



Federal Physical Therapy SECTION

Quality physical therapy care across federal medical facilities.

Fall 2010

WWW.FEDERALPT.ORG

This Issue

President's Message

CSM 2011

Military

Veterans Affairs

Public Health Service

President

Peter Glover, DPT

Vice President Program Chair

Jonathan Glasberg, DPT

Secretary

Randi Woodrow, PT

Treasurer

Alice Holder, PT, DPT, MHS

Section Delegate

Jane Morrical, MPT

APTA Board Liaison

Nicole Stout, MPT,
CLT-LANA

Federal Physical Therapy

info@federalpt.org
www.federalpt.org

President's Message

I would like to thank all presenters for the Federal PT Section that offered their time, expertise, and experience to the education program for CSM 2010. Dr. Barbra Springer coordinated the group of sessions on Amputee Rehabilitation. The Federal Section has a full program for CSM 2011. The theme for CSM in 2011 is Technology in Rehabilitation. Please read the following article as a preview for what the Federal Section will offer for educational programming during CSM 2011.

This year we are having elections for two board positions and the first set of Service Representatives for each service in the section. The positions include representatives from the Veterans Health Administration, all the military uniformed services (Army, Navy / Marines, and Air Force), and the US Public Health Service (Indian Health Service, Bureau of Prisons, Coast Guard, and others). I look forward to the growth of the section leadership next year.

The APTA Combine Section Meeting (CSM) is the primary focus for the section to provide continued education, networking, and social opportunities. This is also the time we conduct our business meetings.

During CSM 2011, the Federal PT Section will continue to combine with the US Army Alumni Association for a social and networking event on Thursday, February, 10, 2011 at 7:00 pm. Our Business meeting will be at 7:00 am on Friday, February 11, 2011.

If you have received this newsletter, and are a PT employed in the Federal government and not a member, please consider joining the APTA Federal Physical Therapy Section. If you are a member, please consider participating in section activities. I look forward to see you at CSM 2011 in New Orleans.

The Federal PT Section includes all the physical therapists who work for the Federal government. Please see our first newsletter that may be downloaded from our website for an overview on the services that comprise the Federal Physical Therapy Section.

Get Ready to VOTE!

The Federal Physical Therapy Section will have an election in January 2011. The poll will open on Monday, January 3 and close on Thursday, February 3. It's important for you to vote! Watch for emails and a direct mail post card reminder or use the link below to VOTE beginning January 3, 2011!

<http://election.federalpt.org>





Federal Physical Therapy

CSM 2011



CSM 2011

The Federal section is proud to sponsor exciting and relevant programming for CSM 2011. The main theme for 2011 revolves around the use of new technologies in the treatment of our Veterans and active service members. Please peruse the brief descriptions of the offerings below. Looking forward to seeing you in New Orleans!

Jonathan Glasberg, DPT

Technology at Work for Our Veterans: An Update on Hi-Tech within VA

Speakers: Kendra Betz, PT, MSPT, ATP; Stephanie Hart-Hughes, PT, MSMS, NCS; Leif M. Nelson, DPT

This talented group will provide us with information on the use of advanced prostheses, sports and recreation equipment, as well as highlight the collaboration with researchers and engineers to develop new technologies for clinical assessment- All within VA!

Innovative Approaches to Improve Mobility Following Lower Extremity Trauma

Speakers: Benjamin Darter, PT, PhD; Johnny Gray Owens, PT; Jason M Wilken, MPT, PhD

This group from the Military Performance Lab at the Center for the Intrepid Brooke Army Medical Center will provide an overview of recent advances in prosthetic and orthotic technologies. They will discuss the basic mechanics behind the function of these devices, and look forward to upcoming developments. They will also highlight treatment interventions in practice for maximizing performance in patients who use these devices. Discussions will primarily focus on recent developments in prosthetic and orthotic technologies and ramifications for the treating clinician who may encounter these devices.

