



March is Brain Injury Awareness Month

By Shannon Carabajal
Mercury Editor

According to the Centers for Disease Control and Prevention, nearly 1.7 million people suffer a traumatic brain injury, or TBI, each year. Of those, 52,000 people die; TBI is also a contributing factor to a third of all injury-related deaths in the U.S.

During March, in recognition of Brain Injury Awareness Month, the Army is taking steps to increase awareness about brain injuries – including prevention, diagnosis, and treatment – while reducing the stigma for persons who seek care.

TBI is a disruption of function in the brain caused by an external force. The severity can range from mild – also known as concussion – to severe involving an extended period of unconsciousness or amnesia.

“Traumatic brain injuries result from an external force such as blow or jolt to the head. Concussions can occur in combat operations (such as during a blast event), in sports (particularly contact sports such as football, soccer, or martial arts), during recreational activities (such as skiing or biking accidents), and in vehicle collisions that have sufficient acceleration/deceleration

movement. A TBI can also be caused by a penetrating injury to the brain from a bullet or other object,” said Maj. Sarah Goldman, TBI program director for the Office of the Surgeon General.

Goldman said concussions are common injuries that occur in many settings including combat operations, contact sports, recreational activities, and vehicle collisions. Because they are not as obvious as other physical injuries, leaders, medics, physicians, and even those injured may mistakenly overlook or underestimate the effects of concussions.

Symptoms of concussion can include confusion, headaches, dizziness, ringing in the ears or nausea. These symptoms usually resolve within hours or a few days. Some people do have more persistent symptoms, which can include trouble sleeping, irritability or visual disturbances.

“It is imperative to reduce the chance of a second head injury before the brain can recover. Soldiers should be taken out of the fight and athletes should be removed from the field to prevent repeated injury and promote healing,” she said.

Col. Nikki Butler, Director of the Rehabilitation and Reintegration Division at

the Office of the Surgeon General, said TBI awareness is especially important for military personnel who, due to the nature of their work duties and lifestyle, are at a higher risk for TBI than the average citizen.

Since 2000, the Defense and Veterans Brain Injury Center has counted 229,106 cases of TBI among U.S. Military personnel worldwide. Of those cases, 76.7 percent were determined to be mild, 16.7 percent were moderate, 1 percent were severe, and 1.6 percent were penetrating.

“Soldiers and leaders need to understand the subtle effects of concussion, because the Soldier often has very subtle or no outward signs of injury. Battle buddies need to be aware of any changes following a head injury and encourage Soldiers to seek medical attention as soon as possible after the injury, no matter how mild it may seem,” she said.

Butler encourages Soldiers and their Families to be proactive in preventing TBI by using protective equipment for sports and avoiding high-risk behaviors such as aggressive driving. She also said early identification and treatment is critical.

“Brain injuries should be identified and treated as quickly as possible. Current scientific evidence supports rest, education, and expectation of recovery as the cornerstones of treatment for concussion. Statistics indicate that over 90 percent of those who have suffered a TBI will fully recover; however, some patients may experience long-term symptoms. The chances of long-term ramifications are increased if there have been multiple or repetitive injuries such as in the case as professional boxers.

“It takes time for the brain to heal and Soldiers do not all recover at the same rate even if they sustain a similar injury. It is absolutely essential to avoid getting a second concussion or insult before the brain has fully healed,” Butler said.

Army Medicine and the Department

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THE MERCURY

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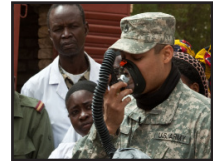
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INSIDE THE BUBBLES: Understanding the balanced scorecard

Throughout the Mercury, our readers will notice interactive bubbles connecting issues and topics to the Army Medicine Balanced Scorecard. The BSC communicates the mission, strategic vision and goals of AMEDD. The bubbles are the strategic objectives - the "means" and "ways" to accomplish the "ends." For more information, visit armymedicine.mil/about/BalancedScorecard.pdf.

MERCURY Comment

AMEDD Civilian Corps 'honored to serve'

By Nancy Quick

AMEDD Civilian Corps Branch Proponent Officer

As we transition to the leadership of the 43rd Army Surgeon General, I have been reflecting on what it means to be a member of the AMEDD Civilian Corps and part of the Army Medicine Team.

I've been a member of the Corps since arriving at the Army Medical Command in March 2001. I didn't realize it at the time, but the Civilian Corps was just celebrating its 5th birthday. We have found informal mention of the Civilian Corps forming in 1988, but historical documentation ties its establishment to the appointment of the first officially recognized Civilian Corps Chief. So we now celebrate March 26, 1996, as the official founding date of the AMEDD Civilian Corps.

I have been a MEDCOM civilian for over 10 years and have proudly served since October 2010 as the first Civilian Corps Specific Branch Proponent Officer. Over the years I've had the privilege to correspond and talk with quite a few members of the Civilian Corps. The dedication, commitment and passion for our mission are unmistakable and unwavering. This is pretty amazing when you consider what a wide variety of jobs we perform. The AMEDD Civilian Corps totals about 45,000 civil service employees. In round numbers, this includes 42,000 civilians within MEDCOM; another 3,000 Army civilians working in healthcare occupations in other commands, plus the civilian staff of the Office of the Surgeon General. The key is that we all support the Army Medicine mission.

We are collectively working toward the AMEDD Civilian Corps mission to revolutionize the current culture to build an integrated and enduring professional team serving Army Medicine. As we move to include "Serving to Heal...Honored to Serve" into our everyday work environment, I am reminded of the line in our Civilian Corps creed that indicates our "honor to serve" as civilians and how proud I am to be part of this great Army Medicine Team.

Happy birthday to the AMEDD Civilian Corps! Congratulations for the many accomplishments of our 45,000 civilians striving to exemplify our vision as a distinguished team of passionate professionals recognized for quality, innovation, and customer service in support of Army Medicine.



Army Civilian Corps Creed

I am an Army Civilian - a member of the Army Team

I am dedicated to our Army, our Soldiers and Civilians

I will always support the mission

I provide stability and continuity during War and Peace

I support and defend the Constitution of the United States and consider it an honor to serve our Nation and our Army

I live the Army values of Loyalty, Duty, Respect, Selfless Service, Honor, Integrity, and Personal Courage

I am an Army Civilian

AWARENESS from P1

of Defense offers support for Soldiers and Families with persistent symptoms and those suffering from moderate, severe or penetrating injuries. Army Medicine has primary care and specialty providers throughout the continuum of care who are educated in brain injury identification and rehabilitation.

On the front lines, medics are trained prior to deployment to screen for brain injuries using the Military Acute Concussion Evaluation developed by the Defense and Veterans Brain Injury Center.

