# Value 38, No. 1 Association of the publication for members of the Army Medical Department Control of the Army Medical Department

# Fight the flu

Influenza immunization campaign begins

see page 3



PVT Carey Sexton immunizes MSG Herman Welch with FluMist nasal spray at Fort Shafter, Hawaii. (Photo by SGT Angela Gilmore/USARPAC)



# Campaign aims for best behavioral health

**By LTG Eric B. Schoomaker** Surgeon General of the Army and commander of Medical Command

One of my top priorities is to ensure that Soldiers who need behavioral health care receive the same care no matter where they are assigned, based on evidence of what treatments work best.

We need a comprehensive system that focuses on wellness and pushes that capability far forward on the battlefield. We want less variance and more continuity. Soldiers and their Families move a lot. If they are acccustomed to a certain kind of service, they should find that same service available wherever they move.

We have leaders throughout Army Medicine who have innovated "silos of excellence." Now, through our Comprehensive Behavioral Health Campaign Plan, we are going to select the best and proliferate them across the entire Army.

Of course, there has to be some room for installation and regional flexibility. But we want a standardized approach, with some small variations where needed.

The "lines of effort" in this campaign plan are to standardize, synchronize, resource, assess and communicate.

The objective will be to enhance

resiliency of Soldiers and Family members, provide them tools so they can handle the stresses of deployment, maximize education, provide early intervention and prevention, maximize return to duty and provide end-to-end documentation.

The plan will include unit medics, chaplains and installation counseling resources as well as Medical Command assets. The efforts of these various groups must be synchronized to provide maximum service as units of Soldiers deploy and return from deployment.

Part of the plan is to manage strategic communications. We have to inform senior leaders, brigade commanders, battalion commanders, Family members — everyone concerned — about what we are doing. We don't want commanders each coming up with their own plans.

We have to get this plan up and running quickly, to help Soldiers and Families through redeployments. We will adjust fire as we implement, but this is not something for which we can spend a year planning and preparing. There is a need now.

We have promised compassionate care where and when it is needed. This comprehensive behavioral health campaign will help us deliver. Army Medicine: Bringing value

inspiring trust.

# Medic enjoys making a difference in Afghanistan

by SGT Anne Ripsky

They say you should never volunteer for anything in the Army, but I think it is safe to say that volunteering for this deployment was a great idea. It is not only making a difference in my life, but in the future of Afghanistan. I am not helping the pull-out of U.S. forces or anything like such in the macrocosm of war, but I am teaching our troops, Afghans and other coalition forces how to save up to 15 percent of all combat deaths prior to reaching a medical treatment facility.

We call it "care under fire" and it is covered in the classes I give daily — Tactical Combat Casualty Care (TC3).

I stress the importance of applying a tourniquet, as can be seen through the highest military ranking death of the Civil War, when General Albert Johnston died of a popliteal artery (artery behind the knee) injury. Johnston bled to death within minutes of being injured — a death a tourniquet could have very easily prevented.

Bleeding of the extremities is the number one preventable death on the battlefield and totals 9 percent (killed in action) that could have been saved. It's followed by tension pneumothorax (sucking chest wound) at 5 percent and airway complications at 1 percent. Although these rates are down significantly since the Vietnam War, they still amount to 15 percent of our preventable combat deaths.

What good is your weapon if you do not know how to fire it? It is the same with your medical supplies. What good is that first aid kit if your right arm is gone and your Improved First Aid Kit (IFAK) is on your right side? Strap an extra tourniquet to the center of your body armor and you can reach it with either arm. From my OIF experience, I saw that it was very rare to only have one extremity wound. Either it was an entire side affected or both legs, and you need to have two tourniquets not only *on* 



SGT Anne Ripsky (right) shows Jordanian soldiers how to bandage an arm. (Photo by Task Force 62 Med)

you, but readily available for self-aid.

The times of getting injured and yelling, "MEDIC!" are over. Some convoys do not even roll out with a medic and every coalition force needs to know how to apply self-aid and buddyaid during those precious seconds that matter. It can take as few as three minutes to die from a severed artery.

Although coalition forces may not have the same medical equipment we do, I teach our equipment, as well as improvised tourniquets and bandages. We spend a lot of time going over ways to slow down the bleeding if a tourniquet is not readily available, and still being able to return fire, if applicable. I teach them how to use the resources around them, using what is seemingly trash to many, but life-saving materials at times of necessity. For example, they learn how to fashion a tourniquet from the cut-off sleeve of the casualty's uniform and the plastic ring from a water bottle.

When I first started teaching I was a little fearful of whether I would be accepted as a female, teaching classes of male-only students, but by the end of the class they thank me for what I imparted to them. Of course, I will always run into a few cultural differences and gender biases, but what really matters is that we get this valuable information disseminated to the lowest level possible. What the troops need is hands-on experience, and that is what I provide. The material is not going to get through to everyone in the group if all you do is lecture. You need to practice until you are comfortable, and practice with the equipment you will have when the moment counts. We need these life-saving skills to combat against the enemy's strategies and save lives, so make every moment count. And make every life count. (Task Force 62 Med)