Using Virtual Reality and Games to Augment Physical Therapy Practice

Speakers: Benjamin Darter, PT, PhD; Sheryl M Flynn, PT, PhD; Jason M Wilken, MPT, PhD

Round two from this group will focus on Virtual Reality (VR). This presentation will review clinically relevant uses of both high-end and low-cost VR systems to augment conventional Physical Therapy. They will discuss the CAREN system in use at the Center for the Intrepid, as well as the use of game consoles and low cost systems which track motion using off the shelf Webcams and infrared cameras and low cost LED's or reflective markers attached to the body or to relevant objects.

Keeping Them In The Game: Tools and Techniques to Effectively Perform Organizational Injury Risk Screenings

Speakers: Robert Butler, PT, PhD; Stephen Goffar, PT, PhD, OCS; Kyle B Kiesel, PT, PhD, ATC, CSCS; Phillip Plisky, PT, DSc, OCS, ATC, CSCS; Scott W Shaffer, PT, PhD, OCS, ECS; Deydre Smyth Teyhen, PT, PhD, OCS

This panel, affiliated with the US Army-Baylor University doctoral program in PT, will provide an overview of injury screening and mitigation strategies that utilize technology so they can be implemented to large groups of individuals in a cost and time efficient manner. The first technology demonstrated is an automated injury prevention platform with associated computerized algorithms, and the second demonstrates the use of a pressure platform to screen for foot structure and function.

Pilates for the Patient with Polytrauma

Speakers: Kim R Gottshall, PT, PhD, ATC; Michael Podlenski, PTA, ATC

This group from the Naval Medical Center San Diego has improved upon last year's presentation by supplementing

continued...



Federal Physical Therapy

CSM 2011

their amazing videos with live demonstration from patients with polytrauma. The participant will be introduced to various pilates exercises and sequences for patients with polytrauma, utilizing various types of pilates equipment, including the Reformer, Trapeze, Pilates Chair, and CoreAlign.

Building and Sustaining the Tactical Athlete: A New Role for Physical Therapists

*Speakers: Danny James McMillian, PT, DSc, OCS, CSCS;
Michael Rosenthal, PT, DSc, SCS, ECS, ATC, CSCS*

This exciting and timely course will describe how physical therapists can assist the tactical population in at least two key ways: first, in collaboration with other performance professionals, PTs can become involved with the design and oversight of training programs to ensure adherence to sound physiological and biomechanical principles; second, PTs can use the sports medicine model to provide screening for injury risk, early intervention, and transitional programs that link rehabilitation with return to full duty.

Army Rehabilitation and Reintegration: Strategic Priorities and Initiatives

*Speakers: Lynne Lowe, PT; Janet A. Papazis, PT;
Barbara A Springer, PT, PhD*

We are thrilled to have this group from the Proponency Office for Rehabilitation and Reintegration, Office of the Army Surgeon General provide us with insight into the topic of Army Rehabilitation and Reintegration. This presentation will specifically discuss current Army TBI Program, Army Pain Management Task Force, and Army Musculoskeletal Action Plan initiatives and the strategic way ahead.

Sheryl Flynn, PT, PhD,

helps keep the fun in physical therapy!



In 1998 and 1999, Sheryl was awarded two doctoral scholarships from the Foundation. Today, her game company, based in Santa Monica, California, is working to develop video games for rehabilitation that patients can enjoy with their friends and family.



Help the Foundation support the next generation of physical therapy researchers. Your gift today will make a difference for your patients tomorrow.

Learn more or donate at www.FoundationforPhysicalTherapy.org or call 800-875-1378.



Federal Physical Therapy

MILITARY

Mild Traumatic Brain Injury (mTBI)

Submitted by Major Robyn Bolgla,
Department of Veteran Affairs, Miami
and Broward County OPC

Physical therapists within the military and Department of Veteran Affairs are becoming more aware of the effects of concussion and mild traumatic brain injury (mTBI) as it relates to our deployed and returning service members from the wars in Afghanistan (Operation Enduring Freedom - OEF) and Iraq (Operation Iraqi Freedom - OIF). Increasing numbers of military members have survived blasts of explosive devices or other trauma with varying degrees of head injury.

