Telehealth

To provide clinical care in circumstances where distance separates those receiving services and those providing services. The value VA derives from Telehealth is not in implementing Telehealth technologies alone, but how VA uses health informatics, disease management, care/case management and Telehealth technologies to facilitate access to care and improve the health of Veterans with the intent to provide the right care in the right place at the right time.

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 telehealth. 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-Foward)
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.

Telehealth Expansion

In May 2011, the Secretary of Veterans Affairs (VA) approved a major Telehealth Expansion Initiative to expand the capability of VA clinicians to provide care to Veteran patients using Telehealth. The primary focus of the Expansion Initiative is Clinical Video Telehealth which enables VA clinicians, typically based at VA Medical Centers, to provide care using real-time video technologies to Veteran patients who receive their health care from VA community based outpatient clinics in their local communities.

Telehealth services provide more timely access to primary and specialty care services and reduce travel for both Veterans and VA clinicians, especially in rural locations. In fiscal year 2012, the Telehealth Expansion Initiative has been integrated as part of the Telehealth Sub-Initiative within the T21 New Models of Care framework and will increase the number and types of clinical services available to Veterans in their local communities that may not have been provided in those locations by VA previously.

In order to accomplish the task of expanding the current capacity of Clinical Video Telehealth and to further transform VA healthcare, a multi-disciplinary national workgroup was formed utilizing the project management model. The Telehealth Expansion workgroup is comprised of VISN-level staff from all 21 VISNs representing telehealth, human resources, finance, contracting, information technology, and biomedical engineering working together to efficiently and effectively meet the objectives established by the Secretary for the Expansion Initiative and overcome any challenges that are experienced jointly across VISNs.

Between June and September 2011, the first objectives completed by the Telehealth Expansion VISN workgroup were the purchase of the necessary clinical video tele-health equipment to support expansion and the hiring of Facility Telehealth Coordinators at each VA medical center to lead and manage the medical center’s telehealth program. Beginning in October, the key focus of the workgroup is hiring Telehealth Clinical Technicians and VISN Telehealth support staff. Telehealth Clinical Technicians are critical to the success of the Expansion Initiative because they are the physical VA presence within the clinic who directly support the Veteran patient and the clinician who is at another location throughout their telehealth visit.

In addition to the need for the critical resources of staff and equipment to be in place for Telehealth Expansion, infrastructural and related support services are equally important.

For that reason, the Office of Information Technology and The office of Healthcare Technology Management (formerly Biomedical Engineering) have pledged to work closely with the Office of Telehealth Services and VISNs to ensure that the necessary information technology infrastructure and biomedical engineering support is provided across the country. The support of the Office of Information Technology and Healthcare Technology Management is demonstrated in their partnership with Telehealth in the development of the Clinical Video Telehealth Help Desk and in the implementation of Service Level Agreements.

As the project moves forward and staff are hired, equipment is received, and programs of Telehealth care are implemented, it is clear that there is a defined commitment from all levels of the VA and from all disciplines within to support and grow the use of Telehealth modalities. There are numerous applications for clinical video telehealth in the delivery of care and the Telehealth Expansion Initiative is a big step toward transforming healthcare.
Telehealth FY11 Accomplishments

An increase in the census of home telehealth patients, such that on any day 66,000 Veterans receive support to live independently in their own homes.

A significant increase in the number of clinical videoconferencing consultations to provide specialty care to Veterans.

The significant increase in Store-and-Forward Telehealth with the roll out of teledermatology and pilot programs to screen for macular degeneration and glaucoma.

Piloting of teleaudiology and teledermatology.

The successful roll-out of interactive voice response to support home telehealth.

Piloting of IP video into the home.

Standing-up a hub and spoke arrangement for Tele-ICU in VISN 23 and nurse led support in VISN 19.

Significant growth in telerehabilitation.

The training of over 5,000 staff to provide them with the competencies to provide care to Veteran patients via telehealth.

A formal infrastructure and support in place for spinal cord injury care via telehealth.