Additionally, the DOD stood up a concussion system of care at the point of injury in theater to promptly identify and treat these injuries.

"Brain injury evaluation and treatment services extend throughout Army Medicine

which has funded over 500 dedicated TBI providers located around the world since 2007. The Department of Defense also collaborates with the Defense Veterans Brain Injury Center and the Veterans Administration to provide ongoing support for patients and their families," Butler said.

In addition to support from medical professionals, Goldman said support from Family members is very important during TBI treatment programs.

"Family members are an essential component to the Soldier's care and recovery. Our Military Treatment Facilities ensure that Family members have the opportunity to learn more about the effects of TBI, be involved in treatment planning, and are an essential aspect in a Soldier's rehabilitation," Goldman said.

The Army is also taking steps to protect Soldiers from injuries and better de-

tect and treat brain injuries. According to Butler, the service has invested more than \$800 million in research and development activities to better identify and treat brain injuries; and Army Medical Research and Materiel Command has funded hundreds of research studies devoted to advancing the science of TBI to include basic science research to better understand the pathophysiology of injury and recovery; improved detection and diagnostic capability such as neuroimaging, diagnostic biomarkers, and improved screening tools; and treatment techniques to maximize recovery after an injury.

For more information about brain injuries, visit the Defense and Veterans Brain Injury Center website, www.dvbic.org.

For more information about the Army TBI program, visit www.armymedicine.army.mil/prr/tbiprg.html.

Military study aims to aid troops with mild TBI

By Elaine Sanchez

American Forces Press Service

A team of experts at San Antonio Military Medical Center has launched a military study aimed at improving outcomes for service members suffering from a signature wound of today's wars: traumatic brain injury.

The Study of Cognitive Rehabilitation Effectiveness, dubbed the SCORE trial, is examining cognitive rehabilitation therapy's value as a treatment for service members with mild TBI.

The Defense and Veterans Affairs departments teamed up on this study to determine the best treatment for combat troops who are experiencing mild TBI symptoms -- such as difficulties with attention, concentration, memory and judgment -- three to 24 months post-injury, explained Douglas B. Cooper, the study's lead and a clinical neuropsychologist for the center's Traumatic Brain Injury Service.

"We have a lot of great interventions to help ... in the first few days after concussion," he said in an interview with American Forces Press Service. "We can pull them out, get them rest and get them better."

However, "we don't have as many good interventions later on -- six months, 12 months or two years post-injury," acknowledged Cooper, who also serves as the director of the Military Brain Injury Rehabilitation Research Consortium.

The trial's aim is to determine if cognitive rehabilitation therapy improves chronic mild TBI symptoms and, if so, which interventions work best, on whom and why.

Cognitive rehabilitation, Cooper explained, involves a variety of interventions that help patients with brain injuries reduce, manage or cope with cognitive deficits. It's commonly used to treat patients



Douglas B. Cooper, a clinical neuropsychologist for the San Antonio Military Medical Center's Traumatic Brain Injury Service, explains how different areas of the brain are affected by brain injuries during an interview at the center in San Antonio. (DOD photo by Linda Hosek)

with brain injuries, whether from concussions, penetrating brain injuries or strokes.

With vast experience in the field, Cooper said, he and his colleagues knew anecdotally that the therapy works, meaning it helps to improve memory and focus in patients. However, he added, experts have cited a lack of evidence-based research tying cognitive rehabilitation to successful treatment of brain injuries.

With a lack of in-hand research, insurance companies began to balk on covering it as a stand-alone treatment. For example, TRICARE, the military's health care plan, won't cover cognitive rehabilitation programs that haven't been proven as effective stand-alone therapy for TBI, according to a TRICARE fact sheet.

Rather than step away from the therapy, Congress directed a series of studies to explore cognitive rehabilitation and its effectiveness among troops, Cooper said.

The Defense and Veterans Brain Injury Center took on the challenge and soon enlisted the help of DOD and VA experts. They took a year to write manuals to serve as a trial guide and began enrolling patients in SCORE in July.

They had only a few enrollment criteria: troops must have suffered a mild TBI while deployed in support of operations Enduring Freedom, Iraqi Freedom or New Dawn, and be three to 24 months post-injury, Cooper said.

They had no shortage of available participants. A TBI database shows that more than 202,000 service members suffered a TBI between 2000 and 2010, with the majority experiencing a mild TBI or concussion, according to the Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury. The center cited blasts, fragments, bullets, motor vehicle accidents and falls as the leading TBI causes within the military.

The team plans to treat 160 participants in six-week cycles over the course of two to three years, Cooper said. While in the trial, patients participate two times a day, five days a week, and are entered into one of four treatment paths, or "arms," he explained.

These treatment paths involve a variety of interventions, and may include individual appointments, group sessions, computer treatments and behavioral health -- or a combination of several intervention types.

For the computer exercises, Cooper explained, service members complete a series of commercially available computer programs touted to improve "brain fitness." These sessions take place in the hospital and are proctored by clinic staff.

The programs are presented in a game-like format, he added. As they progress, troops earn "brain bucks" that can be used to outfit a virtual apartment with big-screen TVs and stereos. This suits technology-savvy service members, he noted, who often fall into the under-25 age range.

The team also is looking at the effectiveness of various treatment combinations, such as mental health care and cognitive rehabilitation offered together. More than 50 percent of TBI patients have a coexisting psychological disorder, oftentimes combat stress, Cooper explained, so wrapping the two treatments together makes sense.

An exercise typical of this approach is to have service members

CS 4.0 Optimized Care and Transition of Wounded, Ill, and Injured Warriors

Army Dental Corps turns 101

Dr. (Capt.) Mitch J. Hernandez, a dentist from Charlie Company, 201st Brigade Support Battalion, 3rd Brigade, 1st Infantry Division, Task Force Duke, examines a patient at Combat Outpost Wilderness, Afghanistan.

(Inset) An Army dentist removes a tooth from a patient during World War I.

Following many years of National Dental Association discourse, congressional hearings, and other failed attempts for recognition, the U.S. Army Dental Corps was established on March 3, 1911.

Since the corps was established, Army Dental Corps officers have served in every major conflict and humanitarian assistance operation.

The Army Dental Corps is the Soldier's trusted agent for oral health: maintaining individual and unit-level dental readiness and advocating for dental wellness initiatives; monitoring access to care, in the military direct care setting and the outsourced private sector; and, remedying dental disease to prevent dental casualties during deployment, are among the most important services provided by the Corps.

For more information about Army Dental Corps history, visit history.amedd.army.mil/corps/dental/dental.html. (Courtesy photos)



TBI from P4

listen to a tape and be asked to focus on certain things in their environment, he said. This exercise is first introduced as a cognitive rehabilitation skill, but troops later see its benefits as a tool to overcome combat-related stress.

