take a day and a half to teach someone to take pictures?” A quick look at the curriculum will provide some insight as to why the program is an intensive day and a half. The certification program includes more than just demonstrating the skills to capture adequate or readable retinal or dermatology images. The curriculum is geared towards a number of important elements that round out the program and are necessary steps in the process, beginning with patient access and leading up to acting on the resulted consult. These facets are essential in light of the fact that many of the new imagers are Telehealth Clinical Technicians who have a variety of responsibilities in addition to Store-and-Forward Telehealth applications.

Common challenges that preceptors face during training begin right from the start of the process, when the Imager chooses the wrong note title. In the case of diabetes, it is the diabetes surveillance consult. For dermatology, it is the initial request for imaging. Choosing the wrong note title precludes image capture for both modalities. Another stumbling block occurs when the imager does not sign the note to result the first consult.

As is implicated, both the teledermatology and teleretinal imaging clinical pathway requires a two consult system. Often this is foreign to end users, and satisfactory completion of the pathway and inclusion of the study on TeleReader requires this two-step process. The second consult is actually used to generate the images and this step in the process also causes some difficulty. We find that sometimes the Imager fails to order the imaging consult but rather orders the request consult a second time. When this is done, the Imager cannot attach the newly acquired retinal or dermatology images and therefore, the study does not appear on TeleReader.

Ongoing Competency

Finally, once the two consults are executed, the Imager is now prepared to capture images. Image capture by itself is highly skills-based and it takes time to impart these skills to a naïve imager. In the case of Teleretinal imaging, the last retinal field, the nasal field, is most difficult to capture and requires more time and experience to achieve competency. Another challenge in teleretinal imaging is the need to eliminate shadows in the field, especially in patients with small pupils. The preceptor spends considerable time with the Imager trainee to work around this challenge, but invariably we are able to achieve entry level competency in almost all candidates.

For teledermatology, we find that most Imagers are adept at learning the operation of the digital camera, but still the Imagers face different challenges. The most prominent of these is avoiding shadows and overexposure of the image, namely the use of too much light during image capture. Another problem occurs when the Imagers don’t use proper backdrop, such as the draping and therefore the image contains extraneous elements that confuse the interpretation on the part of the Reader.

Patient safety is an important part of quality management in Store-and-Forward Telehealth and this occurs either when Imagers fail to ensure that all images have been processed through the DICOM gateway and failure to ensure that images have been completely removed. Considerable time is spent during the training on this critical quality assurance issue for both modalities.

Once entry level competency is achieved, the sustainability of competency is a critical element of our training programs. There are methods to ensure ongoing competence; for example, we have ongoing competency and recertification for Teleretinal Readers as mentioned earlier. For teleretinal imagers, we continually assess gradeability or readability rates. These measures are part of the Conditions of Participation but we assess these on an ongoing basis. The primary responsibility rests with the Reader, who should be giving constant feedback to the Imagers, especially when image quality is less than acceptable. Then, annually, readable rates are reviewed to ensure that they fall within the industry standard.

(Continued Page 7)
Veterans who are already receiving Telehealth services at the CBOC are often ideal candidates for initial implementation. During the pilot, Veterans reported positive experiences using Clinical Video Telehealth into the Home. The Veterans and providers were amazed by the reliability of the technology and how user-friendly the technology and processes were.

The Veteran is a true partner in the Clinical Video Telehealth into the Home care continuum. The Veteran actually owns their own computer equipment. The equipment includes a computer with speakers, a webcam with a microphone, high-speed internet access, and a telephone. The software that is supplied by the VA will work on the Veteran’s computer with either a Windows and/or Apple operating system.

Confidentiality and Veteran safety are priorities for Clinical Video Telehealth into the Home. A checklist and a clinical guidance document that can be found by the providers and other team members on the Telehealth Services website. These documents can assist in identifying the items and steps necessary to assure a confidential and safe Clinical Video Telehealth into the Home visit.