Active duty and reserve service members are at increased risk for sustaining a TBI compared to their civilian counter parts. Training demands and deployments to areas where they are at risk for experiencing blast exposures from improvised explosive devices (IEDs), land mines, mortar rounds, rocket-propelled grenades, small arms fire and suicide bombers place our military at higher risk for sustaining a TBI.

The numbers of Veterans who have sustained a mild traumatic brain injury as reported to the Defense and Veterans Brain Injury Center (DVBIC) are 144,453. All severity TBI's from 2000-2010 are 188,270 (according to the website these numbers were updated as of May 2010). Other estimates suggest that 20% of the approximately 1.6 million service members who have been deployed, or more than 300,000 US Veterans of these wars, have sustained a TBI..

Most recently, US Central Command reported an escalating number of concussions suffered by U.S. service members deployed to Afghanistan. From July through September 2010 more than 1000 service members were identified with concussions, more than twice the number diagnosed in the previous four months. In response to this critical finding, new guidelines for the management of service members

exposed to blasts have been implemented. Service members within 165 feet of a blast must be removed from the battlefield for at least 24 hours and examined for concussion.

Due to the potential long-term effects and costs of such injuries, mild traumatic brain injuries are of increasing concern in both the military and civilian populations. Injuries from conflicts in Afghanistan and Iraq have increased public awareness and concern for TBI. The Rehabilitation and Reintegration Division of the Health Policy and Services Directorate of the US Army Office of the Surgeon General recently tasked a team of physical and occupational therapists to assemble evidence-informed guidelines for assessment and intervention specific to mild traumatic brain injury. The physical therapist involved in the research recently published "Physical Therapy Recommendations for Service Members with Mild Traumatic Brain Injury" providing evidence-based guidance for physical therapy related to the management of mTBI.

Recommendations, characterized as practice standards or practice options based on strength of evidence, are provided in the article relative to patient/client education, activity intolerance, vestibular dysfunction, high-level balance dysfunction, posttraumatic headache, temporomandibular disorder, attention and dual-task performance deficits, and participation in exercise. While highlighting the need for additional research, the work can be considered a starting point for the development of evidence-based practice in physical therapy for managing mTBI in our deserving military service members.

You will find the complete article in: *Journal of Head Trauma and Rehabilitation*, Vol. 25, No. 3, pp. 206-218, Copyright 2010, Wolters Kluwer Health Lippincott Williams & Wilkins, Physical Therapy Recommendations for Service Members With Mild Traumatic Brain Injury, Authors: Margaret M. Weightman, PT, PhD; Robyn Bolgla, MSPT, CTRS; Karen L. McCulloch, PT, PhD, NCS; Michelle D. Peterson, DPT, PT, NCS.





Federal Physical Therapy

VETERANS AFFAIRS

Telerehabilitation Services in the VA and DOD System

*Katie Ambrose, PT, DPT
Cindy Poorman, MSPT*

Last year the Federal Section introduced its members to the use of telerehabilitation within the VA system. This year, we come to you with an update from the Veteran's Administration (VA) and news from the Departments of Defense (DOD). Both organizations are using telerehabilitation to improve access to specialty care, as well as for seamless transition from the DOD to VA. The VA has been using the Polytrauma Telehealth Network (PTN) to connect with the DOD military treatment facilities (MTFs) to allow for a smooth handoff of servicemembers with polytrauma. The PTN is a national clinical video telehealth (CVT) network of video conferencing units that enable real-time, interactive, clinical video conferences. These conferences allow DOD and VA providers to consult and compare notes and treatment plans, and also give servicemember and caregivers the opportunity to meet the VA team before the transfer takes place giving them peace of mind.

