



# Technology Health Wire

A newsletter published by the Washington DC VA Medical Center, "The Flagship of VA Health Care."

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## VistA Turns 30 Years Old

The VA's world-class health information technology system, VistA, is recognized as the best, most widely implemented clinical information system in the world. Built around the renowned Electronic Health Record System, VistA and its growing number of inter-related applications have been credited for improving quality care, patient safety and hospital efficiency.

VistA supports ambulatory and inpatient care and includes computerized order entry, bar code medication administration, electronic prescribing, and clinical guidelines.

VistA has enabled the VA to outperform public sector hospitals in many quality measures, including avoiding medication errors, controlling blood pressure, and dispensing flu vaccine. With VistA Imaging, MRIs, EKGs, pathology slides, x-rays and scanned documents are integrated into patients' medical records, offering providers a complete picture of Veterans' health histories.



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## Employing the Latest in Health Technology

Washington DC VA Medical Center (DCVAMC) is recognized as the "Flagship" VA hospital for innovating and demonstrating VA's outstanding medical technology.

A five-time recipient of the "Top 100 Most Wired Hospital" recognition by *Hospital and Health Networks Magazine* (most recently in the July 2009 edition), the "paperless" hospital uses VA's award-winning Electronic Health Records System. DCVAMC is also recognized for establishing the first Pacemaker Surveillance Center (see p. 6).

Facility leadership encourage staff to continuously seek new ways to apply the technology and to expand remote care options (see p. 2).

Employing the latest technology and utilizing telehealth and telemedicine translates to better access to care and efficient use of resources.

Remote care through the use of Electronic Health Records allows chronically-ill and elderly Veterans to be independent longer, potentially reducing multiple admissions and nursing home care. It means fewer emergency room visits because vital signs are tracked electronically and remotely, catching small problems before they become big ones.

For Veterans who live far from a VA facility, having home monitoring equipment results in fewer trips to the hospital without sacrificing the quality of their ongoing care. Providers like having information centralized and the sys-

tems' many graphic capabilities that offer the long view of patients' health.

As a leader in health technology, DCVAMC provides quality, timely and personalized care to Veterans of our nation's capital.

## Bar Coding Medication Improves Patient Safety



Isabel Sotomayor, RN demonstrates VA's bar code medication administration (BCMA) system to VA Secretary, Eric Shinseki. Also pictured: Chief of Staff, Dr. Ross D. Fletcher and Medical Center Director, Fernando O. Rivera.

The system, evolved from a suggestion by Sue Kinnick, a nurse at the Kansas City VAMC. It ensures medications are administered appropriately by matching bar codes on medications with bar codes on patient wristbands. Additionally, the BCMA verifies doctor's orders, correct medicine, dosage, route and time, as well as any allergies or drug interactions. Through the use of BCMA, the Medical Center has achieved an accuracy prescription accuracy of 99.997%