We hope you are as excited as we are. If you need any further information please feel free to email John Peters (John.Peters@va.gov) or Mike Lewis (Michael.J.Lewis@va.gov).

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Store-and-Forward Telehealth Competencies (continued)

Finally, one of the most important competency measures is Store-and-Forward Telehealth Condition of Participation standard nine, which states “The Store-and-Forward Telehealth Program Lead or Facility Telehealth Coordinator ensures that there is a mechanism in place to ensure all consults pending resolution for imaging/reading are matched with those appearing in TeleReader”. For unmatched patients, Readers should be notified within the three business day period to resolve missing images and complete the evaluation. “Considerable” time is spent with Imagers informing and educating of the importance of this standard, since it is an easy one to overlook, but never-the-less is a critical competency measure.

There are a number of options to ensure that this measure is adhered to, but the most practical and logical approach is to have it rest with the Imager, since they have the greatest opportunity to interact with the Teledermatology or Teleretinal Reader. This approach is emphasized during the training and Readers and Imagers alike are both involved in the process. There are other options, such as giving either imagers or Facility Telehealth Coordinators access to TeleReader, building an Access database, or the least desirable, keeping a hard copy log, which poses quality risks.

Recently, Facility Telehealth Coordinators were shown another option, namely the option of using VistA to run a Consults Pending Resolution Report that assists in keeping track of consults.

We feel that our curriculum is comprehensive and provides more than an adequate array of entry level as well as ongoing competency elements. We gauge our programs based on individual needs and experience, but we are always aware of important facets of competency, including establishing more than acceptable evidence of performance while at the same time being as specific as possible with expectations and accountability. Our outcomes measures are derived from a variety of contexts, but our emphasis is always placed on a standardized approach to ensuring patient safety through rigorous but attainable results.
Master Preceptors 2012 Program

Our forty-six Master Preceptor candidates are well underway with their program with graduation slated for December 2012.

Sunshine Support Preceptors 2012 Program

We are proud to announce the selection of five candidates for our program which will begin September 2012.

Mary Ann Acord, VISN 11
Shameka Coleman, VISN 7
Charles Fisher Jr., VISN 4
Cassandra Hawkins, VISN 17
Amy Orwig, VISN 9

Home Telehealth National Training Center
Putting Care Back into Case Management

We are very pleased with the outcomes of our case management educational program. Our Quality Managers have even noticed a difference while on site visits. A special thank you to Donna Vogel and Gail Wright, our certified case managers, that helped with our May 2012 program.

As a reminder, we held three classes, one each every Tuesday, Wednesday and Thursday of the month. At the end of the month, a case study was released for staff to work through using their case management skills. These case studies were double-blind reviewed with an assignment of “beginner,” “intermediate” or “expert” designated. We had over 700 staff take at least one of the three classes and 535 staff who qualified for the case study after having taken the three courses.

Of the 535 staff who qualified, 329 took the case study. Of this group: 29% were beginners, 46% were intermediate and 25% were expert. We are very proud of the effort given by our home telehealth staff.

In late July, we reviewed the case study and then offered those designated as “beginners” another chance with a different case study to increase their designation to intermediate. We are collecting data on the second case study, but already have seen an improvement for several individuals from beginner to intermediate levels. We plan to offer a case-management related activity quarterly to help staff maintain competency in this area.

Interactive Voice Response

As of October 13th 2012, 15,138 Veterans have been enrolled using Interactive Voice Response (IVR) technology and we continue to train more staff. On October 22nd, Authentidate Interactive Voice Response was released nationally for the VHA Weight Management Disease Mangement Protocol. The monthly Interactive Voice Response service fee can be ordered via the Remote Order Entry System. The five other VHA core Disease Management Protocols are still being tested for Authentidate Interactive Voice Response. Thanks to the Authentidate Interactive Voice Resonse pilot sites for their participation and diligence.