New national contracts for home telehealth.

A major equipment purchase for clinical video telehealth and associated staff hiring underway as part of the Telehealth Expansion Initiative.

Completing disease management protocols for telehealth.

Successful “conditions of participation” reviews of telehealth programs across VA.

Telehealth in the VA Tipping My Hat

Adam Darkins, MD, MPH, FRCS

Non-verbal cues are particularly important in delivering telehealth services. Lack of physical proximity between patient and provider means that non-verbal cues, such as expressions and gestures, are important to communicating during telehealth consultations.

We in VA have been long-recognized as leaders in implementing telehealth, this recognition comes from the size and scope of our organization’s telehealth programs. A important aspect of telehealth in VA, one, that most outside VA don’t know, is that in addition to conducting health care consultations virtually we also use the same technology platforms to develop, manage and sustain our telehealth programs.

A good example of how this virtual connectivity enhances care is from the shared accountability and integration that prospective programs must have met in order deliver safe and effective care; and in order to foster ongoing developments. It is good to consider this new technology as we push to further expand telehealth in VA and place the achievements of each year into a contextual framework.

As fiscal year 2011 (FY2011) closes, I am proud to be associated with the significant achievements that so many have accomplished across VA over this past year.

It is easy to list these achievements, but not so easy to accomplish them. Much was expected of everyone involved in telehealth in VA at the beginning of FY 2011 and during the year even more has been required of them. All who are involved in telehealth have embraced and met each new challenge this year as it has arisen.

It is my privilege to work with all who have contributed so much to the growth of telehealth services in VA. What we have collectively achieved makes such a difference in the lives of Veterans and their families that we must serve through expanding their access to care. These achievements have not been smooth sailing. Hiring staff, purchasing equipment and organizing programs are some of the processes that create the “people” and “technology” infrastructures that we now have in place. Leading change and dealing with uncertainty are what translate these infrastructures into mission critical services upon which hundreds of thousands of Veterans depend.

People from outside VA often ask me what lies behind VA’s success with telehealth. Is it that we are an integrated health care system? Is it that we have leadership that is committed to improving access to care? Let me say that when explaining VA’s strength in implementing telehealth, I always highlight the contributions you have made and how engaging the energy enthusiasm, integrity and commitment of those involved in building telehealth services throughout VA is a key factor in bringing it all together.

Written words seem such an inadequate way to describe the respect I feel for everyone in VA who contributes to the ongoing growth of telehealth in VA. At the moment, it is not physically possible for us all to meet in one place and exchange these sentiments in person. Your achievements stand for themselves, and so instead of only words let me offer you the simple respect for who you are and what you have achieved on behalf of Veterans by metaphorically taking off my hat to you all.
The Facility Telehealth Coordinator and VISN Lead Intensive educational program is designed to provide Facility Telehealth Coordinators and VISN Leads with the knowledge and skills to lead, manage and facilitate a facility and VISN based Telehealth program. To assist in the Telehealth expansion efforts, VHA has hired a growing number of Facility Telehealth Coordinators over the past year.

Due to the rapid growth of Telehealth services across VHA facilities, a knowledge and practice gap exists that requires new Facility Telehealth Coordinators and VISN Leads be trained to meet the demand in Telehealth services and expansion efforts. This program will use an intensive educational approach to develop all aspects of a comprehensive Telehealth program among Facility Telehealth Coordinators and VISN Leads.

This educational activity will provide the participants with knowledge of the roles and responsibilities of Facility Telehealth Coordinators and VISN Leads in a Telehealth setting. Learners will participate in hands-on training and evaluation of Telehealth technology. Future dates available for registration are November 15th through the 18th and January 10th through the 13th with two more programs in February and March.