# The last, full measure of devotion

PFC Paul O. Cuzzupe II, 68W, 3rd-2nd Stryker Cavalry, Aug. 8, 2010

SGT Jamal M. Rhett, 68W, 1st-21st Infantry, Aug. 15, 2010

#### Mercury

Mercury is an authorized publication for members of the U.S. Army Medical Department, published under the authority of AR 360-1. Contents are not necessarily official views of, or endorsed by, the U.S. Government, Department of Defense, Department of the Army, or this command. It is published monthly using offset reproduction by the Office of the Chief of Public Affairs, Directorate of Strategic Communication, U.S. Army Medical Command, 2050 Worth Road Ste 11, Fort Sam Houston, TX 78234-6011 (Commercial 210-316-2648 or 210-221-6213 or DSN 471-6213); email jerry.harben@amedd.army. mil. Printed circulation is 23,000. Deadline is 40 days before the month of publication. Unless otherwise indicated, all photos are U.S. Army photos. Commander.... Director of Strategic Communication. Chief of Public Affairs Senior Public Affairs Supervisor...... Editor

....LTG Eric B. Schoomaker .....COL Wendy Martinson .....Cynthia Vaughan Jaime Cavazos .....Jarry Harben

# Immunization is best weapon against influenza

by Jerry Harben

Each year some 226,000 people are hospitalized with influenza (flu) in the United States, and some 36,000 die. Authorities such as the Centers for Disease Control and Prevention and the Army Surgeon General agree that the most effective way to counter this health threat is immunization.

Influenza immunization is mandatory for all military personnel and for civilian employees who provide direct patient care at military medical treatment facilities. Authorities recommend immunization for all others more than 6 months old (except people with hypersensitivity to egg products, compromised immune systems or other medical contraindications).

The Defense Department has set a goal of immunizing at least 90 percent of military personnel by Dec. 1. DoD has contracted for 4.2 million doses of influenza vaccine, enough to adequately meet its requirements. Beneficiaries can contact their local medical treatment facility to find out when and how to arrange for



immunization.

An interim rule by the TRICARE Management Activity allows network retail pharmacies to administer seasonal influenza vaccine at no cost to TRICARE enrollees.

Only one immunization is required for adults this year, as the vaccine includes protection against the H1N1 influenza strain that required a second dose last year. Last year's immunization is not effective this year, as influenza strains constantly change.

The vaccine will be available as a mist sprayed into the nose (live-virus vaccine for those ages 2-49 years) and as an injection (inactivated vaccine). Research has shown both forms to be safe and effective.

In the rare cases of severe adverse affects from influenza vaccine, the Vaccine Healthcare Centers Network can provide clinical assistance and support. Information about this network is available online at http://www.vhcinfo.org. Adverse events should be reported for monitoring to the Vaccine Adverse Event Reporting System at www.vaers.hhs.gov.

Influenza is highly contagious, spreading from person to person through coughs and sneezes, physical contact, or when the virus is picked up on the hands and transferred to the mouth, nose or eyes. The disease incubation period ranges from two to four days, thus infected people can spread the disease before they show symptoms.

Flu symptoms can include fever, cough, sore throat, runny nose, muscle or body aches, headaches and fatigue. Most people recover in a few days to two weeks, but complications can be serious, even fatal.

More information about influenza immunization is available online at www.vaccines.mil/flu and www.cdc.gov/flu/protect, or by telephone at (877) 438-8222 (8:00 am to 6:00 pm Eastern, Monday through Friday) or (866) 210-6469 (24 hours).

# Field diagnostic system adds bird flu capability

The Office of The Surgeon General has received Food and Drug Administration (FDA) clearance to bring avian influenza (Influenza A/H5) diagnostic capability to Department of Defense laboratories, and provide worldwide medical diagnostic capability to support the warfighter. This clearance adds bird flu diagnostic capability on the Joint Biological Agent Identification and Diagnostic System (JBAIDS) platform, deployed worldwide.

This adds infectious disease diagnostic capability to what previously was limited to biological warfare agents. It complements the current effort by the Chemical Biological Medical Systems Joint Project Management Office-Biosurveillance (CBMS-BSV) to integrate an FDA-cleared expanded influenza test capability on the JBAIDS instrument, ensuring an adequate diagnostic capability in the event of a bird flu (H5N1) outbreak.

The expanded influenza test capability should be completed in Fiscal Year 2011.

The Armed Forces Health Surveillance Center/Global Emerging Infections Surveillance System (AFHSC/GEIS) funded this successful development program, with collaboration between CBMS-BSV, the Centers for Disease Control and Prevention (CDC), the Army Medical Institute of Infectious Disease (USAMRIID), and the Army Medical Materiel Development Activity (USAMMDA).

The JBAIDS is a ruggedized diagnostic system. It is the only DoD biological warfare agent detection device cleared by the FDA to provide medical professionals with a means to rapidly diagnose infections in humans.

The system will detect and diagnose both bacterial and viral diseases, as well as biothreat agents. More than 300 JBAIDS systems have been fielded to all services, including deployed units around the world. (Chemical Biological Medical Systems Joint Project Management Office)

# Resource managers play key behind-the-scenes role

#### by Jerry Harben

They say it makes the world go round. They call it filthy lucre, the bread of life, the root of all evil, pocket change or a king's ransom. One thing is certain — pretty much everything you want to do will take money.

In an Army hospital, to keep the pharmacy stocked, the equipment working, the bed sheets clean, the air conditioner running — not to mention the paychecks coming — takes lots of that green stuff.

Medical Command has people charged with making sure healthcare providers have what they need to take care of patients, and that checks don't bounce. We call these people resource managers. They are seldom spotlighted, often underappreciated, but just try running a hospital without them.