Don’t forget to check the Home Telehealth National Training Center SharePoint events calendar for the dates, times and meeting links for the most up-to-date educational information.
Telehealth Quality  Dilation by UAPs in Teleretinal Imaging

Teleretinal imaging to screen for diabetic retinopathy is a tool that may be used for the systematic assessment of diabetic eye disease in an “at risk” population.

This process involves the capturing of retinal images from the targeted (diabetic) population and transmitting them via a secure and reliable telecommunications network for reading by a provider. The stored image and the associated report must then be available for the patient’s clinician(s) to assist in the care of the patient. Acquiring the images of the retina involves the use of a digital camera that is capable of non-mydriatic (non-dilated) digital image acquisition. In most cases, this process has worked well for imagers and readability rates for image acquisition have remained high for full-time or high-volume imagers.

At some sites, however, there are Veterans that have pupils that are particularly small and the capture of readable non-mydriatic retinal images is very difficult and/or not possible. In these situations, some sites have elected to use selective dilation in accordance with the guidelines and clinical pathway established for the teleretinal imaging program in the VHA.

The teleretinal imager, who is often an Unlicensed Assistive Personnel may be expected to instill the mydriatic agent into the Veteran’s eyes. This will cause a pharmacologic dilation of the pupils so that acquisition of readable retinal images is easier to obtain.

Although this seems like a simple order request and procedure for the Teleretinal Unlicensed Assistive Personnel imagers to perform, it is not a part of the routine scope of Unlicensed Assistive Personnel.

The standard scope for most Unlicensed Assistive Personnel does not include the administration of any medications. Thus, this expansion of their specific scope must be authorized for the Unlicensed Assistive Personnel imager by the medical center Director based on the written recommendation of the Nurse Executive and with approval by the Chief of Staff, with policies and procedures defining the scope of medication administration for Unlicensed Assistive Personnel.

A scope of medication administration must be established for each individual Unlicensed Assistive Personnel. The requirements are fully outlined in VHA Directive 2010-028, The Use of Unlicensed Assistive Personnel in Administering Medication.

Along with the establishment of a scope of medication administration, oversight of the Unlicensed Assistive Personnel imager’s practice in this regard must be clearly defined. The Unlicensed Assistive Personnel imager must complete all appropriate training and have their competency assessment documented before any Unlicensed Assistive Personnel imager may be allowed to administer dilating medication. Those Unlicensed Assistive Personnel who are not practicing under the delegated authority of a Registered Nurse must have their initial and annual evaluation and verification of competency with regard to dilation accomplished and documented by a licensed clinical supervisor who has the competency to perform such an evaluation and verification.

The Conditions of Participation standards, numbers 13 and 14, in the Store-and-Forward Telehealth modality-specific standards, address dilation in teleretinal imaging to help ensure that performance of this procedure is safe and effective.

These standards directly refer to VHA Directive 2010-028 which outlines the necessary responsibilities, training, competencies, clinical oversight and policies required to allow for Unlicensed Assistive Personnel imagers to administer dilating medication. Telehealth staff, particularly Facility Telehealth Coordinators, must familiarize themselves with the requirements of this Directive and ensure that these requirements are met in any instance where dilation by Unlicensed Assistive Personnel is contemplated.
As of June 25, 2012, all Home Telehealth programs are now using the DALC for all Home Telehealth equipment orders and service requests.

The DALC is the Denver Acquisition and Logistics Center, which has a long history of outstanding service providing hearing aids and supplies to Veterans nationwide since 1953 – and now brings that expertise and support to the VHA Home Telehealth program.

This was a result of over two years of collaborative planning between the VHA Prosthetics and Sensory Aids Service, VHA Telehealth Services, DALC staff, and the Telehealth Equipment Management Committee and included a rigorous VISN rollout over this past year – which was completed by the targeted date. In recognition of this significant achievement and milestone, on the July 30th National Telehealth Leads call Dr. Adams Darkins, VHA Telehealth Services Chief Consultant, recognized those involved for their professionalism, diligence, teamwork, flexibility, responsiveness, dedication and excellence.