In addition to polytrauma care, CVT is being used in both organizations to provide other types of clinical care. Applications of telerehabilitation within VA and DOD include rehabilitation specialties like Physical Therapy (PT), Occupational Therapy, Speech Language Pathology and Audiology. Clinical encounters in these disciplines are, like all telehealth encounters, composed of two parts: the patient site/originating site/local site, where the patient is physically located; and the provider site/distant site/remote site, where the provider is located. Both sites are connected to each other through their CVT unit.

The DOD has some exciting developments in the use of CVT. The video conferencing infrastructure that is already present on most commands for administrative reasons is now being used to meet the growing demand of patient care.

The DOD is now using this new modality to streamline care and improve efficiency in a stressed system. Tele-Physical Therapy services are currently being used between Walter Reed Army Medical Center (WRAMC) and Ft. Bragg as part of the Tele-Neurosurgery clinic. The PT at WRAMC works with the multidisciplinary Tele-neurosurgery team at WRAMC consulting with patients at Ft. Bragg, NC. Ft. Bragg does not have a neurosurgeon on site and patients in need of spine evaluation often had to travel long distances for evaluation and treatment. Now patients can access specialized services through video conferencing with the team at WRAMC.

DOD Tele-Physical Therapy recently started in Europe for routine orthopedic care. In Europe there are several independent duty stations manned by a PT tech and covered by a PT 4-5 hours away. The PT visits the remote site monthly; however between visits the PT tech has limited access to the PT. Now through use of video conferencing the PT and PT tech can consult more frequently between visits for patients who are progressing. By identifying and caring for patients who progress between visits, this telehealth model helps open more appointment slots for the PT during the monthly site visit for patients who require more hands-on treatment.

Starting in December 2010 Tele-Physical Therapy services will be available to Traumatic Brain Injury (TBI) teams at commands that do not have TBI PT services, including Ft. Lee, Virginia and Ft. Dix, New Jersey. Using the video conferencing the PT will work with the local TBI team to screen the servicemember for symptoms of TBI, teach the patient symptom management and make further recommendations for treatment planning.

In the VA, PTs are also involved in TBI care through the secondary TBI evaluations. PTs at the patient site confer with a physician at the provider site. Together they complete the evaluation and determine the treatment plan



Federal Physical Therapy VETERANS AFFAIRS



for the patient. This plan may include continued therapy which can be completed in person at the patient site or alternatively through CVT.

VA Tele-Physical Therapy involves PTs in numerous clinics across the system. These include but are not limited to amputee, wheelchair and durable medical equipment (DME) clinics. During these sessions PTs are part of an interdisciplinary team that evaluates the patient for a custom wheelchair, prosthesis or equipment. Follow-up appointments after equipment distribution are also often performed through telehealth. A Physical Therapy Telehealth Task Force has been developed within the VA. Their goal is to identify clinical as well as educational uses of telehealth within PT.

The Tele-Physical Therapy applications listed above are just the beginning in a wide array of how Tele-Physical Therapy can help improve the patient's access to PTs. The Tele-Physical Therapy clinic model improves access to specialty care, decreases burden on the patient and caregiver, and ultimately improves continuity of care and compliance.

APTA Learning Center Work Group

The APTA developed the learning center as means of increasing the access of APTA members to continuing education material. The APTA has now spearheaded a learning center work group to better meet the continuing education needs of each section. Each section has identified a representative to collaborate and identify the needs of each section. The unique make up of the therapists in the Federal Section makes meeting everyone's needs a challenge. As the Federal Section Representative for the APTA learning center work group, I will be looking for information and feedback from the Federal Section members to ensure the professional educational needs are identified and met. I look forward to working with you all and please feel free to contact me with any questions or comments regarding the educational needs of Federal PT's.

Katie Ambrose, PT, DPT
Katharineambrose@gmail.com (personal) or kambrose@dvbic.org (work)



Federal Physical Therapy

VETERANS AFFAIRS

VHA National Physical Therapy Lead

Mark Havran DPT, LAT, CSCS, has been selected as the National Physical Therapy Lead for VHA, and will serve as the contact point for Physical Therapists within the VA, and with stakeholders outside of the VA spectrum of health services. Mark's initial responsibilities will be to represent the Office of Rehabilitation Services, and address recruitment/retention, identifying best practices, inform and engage the field in promoting evidence-based practices, and assisting with educational needs.