This integrated treatment is particularly useful for service members who aren't willing to seek behavioral health care on their own, Cooper noted.

"There's still a large stigma attached to mental health care," he explained. "They may not want to seek behavioral health to get care, but are willing to talk to a psychologist while here getting care for a concussion."

Cooper said his team will look at each treatment arm to see which interventions have proven most successful and for whom. In general, they're looking for improvements in several areas: working memory, which is holding on to information; prospective memory, which involves remembering to perform a planned action or intention at the appropriate time; and simple attention, which is being able to process what someone is saying at the moment and then remembering what was said.

"We hope to not only look at what interventions work, but then look at subsets of patients -- these particular people haven't shown as much improvement or people with multiple concussions may be harder to treat and so on," he explained.

As Cooper's team works to improve attention and focus, a parallel study at the medical center here is delving deeper into their patients' brains. Participants of the SCORE trial also are invited to participate in the Imaging Support for Study of Cognitive

Rehabilitation Effectiveness, known as the iSCORE study. For this study, experts use cutting-edge imaging technology to scan patients' brains at certain intervals: before the SCORE trial, halfway through, after the trial and at 12 to 18 weeks later.

Imaging experts are hoping to learn more about people's white matter track pathways in the brain, Cooper explained. "Is there something about these that will tell us why individuals are changing?" he asked. "Why are they getting better, and which ones are not able to get better?"

The best clinical trials, he added, raise more questions than they answer. If the SCORE trial proves successful -- meaning it proves cognitive rehabilitation's efficacy -- the goal is to disseminate that information to VA and DOD centers, Cooper said. Civilian providers also may glean ideas that can aid them in the treatment of noncombat-related brain injuries, such as those from a car accident or a stroke.

Meanwhile, Cooper is hoping the study will have a direct, positive impact on troops' well-being and their ability to return to active duty, and, on a bigger-picture level, the health care system as a whole. Above all, he added, "we want to make sure they're functioning and doing OK."

The nation has an obligation to ensure service members get the best care and treatment possible, Cooper said.

"They need to feel taken care of, that their complaints are valid, and that they're not alone in going through this process," he added.

The SCORE trial, he said, "is accomplishing that and more."



Capt. Brendan Graham, seen here with 'Jeopardy' host Alex Trebek, is donating half of his \$47,602 winning to military charities. Graham is a pathologist at San Antonio Military Medical Center. (Courtesy photo)

Soldier performs selfless act of generosity and fortune

By Maria Gallegos

Brooke Army Medical Center Public Affairs

Born and raised in California, Capt. Brendan Graham never imagined winning big on a game show.

In January 2012, that is exactly what he did. Graham, a pathologist at San Antonio Military Medical Center won \$47,602 on 'Jeopardy' during his three-show stint.

After his first win on the show, Graham and his wife Lindsey, also a physician at SAMMC, agreed to donate half of their winnings to three charities: the Wounded Warrior Project, the Fisher House and the Archdiocese for the Military Service -San Antonio.

As military physicians, working and collaborating with the Wounded Warrior Project and the Fisher House organizations were well-known by the Grahams'.

"I saw these organizations almost every day. When a patient arrives at the hospital, a representative from the Wounded Warrior Project is always there to assist the patient and their well being," Graham said. "And the Fisher House project offers a free place to stay for families while their loved ones

"Winning lots of money was not my priority on the show. I was more interested in beating other competitors and demonstrating to the world (that) we have very intelligent people in the military (who) can compete with very intelligent civilians in the world."

- Capt. Brendan Graham

San Antonio Military Medical Center

recover from their injuries."

"Another charity I failed to mention on the show was the Archdiocese for the Military Service - San Antonio. We are giving a third of our winnings to this organization," Graham said. "As devoted Catholics, this was a natural decision for us to make."

According to the website, the organization provides the Catholic Church's full range of pastoral ministries and spiritual service to those in the United States Armed Forces.

"I am grateful and blessed for what they [three charities] do for our patients," he said. "My wife and I are simple people. Winning lots of money was not my priority on the show. I was more interested in beating other

competitors and demonstrating to the world (that) we have very intelligent people in the military (who) can compete with very intelligent civilians in the world."

The Grahams' are expecting their second child in March and their personal plans to use the money are small but meaningful.

"My wife wants to buy a rocking chair that is wide enough so both of our children can sit in the rocking chair with her while she reads to them," he said.

For more information on the Fisher House, visit www.fisherhouse.org; Wounded Warrior Project, visit www.wounded-warriorproject.org; Catholic Charities: Military Archdiocese of United States, visit www.milarch.org.

US, Tanzania work together in MEDRETE

Story and photo by Sgt. Terysa M. King
U.S. Army Africa Public Affairs

ZANZIBAR, Tanzania – Only a few people have the opportunity to visit Africa. Even fewer have the opportunity to visit Africa to give sight to the blind, creating a small footprint with an enormous payoff.

In support of U.S. Army Africa's first Medical Readiness and Training Exercise of the year (MEDRETE 12-1), U.S. medical personnel traveled to Zanzibar, Tanzania, Jan. 30 through Feb. 10, to perform a suture-less cataract surgical technique to improve military relationships with host medical providers and provide medical treatment to local citizens.

Medical personnel who participated in the event included military specialists and civilians from throughout the U.S. Army Medical Command from Womack Army Medical Center, Fort Bragg, N.C., Madigan Army Medical Center, Fort Lewis, Wash., and Joint Base Elmendorf-Richardson Hospital, Anchorage, Ala.

Col. Darrel K. Carlton, the officer in charge of MEDRETE 12-1 and an Army ophthalmologist from the Womack Army Medical Center in Fort Bragg, N.C., said the mission is a life changing experience for the people of Zanzibar.

"I always get a great deal of satisfaction knowing that the vast majority of people we come in contact with, we're able to improve the quality of their lives," Carlton said.

Of the 2,000 patients screened, approximately 150 were selected for surgery. Patients who qualified for cataract surgery showed up to their scheduled appointment, and within 24 hours they are able to see clearly for the first time in years.

The surgical technique, known as Extracapsular Cataract Extraction, is low tech, inexpensive and takes only 20 minutes for a person blinded by cataracts to regain their eyesight.

Kevin Czarkowski, USARAF chief of exercises and the command and control officer-in-charge, said the mission is a great opportunity for the U.S. and the host nation to work side by side to build a lasting relationship.

"The collaboration between the U.S. medical team, the Ministry of Health officials from Zanzibar and the Tanzania People's Defense Force and the ability to get these three organizations together is remarkable," Czarkowski said.

Mohammed Ameer Bonda, a retired colonel of the TPDF, said he was grateful for the chance to restore his eyesight.