"Classically we do dollars and people — manpower requirements and authorizations. We're the ones really helping to shape where and how resources are employed," said COL Marcus Cronk, director of resource management at Medical Command Headquarters. "You really can draw a thread from every episode of care back to an administrative support person that made something happen — quietly, routinely — that ended up impacting patients."

"Our major functions are to predict the resources we will need, and to secure them from either the Department of Defense or the Army," he continued. "Beyond just predicting and securing resources, we have an accountability function, which means we have to be able to explain what those resources were used for and what did they actually produce for the command. That information is used by senior leaders and others to make better decisions and better investments."

As an example, Cronk cited the Behavioral Health System of Care Campaign Plan.

"That is complex. There will be resource requirements as it is implemented. We are working from step one to make sure they have all the pieces in place. We align dollars and people as we align the performance matrix," he said.

Cronk and his staff have been recognized for excellence in what they do. They have been cited five times as "best in the Army" or "best in DoD" by the undersecretary of defense (comptroller), the assistant secretary of the Army for financial management and comptroller or the American Society of Military Comptrollers.

Not the least of their accomplishments is making all the books balance at the end of each fiscal year.

"Very little of our business is static," Cronk said. "We have to be agile enough to realign resources to meet new requirements — and, magically, on 30 September to have obligated 100 percent. It's a heroic effort to employ all those resources and support everything that has to be done. It has to match perfectly, and then you start over again on 1 October."

"Patients never notice you come to fiscal year end, nobody (notices) but us. We comply with the law and do right to be accountable for resources entrusted to us," he added.

"At the top level we make decisions about big practices, strategic moves, things that can change performance measures. Lower in the organization, RM takes the shape of the units they support. RM is part of the executive leadership team, very much involved in making sure patients are cared for by providers who have what they need," Cronk said.

"We impact the foundation of everything that goes on in the Medical Department," he concluded.

# New prosthetics improve quality of life

#### by Donna Miles

From developing a new microprocessor-controlled prosthetic leg to a non-chafing socket device, the Telemedicine and Advanced Technology Research Center at Fort Detrick, Md., is advancing prosthetic science to improve wounded warriors' quality of life.

The center reaches out to researchers at universities, hospitals, and small businesses to promote next-generation, cutting-edge prosthetic technologies.

"The objective is to help amputees and traumatically wounded service members return to the highest level of functionality that they are capable of," said Troy Turner, who manages the center's advanced prosthetics and human performance portfolio.

One of the center's biggest triumphs to date is the X2 microprocessor leg. The new "C-leg," being tested by above-the-knee amputees at Walter Reed Army Medical Center in Washington, D.C., uses a microprocessor to control the knee's hydraulic functions. This gives the wearer more flexibility to change speeds or directions without sacrificing stability.

The device enables users to walk

backward or up and down ramps, and even to swim.

"In its latest iteration, somebody would actually be able to wear it water-skiing and even surfing, because of how weatherproof and amenable it is to hostile environments," he said.

One promising program is aimed at developing a robotic ankle that will give users more flexibility to move over different types of terrain, with a motor that provides a "spring" after each step.

Other programs are tackling what Turner calls the biggest gap in prosthetic development: the socket itself.

The hard, plastic cups currently used as socket devices can be painful to wearers, chafing when the surrounding muscles swell or the wearer sweats.

"Even the best-fitting socket can be painful," Turner said.

Two promising research programs, one in Los Angeles, Calif., and one in Boston, Mass., are exploring ways to provide more comfortable sockets that use breathable or wicking materials to prevent moisture buildup.

"Both of these projects, if successful, will result in sockets that

are very nontraditional, and in some cases, don't operate or even look like traditional sockets," Turner said. Among concepts being explored is a socket that's pliable and flexible when there's no weight on it, but goes rigid to provide support when the wearer stands.

The ultimate goal is to provide comfortable, adaptable prosthetics that operate almost intuitively, recognizing what the user wants them to do and responding on cue, Turner said.

The center is exploring what Turner calls "user intent control." One approach involves putting a miniature sensor on the muscle or even injecting it directly into the muscle to pick up electrical signals and relay them directly to the prosthetic device.

Bringing together a research community can add up to big promise for wounded warriors, he said.

"If you put yours with theirs," he said, "this one-plus-one could equal three."

With a vast portfolio, and many research efforts under way simultaneously, Turner conceded that sometimes it seems "like we are going in a lot of directions."

"But the thing that binds it all

together is our mission of bringing together as much as possible whatever revolutionary concepts and technology we can — to help the warfighter achieve the highest level of functionality possible," he said.

Marine SGT Adam Kisielewski, who gave his left arm and his right leg from the knee down during an explosion at a booby-trapped school near Fallujah, Iraq, in August 2005, said he's excited about the possibilities the center is opening up for him and his fellow wounded warriors.

Kisielewski served until recently as a project officer in the center's prosthetics department, providing unique, personal insights into the projects under way.

"It's great to provide input, to be able to get the broad picture of everything that is going on [in the research arena] and to see what is going to be available in the next couple of years," he said.

"When I see some of the stuff coming out, I get really excited," Kisielewski added. "It is going to do a lot to increase the standard of living that the guys are going to have when they come back from war with really serious wounds." (American Forces Press Service)

# West Point cadets develop advanced powered foot

#### by Barb Ruppert

West Point cadets have designed, built and tested the world's first lower-leg prosthesis to achieve motorized running.