## Telehealth Clinical Technician Boot Camp

To help with the deployment of more than 1,000 Telehealth Clinical Technicians, we have developed the Telehealth Clinical Technician Boot Camp. The Telehealth Clinical Technician Boot Camp is based on standardized core curriculum classes to help them successfully start their role as a Telehealth Clinical Technician. This Boot Camp is virtual (requiring no travel) and open to all who are Telehealth Clinical Technicians and/or for those who want to learn about the Telehealth Clinical Technician’s roles and responsibilities.

Classes will be offered via Live Meeting on a two week recurring schedule and include the courses listed in the sidebar (right).

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### Rocky Mountain Telehealth Training Center

**Facility Telehealth Coordinator and VISN Lead Intensive**

**Telehealth Clinical Technician (TCT) Course Listing**

<table>
<thead>
<tr>
<th>Course Listing</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Basic CVT Training</strong></td>
<td>Successfully start a Clinical Video Telehealth clinic, practice and/or knowledge base of universal Clinical, Business and Technology skills. We offer two methods you can choose from.</td>
</tr>
<tr>
<td><strong>Advanced CVT Technology</strong></td>
<td>Successfully advance your Clinical Video Telehealth Technology skills. The Rocky Mountain Telehealth Training Center offers two tracks dependant on the equipment your VISN uses.</td>
</tr>
<tr>
<td><strong>Advanced Business Operations</strong></td>
<td>Successfully start a universal Clinical Video Telehealth Clinic and gain a fundamental knowledge base of general to advanced Business skills.</td>
</tr>
<tr>
<td><strong>How to Manage a CVT Group</strong></td>
<td>Basic information regarding the different dynamics of organization, management and the technology skills needed to successfully run your CVT groups and classes. Identifies how you can keep your participants engaged, safe, organized and prepared effectively for the class or group they will be attending via CVT.</td>
</tr>
<tr>
<td><strong>Telespresenter Fundamentals</strong></td>
<td>Provides the essential techniques for creating high quality, interactive online training. The primary purpose is to increase competence for new telepresenter in general telehealth exam skills.</td>
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**VHA Office of Telehealth Services**

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Store-and-Forward Telehealth programs continue to expand into new and exciting areas. Teledermatology is the next Store-and-Forward program to be implemented nationwide within VHA.

The Store-and-Forward Teledermatology program came into being as an extension of existing local dermatology programs that were in place in a number of VISNs around the country. As is often the case, the program arose in response to the growing demand for care and the challenge in recruiting specialty trained dermatologists in VHA. This is especially true in remote areas, where Veteran patients often experience long wait times or must travel long distances to receive much needed dermatology services. There were approximately 45 sites in seven VISNs that participated in the original Teledermatology Project that formally began two years ago.

The national release of DICOM Patch 106 in May 2011 (since upgraded to Patch 117) along with the formal appointment of national Teledermatology Leads, Dr. Dennis Oh and Marty Weinstock, the program is now ready for national implementation. Currently, the national leads are working with the Boston Telehealth Training Center to develop a standardized training curriculum for teledermatology imagers. They are also working with Specialty Care Services and the Office of Telehealth Services to revise the Teledermatology Operations manual. All of this is occurring at the same time that the leads are working with Carla Anderson and our Quality Management team to develop Conditions of Participation for Teledermatology.

Historically, the Teledermatology Project followed closely on the heels of the national Diabetic Retinopathy Surveillance program, which had its origins in the spring of 2006 and has been a nationwide program since then. Since the infrastructure was already in place for the teleretinal program, the goal was to share some of the same software applications and network functionality for the teledermatology program. For the most part, this was accomplished for many components of the program, and for others, on an interim basis, commercially available software (DicomPush®) was used until VistA Imaging enhancement was completed.

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The Boston Telehealth Training Center will provide training for newly appointed teledermatology imagers or Telehealth Clinical Technicians. Training typically takes place at the imagers site, either by a Store-and-Forward Telehealth Master Preceptor or by Boston Telehealth Training Center staff. Information on training, including registration for training, can be accessed on our website. Please contact the Boston Telehealth Training Center for questions or support in establishing your Teledermatology programs.