"My vision now is not good, it's not clear. For a long time I struggled [with] my eyes. I'm very happy for this opportunity," Bonda said before his surgery. After his operation, Bonda was all smiles, asking to see his brother.

Carlton said restoring eyesight to the blind has great benefits for the patients.

"It is very difficult to be a fully contributing member of society if you are blind, especially in these poorer countries. People without it are not able to find employment. They not only become a burden to themselves, but to their immediate family and the surrounding community. Curing blindness, or curing someone's vision, in an austere setting like this has many secondary effects, not just to the person who is being assisted but to their entire families," Carlton said.

Czarkowski said this mission not only helps people see, but it



Col. Kevin Winkle, an ophthalmologist from Joint Base Elmendorf-Richardson, Anchorage, Ala., checks the eyes of a local woman of Zanzibar during the screening process of the Medical Readiness and Training Exercise in Tanzania.

enhances Zanzibar's treatment capabilities.

"The key is Africans solving African problems. We come here with a small team and we stand next to the Ministry of Health officials and their doctors, building their capacity. At the end, now they [the Ministry of Health] have the capability and the capacity to do this themselves," Czarkowski said.

Along with helping build Zanzibar's ophthalmology capacities, Carlton said he enjoyed the learning experience.

"I enjoy the satisfaction of knowing that we've helped people see. I enjoy working with other militaries and learning as much about their culture and their way of doing business. It's truly a two-way street. We don't come here and run the show, we're working with them," Carlton said.

MEDRETE is a regularly scheduled USARAF exercise where teams of U.S. military medical specialists travel to select areas in Africa. Future MEDRETE exercises are scheduled to take place in Burkina Faso and Mauritania.

Headquartered in Vicenza, Italy, U.S. Army Africa is the Army Service Component Command for U.S. Africa Command. Dedicated to positive change in Africa, U.S. Army Africa enables full spectrum operations while conducting sustained security engagement with African land forces to promote security, stability, and peace.

For more information about U.S. Army Africa and ongoing activities, visit www.usaraf.army.mil.

IP 8.0 Build
Relationships and Enhance
Partnerships

Matt McCollum, a paramedic at the Emergency Medical Service in Schertz, Texas, inventories the supplies in the ambulance that is stocked with the Combat Application Tourniquet. (Photo by Staff Sgt. Reynaldo Bermea)



USAISR research benefits extend beyond battlefield

By Steven Galvan
USAISR Public Affairs

The research conducted on tourniquets at the U.S. Army Institute of Surgical Research, Fort Sam Houston, Texas, is proving to be beneficial beyond the battlefield.

The research that started in 2004 showed that tourniquets were effective at stopping blood loss from injuries to the arms and legs without long-term complications and saving the lives of Wounded Warriors. Shortly thereafter, the Department of Defense ordered that the Combat Application Tourniquet, or CAT, be issued to all troops deployed to combat.

Today, the same tourniquets that are saving lives in the battlefield are being used by paramedics to save the lives of people with life-threatening, non-combatant injuries in South Central Texas.

Recently, a team of paramedics from the Emergency Medical Service in Schertz, Texas, used the CAT on a motorist whose leg had been amputated by another vehicle as he was changing a flat tire on the side of the road.

"He probably wouldn't have made it without it," said Jason Hedrick, the Schertz paramedic who applied the tourniquet.

According to the Schertz EMS Director, Dudley Wait, this is the second time that

paramedics have had to use the tourniquet since making it part of the equipment in their medic bags two-and-a-half-years ago.

They were effective both times," he said. "We decided to use that particular tourniquet because that's what the military uses. We consulted with the emergency room trauma doctors at the Brooke Army Medical Center since that's where we transport our trauma patients. We wanted to use a device that military doctors are familiar with."

Wait also said that his paramedics receive the same training that military troops get for self-applying and applying the tourniquet to an injured comrade. The CAT is a small, light-weight device that can be applied with ease one-handed. It was selected as one of the "Army's Top 10 Inventions" in 2005 and recommended for battlefield use by the Committee on Tactical Combat Casualty Care.

"It seemed too easy to use," recalled Hedrick. "After it was on, I kept going back through the steps of applying it because it seemed too easy to apply. It's a great tool to have in our kits."

The tourniquet was placed perfectly by U.S. Military Tactical Combat Casualty Care training standards," said Col. (Dr.) Lorne H. Blackburne, ISR commander and trauma surgeon.

The CAT used to save the motorist's

life was identical to the tourniquet that kept Staff Sgt. Reynaldo Bermea from bleeding to death after being shot in the back of his thigh during an operation in Iraq.

"We had just finished a three-hour mission and we were being evacuated from the area. I boarded a Chinook [helicopter] and we started taking on fire as we were taking off," Bermea said.

One of those rounds pierced through the bottom of the helicopter where he was sitting, striking him in the back of the leg and hitting the main artery. Thirty minutes from the nearest field hospital, a combat medic in the helicopter applied a tourniquet on Bermea's leg which was bleeding profusely.

"I know it saved my life. After it was on, I knew I was going to be fine, but I thought that I was going to lose my leg," Bermea said.

Four months later, Bermea volunteered to join his unit back in Iraq.

"Every time I see patients like him [Bermea] I am reminded of the great work that is going on here at the ISR," said Col. (Dr.) Todd Rasmussen, ISR deputy director.

"Everything that we do here is for the combat wounded and we are saving lives. It is gratifying to be part of an organization that is working for the Wounded Warrior and to see that the work here is saving lives away from the battlefield."

Doctors use robot to increase patients' quality of life

Story and photos by Stephanie Bryant
TAMC Public Affairs

TRIPLER ARMY MEDICAL CENTER, Hawaii – In May 2011, the da Vinci Surgical System was embraced by two of Tripler Army Medical Center's otolaryngologists. The robot, which was first purchased in 2009, has been used to support a variety of surgical specialties.

Otolaryngology is a branch of medicine and surgery that specializes in the diagnosis and treatment of ear, nose, throat, and head and neck disorders.

Lt. Col. Joseph Sniezek, chief, Otolaryngology, Department of Surgery, TAMC, and Lt. Col. Christopher Klem, chief, Head and Neck Surgery, Otolaryngology, Department of Surgery, TAMC, are excited that the robot has found its way to head and neck surgery. Since last May, the specialists have performed about eight thyroidectomies and about a dozen Trans Oral Resection Surgeries, or TORS.

"These are surgeries we are familiar with, but (now) we have a new tool," Sniezek said. "It takes a little different thought process for how to approach it ... it sort of is a fresh way to do a surgery that we do all the time and the patients do better, so it is exciting."

Tripler is the first Department of Defense medical treatment facility and the first hospital in the state of Hawaii to do these two types of head and neck surgeries using the robot.