A Soldier tests the lower-leg prosthesis developed by West Point cadets. (TATRC photo)

A Special Operations Soldier who gave his lower leg in combat used the West Point-SpringActive Bionic Foot (WPBF) to run on a treadmill at 8 mph, the fastest any powered device has ever moved someone.

This computer controlled, motor-powered prosthesis generates the same push-off power and has the same joint motion as a natural foot and ankle. Current passive prosthetics have no ankle joint and rely on a spring, and thus cannot create the totally natural gait replicated by the bionic foot.

The WPBF is the only such effort focused completely on the needs of the wounded warrior. It is funded by Medical Research and Materiel Command's Telemedicine and Advanced Technology Research Center. The WPBF project is a continuing success story that is not atypical within TATRC's advanced prosthetics and human performance research portfolio, directed by Troy Turner.

"The way the WPBF is being developed — by undergraduate students — is perhaps as unique as the demands an active duty deployed warfighter would place on the foot," Turner said.

The idea's genesis was with Dr. Tom Sugar at Arizona State University as the Spring Ankle with Regenerative Kinetics, or "SPARKy," robotic ankle. Ph.D. candidate MAJ Joe Hitt was collaborating with Sugar on the project. Hitt became LTC Hitt, Ph.D., and moved to New York to teach at the U.S. Military Academy at West Point. It was there that the idea of evolving the SPARKy ankle into a prosthetic foot uniquely designed for the demands of the deployed active duty military took shape.

Eight West Point cadets each year in the

academy's civil and mechanical engineering, electrical and computer science, and behavioral science and leadership departments have worked on the foot with Hitt since 2008. Cadets have gained much from this opportunity. One former team member has gone on to Yale Medical School and one is now a Rhodes Scholar.

"Others are doing great work out there with motor-powered prosthetics for better walking --but they're building a sedan for the mass market, and we're here to build a Humvee," Hitt said.

TATRC has supported the project since 2006 through the Army Medical Department's Advanced Medical Technology Initiative. The WPBF is also supported by the Army Research Lab, Walter Reed Army Medical Center and Brooke Army Medical Center.

"When I talk to the severely wounded service members in rehabilitation here, the one thing they all want to do is to be able to run again," said LTC Rachel Evans, research director for the Center for the Intrepid at Brooke. "It's such an integral part of military culture. Being able to run with the bionic foot will make a wounded warrior feel like a real warfighter again.<sup>2</sup>

This fall's team of cadets, led by West Point faculty member MAJ J.J. Johnson, will work on phase three of the device, which will enable running on any terrain. The ultimate goal is to develop a robust walk-run, all terrain, all weather, silent device that requires one battery charge per day.

"By April 2011, we plan to prove the device will support a soldier taking the Army Physical Fitness Test," Hitt said.

Hitt says the device could be Soldier-ready by 2012. (TATRC)



#### USAMRICD

The Army Medical Research Institute of Chemical Defense will conduct a three-day Chemical, Biological, Radiological and Nuclear Course at the annual meeting of the Association of Military Surgeons of the United States on Nov. 2-4. The course addresses the management of specific types of CBRN incidents with respect to a hospital environment. Continuing education credits are available. Registration is at https://ccc.apgea.army.mil/course/ In\_house/amsus\_Reg\_form.pdf

#### Iraq

The combat stress clinic on Contingency Operating Base Basra has been renovated, now providing thicker walls for privacy, air conditioning, new flooring and new paint. Services at the clinic include smoking cessation classes, sleep hygiene and individual counseling. \*\*\*\*\*

Representatives of non-governmental organizations, the Basra Provincial Reconstruction Team and

#### U.S. Division-South held a two-day conference to discuss health-care issues in southern Iraq. According to Dr. Sami Al-Saedi, a development and humanitarian support officer with the United Nations, health threats such as cholera, influenza, leishmaniasis, malaria and tuberculosis are prevalent in southern Iraq. More doctors and more clinics are needed.

"We believe that health care from a civil capacity perspective — is a way to make the country stable and give the people a better way of life," said MAJ Reginald Hughes, public health physician with the 486th Civil Affairs Battalion.

#### Brooke

Patients at Brooke Army Medical Center no longer have to cruise the construction zones near the hospital searching for a rare unobstructed parking space. Now they can pull up to the medical mall door, hand keys to a valet, and go on to their appointment. Some 450-600 patients a week are being served. "We expect to eliminate a major stressor associated with clinic appointments at BAMC," said BG Joseph Caravalho Jr., commander of the Southern Regional Medical Command.

#### \*\*\*\*

Patients at Brooke have an easy way to register their opinions on the service they receive, using 30 automated kiosks throughout the hospital. Issues reported are researched by the department involved and responses are passed to the patients by telephone, mail or email.

"Another great benefit of using the kiosks is you can make your own appointments by using TRI-CARE Online — which can save time — provide DEERS updates, get information about BAMC services and see the BAMC directory, all in one place," said MAJ Jeffery Blackwell, chief of the department of health care operations.

#### USAARL

During a farewell luncheon for SFC Tamekia Carter of the Army Aeromedical Research Laboratory, the restaurant manager suffered cardiac arrest and Carter, SFC George Spann, SSG Eduardo Alegria and SGT David Allen responded with immediate treatment. They performed 8 minutes of cardiopulmonary resuscitation and used an automated defibrillator to restore the man's heart beat and breathing. Then they turned the patient over to emergency medical personnel.