# What's the Difference Between Telehealth and Telemedicine?

## Telehealth

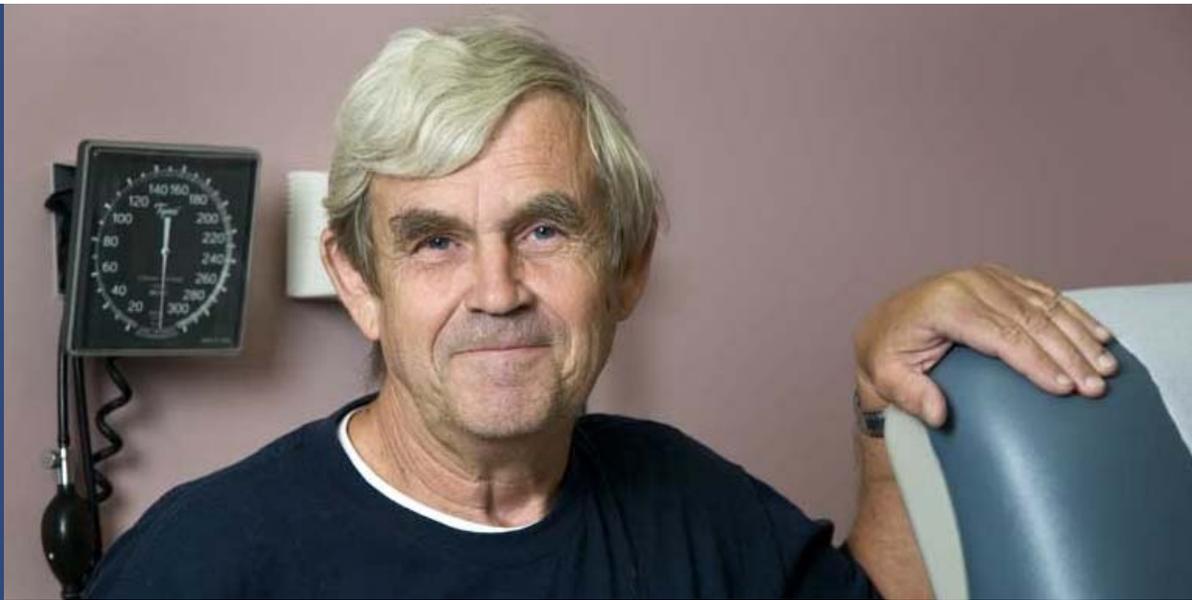
The term telehealth describes transmitting data through telephone lines and modems. Participating patients have telehealth devices in their homes. These devices transmit information such as blood pressure, blood sugar and body temperature on a daily basis (or as often as the provider recommends) directly to the Electronic Health Record. A nurse reviews the data and manages patients' care with their assigned provider. There are currently more than 400 DCVAMC Veterans enrolled in this program.

## Telemedicine

Telemedicine refers to remote care interactions between patients and providers via closed-circuit television. Several applications are employed by DCVAMC, giving patients remote access to health specialists.

- **Tele-Derm** – Patients go to a Community Based Outpatient Clinics (CBOC) for a telemedicine appointment with a Dermatologist.
- **Tele-Mental Health** – Patients get counseling from mental health providers.
- **Tele-Retinal Imaging**– Photos of patients' retinas are taken at the CBOC and read by optometrists or ophthalmologists.

Participants in the program generally have complex, chronic diseases and are required to have a land-line phone. Contact Susan S. Jackson at (202) 745-8000, extension 2250.



## Getting Patients Home Sooner: DCVAMC institutes new hospital discharge system

When a doctor tells a patient, "You're well enough to leave the hospital," the last thing the patient wants is to wait hours for official discharge papers, medications and an escort.

DCVAMC has streamlined these processes and made significant improvements in the way it discharges patients, with the goal of discharging by noon.

The improvements have not only made for quicker, smoother discharges, but allow other patients waiting for beds to be admitted sooner. This saves money by utilizing the hospital's resources more efficiently.

As with many improvements to hospital processes, a multi-disciplinary team identified discharge "bottlenecks" and explored ways to utilize Electronic Health Records (EHR) to improve the process.

They call themselves the "Discharge Before Noon" Team and their *Bed Tracking and Patient Movement Notification* program in EHR helps make discharges more timely.

By implementing real-time tracking and notification,

information needed for an expedited discharge is available to all. Now when a doctor enters a discharge order into the computer, a chain of events begins directing pharmacy, laboratory, housekeeping, admissions and clerical staff to start their various discharge procedures.

Since the patient movements are tracked electronically, all units know the status of the discharge and can adapt quickly to any unique needs. In developing

### ***The Discharge Before Noon Team was empowered to use EHR to improve health care delivery.***

the tracking system, the "Discharge Before Noon" Team determined that extra medication delivery times needed to be scheduled before noon - if they were to meet their goal - another system improvement. And, they established a *Bed Huddle Group* which meets daily to review pending discharges, admissions, and bed availability.

This automation, communication, and follow-up has resulted in dramatic improvements. In February 2007, less than 10 percent of hospitalized patients were discharged before noon. A year later, that number jumped to 44 percent.

The turnaround time from discharge order to actual discharge has decreased by 90 minutes—a significant amount of time for a patient anxious to get home.

Again, this new discharge system has had a beneficial "ripple effect". Turning beds over efficiently directly impacts patient care and satisfaction. Vacated beds are used for incoming patients from the Emergency Department, Admissions Office and Clinics.

The *Bed Tracking and Patient Movement Notification System* is another enhancement of VA's award-winning Electronic Health Record System. It's an example of how this dynamic technology continues to positively impact health outcomes for our nation's Veterans.