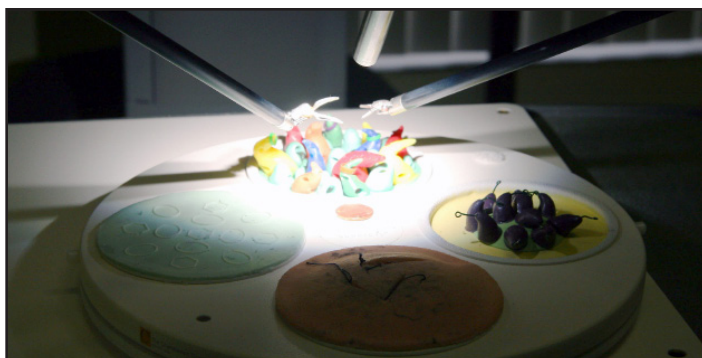
One of the major advantages of using the robot to perform these surgeries is dramatically better cosmetic results. It is a very difficult area of the body to access, Sniezek explained.

"We would have to do pretty radical procedures like big incisions to open the face or splitting the jaw in half," Sniezek explained. "The robot allows us to just use the arms of the robot and a camera placed through the mouth, a natural orifice, and then we can resect the tumor without having to split the mandible or do facial incisions."

Sniezek added that this applies to the thyroidectomies as well because instead of removing the thyroid through the neck, in certain cases they can enter through the arm pit.

For TORS, Klem said the recovery time is much quicker for the patient and typically less chemotherapy and radiation are required.

"When we talk about recovery, we talk about speech and swallowing," Klem said. "So far, since this is a relatively new procedure, studies are showing that speech and swallowing is much better than for open surgery for this type of resection."



A simulation tool is set up on the da Vinci Surgical System table for surgeons and residents to practice their skills.



Lt. Col. Joseph Sniezek, chief, Otolaryngology, Department of Surgery, Tripler Army Medical Center in Hawaii, explains how to operate the controls of the da Vinci Surgical System.

"The quality of life and overall function has been much, much better with this type of minimally-invasive surgery followed by lower dose radiation therapy," he added.

Sniezek and Klem are excited about the possibilities that this technology gives surgical specialties.

Sniezek said after the technology was created in the early 1990s, the Defense Advanced Research Projects Agency became very interested in supporting it because of its potential to allow surgeons to operate remotely on Soldiers wounded on the battlefield.

"You don't have to be in the same room to control the robot," Sniezek said. "You can be on another continent ... It would allow a surgical specialist here at Tripler to operate on a Wounded Warrior in Afghanistan."

In December 2011, Klem and Sniezek started doing head and neck surgeries at Queens Medical Center in Honolulu and one of the surgeries involved the robot.

"This is a great resource sharing agreement between Tripler and Queens, that I think is a great example of the partnership between military and civilian medical resources," Sniezek said.

Tripler and Queens use the same kind of robot to perform the surgeries.

"I think it is important to get the word out that military medicine has the same cutting edge treatment for these difficult cancers as anyone does," Klem said.

"We are committed to staying on the cutting edge of advancements in surgical treatments, particularly for cancer therapies," Sniezek added. "Tripler is offering the very latest in techniques and technologies that are available."

LG 3.0 Promote
and Foster a Culture of
Innovation

Combat Lifesaver Training



Medical training builds partnerships, saves lives

Sgt. Alfonso Bernal-Stevens, a combat medic from the 421st Multifunctional Medical Battalion, coaches a German soldier through the proper technique for placing a tourniquet during Combat Lifesaver training in Wiesbaden, Germany.

Story and photo by Sgt. 1st Class Christopher Fincham
30th MEDCOM Public Affairs

WIESBADEN, Germany – Bundeswehr Soldiers from Germany’s Armed Forces United Training Center were challenged physically and mentally at the 421st Multifunctional Medical Battalion’s “Viper Pit” while conducting Combat Lifesaver training recently.

The week-long training – three days of didactic and two days of hands-on trauma lanes – introduced the 25 Bundeswehr Soldiers to U.S. combat lifesaver standards and was designed to prepare them to take the knowledge and skills back their organization, where they will train Soldiers and civilians preparing for deployment.

“I just received new instructors and searched for a unit to help me train my Soldiers,” explained Capt. Carsten Dombrowski, the senior training officer for Tactical Combat Casualty Care for the German Army. “Our liaison officer had a lot of experience working with the 421st MMB, so we asked to be their guests and everything has worked very well.”

Staff Sgt. John Lacroix, a combat medic with the 421st MMB, has trained more than 700 Soldiers at the Viper Pit and said the opportunity to train Bundeswehr Soldiers who will be able to share their skills with other Soldiers has been great.

“About half of the class just got out of basic training and are infantry while the other half are seniors – master sergeants and officers. We are actually going to certify them to the American combat lifesaver standard, and they will go on to teach other Bundeswehr soldiers. So it’s a kind of train-the-trainer too.”

Approximately 90 percent of combat deaths occur on the battlefield before the casualties reach a medical treatment facility, according to the CLS manual. Most of these deaths are inevitable due to massive trauma or massive head injuries. However, some conditions such as bleeding from a wound on an arm or leg, tension pneumothorax, and airway problems can be treated on the battlefield. These treatments can be the difference between being a combat death on the battlefield and a recovering Soldier in a hospital or clinic.

“Years ago, a tourniquet was the absolute last thing that you did and now it’s the absolute first thing that you do. I think that the lessons learned from Iraq and Afghanistan – a lot of experience and a lot of wisdom – went into changing the program. Now our two main focuses are stopping bleeding with tourniquet and decompressing a tension pneumothorax,” explained Lacroix.

Along with being good training, the time at the Viper Pit has also served as a unique opportunity to build partnerships and friendships between the German and American Soldiers.

“Many of them are privates, so it’s their first contact with the U.S. Army. For them it’s not only training, it’s also knowledge of how the U.S. Army works and what the American-Soldier mentality is, so it’s very interesting for them,” Dombrowski said.

“We’re doing this to build relations with the Bundeswehr and also to compare the way that they do medical treatment to how we handle things, which has been pretty interesting,” said Lacroix. “We both do TC3 just about the same, but mostly I’m learning about treatment techniques and shortcuts, just different ways of doing things and we’re teaching them at the same time.”

IP 8.0 Build Relationships and Enhance Partnerships

Malaria vaccine ranks among top medical breakthroughs

By Maj. (Dr.) Jason Regules and Col. (Dr.) Christian Ockenhouse
Walter Reed Army Institute of Research

The RTS,S malaria vaccine candidate, the result of a collaboration between the Walter Reed Army Institute of Research and public-private partners, was recently recognized by Time magazine as the second most momentous medical breakthrough of 2011.