#### Fort Leavenworth

Just days after COL John McHugh was killed by a terrorist's bomb in Afghanistan, SPC Bradley Benham of Fort Leavenworth MEDDAC found the colonel's identification tag in the field in front of the post fitness center. He had a plaque made including the tag and a Munson Army Health Center coin, and delivered it to McHugh's Family.

"The important thing is the Army Family," said Benham. "We have to take care of Soldiers and their Families — they are all our Family."



#### Hot shot

SPC Dionne Brown from Tripler Army Medical Center launches the game-winning shot in the All Army Women's Basketball Team's 56-53 victory over All Navy, giving Army first place in the Armed Forces Basketball Championships.

Brown played college ball at Texas Tech and Baylor, and a season with the Seattle Storm of the Women's National Basketball Association.

"That shot right there is worth every 20-point game I've had in my life," she said.

Army lost its first two games, then came back with four victories for the championship. (Photo by Tim Hipps/Family and Morale, Welfare and Recreation Command)



#### Centennial Jamboree

SPC Sarah Hodges stands ready to provide medical assistance at the 100th Anniversary Jamboree of the Boy Scouts of America, held at Fort A.P. Hill,Va. The event drew thousands of Scouts from around the nation and 28 other countries.

Military medics worked with emergency medical service personnel, volunteers and the A.P. Hill fire department to staff 21 medical centers throughout the camp, and provide bikers and walkers on patrol addressing all medical needs.

"It's more exciting than I thought it was going to be," commented SSG Latasha Kinnes of the 690th Medical Company. (Photo by PFC Sharmain Burch/JTF-National Scout Jamboree)



SGT David W. Rider has been selected NCO of the Year for the Army Reserve, while SPC Joshua McDowell is Soldier of the Year. Both are health-care specialists, Rider with the 256th Combat Support Hospital and McDowell with the 7246th Installation Medical Support Unit. They will represent the Reserve in Army Best Warrior Competition this month...Rex Deloach, a Red Cross volunteer at Tuttle Army Health Clinic, received the Marne Spirit Award presented by the 3rd Infantry Division.

Approximately 104 Air Force brigadier generals and Senior Executive Service officials visited Brooke Army Medical Center, the Institute of Surgical Research burn center and the Center for the Intrepid to learn more about care for wounded warriors...The Council on Social Work Education has released a set of educational guidelines specifying the knowledge and skills that social work practitioners need to serve military personnel, veterans and their Families. The guidelines are at http://www.cswe.org/File. aspx?id=42466 ...Caitlyn R. Webb, 14-year-old daughter of COL Craig R. Webb, chief of primary care and community medicine at Fort Riley MEDDAC, won the Kansas state title in the National American Miss Junior Teen pageant.

The 4th Battalion, 10th Infantry Regiment created a medical simulation training facility to teach first aid to Basic Combat Training Soldiers at **Fort Jackson**. The six-room facility is equipped with interactive mannequin "patients", smoke and noise generators, and HUMVEEs from which casualties must be extracted. A medic observes each training room and conducts after-action reviews.

# 6 October 2010 http://www.armymedicine.army.mil New clinics bring health care to Families

#### by Jerry Harben

Active-duty Family members who live near some Army installations soon will have an additional option for health care, without traffic, waiting time, expense and frustration that may sometimes be involved with going to on-post medical facilities or TRICARE network providers.

Medical Command plans to open communitybased primary-care clinics close to where beneficiaries live. Current plans call for 16 clinics near 11 installations: Forts Bragg, N.C.; Hood, Texas; Campbell, Ky.; Jackson, S.C.; Leonard Wood, Mo.; Lewis, Wash.; Sam Houston, Texas; Sill, Okla.; Shafter, Hawaii; Stewart, Ga.; and Benning, Ga.

Twelve clinics are expected to open for patient care between early November and late January, with the remainder later in 2011. If the concept proves beneficial, clinics may be added at other locations in the future.

The clinics will be in leased space with civilian employee staffing. They will be an expansion of available care, not a shifting of care from the post hospital.

#### Many improvements

"We expect to improve access, reduce emergency room visits, improve patient and provider satisfaction, and improve the quality of care both on and off post," said COL Marcus Cronk, deputy chief of staff for resource management for Medical Command.

"This effort will improve the readiness of our Army," he added.



Each clinic will be able to enroll more than 8,000 active-duty Family members.

"Beneficiaries who are enrolled in TRICARE Prime won't have to reenroll, just say they want to get care at that clinic. It is totally their option, they can still get care at the post medical treatment facility, or can go to a TRICARE network provider," said MAJ Chad Rodarmer, who is working on the project in Medical Command's directorate of resource management.

Rodarmer said the clinics will provide pharmacy and laboratory services focused on a primary-care setting. Obstetrics/gynecology and pediatric services may be provided when needed, with a specialist from the installation's medical treatment facility coming to the off-post clinic. "We're trying to keep things convenient for

the patient," Rodarmer said.

Some building leases have been signed and

equipment ordered. Staffers are being hired. An operations manual has been drafted.

Rodarmer said these clinics will be part of the Army direct-care system, an extension of the medical treatment facility on the installation. One advantage is that when a family transfers to another post, electronic medical records will be forwarded to the facility at the new assignment, facilitating continuity of care through the move.

#### **Medical home**

The community-based clinics will employ a patient-centered medical home model of health care.

"The concept emphasizes continuity of care and a culture of trust through developing a strong patient-provider relationship," Rodarmer said.