VA Secretary, Eric K. Shinseki, gets a demonstration of the technology that puts EKGs on Blackberries by DCVAMC Associate Chief of Staff, Informatics, Dr. Divya Shroff.

## Getting Information When and Where It's Needed—

### Technology Developed at DCVAMC Can Save Lives

DCVAMC was the first hospital in the VA system to develop and use technology to transmit EKGs directly to the cardiologists' Blackberries. Cardiologists strive to begin treatment for heart attack victims in under 90 minutes. Through the use of this technology, the cardiac team at DCVAMC can often get appropriate care to a patient in **under three minutes**. The faster a patient is treated, the better the outcome. The American Heart Association recognized DCVAMC as the first to develop this model of care. EKGs on Blackberries— another example of VA employees leading the way in the use of electronic health technology.

## DCVAMC Pilots New VA/DoD Disability Evaluation Examination

Mike Welsh was injured by an Improvised Explosive Device (IED) during a tour of duty in Afghanistan. While recuperating at Walter Reed Army Medical Center, and still officially on active duty, Mike began rehab at the Washington DC VA Medical Center (DCVAMC).

"At first I was hesitant but I was willing to give it a try and, immediately, the results and the benefit were recognized - right away. Seamless. All that it required of me was to come over to the VA hospital. Everything was done for me - caseworker, social workers - they did all the coordination".

That's the kind of feedback the Medical Center strives to get from Veterans

of Operation Enduring Freedom and Operation Iraqi Freedom (OEF/OIF) who transition following combat from military health care to VA health care.

It's hoped that a pilot program, now underway at DCVAMC, will further ensure that Seamless Transition by simplifying the process of evaluating injured service personnel.

Combat personnel being considered for a medical discharge won't need to go through two or more rounds of medical exams to be evaluated for fitness for duty, just one.

Called the Disability Evaluation System (DES), this all-in-one medical examination serves the purpose of both determining fitness to

return to duty and rating the soldier on service connection. Currently 17 medical centers are participating in the pilot.

It is a "single" examination by VA for the use of the military branch and Veterans Benefits Administration (VBA). Ultimately, the service member's transition time to veteran status should be significantly shortened.

Dr. Patrick Joyce, Chief Physician, Compensation and Pension, at DCVAMC says, "We are working closely with our military colleagues to shorten the disability evaluation process."

Since DES began, 1,700 service members have entered the program and the average processing time is 30 days. Working together,



## MyHealthVet Continues to Expand Features

A new alert system on VA's award winning health management tool, My HealthVet, will let VA patients registered in the system know when it is time to take some type of health care action such as schedule a certain test or examination.

The program provides Veterans who My HealthVet to be more proactive in their health care. My HealthVet is an online Personal Health Record that allows patients to manage their appointments, track their weight and other vital signs and even order prescriptions.

The notification system, known as **Wellness Reminders**, is specific to each patient. This is especially important for Veterans with known risks for developing an illness.

Veterans can register for MyHealthVet at:

[www.myhealth.va.gov](http://www.myhealth.va.gov)

VA and DoD programs such as DES will help improve service to OEF/OIF Veterans. Mike Welsh appreciates the importance of this alliance. "Because of advancements with information technology all of my medical records are electronic now, those are electronic files and those files can be shared between the different parts of the DoD as well as the VA medical system and for me that was a big benefit. It was all seamless".

## Facts About ALS

Amyotrophic lateral sclerosis (ALS), sometimes called Lou Gehrig's disease, is a rapidly progressive, neurological disease that attacks the nerve cells (*neurons*) responsible for controlling voluntary muscles.

The disease belongs to a group of disorders known as *motor neuron diseases*, which are characterized by the gradual degeneration and death of motor neurons.

As many as 20,000 Americans have ALS, and an estimated 5,000 people in the United States are diagnosed with the disease each year.

ALS is one of the most common neuromuscular diseases worldwide, and people of all races and ethnic backgrounds are affected.

ALS most commonly strikes people between 40 and 60 years of age, but younger and older people also can develop the disease. Men are affected more often than women.

As ALS progresses, the patient experiences muscle weakness and paralysis, losing the ability to walk, speak, swallow and breathe.