Mark and other key VA staff recently met in Washington, D.C. with APTA representatives to discuss opportunities for future collaboration, including VA participation at conferences, recruitment/retention, and educational opportunities. We look forward to the many opportunities that this position can assist all stakeholders to improve Veteran care within the VA.

Physical Therapy Residency in Neurology Clement J. Zablocki VA Medical Center, Milwaukee, Wisconsin

The diversity of populations served by physical therapists has led to the development of specialization in areas including neurology, cardiopulmonary, orthopedics, and geriatrics. The certification of specialists by the American Physical Therapy Association has been in place since 1985 and the number of Board Certified specialists has grown exponentially, nearly doubling in number since 2002. Board certified Physical Therapists are expert clinicians who not only provide advanced patient care but also serve as consultants, clinical educators, mentors and leaders in program development. Residencies are one way to gain experience in a specialty area.

The Physical Therapy Residency in Neurology at the Clement J Zablocki VA Medical Center, Milwaukee Wisconsin began in July 2009, and was accredited July 31st, 2010 as the first Physical Therapy Residency in the VA System. It is the ninth residency in neurology in the country. The Physical Therapy Residency in Neurology is a partnership with Marquette University - Department of Physical Therapy. Marquette University provides administrative functions and supports the didactic, teaching and research components of the program. The Physical Therapy service at the Clement J Zablocki VA Medical Center provides the primary

clinical experience as well as didactic support and other opportunities to collaborate with VA staff. Funding for the resident was provided through a pilot program supported by the VA Office of Academic Affiliations (OAA). The mission of the Physical Therapy Residency in Neurology is to prepare physical therapy residents for advanced specialty practice. The goal is that participants successfully pass the American Board of Physical Therapy Specialties (ABPTS) neurologic clinical specialty board exam on completion of the residency program. The program is supported by funding from the OAA as an Associated Health Fellow (post doc year 1).

Residents in the program are graduates of an accredited Physical Therapy program and are licensed Physical Therapists. The first resident completed the program July 2, 2010. The second resident started on July 6th, 2010. The Physical Therapy Residency in Neurology is a year-long program with an emphasis on clinical practice in neurology, 1:1 mentoring by experienced clinicians, and didactic study. The resident also gains exposure to teaching and research. Residents are employed by the Zablocki VA and treat their neurologic patient caseload ~30 hrs/wk. Residents rotate through acute inpatient rehab, spinal cord rehab, and outpatient neuro, as well as some outside experiences in pediatrics and traumatic brain injury. The clinical faculty for the program includes VA Staff who are board certified specialists in neurology (NCS) as well as other experienced staff therapists. Laurie Elling, MPT, NCS is the clinical coordinator. Michelle Lanouette, MPT, NCS has been instrumental in developing the curriculum, serving as a mentor /faculty member. Kim Ring, DPT, NCS was recently board certified and will be joining the faculty, sharing expertise in vestibular rehabilitation.

A residency in neurologic physical therapy is particularly well suited to the Veterans Health Administration. Veterans with neurologic dysfunction including spinal cord injury, stroke and traumatic brain injury have historically been identified as special populations in the VA system. Training physical therapists in advanced practice will improve care for these patients. The residency will attract physical therapists who are motivated to work with this population, introduce them to the VA system, train them in advanced practice and as a consequence, serve as an excellent recruitment tool, attracting highly qualified Physical Therapists to the VA system. In addition, the residency program will further benefit current PT staff by providing additional opportunities for learning and clinical teaching. These opportunities will contribute to staff development and thereby support retention of qualified therapists.