This success was also due to the same qualities demonstrated by all of the Home Telehealth program staff nationwide, as they transitioned from the long-standing local and VISN processes of managing Home Telehealth equipment and services, to this new centralized process.

All staff have been trained on the new ordering processes using ROES (Remote Order Entry System). This VistA software application, previously used for the Audiology and Speech Pathology services, has been re-programmed to accommodate Home Telehealth needs. Home Telehealth staff order both the equipment needs (including peripheral devices) as well as monthly service fees via ROES.

### Type of Support DALC Provides to Home Telehealth

- **Acquires, receives, stores, accounts for, ships and pays invoices for Home Telehealth equipment nationwide.**
- **Orders, tracks, and pays invoices for all licensing and/or service fees.**
- **Provides information on orders placed and assigned for Home Telehealth products/licenses/services to Program Support Assistants for inclusion on the Veteran's Form 2319 record.**
- **Installs batteries and sets the date and time as needed in the devices before they are sent to the Veteran.**
- **Maintains a centralized database of all registered devices by serial number, Veteran name and current location of device/deployment status.**
- **Maintains a centralized database of licenses.**
- **Receives Home Telehealth devices that are returned by Veterans and Home Telehealth programs.**
- **Refurbishes returned devices or provides for proper disposition.**
- **Tests each device for operability and data removal prior to postal delivery to the Veteran.**
- **Bills for all Telehealth related equipment and services that are distributed to clinics and/or Veterans.**

(Continued Page 11)
The monthly fees include the general service fees for the use of a messaging and measuring device, as well as special service fees — dependent on specific Veteran needs — such as IVR (Interactive Voice Response), and cellular modem use.

These ROES orders trigger the DALC process for assigning and providing services as well as billing. Therefore, extensive training is provided for Home Telehealth staff to ensure proper and correct ordering.

Since 2003, VHA Telehealth Services has worked collaboratively with Prosthetics and Sensory Aids Service to provide a systematic approach for VISNs to implement Home Telehealth programs and manage Home Telehealth equipment.

In 2008, Prosthetics and Sensory Aids Service issued the VHA Handbook, “Home Telehealth Equipment Management Procedures” to provide guidance for the management of Home Telehealth equipment at the VAMC or VISN level. This handbook is being revised to reflect the changes to this centralized process and is currently under final review by national Prosthetics and Sensory Aids Service staff.

In addition, several recommendations by Home Telehealth staff are also in process. These include a VHA Telehealth Services proposal to Prosthetics and Sensory Aids Service to allow Home Telehealth Program Support Assistants to order/obligate funds via ROES.

Program Support Assistants are currently authorized to obtain security codes for the ROES software to order retrieval kits, registrar devices, and stop monthly service fees.

Also, a ROES Home Telehealth report is available. It was developed by the ROES Enhancement Workgroup. This report provides Home Telehealth staff with a method for tracking orders and inactivation of equipment and services. Staff are encouraged to review this report weekly to verify accuracy of any new enrollments/disenrollments and assist with timely billing by the DALC.

All of these efforts ultimately free up the time previously spent by Home Telehealth staff ordering and managing equipment and services, so they can dedicate their efforts to the direct care and case management of the over 77,000 Veterans currently served nationally in the Home Telehealth programs.

Kudos to all of the Home Telehealth staff for a job well done and especially to the DALC staff and the Telehealth Equipment Management Committee members:


DALC contact information for Home Telehealth:
DALC Customer Service, 303-273-6200
Contact information for Pat Booth is 303-215-5241. Email for Pat: patrick.booth@va.gov.

VISNs are encouraged to share a short paragraph about a particular “star,” team, innovative projects or other similar news. Submissions should be sent to David Palazzolo. The due-date for the next newsletter (winter) is Monday, December 3rd.