There is currently no cure for ALS, but with technological advances, and a caring support network, those with the neuromuscular diseases can live a full life, often in their own homes.

For more information about ALS, visit: [www.alsa.org](http://www.alsa.org)

# A Wonderful Life: Lessons from a Veteran with ALS

She could be called Wonder Woman. Like many of us, Sandy Stuban manages her household – planning meals, arranging for cleaning and service personnel, scheduling medical appointments, doing the banking and paying bills.

She's a busy mother, juggling boy scouts and church responsibilities and has frequent contact with 14-year-old Nick's teachers and sports coaches. Then, of course, there's the homework help.

Just recently, Sandy concluded several years as the chair of membership for the local chapter of her professional nursing honor society and she finds time to regularly submit articles to professional nursing journals.

As a retired Army Lt. Colonel, Sandy has a wide-circle of friends around the country and the globe - many active-duty and Veteran

nurses - and keeps up with them, their families, and the latest news in the nursing field. Sandy also hosts a monthly book club in her home.

Sandy contributes her knowledge and experience to the able-disabled community by guiding those facing the challenges of life with ALS with useful tools, tips and inspirations via her virtual networks.

She puts her nursing skills to use, training caregivers from home care agencies to work with home ventilator patients.

Each year, Sandy participates in the "Walk to Defeat ALS" with her own dedicated team of family and friends and helps raise funds for ALS research.

And, Sandy just published a book which took her four-years to finish, using the biggest muscle in her body left to her control – in

her right cheek. Yes, Sandy is a Wonder Woman...and what she does is a testament to the indomitable human intellect and spirit.

Lt. Col. Sandy Stuban was diagnosed with Amyotrophic Lateral Sclerosis (ALS) when she was 38 years old, while stationed in Hawaii. She was a new mother and at the height of her military career.

Sandy was rated 100% service-connected disabled prior to her military retirement and receives all of her health care and services from the Department of Veterans Affairs Medical Center, Washington, DC (DCVAMC).

"I had no idea what to expect when I first began receiving my care at the DC VA Medical Center," says Sandy. "They support me in every way possible. I credit the VA with my ability to be so productive and



*Sandy Stuban, RN, at age 38 and her son, Nick, just prior to her diagnosis of ALS.*

## Sandy's Life Lessons

- Take responsibility for your life and your health care.
- Conquer the destructive mindset that you have little to contribute.
- Do something meaningful that makes you feel good and productive.
- Know your quality of life issues. These are things that are important to you and improve your feelings of self-worth and self-esteem.
- Choose a positive attitude.



*Sandy at home and her son Nick in 2004.*

comfortable as a ventilator-using quadriplegic living at home. It's a first-class hospital where people truly care about the Veteran."

With a dedicated and supportive care management team and the personal determination of a marathoner, Sandy, says she "has overcome insurmountable obstacles to my health care, accepts life with ALS and is enjoying living."

How does she do it all? Sandy has always been highly-motivated and she gives herself very little time for self-pity.

She is an active partner in her health care management – which she recommends to everyone.

Sandy uses every "techno-tool" available to her and all are provided by VA.

Her house has been modified to include an elevator, a roll-in shower (a pleasure Sandy truly appreciates), a special toilet chair and a dynamic airflow mattress. This mattress is key to Sandy's comfortable eight hours of uninterrupted sleep each night. A good night's rest is one of her mantras.

An avid reader, Sandy used to utilize a "sip and puff" controller to turn the pages of her library books. But, the course of ALS is cruel and Sandy no longer has the control of her mouth and lips necessary for this equipment. But, that's not stopping her.

Sandy is a powerful voice for the able-disabled although she has no voice of her own. The movement of her cheek activates an infrared sensor allowing her to use her computer and select

words and phrases to write emails.

One of her frequent email buddies is Susan S. Jackson, retired Navy captain and DCVAMC's Clinical Nursing Director for Care Coordination, Home Telehealth and Case Management.

***"I credit the DC VA with my ability to be so productive and comfortable as a ventilator-using quadriplegic living at home. It's a first-class hospital where people truly care about the Veteran."***

Susan met Sandy in 1998 and was in charge of the initial set-up and coordination of Sandy's home care. Since their first meeting, the two have become good friends.