Time cites the early results of a Phase III efficacy trial conducted in 15,460 infants and children, at 11 study sites across Africa. The trial demonstrated that the RTS,S vaccine was 56 percent effective in protecting children 5 to 17 months of age from malaria infection and 47 percent effective in preventing severe cases of malaria. The final trial data will be available in 2014 when the trial is completed.

Approximately 300 million cases of malaria occur annually, with an estimated 1 million deaths. While infected pregnant women and children are prone to severe disease, U.S. military personnel and other people from non-endemic regions are also extremely susceptible to severe disease and/or death from malaria.

This high-risk medical threat has a substantial impact on operational effectiveness in deployed U.S. military forces serving in malaria-endemic areas. Malaria has been a leading cause of non-battle injury through every major U.S. conflict.

As the most advanced malaria vaccine ever created, the RTS,S vaccine represents more than two decades of collaboration between the WRAIR and key civilian partners. The Army's role in co-development and advancement of the RTS,S vaccine has been pivotal. The WRAIR Malaria Vaccine Development Program has executed clinical testing of over a dozen prototypes leading up to the RTS,S particle.

Using the WRAIR malaria challenge model, whereby humans are experimentally inoculated with malaria after vaccination, the Army conducted the first proof-of-concept clinical trial demonstrat-

ing the protective efficacy of RTS,S. Army malaria vaccine researchers also conducted the first RTS,S clinical trial in Africa.

Multiple clinical trials have been executed at WRAIR to optimize vaccine presentation and safety. Critical field-site testing for the current phase III study is ongoing in Western Kenya at the Army Medical Research Unit-Kenya, an overseas laboratory of WRAIR.

Research and development of second-generation vaccine strategies has begun. People vaccinated with the current RTS,S formulation would still be at risk of malaria infection and disease after prolonged exposure in malaria-endemic areas since the level of efficacy does not meet the threshold required to protect the warfighter. The second-generation malaria vaccine must achieve 80 percent or greater efficacy. WRAIR is continuing to develop and test improvements to the vaccine.

The U.S. military malaria vaccine community is uniquely positioned to make a critical contribution at the crossroads of force protection and global public health. Given an increasing trend in global malaria drug resistance, the staggering worldwide morbidity and mortality of malaria, and the difficulties inherent to protecting the fighting force from this threat, the development of an optimal malaria vaccine is a clear priority for the U.S. military and its global health partners.



As a major worldwide problem, malaria affects regions of strategic importance to the U.S., such as tropical Africa, Asia, Oceania, and Latin America. (Courtesy photo)

COE reaffirms Academy of Health Sciences accreditation

By Phil Reidinger

AMEDD Center and School Public Affairs

Following a week long evaluation of the Army Medical Department Center and School, the Council on Occupational Education reaffirmed the school's accreditation as a training and educational institution.

The initial Council of Occupational Education institutional accreditation of the AMEDD Center and School was granted in 1983. Since then the AMEDD Center and School has successfully received five reaffirmations of accreditation in 1988, 1993, 1999, 2005 and 2011.

The accreditation process includes a review of the school's educational programs, evaluation of students' outcomes such as knowledge and skills and student success, strategies for achieving educational and training objectives, faculty credentials, student learning resources, student services and activities and comparability of distance

learning courses to programs of instruction for resident courses.

The AMEDD Center and School received excellent scores in all evaluated areas, with no recommendations or suggestions for improvement.

When the results of the accreditation evaluation were release, Maj. Gen. David Rubenstein, AMEDD Center and School commanding general, congratulated the staff and faculty.

"Congratulations to the entire AMEDD Center and School staff and faculty on the successful Council on Occupational Education accreditation survey. During their visit the COE surveyors had no written findings. That's a testament to each of you as individuals and as teams," he said.

Rubenstein added that the surveyors commended the 68T Animal Care Special-

ist training team, led by Sgt. 1st Class Elizabeth Marroquin, for demonstrated knowledge, professional environment, and success at ensuring all animals are treated with compassion, care, concern, and gentleness.

The COE evaluation team also acknowledged Vicky Cruz for her extensive knowledge of all AMEDD courses. Her professional manner was instrumental in completing the accreditation process. The team members commended the Quality Assurance Office as the COE liaison and office responsible for consolidating the very thorough and complete self-study.

"The evaluators acknowledged the faculty at Fort Rucker, Camp Bullis, and Fort Sam Houston for their enthusiasm, professionalism, and instructional charisma, which encourages and motivates students to Army excellence," Rubenstein said.



U.S. ARMY MEDICAL ENLISTED CORPS

A History of Strength and Service

1776

The Army Medical Department NCO Corps traces its roots to July 17, 1776, when congress authorized the employment of hospital stewards or medical NCOs, which were the forerunners of the AMEDD NCO Corps.



In 1851, regulations were changed allowing a "Half Chevron" consisting of a green background with yellow trim and a caduceus to denote the rank of the Hospital Steward.

1856

In 1856, Congress authorized the Secretary of War to appoint as many hospital stewards as needed in the army and mustered onto the hospital rolls as "NCOs". This action permanently attached the stewards to the Medical Department.

1887

The Hospital Corps was formally established on March 1, 1887. General Order 29 published in April 1887 stated "the Hospital Corps of the U.S. Army shall consist of hospital stewards, acting hospital stewards, and privates; and all necessary hospital services in garrison, camp, or field (including ambulance service) shall be performed by the members thereof, who shall be regularly enlisted in the military service..."

General Order 29 also established new chevrons denoting the ranks of the hospital stewards similar to the chevrons worn by all NCOs in the Army. Hospital stewards wore full sized chevrons that had three stripes below and one on top with a Red Cross in the center. Acting hospital stewards wore the same chevrons except for the stripe on top. Privates of the Hospital Corps wore the "white arm band with a Red Cross"



Hospital corpsmen who served President McKinley, Private Ernest Vollmeier, Acting Hospital Steward Palmer A. Eliot, and Private John Hodgins, 1901.



Hospital NCOs at Fort McHenry, Maryland 1898

1900

In 1900, the Hospital Corps serves an important role in the study of the causes and transmission of Yellow Fever. Soldiers volunteer to be bitten by infected mosquitoes.



WWI

During World War I, enlisted personnel of the Army Medical Department began training at Fort Oglethorpe, Georgia. Laboratory, radiology, dental, veterinary and psychiatric classes were established with some courses taught at civilian universities.



Litter bearers await their next mission during World War I.

WWII

In World War II training camps were expanded to conduct basic and specialized training for medical and surgical technicians. Even with the accelerated training at these camps, the shortage of medical personnel on the front lines remained critical.