Dennis H. Oh, MD, PhD, is an Associate Professor of Dermatology at University of California at San Francisco and Assistant Chief of Dermatology at San Francisco VA Medical Center. He also serves as National Co-Lead for Teledermatology for the Office of Telehealth Services in Department Veterans Affairs. For the past 10 years, he has developed and managed a store-and-forward teledermatology program serving rural Veterans. He also oversees a teledermatology resident teaching clinic whose trainees have established their own successful teledermatology programs. He has been a co-contributor to the VA Teledermatology Operations Manual, as well as a co-author of the American Telemedicine Association’s Practice Guidelines for Teledermatology. He has served as Secretary for the ATA Teledermatology Special Interest Group, and currently serves as its Vice-Chair. His major research interests are in the cell and molecular biology of skin cancer, but he has also published outcomes research in teledermatology.

Martin A Weinstock, MD, PhD, Dermatologist and Epidemiologist, initiated the first teledermatology program in the VA. That program has been delivering dermatology services continuously for the past 14 years, serving thousands of veterans. He is Chief of Dermatology at the Providence VAMC since 1988 and is Professor of Dermatology and Epidemiology at Brown University. He has an international reputation, having over 360 publications and has delivered over 200 invited lectures in the United States and in other countries in five continents. He has held numerous positions in national and international organizations as well as in the VA, including as Chair of the Dermatology Field Advisory Committee for the past several years, and has won several awards from the VA and other organizations.
We are getting ready to release three new online courses: *Home Telehealth Business Operations*, *Home Telehealth Clinical Operations* and *Home Telehealth Technical Operations* which will replace Foundation, Building Blocks, Technical Operations and Clinical Operations Parts One and Two.

Because the content has significantly changed in these courses all Home Telehealth staff (Lead Care Coordinators, Care Coordinators and Support Staff) will be required to take them during this fiscal year.

We are completing the course review with the help of our Employee Education System partners and national Peer Review Board. We would like to thank our peer reviewers for taking the time to provide feedback on the courses so we can provide continuing education. Hopefully we will be able to offer continuing education for pharmacists and dietitians in addition to our physician, nurse, social worker and psychologist continuing education.

**IVR Implementation**

Interactive Voice Response (IVR) implementation has been moving along well. IVR rolled out nationally August 1st and over 800 care coordinators have been trained. CardioCom continues to offer several webinars weekly besides the online training available.

During the pilot phase, we heard from the field that IVR Disease Management Protocols are not as comprehensive, especially related to education and self-management. In response to this, we’d like to remind staff that IVR was not created to be as comprehensive. IVR was designed to meet the needs of those Veterans who do not have land-lines, who may be younger or more mobile or who have difficulty using other technology options.

We reviewed the vendor Disease Management Protocols and added content to ensure they meet the needs of our Veterans. With the cost of cell phone minutes being paid by the Veteran, content has been limited to approximately four minutes. Care Coordinators in the field have been instructed to use IVR before considering satellite or a cellular modem due to the cost of that equipment. Continued use of cellular modem or satellite technology must be documented especially in those patients who are not responding daily.

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**DMP Update**

**Disease Management Protocol**

**Dementia DMP** is ready for national release in October and will come out first from Bosch Health Hero followed by Bayer Viterion.

**Heart Failure (HF) DMP** is ready for national release in October and will be released first by Bosch Health Hero followed by Bayer Viterion. A co-morbid and Interactive Voice Response (IVR) version has been forwarded to vendors for review with a release planned for the second quarter of FY12.

**Palliative Care DMP** is ready for national release in October by Bosch Health Hero.

**The Spinal Cord Injury (SCI) DMP** is ready for national release in October by Bosch Health Hero.

**Diabetes (DM) DMP** patient testing is underway in Orlando. Projected release nationally is in the first quarter of FY12. Sunshine Telehealth Training Center staff participated in a workshop in Washington DC in September to develop a co-morbid and IVR version of this DMP which will also be released in the second quarter.