Susan calls Sandy an invaluable resource. "Whenever I have a difficult clinical situation and need to think outside the box, Sandy

is the first person I e-mail for ideas. If Sandy doesn't have the answer, she'll do online research and come back with suggestions. Some of the best practice ideas we have implemented for VA home care came from her."

Sandy's newly released book "The Butcher's Daughter: The Story of an Army Nurse with ALS" is an autobiography and a guidebook, offering her experience and support to those living with physical challenges and their loved ones.

In the book, she praises her devoted VA care team and credits VA with giving her the tools and the support system that allow her to live independently at home with her family rather than in a nursing facility.

As her story unfolds, each page gives the reader greater hope, inspiration and appreciation for the gift of life.

For more information about VA's life-enhancing technology contact Susan Jackson, 202-745-2250.

## Life-Enhancing Technologies

The VA offers a variety of different devices to help patients maintain their independence.

Items such as motorized wheelchairs which can be controlled by different methods, page-turners for readers and augmented communication devices help enhance the lives of patients stricken with neuromuscular diseases.

Augmentative communication devices: Many of these are computerized speech devices, for which the patient can type in messages and the computer speaks.

There are a choice of voices, from elderly males and females to children, some even with accents!

With these devices, patients are able to access the internet and email, use an infrared system to turn on radios, televisions, lights, phone or most any other electronic device.

If a patient is unable to type directly, the speech-language pathologist can set-up access to the device via a straw (sip/puff), foot pedals, eye blink or eye gaze systems, or a single muscle movement like a frown or smile.

For patients with a degenerative condition such as ALS for which the loss of speech is likely, the VA speech-language pathologist encourages patients to "bank their voice". That is, to record their own voices, so that later when needed, they can download their own voice onto a computer-speech system.

Voice amplifiers and amplified phones save the patient's precious energy and resources for something other than speech.



# More Than One Million *Electronic House Calls* & Counting...



For the fifth time, DCVAMC has been recognized as a "100 Most Wired Hospital" by the American Hospital Association (AHA). The coveted recognition was announced in AHA's July 2009 edition of *Hospitals and Health Networks (H&HN)* the publication that coordinates the competition.

In 2008, the Flagship Medical Center was also selected as a finalist in the Innovator Awards competition for development of a patient handoff tool used by physicians to ensure the smooth and safe transfer of care between providers.

The coveted innovation award is the result of the H&HN's "Most Wired" Survey and Benchmarking Study which promotes the effective use of information technology in achieving clinical and operational excellence. Areas surveyed included business processes, customer service, safety and quality, workforce management and public safety and quality.

The Provider Hand-off Tool protects patient safety - at shift changes and other times - when providers change. Avoiding communications errors can save lives and costs (repeat tests, etc.)

The graphic interface in DCVAMC's electronic health record (EHR) helps prevent miscommunication and medical mishaps.

Submissions were evaluated on universality and achievement of stated business objective; creativity and uniqueness of concept; impact on the organization; scope of the solution and the stage of implementation.

The Washington DC VA Medical Center's (DCVAMC) Eastern VA Cardiac Pacemaker Surveillance Center recently reached a crucial milestone, a million "electronic house calls".

Two Cardiac Pacemaker Surveillance Centers, one located at DCVAMC and the other at the San Francisco VA Medical Center, actively follow more than 22,000 patients across the country and maintain a registry of all patients who've had pacemakers implanted at VA facilities.

The Eastern VA Cardiac Pacemaker Surveillance Center monitors 11,600 veterans with regularly scheduled "house calls" by technicians and nurses. Patients have wristbands and a transmitter that together give EKG readings over telephone lines. The pacemaker rhythm indicates the status of the battery. Readings from defibrillators can also be transmitted and reviewed by clinicians.

Patients appreciate the timeliness and convenience of this service. The Pacemaker Registry, which contains implant histories on more than 200,000 devices, can facilitate replacement or other appropriate actions in the event of a recall or other pacemaker issues.