Federal Physical Therapy

VETERANS AFFAIRS

Cincinnati VA Program Highlighted

Cincinnati VA's Management of Overweight/Obesity for Veterans Everywhere (MOVE!) Program, an evidence-based lifestyle program for Veterans; was highlighted in the Department of Health and Human Services Physical Activity Guidelines for Americans Blog:

www.health.gov/paguidelines/blog/?page=3



The Program Basics

According to Stephanie Ciccarella, Cincinnati VA utilizes a 2-step process to promote readiness to change. The first step offers education on nutrition, behavioral habits, and physical activity. The second step emphasizes action, like journaling, physical activity, and problem-solving personal habits.

Training is offered twice a week under

the supervision of a physical therapist with cardiovascular, strength training, and education during 2-hour classes. Personal accountability is the cornerstone of the program.

Veterans begin the second step with education on the importance of regular daily activity. Each person is issued a pedometer and instructed to track their daily steps. Veterans are able to see changes in their activity levels reflected in their journals and set goals. By the end of the program, Veterans take lead roles by leading exercise and supporting each other through problem solving and motivation.

Measuring Success

"Emphasis on performance and outcome measures are keys to determining effectiveness of the program," says Ciccarella. "They help guide program development."

The Cincinnati MOVE! Phase II program utilizes additional evidence-based outcome measures to help guide the development of physical activity training and education during meetings. These outcome measures (listed below) help indicate ability to successfully participate in semi-intensive exercise, degree of health risk, and improvement in function. By reviewing pre- and post- assessment measures, each group member is able to see his or her specific improvement.

Challenges and Program Shortcomings

"One of the primary shortcomings of this program is its length," says Ciccarella. A longer program would ensure a more thorough change in behavior and demonstrate greater physical progress. Another drawback to the program is geographic availability. Evidence demonstrates that people are more likely to maintain a physical activity schedule when resources are available within 10 miles of their homes. Some Veterans must travel significant distances to participate. Veterans are also required to commit a significant amount of time over a 6-week period. This poses a problem for those who work, have children, or go to school. Given the nature of weight loss, the benefits of participation may not be dramatic enough to maintain motivation. Some of the proposed answers to these problems include lengthening the program to 9 or 12 weeks, expanding Physical Therapy Clinics in all outpatient settings, and introducing more flexible scheduling.

Outcome Measures

Berg balance scale	Perceived wellness survey
Montreal cognitive assessment	Gait speed
Weight/BMI	6- minute walk test
Rate of perceived exertion	Vital signs
Readiness to change	

Implementing a Similar Program in Your Community

Cincinnati VA tailored the national MOVE! Program to fit their specific needs. To implement the program in your area, check out the original MOVE! Program at: www.move.va.gov/ and see how it can work for you.



Federal Physical Therapy

PUBLIC HEALTH SERVICE

Public Health Service Physical Therapists Promote Healthy Lifestyles

Physical therapists in the US Public Health Service (PHS) have taken the lead in developing programs at their agencies to promote wellness and healthy lifestyles through improved physical activity and nutrition. PHS physical therapists serve historically vulnerable populations, including American Indians and Alaska Natives in the Indian Health Service and inmates in the Federal Bureau of Prisons. A few of our recent successes in health promotion are described by the officers who developed and lead these innovative programs.

Tse' Bit' Ai Middle School Wellness Program

LT Steven Spoonemore, Jr. PT, and CDR Tom Schroeder, PT

The Physical Therapy Department at Northern Navajo Medical Center in Shiprock, NM secured grant money to establish a wellness program at Tse' Bit' Ai' Middle School. The school is located on the Navajo Indian Reservation, which occupies 27,000 square miles in Arizona, New Mexico and Utah with a population of 180,000. The school has an enrollment of 497 sixth through eighth graders.

The program's objective is to promote and assist middle school students in adopting healthy lifestyle practices in physical activity and nutrition to decrease the prevalence of childhood obesity. Obesity rates for 12-24 year olds in the Shiprock area have been reported at 37% compared to 18% for adolescents nationwide. Statistics show that 70% of overweight adolescents go on to become obese adults. The hope is that by decreasing the prevalence of childhood obesity it will eventually decrease the prevalence of obesity in adults.