Also, if any of your VISN staff have a creative, Telehealth–themed title for this column – please send as well. We’ll announce the “winning” VISN entry in the Winter newsletter.
VISN 20 - TeleEducation Pilot Program

Telehealth isn’t just for doctor’s visits. In VISN 20, the Northwest Parkinson’s Disease Research, Education and Clinical Center (Northwest PADRECC) has started using V-tel technology to bring patient education events to more Veterans in its service area.

The Northwest PADRECC serves Veterans with Parkinson’s disease and other movement disorders in ten states and three VISNs. Veterans can live hundreds of miles from the main PADRECC clinical centers in Portland, Oregon and Seattle, Washington. Tele-education is a way to provide local information and support to Veterans who may have limited mobility and/or be unable to travel long distances.

Director Joseph Quinn, MD and Northwest PADRECC staff started a pilot effort in 2011 to engage 5-8 VA sites to act as “remote facilities” which would host Veterans for one-hour patient education lectures broadcast via V-tel. Nurse Coordinator Susan O’Connor, RN, and Program Assistant Elizabeth Minium have spearheaded this effort, coordinating services with Telehealth personnel as well as VA staff at the remote sites.

Although the Northwest PADRECC has been offering patient education via V-tel for only a few months, the results have been positive. The number of patients able to attend education events immediately doubled overall, with good feedback and participation from Veterans and VA personnel at the remote sites.

The tele-education events also serve Veterans in ways which are not so obvious. Veterans and family members receive information at the lectures, but also have a chance to meet others with similar medical issues. Although not a “support group,” the education events give Veterans a valuable opportunity to socialize and exchange information with others in their area. The V-tel events are interactive, allowing patients to ask questions of the presenter and to interact with other patients virtually.

The staff of the Northwest PADRECC look forward to improving and expanding on the 2011/12 pilot tele-education effort. They are currently working with Telehealth personnel at the Portland VA in order to connect with facilities in VISNs 19 and 23 to expand their educational outreach for Veterans with Parkinson’s disease and other movement disorders.

VISN 9 "Increased Telehealth Specialty Services at Contract CBOCs"

VISN 9 successfully completed an amendment to the contract that pays a fee for each Clinical Video Telehealth visit in lieu of hiring a Telehealth Clinical Technician. For VISN 9’s two Outreach CBOCs, there was little justification to employ a full-time Telehealth Clinical Technician. There was also concern regarding VA employees at a contract CBOC spending down time assisting the contract clinic and doing non-VA care.

Paying the contract CBOC on a per-encounter basis is a win for both VA and the Clinic as it creates an incentive to increase telehealth services while giving the contract CBOC extra dollars to assist in providing more patient-centric care and meeting performance measures.

With increased specialty services, more Veterans will hopefully want to move their primary care to the contract CBOC. While this scenario is not ideal for all, VISN 9 has found this to be the best solution for their rural Veteran population.

VISN 9 has had a very active Store-and-Forward Teleretinal program. In FY2011, VISN 9 increased its teleretinal camera locations from ten to 18. At the end of FY2012, VISN 9 will have added another 20 cameras for a total of 38 locations. This program is well received by both Veterans and optometrists.
VISN 17 has experienced a year of growth and expansion in its Telehealth programs. There have been many accomplishments due to the dedication of the staff and willingness of our patients to become the most technologically advanced healthcare system in Texas. New Clinical Video Telehealth programs implemented this year include TeleMOVE, TeleChaplaincy, TeleRehabilitation and TeleSpeech Language and Pathology (TeleSpeech). These new programs combined with the continuing growth of the TeleMental Health program, has resulted in an 86% increase in Clinical Video Telehealth patient visits compared to FY11.