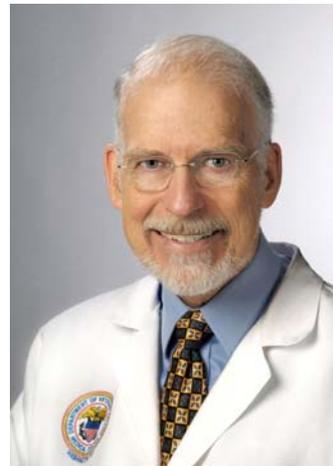
Since the establishment of the Center, innovations in implanted cardiac therapy have expanded and the Center in turn expanded. Now devices are all solid state and record multiple events. These data (called tracings) are collected and maintained in patients' electronic health records which consist of all records, vital signs, physician

notes, test results and images on each VA Medical Center patient.

According to engineer, Ron Jones: "Out callers download the tracings, analyze them, and send a report to the referring hospital. We also have an automated system for recording the tracings called "CardioVoice."

Ross D. Fletcher, MD, Chief of Staff at the DCVAMC was among the early advocates for these remote monitoring stations and is considered a pioneer in the use of electronic health records and electronic health monitoring.

Over twenty-five years



*The Medical Center's Chief of Staff, Dr. Ross Fletcher, is one of the VA visionaries who has been instrumental in bringing the latest technologies to DCVAMC, including the Pacemaker Surveillance Center, Electronic Health Records, and VistA.*

ago, Dr. Fletcher and another VA employee, Daniel Maloney, explored the use of computer monitoring for tracking battery status in pacemakers. In short order,

the project was chartered by Congress and two VA Cardiac Pacemaker Centers were established, one on the east and one on the west coast.

Dr. Fletcher attributes the VA Cardiac Pacemaker Surveillance Center's success to rapid adoption of new technology which led to outstanding quality care for larger numbers of patients with the same number of personnel.

He is extremely proud of his role in the development of the Surveillance Center, which Dr. Fletcher says "was a forerunner for telemedicine, the paperless record and the use of large databases to improve the quality of care for our Veteran patients."

The VA Cardiac Pacemaker Surveillance Centers were the first VA health units to be completely "paperless" with every record, every call and all data stored in electronic media since 1982. Today, VA is the only health care system that exclusively utilizes electronic health records for patient care. Due to VA's outstanding record in both health care delivery and patient satisfaction, it is considered the nation's leading health care provider - offering the "best care anywhere".

Veterans participating in the pacemaker program are benefit by the regular monitoring and clinical attention this program provides", says Fernando O. Rivera, Medical Center Director. "Those who served our country deserve and earned the best care anywhere and that's what we give them."



## Is Care Coordination Home Telehealth (CCHT) Right for You?

### The ideal candidate:

- Has a chronic condition such as congestive heart failure, chronic obstructive pulmonary disease, diabetes, hypertension, multiple sclerosis, kidney failure, obesity, multiple sclerosis or post-traumatic stress disorder;
- Is motivated to improve his/her quality of life and willing to learn more about their condition;
- Is committed to using the Telehealth devices regularly and is interested in helping to self-manage their health condition;
- Must have a land-line telephone;
- Has a caregiver who is readily available to offer assistance if needed.

**To learn more about CCHT, call 202-745-2250 or speak to your primary care provider.**



## The Next Best Thing to a Doctor Visit

### The Care Coordination Home Telehealth (CCHT) Program Helps Improve Veterans' Quality of Life

There are more than 400 Veterans currently participating in the DCVAMC's Care Coordination Home Telehealth (CCHT) Program, allowing them to be directly connected to their health care providers through the use of telehealth devices installed in their own homes.

The patients answer questions and enter information and the devices electronically transmit the patient's vital health information to an assigned "care coordinator" daily or as often as their primary care provider recommends.

If the coordinator receives any abnormal readings or changes in symptoms, he or she promptly calls the patient and takes the appropriate action.

The care coordinator's action could be arranging for a same-day appointment and transportation, contacting the patient's doctor for a medication review, or even calling an ambulance -- whatever is necessary to keep the patient healthy.

CCHT helps improve Veterans quality of life by

allowing patients to remain in their own homes and live independently. This may also reduce health care costs.

CCHT participants have been shown to have fewer complications and fewer emergency room visits because small problems are often caught early.

Some patients have a video phone that allows patients to speak and be seen by their care coordinator or health care provider.

Having the ability to see and speak to the patient is invaluable. It not only offers improved personalized communication but allows the provider to better access the patient's condition.