**Hepatitis C Virus DMP** is in patient testing.

**Post Traumatic Stress Disorder (PTSD) DMP** content development is completed and has been forwarded to the vendors for their review. Release is planned for this fiscal year.

**Hypertension (HTN) co-morbid & IVR DMPs** are written and have been forwarded to the vendors for their review.

**Chronic Obstructive Pulmonary Disease (COPD) DMP** has been forwarded to the vendors for their review.

**Tobacco Cessation** is in the writing stages with a face-to-face DMP workshop held in September to develop a standalone for messaging and IVR as well as a co-morbid for both systems.

**Chronic Kidney Disease and Multiple Sclerosis DMPs** are in the content writing stage.

**Patients** are currently enrolled in Cardiocom’s Five (COPD, DM, HTN, HF & Depression) IVR DMPs.

**ExpressMD Solutions’ (Authentidate) IVR and in-home messaging DMPs** have been reviewed by the Sunshine Telehealth Training Center.

The annual review of the TeleMove DMP was completed in May and has been forwarded to the vendors for revisions to be made. The biggest change in this DMP will be asking the patient for daily weights. Weekly weight is required and the patient has the option to provide daily weights. An IVR and co-morbid version has also been forwarded.
National Telemental Health Center
NTMHC Expands Its Telemental Health Rollout

The National Telemental Health Center continues its delivery of innovative telemental health services. The Tele-Pain initiative, under the direction of John Sellinger, PhD, has been providing increasing numbers of Veterans with chronic pain the opportunity for evaluation and treatment by expert psychologists.

Beyond the medical treatment for chronic pain, the National Telemental Health Center pain clinicians focus on psycho-social factors that impact the frequency and intensity of pain perception. Their psychotherapeutic modules provide Veterans with chronic pain cognitive behavioral coping strategies that have demonstrated decreases in pain experience and increases in quality of life.

The National Telemental Health Center is launching its Tele-Bipolar Program, under the direction of Mark Bauer, MD, at Boston Healthcare System. The Tele-Bipolar program will be the first to provide remote evaluation, education, and treatment strategies for Veterans who have been diagnosed with bipolar disorder. The initial tele-visit will be conducted by an expert psychiatrist who will provide detailed evaluation and recommendations. Subsequently, an expert psychologist will offer several sessions of patient education about bipolar disorder, including identifying and managing symptoms. Established psychological approaches, such as motivational interviewing techniques, are employed in the sessions.

The National Telemental Health Center is expanding beyond its pilot international program to deliver Compensation and Pension Examinations. National Telemental Health Center providers at VA Connecticut conducted exams with Veterans who came to the US Naval Hospital in Okinawa, Japan. In spite of a thirteen hour time zone difference several international exams were successfully completed, demonstrating the feasibility of international connectivity across federal agencies, time zones and national boundaries. The National Telemental Health Center is currently exploring expansion of such international applications to other continents.

The National Telemental Health Center was asked to assist in the expansion of telemental health services for Post-Traumatic Stress Disorder (PTSD) within VA. The National Telemental Health Center, along with the Rocky Mountain Telehealth Training Center, conducted several sessions in the Tele-PTSD pre-conference workshop held by the Office of Mental Health Services in Baltimore, Maryland and will be involved a number of further trainings.

The goal is offer mental health clinicians, with evidence-based Post-Traumatic Stress Disorder treatment, the opportunity to become trained in remote videoconferencing delivery so that they can expand access for Veterans to Post-Traumatic Stress Disorder treatments using telemental health.
As the end of the fiscal year has come and gone, it is time to begin another round of Conditions of Participation VISN reviews. The Office of Telehealth Services Quality Managers finished the fourth round of biannual reviews in Chicago/VISN 12 in July.

The Conditions of Participation reviews continue to focus on patient safety, outcomes, and the operations for three telehealth modalities: Home Telehealth, Clinical Video Telehealth, and Store-and-Forward Telehealth. The goal is to continue to help assure that telehealth programs provide safe and effective care for Veterans.