According to a DoD memo about the medical home model, patients have primary-care managers (PCM) who may be physicians or other licensed health-care professionals, who serve as beneficiaries' first contact with the health-care system. PCMs may refer patients for specialized care when needed, while providing ongoing continuity and coordination.

Rodarmer explained that patients will be considered integral parts of the health-care team, rather than passive recipients of care. The model depends on patients and providers being proactive in developing and ensuring compliance with the treatment plan, and in communicating with other members of the team.

"We want a person to feel this is his or her personal health-care team," he said.

### Sharing agreement improves many services Eisenhower reaps benefits from VA partnerships

#### by Kathleen Haskell

Eisenhower Army Medical Center partners with many medical facilities near Fort Gordon, Ga., to provide excellent health care for Department of Defense beneficiaries. The sharing agreement with Charlie Norwood Veterans Affairs Medical Center is a huge cornerstone in providing access to world-class health care for wounded warriors as well as other patients needing specialized care.

The VA sharing agreement includes cardiology, cardiothoracic surgery, mammography, neurosurgery, wounded warrior physical rehabilitation, gastroenterology, lab services, obstetrics/gynecology, blood products and medical/surgical bed space.

#### Surgery goal

In August 2009, representatives from the Veterans Integrated Services Network 7 and Eisenhower set a benchmark of 100 cardiothoracic surgeries to be performed by Eisenhower's cardiology/cardiothoracic surgery clinic in the upcoming year.

Due to the successful VA outreach and a new partnership with Carl Vinson Veterans Affairs Medical Center in Dublin, Ga., Eisenhower exceeded the benchmark by performing the 101st successful cardiothoracic surgery on August 9.

"We have finally reached triple digits for the first time since 1993, and with half the staffing. This has significant impact on keeping the surgeons proficient in the field of cardiothoracic surgery as well as continuing to support the Graduate Medical Program at Eisenhower," stated LTC Dominic Gallo, chief of cardiothoracic surgery.

#### **Benefits**

"Sharing agreements between Eisenhower and the VA are beneficial to everyone", said Keith Sickafoose, chief of managed care. "Not only is the best treatment readily accessible to our patients, but we save the taxpayer money by relying on the strengths of both organizations in providing comprehensive and compassionate health care. The VA has saved nearly \$3.3 million this past year alone by using our cardiology and cardiothoracic surgery services."

The Master Sharing Agreement between Eisenhower and Charlie Norwood VA is used for short term sharing of services not to exceed 90 days while formal agreements are developed and approved. In cases where sharing requirements are short term only (90 days or less) the MSA serves as the only authority required. The MSA outlines important procedures for determining patient eligibility, registration, pharmacy benefits, billing procedures, etc.

#### Gastroenterology

In another agreement, Charlie Norwood VA provides required support for endoscopic retrograde cholangiopancreatographys (ERCP) for DoD and VA beneficiaries. This is a training agreement to enhance the skills of Eisenhower gastroenterology providers and support staff. ERCP is a technique to diagnose and treat certain problems of the bile ducts or pancreatic duct systems. Through the endoscope, the doctor can see the inside of the stomach and small intestine, and inject dyes into the ducts so they can be seen on X-rays. Once fully trained, Eisenhower staff will perform future ERCPs at Eisenhower.

A Memorandum of Agreement for laboratory services between Eisenhower and Charlie Norwood VA provides the terms, conditions, and responsibilities of each party to support laboratory services.

Under the terms of the OB/GYN

services agreement, Eisenhower provides obstetrical and gynecological services to women veterans. OB patients are followed by Eisenhower providers throughout their pregnancies and deliver at Trinity Hospital in Augusta, Ga. All other Eisenhower OB patients also deliver their children at Trinity through a direct contract with that facility.

#### Extra beds

Eisenhower and Charlie Norwood VA provide inpatient intensive care beds, monitored beds, and medical/surgical beds to their partner facility during times of high census or low capacity. Billing for these services is based on current DoD/VA guidelines.

Another agreement allows for Eisenhower to provide units of packed red blood cells to the Atlanta VA. Eisenhower is reimbursed for each unit based on a negotiated rate between the two facilities.

As the regional hub for the south, Eisenhower is reaching out to other military treatment facilities. Satisfaction surveys show 93 percent of Eisenhower's patients are very happy with the care received, according to the Office of the Surgeon General. (Eisenhower)

#### The Mercury 7 October 2010

# TATRC leads efforts to move supplies quickly, efficiently

#### by Lori DeBarnardis

Knowing that having the right supplies and equipment at hand can mean the difference between life and death, logistics technology developers are making their technologies compatible for improved ordering, shipping, tracking and organizing of medical supplies needed for field operations.

"The value of these projects together is far more than the sum of the parts," said John De-Pasquale, medical logistics portfolio manager for the Army Telemedicine and Advanced Technology Research Center. "What we're doing here could make logistics more efficient and revolutionize it worldwide."

DePasquale said these new products could be in widespread use within a year.

In a new future for medical logistics, military medical specialists will have rugged, standardized containers that fit together in modules to organize supplies—"just grab the pieces you want without unpacking everything."

All items will be tagged using smart technology so containers and the equipment inside them can be accounted for and tracked to ensure they have made the journey safely. Modules that have everything for each mission — say, pediatric supplies for civilians, IVs for critically wounded warriors, or the portable logistics system to set up a hospital — will be tagged, packed and ready to be deployed where needed.