This personalized communication is the hallmark of Home Telehealth.

According to Beverley Gookins, RN, a care coordinator at the hospital, "We aren't just monitoring the machines, we develop relationships with the patients and coordinate their care."

These care coordinators come build close relationships with their patients and can often quickly spot

when things are out of the ordinary. According to CCHT participant, Craig Carpenter, a former Army Medic who served in both of Operation Desert Storm and Somalia, "It's the closest thing to a doctor's house call."

Mr. Carpenter uses his Telehealth devices weekly to check his blood pressure, blood sugar and oxygen levels. He says the CCHT program gives him "Peace of mind."

Susan Jackson, Clinical Nursing Director for CCHT, cautions that CCHT is not a substitute for primary care or emergency care. It is a great way to keep an eye on chronically-ill patients who can not travel daily to the Medical Center.

"It's a wonderful program but it's not for everyone," says Jackson. Patients who are motivated to work with the team and help to improve their own health, benefit most".

If you think CCHT might be right for you, speak to your primary care provider during your next visit or contact the CCHT Team at 202-745-2250.



Visit the DCVAMC website: [www.washingtondc.va.gov](http://www.washingtondc.va.gov) to view the latest information on health, Veterans' programs, activities, special events, jobs, volunteer opportunities, visitor information, benefits and more!

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## Frequently Used Phone Numbers

### Main Number

202-745-8000

### Emergency Room

202-745-8360

### Suicide Hotline

1-800-273-TALK (8255)

### Patient Service Center

202-745-8577

### Medical Advice Line

202-745-8247

### Toll Free

### Appointment Line

1-877-328-2621

(1-877-DCVAMC1)

### OEF/OIF Help Line

1-877-OIFOEF1

(1-877-642-6331)

### Pharmacy Refill

202-745-4046

### Pharmacy Questions

202-745-8235

### Patient Advocate Office

202-745-8588



## Video Games Help Veterans of All Ages

### *Video gaming offers Veterans a fun and effective mode of physical and cognitive therapy.*

Air Force Veteran Arthur Cunningham suffers from degenerative joint disease.

But today, working with occupational therapists at the VA Medical Center in Washington DC, Cunningham is getting the better of his affliction thanks to an unusual therapeutic instrument – the Nintendo Wii game station.

Nintendo introduced Wii. (Pronounced like the English pronoun 'We') back in 2006, and it has turned out to be a huge success for the firm.

But the scope of its appeal and the creative uses that Wii systems have now been put to is much broader than expected. VA Medical Centers were among the first to recognize this.

Cunningham says it's hard to get exercise when your hips are hurting and your knees are hurting all at the same time, but he has been able to regain some of the range of motion he had lost by playing Wii games of tennis and the bowling.

Just two years after Wii games first became available, an ever increasing number of them are finding their way into occupational therapy clinics, where they are helping wounded and injured Veterans regain lost function in an atmosphere that is both playful and challenging.

The games simulate real-life activities, but in this case – do it in the controlled environment of a clinic, under the supervision of a trained therapist.

Occupational therapist Stephen Smith says Wii games provide a variety of benefits that traditional therapy techniques cannot, including motivating patients.

The same features that have made Wii so popular with the general population help explain its appeal in the clinic as well.

The competitive aspects of the games can be so engaging that users become immersed in the challenges presented, whether they be physical...or analytical.

Therapist Andrea Meehan has been working with Army Specialist Eric Rich, one of several patients at the Medical Center

whose cognitive skills have been impaired by traumatic brain injury.

She says patients like Rich often have trouble with memory, attention, concentration, and things like organization and planning.

So she uses Wii games in her therapy sessions to try to improve her patients' memory and attention to detail.

Meehan has been playing the game "Covered Cages," with Rich which gives him a quick glimpse of half a dozen bird cages, some occupied – some not, before a cover comes down and the cages are shuffled across the screen. Rich needs to track the movement and remember which covered cages contain a bird, and which do not.

He says he enjoys the immersive aspect of the game, and likes the fact that its scoring system gives him feedback on his progress.

Over time he has advanced to more difficult levels of the game, drawn in by the challenge of bettering his previous scores.

*Submitted by  
George Dwyer,  
Employee Education Service*