Medics pull a boat filled with supplies for wounded troops on the other side of a river.



Newly created flight medics play an increasing role in saving lives during evacuation in the Vietnam War

GWOT

October 1, 2006, the Combat Medic military occupational specialty (MOS) code changes from 91A and 91B to 68W. During an interim period 2001-2007, new specialty training includes maintenance of civilian EMT certification.



Medical Enlisted Corps celebrates 125 years

Though the Medical Enlisted Corps was formally established as the Hospital Corps on March 1, 1887, their history dates back to the Revolutionary War.

At the outbreak of the war, medical support was hampered not only by the limited availability of trained medical personnel, but the lack of adequate medicine and equipment.

Insufficient care of the wounded and the lack of treatment and prevention of the diseases that ravaged the Army caused Washington to address the issue of medical care with Congress.

Finally, on July 27, 1775, Congress authorized the establishment of a Medical Service. This date is known as the Anniversary of the Army Medical Department.

This important step made provisions for a Director General and Chief Physician (Surgeon General), four surgeons, one apothecary, 20 surgeon's mates, one clerk and two storekeepers. It also provided one nurse to every 10 sick, and laborers as needed.

Dr. Benjamin Church was selected as the first surgeon general. Based on the recommendations of the director general, on July 17, 1776, congress authorized the employment of hospital stewards who were the forerunners of the AMEDD NCO Corps.

General Order 29, published in April of 1887, assigned enlisted members to the corps and permanently attached them to the Medical Department.

After one year of service with Hospital Corps, privates were eligible for appointment as acting hospital stewards. After one year of probation and passing of another examination, they could be appointed "permanent" hospital stewards.

In its first year, some 600 privates transferred to the new corps, with only 24 passing their examinations and promoted to acting hospital stewards.

On March 2, 1903, the Hospital Corps was disestablished. The terms hospital steward and privates of hospital corps were replaced by the terms sergeant and private with an exception for the master hospital sergeant which was used until 1920.

Today, there are more than 36,000 enlisted serving in Army Medicine.

(Courtesy Office of Medical History)

IP 9.0 Tell the Army Medicine Story



Malian Medical Defense Forces Colonel Youssouf Traore practices using a ring cutter on Sgt. La Tonia R. Luna, 807th Medical Detachment Support Command, during a medical equipment demonstration in Mopti, Mali, Feb. 7. (Photo by Spc. Kimberly Trumbull)

Medical Soldiers share training in Mali during Atlas Accord

By Sgt. Mark A. Henderson

128th Mobile Public Affairs Detachment

MOPTI, Mali – Soldiers of the 807th Medical Deployment Support Command, Fort Douglas, Utah, are sharing their expertise with their Malian medical defense forces counterparts during Atlas Accord 12 in Mopti, Mali, Feb. 7-15.

This annual-joint-aerial-delivery exercise, hosted by U.S. Army Africa, brings together U.S. Army personnel with militaries in Africa to enhance air drop capabilities and ensure effective delivery of military resupply materials and humanitarian aid.

Doctors and medics from both militaries are seizing this unique opportunity to expand on training.

While here in Mali 807th medics were asked by Malian Army Col. Youssouf Treore, commander of the medical detachment in Mopti to aid Malian medical personnel in the use of supplies they received from U.S. forces several years ago.

Treore said the supplies are very practical, easy to use, and helpful to the Malian Medical Defense Forces.

“We are training with the Malian medical personnel on different types of equipment that include cervical braces, finger splints, ring cutters, pressure bandages, back boards and more,” said Maj. Dean A. Nelson, a family physician assigned to the 328th Combat Support Hospital, or CSH, 807th Medical Deployment Support Command, or MDSC.

“These Malian soldiers and medical personnel have on-the-job

training, so it is very rewarding to show them and see their excitement when we demonstrate the proper use of the equipment,” said Sgt. La Tonia R. Luna, an 807th MDSC Army healthcare specialist.

American medical personnel gained experience from working with the Malians.

“I learned they do a lot with a little. I don’t know how they handle trauma situations but, it’s impressive how they do it,” said Staff Sgt. Anthony P. Baca, an 807th MDSC Army healthcare specialist.

“Training will help our medics become better since they are teaching the Malians through interpreters and have to move slowly and ensure they are understood. It gives them a better understanding of the training they are providing,” said Lt. Col. David H. Moikeha, an emergency physician assigned to the 94th Combat Support Hospital, 807th MDSC.

Baca said he is impressed with the willingness to learn of both militaries. Luna agreed.

“The Malians asked very good questions and were curious about the use of the equipment and now they know how to use it to help their patients,” she said.

Helping patients recover is important to the people, Treore said. “We receive so much trauma from highway accidents, military and civilian,” he said. “The equipment we have will help us care for the trauma patients we receive at our level.”

Treore added he was grateful for the experience.

“I appreciate the cooperation with the U.S. Army,” he said. “It [the training] is very practical and it will help us face all of our needs.”

IP 8.0 Build Relationships and Enhance Partnerships

Army blood drive seeking targeted donors

By David Vergun
Army News Service

FORT MEADE, Md. – The goal of the Army’s new blood drive campaign, which began Feb. 14, is to match a donor’s blood type with a specific need, rather than simply issuing a general call for donations.

It’s an education campaign as much as it is a blood drive, according to Julie Oliveri, director, Communications and Marketing, Armed Services Blood Program Office.

“Many of our donors are accustomed to signing up for blood drives and coming in to donate, irrespective of their blood type. We don’t want our very dedicated donors to be alienated by the idea that we might need a specific type at a specific blood drive, and that type may not be theirs,” she said.

“This is also why we take the time to explain that certain blood types are well suited for certain blood products. For example if you are O, you will want to donate whole blood, A for plasma or platelet-pheresis, and AB for plasma. We suggest that our donors check with their local donor center to find out exactly what their needs are,” said Oliveri.

“Our goal,” she said, “is to encourage donors to register online so local donor centers can contact them to let them know when their type is needed and where and when the next blood drive will be.” To register, visit <https://www.militarydonor.com/index.cfm>.

Giving blood is a way of supporting wounded warriors, as well as Soldiers and their families everywhere, who could someday require a blood transfusion, said Col. Ronny Fryar, Army Blood Program director, who went on to explain the process. ABP is a component of the Armed Services Blood Program.

“We monitor the blood supply worldwide,” he said. “For example, we ensure there’s enough in Afghanistan to treat our wounded warriors. Having enough on hand could entail requesting a shipment from Germany or elsewhere to replenish the supply. As a matter of fact, blood is routinely shipped throughout DOD.”

Why the need for careful and constant monitoring and shipping?