In October of 2009 the Tse' Bit' Ai' Wellness Program opened its doors to students at the middle school. The program is directed by a physical therapist, staffed by faculty from the local school district, and equipped with interactive electronic games such as the Nintendo Wii, Dance pads and game bikes, and resistance training equipment along with traditional sports and games such as flag football, basketball, volleyball and ultimate frisbee. Nutritional information was also provided. During the first year 110 students enrolled in the program with over 650 visits during the 62 days the

center was open. Average attendance was about 15 students per session.

The 2010-2011 school year got off to a fast start with 62 students enrolling and an average attendance during September of more than 25 students per session. New opportunities for program participants include two 6-week nutrition courses taught by certified diabetes educators and a weekly group exercise class, which will include Zumba dance, step aerobics, line dancing, and plyometrics among other activities.

The Physical Therapy Department at Northern Navajo Medical Center is measuring several outcomes from the program including participant fitness levels as measured by the Fitnessgram assessment, body mass index as well as exercise and nutrition knowledge and behaviors. The goal is to identify the successful elements of the program and share them with schools across the Navajo Nation in order to decrease childhood obesity.

Assembling a Task Force for Treating Obesity in the Federal Prison System

LCDR Tracy Gualandi, PT, DPT

In 2008, a multi-disciplinary team lead by a PHS physical therapist developed a wellness program at a federal medical correctional facility housing 1800 female inmates. The female prison population tends to exhibit poorer nutrition, undertake less exercise, and exhibit higher rates of diabetes and psychiatric disorders than the general population.^{1,2} This can pose both challenges and present opportunities for improving health literacy among incarcerated women.

The multi-disciplinary team consisted of a physician, a physical therapist, a dietitian, a psychologist, and an activity therapist. The team's mission was to develop a wellness program targeted at the obese prison population. A twelve-week program was designed by the team. Forty-four inmates participated in the initial voluntary program. Inmates that participated in the program had Body Mass Indexes (BMI) ranging from 35 to 72. Patients were divided into two groups. Group 1 consisted of patients with BMI 35 to 50 and was considered the "lower risk group". Group 2 consisted of patients with BMI's ranging from 50 and above and was considered the "higher risk group". Inmates with a

continued...



Federal Physical Therapy

PUBLIC HEALTH SERVICE

BMI between 35 and 50 with Hypertension, Diabetes, and/or cardiac disease were also placed into group two. Both groups underwent weekly classes on variable weight loss and nutrition topics. Group two underwent additional interventions consisting of medication reviews, vital sign monitoring, individual counseling, and monitored exercise. Thirty three participants completed the 12-week course and averaged 9.2 pounds of weight loss per person. There were no significant differences between the two groups.

Since completing the pilot program two years ago, many of the inmates in both of the original groups have continued to lose weight. Two inmates have reported an additional 80 and 100 pound weight loss since initially participating in the program two years earlier. Since 2008, the classes have been offered again at least once per year and more than 100 inmates have participated in the program.

The goal of offering health and wellness programs to inmates is to improve inmate health literacy, which in turn, will decrease the strain of treating preventable illnesses on the federal prison system.

Inmate Mobility and Health Promotion

LCDR Alex K. Brenner, DPT, OCS

At the Federal Medical Center in Lexington, Kentucky, which houses nearly 1800 inmates, a pedometer-based study was conducted in 2009 to gauge the amount of mobility medically assigned inmates were achieving on a daily basis. Medically assigned inmates in Federal Medical Prisons are those with complex medical conditions requiring regular medical care. These conditions can include morbid obesity, type II diabetes, COPD, peripheral vascular disease and other cardiac disorders.

According to Tudor-Locke et al,³ 10,000 steps per day are recommended to maintain weight control and receive health benefits from walking. It is intuitive to think that inmates in a confined environment such as a prison, especially those with complex medical conditions, would not achieve 10,000 steps per day. Therefore, the aim of the study was to utilize pedometers to identify which groups of medical inmates were not achieving optimal physical activity by measuring the steps they took during a 1-week period. Health promotion interventions would then be aimed at the groups found to have the least mobility.