The South Texas Veterans Healthcare System is the first in the Network to begin TeleChaplaincy and TeleSpeech programs. The TeleChaplaincy program expands pastoral counseling services to Veterans at distant clinic locations using Clinical Video Telehealth technology. These sessions cover depression, grief, addiction, anger, etc. The new TeleSpeech program allows providers to assist patients with communicating their wants and needs with their caregivers, and enjoying a meal with their families. The decline in ability to communicate or swallow can have a significant effect on the quality of life for Veterans. As a result, patients assigned to the Victoria Outpatient Clinic no longer have to drive 125 miles to the VA Hospital in San Antonio, TX to receive Speech services.

The benefits of these Telehealth programs are increased access to services, reduced travel costs and reduced patient stress.

The VISN has been selected to participate in two national Clinical Video Telehealth pilots that are currently being planned and will begin seeing patients in FY13. The first pilot establishes a regional TeleMental Health Clinic focused on providing evidence-based psychotherapies to Veterans who live in underserved rural areas and are suffering from PTSD. Services will be provided to patients using VA CBOCs, Community Mental Health Centers, and IP Video to Home technology. The Office of Mental Health Services has funded this project. Once the program is fully established, we will look at expanding services to additional rural sites within Texas that fall within VISNs 16 and 18 catchment areas and working with those respective VISN Leads.

In addition, the VISN has realized significant expansion of our Teledermatology Program across the VISN. We currently have 22 imaging sites (up from six in 2008). Funding from Telehealth Services and the Office of Rural Health has provided us the opportunity to improve access for diabetic retinal eye exams. This fiscal year our patient visits increased 35% compared to last year. Recently, we conducted VISN-wide training for TeleDermatology and we anticipate starting this program in FY13. The Home Telehealth program has increased census by 15% compared to FY11 and continues to add new disease management protocols and collaborate with the PACT initiative.

VISN 7 Home Telehealth Success Story

In April 2012, a female patient was hospitalized back with Congestive Heart Failure exacerbation at a weight of 213 pounds. A Home Telehealth consult was entered on her discharge and she was enrolled using the Congestive Heart Failure and Depression Disease Management Protocol as a comorbidity. Since April, she has received a pacemaker.

Recently she called and said she needed a new Home Telehealth device and could not “afford to be without it”. The Care Coordinator had noticed she had been offline for a while and the patient explained that she thought lightning had caused the failure. On a subsequent visit, we replaced her device and she shared the following information with us:

“Mr. Ray, you and the Home Telehealth program have saved my life. I have dropped down to 185 pounds and now realize that just about every kind of food has “salt” in it. I also realize I can’t just drink all the water and fluids that I want to drink because of my heart failure – not if I want to live. I have learned to read food labels on everything. Did you know that even grapes has salt in it? I actually feel good enough to go for a walk on occasion.”

This Veteran went on to tell us that because she is feeling so much better physically that her mental health and mood is much brighter. The Care Coordinator affirmed everything that the patient said, the Care Coordinator also told her that it is our hope for every Veteran in the Home Telehealth program to understand the information their Care Coordinator and telehealth device is providing them and be able to apply it just as she has done.
The role of the Clinical Pharmacy Specialist has grown tremendously over past years. Literature studies support that clinical pharmacist services improve health outcomes, access to care, patient satisfaction, safety and continuity of care. As pharmacy clinicians, we are constantly looking for new and innovative ways to provide patient care. Hence, clinical pharmacists within VISN 12 developed and expanded clinical pharmacy services provided via Clinical Video Telehealth.

The program lead on this project consulted with existing clinics and the VISN 12 Telehealth Coordinator to formulate a process for expanding TelePharmacy services. Pharmacy Clinical Video Telehealth clinics have been established and there are now four sites within VISN 12 providing such services.

These sites provide a variety of TelePharmacy services such as heart failure, diabetes mellitus, hypertension and hyperlipidemia, medication therapy management, thyroid abnormalities, chronic obstructive pulmonary disease, asthma, smoking cessation and psychopharmacology medication management.