The Conditions of Participation documents have recently undergone significant revisions to reflect the advancement of Home Telehealth and Teleretinal Imaging, the initiation of a more comprehensive review of the Teledermatology and Clinical Video Telehealth programs, and the new Telehealth operations manuals. The Core Conditions of Participation, which are required of all of these Telehealth programs, have been rewritten to reflect the inclusion of all telehealth modalities in the clinical, business, and operational aspects of the standardized expectations for telehealth. The Teledermatology Conditions of Participation have been written and vetted by both the Teledermatology Leads and field staff and will be the foundation for the review of all Teledermatology programs. Nationally, the Clinical Video Telehealth programs have been the least developed from a Conditions of Participation perspective and will be a focus for the next cycle of survey visits as these initiatives seek to use the technology in other specialty areas beyond Telemental Health.

The revised Conditions of Participation process will be piloted in VISN 8 in October and VISN 19 in December. Some of the Quality Management review processes which will change in this cycle include the increased involvement of the Quality Management staff in the remote review of the Teleretinal Imaging work stations, the inclusion of the National Teledermatology Leads in the review process and the piloting of some remote Home Telehealth tracers done prior to the on-site visit.

The sequence of the Conditions of Participation surveys has changed to reflect a variety of logistic issues. Every VISN Telehealth program will continue to be surveyed approximately every two years. As the technology, funding and national goals and expectations rapidly change, the Conditions of Participation and the schedule are also subject to change.

Another exciting change in Telehealth is the commencement of four TeleICU programs within the VHA. The national TeleICU work group developed a set of Conditions of Participation that are specific to TeleICU and the first survey using these Conditions of Participation occurred in VISN 23 in June. Plans underway to review the other three TeleICU programs in the coming months.

As the Joint Commission reviews each VA facility, they may review Telehealth activities during a tracer activity. Tracers identify a Veteran and follow the Veteran’s care through the continuum of care processes. If telehealth is a modality identified as used in that care, telehealth programs may also be reviewed by The Joint Commission. There continues to have been no citations by The Joint Commission for VA care related to Telehealth. Following the most recent revisions to the Conditions of Participation and the review process, the Office of Telehealth Services staff plan to meet again in 2012.

The maturity of telehealth in the VA has provided Veterans with innovative options for care and Telehealth has helped fill a need for greater access. In the next cycle, the Conditions of Participation process will review aspects of Telehealth with progressively higher performance expectations for the program operations and outcomes. These elements will be reflected in a focus on the roles of Facility Telehealth Coordinators and Telehealth Clinical Technicians, use of Clinical Video Telehealth pathways, Home Telehealth outcomes and technology use, and Store-and-Forward Telehealth program consistency. All telehealth programs should continue to emphasize patient and staff education and competencies as well as collaboration with specialty care and PACT initiatives in the continuum of care for Veterans and their families.

The Quality Management staff saw tremendous evolution in maturity in telehealth operations during the fourth cycle of reviews. Commendable practices were identified during each VISN site visit. These practices include:

The use of clinical protocols and the effective monitoring and use of action plans for non-responders in Home Telehealth.

The integration of Clinical Video Telehealth into care for OEF/OIF Veterans.

The innovative use of Telemental health encounters.

The development of program structures to support increasing workload and diversity in Clinical Video Telehealth.

The innovative use of tools to identify Veterans eligible for Teleretinal screening.

The importance of team work and collaboration with Primary Care in the establishment of Teleretinal imaging processes.
Telehealth Champions
Liz Santa Ana PhD and Steve Martino PhD

Congratulations to these individuals who were nominated for being Home Telemental Health champions for their tireless efforts in not only the creation of but the follow through for the Substance Use Disorder Disease Management Protocol. Dr. Elizabeth Santa Ana is a Research Health Scientist at the Charleston VAMC and Dr. Steve Martino, is an Associate Professor of Psychiatry/Psychology at Yale University. In October, Dr. Martino will become the Chief of Psychology at the Westhaven VAMC. Their passion for this subset of Veterans has made it possible to provide yet another tool to help this very vulnerable population.