Pedometers were placed on 60 volunteers of various ages, weights, ethnicity and medical pathology. The pedometers were calibrated specific to each volunteer and they were instructed on how to properly wear the pedometer. At the end of the week the pedometers were returned and the data were analyzed. It was observed that inmates who were both 51 years or older and who had a BMI greater than 40 were the group least likely to achieve the recommended 10,000 steps per day.

Since this study was completed, the physical therapy staff primarily has focused patient education in the sedentary group identified by the study aiming to increase daily walking distances to at least 10,000 steps per day. The physical therapy staff has measured and clearly marked various walking tracks within the facility and on the recreation yard. Inmates in the more sedentary groups have increased their walking by 57% as measured with pedometers. The physical therapy staff is currently working with correctional staff to allow inmates to purchase personal pedometers in an effort to increase daily walking distances.

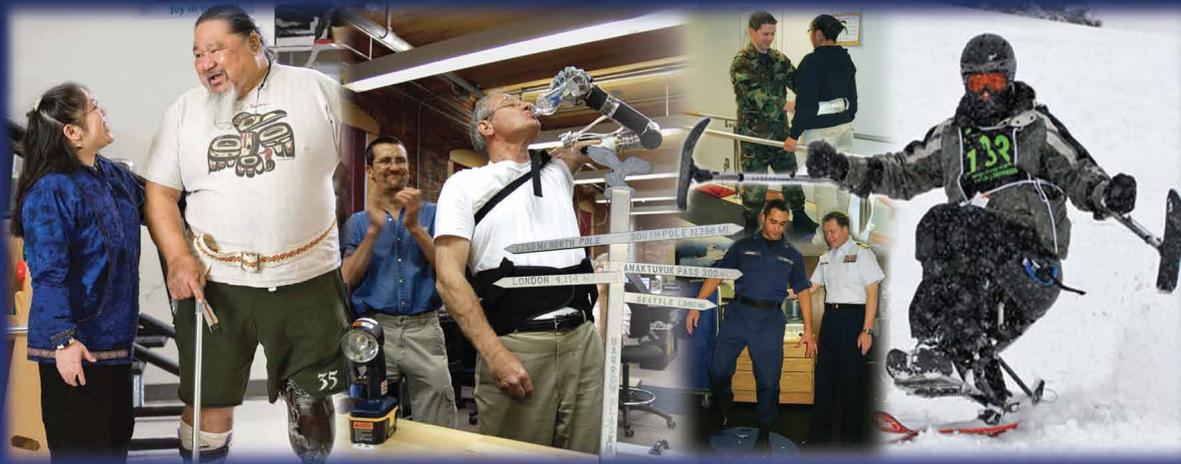
References

1. Baillargeon, JG, Paar, DP, Wu, H et al. Psychiatric disorders, HIV infection and HIV/hepatitis co-infection in the correctional setting. *AIDS Care*. 2008; 20(1): 124-129.
2. Young M, Waters B, Falconer T, O'Rourke P. Opportunities for health promotion in the Queensland women's prison system. *Aust Nz J Public Health*. 2005;29(4):324-327.
3. Tudor-Locke C, Bassett D. How many steps/day are enough? Preliminary pedometer indices for public health. *Sports Medicine*. 34(1):1-8, 2004.

In service around the world



- ★ The Federal Physical Therapy Section promotes quality across the continuum of care within federal medical services.
- ★ The Section provides opportunities for networking, continuing education, leadership, and professional development as well as experiences in a variety of settings that include clinical, educational, and research.
- ★ Section members include PTs and PTAs who are or have been employed by the federal government in civil service, as members of the uniformed services, as contractors, or as tribal hires, and PT students interested in federal service careers.



American Physical Therapy Association
The Science of Healing. The Art of Caring.™