“Blood has a relatively short shelf life,” Fryar said. “When blood is drawn, it is processed into three components: platelets, red blood cells and plasma. The approximate shelf life on platelets is a mere five days; 42 for red blood cells and about a year for plasma, if frozen. This makes stockpiling a challenge.”

Fryar said the Army routinely shares blood with the other services and even their civilian counterparts.

“For example, if we have a large supply of plasma that will soon expire and it is not needed right away within DOD, we’ll contact civilian hospitals that are in short supply. They in turn will help us out the same way.”



Cpl. Christopher LeRoy, 932nd Blood Support Detachment, monitors the progress of Sgt. Jennifer Skebong, 583rd Medlog Company, as she gives blood at Bagram Airfield, Afghanistan. (Photo by Senior Airman Dilia Degrego)

Maintaining an adequate supply of blood on hand depends on the goodwill of volunteers, and this is where ASBP’s advertising efforts help get the word out, Fryar said. Also, every unit has a blood coordinator, who can be found by asking the first sergeant. For Army families, the family readiness groups also assists with getting donors to turn out for blood drives.

Which types of blood are needed?

“All types,” Fryar emphasized. “Especially rare types like AB, which we solicit through targeted advertising. But even the common types like O are always in demand.” He said the process is safe, easy and relatively pain free. “Although (ASBP) donors are not paid for their blood, units sometime give Soldiers time off. Also, there’s a canteen on hand with delicious snacks so donors can replenish their fluid and sugars.

“The most important incentive for donating, however, is knowing that you are going to be helping someone, giving them the gift of life.”

Patient Safety Awareness Week

During the week of March 4-10, the U.S. Army Medical Command will celebrate Patient Safety Awareness Week. This year’s theme, “Be Aware for Safe Care,” focuses on the need for everyone to understand the importance of patient safety and to recognize the range of efforts being made to improve health safety in the U.S. and worldwide. For more information, visit <http://health.mil/dodpatientsafety/PSAW.aspx>.



Readiness through prevention

Detachment stops disease before it starts

Sergeant 1st Class Malisha Palmer
452nd Preventive Medicine Detachment

The 452nd Preventive Medicine Detachment, a reserve unit out of Pierne, Florida, is currently providing preventive medicine support to U.S. and coalition forces in western Afghanistan.

Preventive medicine may be the most misunderstood job in the medical field today. According to the Soldiers of the 452nd Preventive Medicine Detachment, direct patient care or hands-on care is not their primary mission.

Instead, their purpose is to preemptively strike the health threat to the Soldier before it becomes an issue, hence the name preventive medicine.

If the possible source of a disease outbreak can be narrowed down and eliminated before it becomes an outbreak, then the PM detachment has done its job. A common phrase in their line work is “break the chain of disease transmission” or just “break the chain.”

Lt. Col. Jason Pike, 452nd PM Detachment commander, likens his mission to “your public health department.”

In Afghanistan, the detachment assists in breaking the chain of disease transmission by keeping base camps clean. The unit is responsible for a large western region of Afghanistan with several coalition base camps.

This small Soldier detachment travels extensively to ensure each camp’s sanitation practices are satisfactory and enforces recommendations with the assistance of the camp leadership.

These actions ultimately ensure sanitation is up to standard which leads to preventing the spread of disease at the camps they service.

The PM detachment focuses on everyday threats like water quality, food service sanitation, air quality, soil quality, sexually transmitted diseases, culturally endemic diseases, entomology, vector surveillance and general sanitation in areas where Soldiers eat, sleep, and play.

Ensuring that proper sanitation measures are established and enforced reduces the threat of a laden fighting force due to disease and non-battle injuries.



Members of the 452nd Preventive Medicine Detachment test water from a reverse osmosis water purification unit in western Afghanistan. The unit is providing support to support to U.S. and coalition forces by ensuring proper sanitation measures are established and enforced to reduce the threat of a laden fighting force due to disease and non-battle injuries. (Courtesy photo)

The water we drink, the food we eat and where we sleep, are a big part of Soldier care and safety. The 452nd PM detachment provides specific guidance that, if followed, can almost eliminate the chance of food borne disease outbreaks, improve water quality, and minimize pests in common areas.

Water quality in host nations has been and will always be an issue. The detachment provides education to local field sanitation teams, passing on valuable information to service members on how to properly sanitize drinking water prior to consumption if it is not already clean. In addition, the unit monitors water production operations and conducts testing for various contaminants to ensure the water produced is safe for human consumption.

Poor sanitation in living quarters can lead to a host of problems for Soldiers. Open food containers and trash are an invitation for various diseases carrying pests such as rodents, roaches, and flies.

The Soldiers of the 452nd PM analyze living quarters from both a preventive and medical aspect. They provide recommendations for space utilization and pest control.

The space and distance one service member sleeps from another can play a big part in the reduction in the spread of colds, the flu and other respiratory infections.

Another PM function is vector surveillance. Vector surveillance looks at and tracts prevalent diseases carried by insects in particular geographical area or region. In Afghanistan, leishmaniasis and malaria are two endemic diseases the Soldiers routinely survey.

Leishmaniasis is a disease carried by sand flies while malaria is transmitted by mosquitoes. The PM detachment collects the disease carrying insects such as sand flies and mosquitoes to establish base line data for western Afghanistan.

This information is used to educate current and future service members deploying to that specific region to be aware of the possible medical threats and to start the appropriate prophylactic treatment against the disease.

Preventive medicine protects the fighting force by making service members aware of the not so obvious dangers on the battle field that affect our health and ultimately conserve the fighting strength.

CS 1.0 Improved
Healthy and Protected
Warriors

AROUND ARMY MEDICINE

1. Defense Secretary Leon E. Panetta (center) joins Col. Jeff Ashley and 2nd Lt. Analise Medina in cutting a cake in celebration of the 111th Army Nurse Corps Anniversary Celebration at Landstuhl Regional Medical Center, Germany, Feb. 3. (Photo by Phil A. Jones)

2. Sgt. Michael Wilson, a medic with HHC, 5th Ranger Training Battalion, Ranger Training Brigade, re-enlists at Lower Mountaineering Area, Dahlenega, Ga. Capt. Chad D. Maddox, company commander, was the re-enlisting officer. (Courtesy photo)

3. Heisman Trophy winner and former Dallas Cowboys running back Hershel Walker signs autographs for fans at Freedom Crossing. Walker was visiting members of Fort Bliss, Texas, to spread the message of seeking help if you have behavioral health issues. (Photo by Staff Sgt Casey J. McGeorge)

4. Capt. Miriam Lovell (left) and Maj. Todd Thomas, both Army Veterinary Corps surgeons, work to remove a tumor from a pet cat in the operating room of the Guantanamo Bay Veterinary Treatment Facility. (Photo by Petty Officer 2nd Class Kilho Park)