Standard shipping and storage containers are being designed to fit neatly into modular, stackable groups. Sixteen JMIC containers developed by the Navy fit perfectly into a 20-foot ISO shipping container with no wasted space.

Another variation, Triton Systems' JMIC UltraLight<sup>™</sup>, is made of a composite material much lighter yet more durable than the original aluminum and offers the added advantage of significant fuel savings. It is being adapted for medical field use at TATRC's request.

"We saw that the container would make for safer, more efficient shipping of medical supplies. This is a great leap forward from the wooden and cardboard boxes that we used to use," DePasquale said.

A smart JMIC UltraLight will be wired to



Six plastic medical chests fit in the JMIC Ultralight. (Photo by Triton Systems)



The InfinID Technologies V-Tag System.

monitor location and whether the container has been tampered with, exposed to extreme environmental conditions or simply had its contents emptied, thus indicating the need for replacement shipments.

Within the standardized JMICs will soon be standardized medical chests. The military is converting from aluminum to Pelican-Hardigg's more rugged plastic chest.

The chests have been designed with grooves and anchors so they can be cross-stacked and used as printer stands or desks in the field. They include recessed areas for securely attaching smart tags. DePasquale notes that the company is working with VerdaSee to develop a smart chest with sense and respond capability to automatically monitor and report when a medic has removed items.

TATRC-managed grants have supported the development of two types of RFID, or radiofrequency identification, "smart tags." These meet military requirements for a secure, low-cost method to track and monitor the condition of medical supply items.

VerdaSee Solutions' mobile logistics system for austere environments addresses the need to communicate supply information accurately back and forth from command centers to far-forward locations throughout the globe.

In a black box the size of a toolbox are two handheld scanners that can read everything from barcodes to the latest RFID tags; a mesh network that allows the scanners to communicate wirelessly; a laptop server with programs that enable multiple users to keep track of incoming and outgoing supplies; and an optional satellite receiver and solar panel for operations in any environment. Set up the Intelli-Flex<sup>™</sup> shelves that read smart tags and the collapsible aluminum doorframe that reads all tagged items entering the medic tent, and there it is — a medical supply system in a box.

The system's scanner can read a wide variety of input, taking the place of what would usually take three or four different scanners.

The server software can create a floor plan of a tent or an airfield, linked to a spreadsheet that shows the inventory on each shelf or zone of the area. The operator can see exactly how much space is left for additional shipments, and can color code the inventory, by expiration date, for example, to know which supplies to use first.

"Smart logistics are critical in providing the best and most efficient care to the warfighter. TATRC is proud to bring forward new approaches and technologies that have such an important practical impact in this time of difficult and distant delivery systems and supplies," said TATRIC Chief Scientist Dr. Charles Peterson.

More information is available at depasquale@ tatrc.org. (TATRC)

### Standard equipment in theater helps repair specialists

#### by MAJ Raymond Spiak

Medical equipment standardization is the process by which the Department of Defense achieves the closest practicable cooperation among the services and defense logistical agencies to control the types and models of equipment in Afghanistan. This process focuses the training of Army biomedical equipment specialists and reduces the volume of repair parts. This ensures that health-care providers have the equipment they need and leads to better clinical outcomes for Soldiers.

There are three dimensions of medical equipment standardization:

#### 1. Focuses the training of Army biomedical equipment specialists.

Army biomedical equipment specialists (MOS 68A) receive 10 months of intensive training through the AMEDD Center and School at the Biomedical Equipment Technician Training School. It is impossible to train them on every model of equipment in this time.

Currently there are five different types of anesthesia machines in Afghanistan. Each model is unique and requires different training. The current initiative is to move to one type of machine. Reducing the number of anesthesia machine models will aid biomedical equipment specialists in calibrating, certifying, repairing and technical inspecting.

#### 2. Reduces the volume of repair parts.

Medical equipment standardization reduces the number of repair parts that are stored, stocked and ordered. Space is a limited resource at every level in the supply chain in Afghanistan, from the MEDLOG warehouse to the forward distribution team on a remote outpost. Standardization allows medical maintenance professionals to determine what parts to stock and reduces shipping time.

In the example of the anesthesia machine, keeping the two or three components that routinely need replacement on hand can greatly reduce shipping time. Trying to do this for five or more models becomes more difficult.

### 3. Improving the ability of the Army to repair equipment for forward medical units.

Forward repair is the best way to support health-care providers in Afghanistan. Remote locations require biomedical equipment specialists to travel from the MEDLOG warehouse or forward distribution team to the customer. With a standardized part stock, the biomedical equipment specialists can grab what they need and move out to the customer. The alternative is to bring equipment from the forward medical unit to the MEDLOG warehouse or forward distribution team.

In summary, medical equipment standardization ensures the right repair parts are in the hands of properly trained biomedical equipment specialists to support health-care professionals. Moving maintenance support closer to forward medical units leads to better health care for the war fighter. (Task Force 62 Med) http://www.armymedicine.army.mil

# Research disproves running shoe myth

#### by Lyn Kukral

If you want to minimize your chance of injury while running, you choose a shoe based on your foot shape, right?

Wrong.

Results of three military studies showed that prescribing shoes based on foot shape made no difference in the rate at which injuries occurred in Army, Marine and Air Force basic trainees, who spend quite a bit of time running. That's "no" as in none, sports fans.