Clinic visit workload capture for TelePharmacy visits has increased since inception of our new TelePharmacy clinics with a 32% increase in TelePharmacy workload in fiscal year 2012 quarter two versus quarter one. The outcome data from one of our VISN sites has shown the average reduction in Hemoglobin A1c after six months for Telehealth (0.88%) versus in-person group patients (1.10%, p=0.46) to be similar.

The utility of these services continues to increase as noted by our workload capture. Patient outcome data helps to validate the efficacy of these clinics. VISN 12 will continue to collect workload capture data and performance improvement measures as well.

VISN 21 Telemove Success Story

If I can do it, anybody can do it,” said TeleMove program participant Cole, age 69, of Santa Rosa. He started the TeleMove program over a year ago weighing 408 pounds with high blood pressure, diabetes, and a replaced knee.

“I told Cole to give TeleMOVE a try,” said Santa Rosa VA Clinic Medical Director Ginger Schechter, MD. “He started on a treadmill at his house walking a couple a minutes a day and he also received daily coaching calls and nutritional education.” Today Cole has lost over 160 pounds and is well on his way to reaching his goal weight of 200 pounds. His high blood pressure has returned to normal and, per Schechter, he is technically no longer considered diabetic.

“My mantra is “eat less, move more,” said Schechter. “It takes good old fashioned hard work to lose weight and keep it off. There is no magic bullet. But if you follow the TeleMOVE program, it works. I’m so excited for our Veterans to have this program. You need this sort of guidance when you’re starting out. The MOVE and TeleMOVE programs help us to make better choices for our life.”

“I’ll make it. Life looks better, and I’m proud of myself,” says Cole, who uses the Home Telehealth technology along with the MOVE book, a weight scale and encouraging calls from TeleMOVE coordinator Brady. “I’ve learned to read labels, watch sodium levels in food, learned about portion control, I now do less snacking and eat more fruit and vegetables.” Plus, he walks 80 minutes six days a week on his treadmill. “When I started I could barely walk for five minutes,” said Cole proudly. “Cole, you inspire me,” says Brady.

“The TeleMOVE program is especially effective for motivated Veterans who aren’t able to come to a medical center and participate in the full MOVE program,” said Brady. “This program provides daily communication, support and guidance to promote a healthy lifestyle and positive weight management changes.” The TeleMOVE program helps Veterans learn new skills to control their weight and reduce health-related risk factors such as high blood pressure, type 2 diabetes, high cholesterol, osteoarthritis, gallbladder disease, sleep apnea, and even some forms of cancer.
VHA Telehealth Services - Overview

VHA Telehealth Services uses health informatics, disease management and telehealth technologies to target care and case management to improve access to care, improving the health of Veterans. 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. VHA 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 defined as the use of real-time interactive video conferencing, sometimes with supportive peripheral technologies, to assess, treat and provide care to a patient remotely. Typically, Clinical Video Telehealth links the patient(s) at a clinic to the provider(s) at another location. Clinical Video Telehealth can also provide video connectivity between a provider and a patient at home. Clinical Video Telehealth encompasses a wide variety of clinical applications such as specialty and primary care.

• **Home Telehealth**
  
is defined as a program into which Veterans are enrolled that applies care and case management principles to coordinate care using health informatics, disease management and Home Telehealth technologies to facilitate access to care and to improve the health of Veterans with the specific intent of providing the right care in the right place at the right time. The goal of Home Telehealth is to improve clinical outcomes and access to care while reducing complications, hospitalizations and clinic or emergency room visits for Veterans in post-acute care settings and high-risk patients with chronic disease.

• **Store-and-Forward Telehealth**
  
is defined as the use of technologies to asynchronously acquire and store clinical information (such as data, image, sound and video) that is then forwarded to or retrieved by a provider at another location for clinical evaluation. VA's national Store-and-Forward Telehealth programs operationalize this definition to cover services that provide this care using clinical consult pathway and a defined information technology platform to communicate the event/encounter between providers, as well as enabling documentation of the event/encounter and the associated clinical evaluation within the patient record.