Linda Godleski MD

Dr. Linda Godleski, Director, National Telemental Health Center and Associate Chief of Staff for Education at VA Connecticut Healthcare System has been awarded the David M. Worthen Award for Career Achievement in Educational Excellence. This is the highest award given by the VHA to recognize outstanding achievements of national significance to education in the health professions. Dr. Godleski is a nationally recognized psychiatrist, educator and a pioneer in designing and implementing education and training for telemental health. An Associate Professor of Psychiatry at the Yale School of Medicine, Dr. Godleski has spent 25 years of her professional career training the next generation of multidisciplinary clinicians with more than 15 years committed to VA public service.

Interactive Voice Response
Cathy Buck, RN, MS, GNP-BC

This summer, another innovative technology was added to the Home Telehealth program for the care of Veterans – Interactive Voice Response, or IVR. As evidenced by the rapid enrollment of just over 3,300 Veterans since the August 1, 2011 national release date, it has been a welcomed technology indeed by Home Telehealth staff and Veterans alike.

IVR is a device-free, bi-directional messaging and measurement system that works via a simple, secure phone call. Using a patient-specific pass-code, Veterans can either call into the toll-free number, or the system can be programmed to call them – either on a scheduled basis or as a reminder. In addition to responding to symptom questions and listening to health education, Veterans can also enter any necessary vital sign information such as a blood pressure, heart rate, weight, and blood glucose. Responses can either be spoken or entered via the phone keypad, based on the Veteran’s needs and preference. Just like with existing home telehealth technologies, the care coordinator is able to review Veteran patient responses using the vendor web interface display and provide care management and coordination of services as needed.

The appropriate Disease Management Protocol (DMP) is assigned by the care coordinator based on the Veteran’s specific health care needs. Currently, there are five DMPs available; hypertension (HTN), congestive heart failure (CHF), diabetes (DM), chronic obstructive pulmonary disease (COPD) and depression. In the near future, other VA standardized DMPs, such as Weight Management (TeleMOVE), will also be available. Each session takes an average of four minutes to complete and Veterans are responsible for the provision of the cell phone and the cell phone service.

IVR was initially solicited to meet the growing demand of Veterans who did not have the required landline phone connection for existing home telehealth messaging and measurement devices, but instead only had cell phones for their communication needs. However, IVR can be also be used for patients with a landline phone service who may have other needs not suited to other home telehealth devices. These Veterans could include those with limited vision or literacy levels or those with difficulty using other available devices, and Veterans who may travel frequently or work and do not have easy access to a landline phone.

Elaine Owens, Training Specialist, and the staff at the SunshineTelehealth Training Center provided the national IVR training required for VA staff in collaboration with the vendor. In addition, the home telehealth staff at the four pilot sites were crucial to the successful national implementation. These sites included Lebanon (VISN 4), Salt Lake City (VISN19), Spokane (VISN 20), and Syracuse (VISN 2). Many thanks from the Office of Telehealth Services to these dedicated individuals for their valuable time and contributions. We look forward to the continued advancement of this new telehealth technology in the coordination of care for “those who have served.”
Office of Telehealth Services - Overview

The Office of 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. 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 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. The Rocky Mountain Telehealth Training Center provides training and support to staff involved in the delivery of Clinical Video Telehealth services.

• **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. The Sunshine Telehealth Training Center provides training and support to staff involved in the delivery of Home Telehealth services.

• **Store-and-Forward Telehealth**

  is defined as the use of technologies to acquire and store clinical information (e.g. data, image, sound and video) that is then forwarded to or retrieved by a provider at another location for clinical evaluation. Store-and-Forward Telehealth in VA uses a clinical consult pathway and VistA Imaging in conjunction with TeleReader to provide screening, diagnostic and treatment services where time and/or distance separate the patient and provider. The Boston 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.