"We found no scientific basis for choosing running shoes based on foot type," said Dr. Bruce Jones, injury prevention program manager at Public Health Command (Provisional). "Our findings have surprised not just military decision-makers, many of whom run to stay fit, but runners in general."

Popular running and sports medicine literature recommends that people with high arches should choose cushioning shoes, those with normal arches should choose stability shoes, and those with flat feet should choose motion-control shoes, Jones explained. The literature says that such shoes will compensate for the way these foot types strike the ground during running and lessen injuries to the legs and feet. "This seemed to many of us to make sense," said Jones, a longdistance runner for many years. "But when we looked at it in multiple, scientific studies, it turned out to be a sports myth."

Jones and his colleagues were asked by the Department of Defense to test whether basic trainees suffered fewer injuries if shoes were matched to foot type in the way the literature suggested.

Experts led by Dr. Joseph Knapik looked at more than 9,000 pairs of feet, manually measuring arch height as well as taking foot imprints. In the most recent study of Marine recruits, 1,400 men and women were divided into two groups at random, with one group receiving shoes matched to their foot types and the other group (the control group) receiving stability shoes.

Like their Army and Air Force counterparts from two previous studies, the recruits with shoes prescribed according to foot type experienced the same rate of injuries as those in the control group, regardless of other demographics like age, sex, race and smoking habits (other USAPHC (Prov) studies have linked smoking to higher injury rates in basic training). The military services are keenly interested in preventing injuries from running, and for good reason.

"Injuries are the leading health problem in the U.S. military, resulting in about two million visits to medical treatment facilities a year," Jones said. "Of those, more than 50 percent are lower-extremity injuries caused by weight-bearing training, and the biggest culprit is running."

In addition to the pain and disruption the service member suffers, such injuries mean duty time lost to recovery, which in turn affects unit readiness.

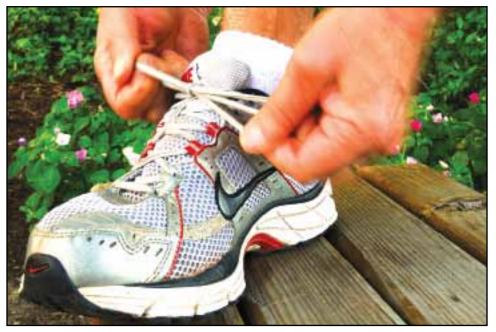
Some medical experts argue

that static foot morphology (what Jones and colleagues looked at in their studies) is less predictive of injuries than studying the foot in motion, but so far that theory has not been put to the scientific test. In the meantime, what's a run-

In the meantime, what's a runner to do?

"You can't simply look at foot type as a basis for choosing running shoes if you want to prevent injuries," Jones advised. "You should choose a shoe that you like and that feels comfortable."

In other words, if the shoe fits (comfortably) — wear it. (Public Health Command (Provisional))



# Laws give breastfeeding rights to mothers nursing in public places

#### by Linda Turner

Despite the fact that in today's world we like to think of ourselves as culturally and socially advanced, taboos from the past linger. As Jim Croce once sang, "You don't tug on Superman's cape, you don't spit into the wind, and you don't pull the mask off the old Lone Ranger."

And, apparently, if you are a nursing mother, you should breastfeed your baby in the restroom or the privacy of your car or home ... anywhere but in public.

Lately, the news has been filled with stories of women who chose to do otherwise and paid the price. Nursing mothers have been accused of violating decency laws and told to cover their babies and themselves. Those who refused were ordered to leave and instructed not to come back. In one instance, a woman and her child were thrown off a bus. In Colorado, a woman who was breastfeeding her child in a local mall was told to "wrap it up."

During National Breastfeeding Week, August 1-7, 2010, a woman was discreetly feeding her baby in a courtroom in Crawford County, Arkansas, when she was confronted by a bailiff and ordered to leave a courtroom. The judge described the bailiff's actions as "appropriate."

One has to wonder if the judge was aware of the fact that Arkansas law allows a woman to breastfeed in a public place or any other place where people are present. In fact, every state in the union now has laws that allow breastfeeding in public. Generally, state laws take one of two forms. They either shield breastfeeding mothers from indecent exposure and obscenity laws or, through strong civil statutes, protect a woman's right to breastfeed her baby whenever and wherever she chooses.

Recent changes in federal law also extend rights to nursing mothers in the workplace. Section 4207 of the Patient Protection and Affordable Care Act, which was signed into law by President Obama in March 2010, requires employers to provide "reasonable break time" and a "private, non-bathroom place for nursing mothers to express breast milk during the workday." Furthermore, employers are required to continue to provide such services for the first year of a child's life. Employers with less than fifty employees, however, are exempt from such requirements if they create an undue hardship.

Whether public breastfeeding is a constitutional right has yet to be determined because no case has reached the Supreme Court, but the benefits of breastfeeding for both mother and child are well documented. Consequently, any law that protects the rights of nursing mothers also affects the health and development of society as a whole.

For more information on breastfeeding laws in the United States, visit http://www.ncsl.org/ default.aspx?tabid=14389 (MEDCOM office of the staff judge advocate) Red Ribbon Week aims for drug-free communities DoD supports anti-drug message Oct. 23-31

The nation's oldest and largest drug prevention program encourages all to live a drug-free life and pays tribute to Drug Enforcement Administration agent Enrique "Kiki" Camarena, murdered by drug traffickers in 1985. An estimated 80 million people participate in Red Ribbon events each year. The campaign is a unified way for communities to take a stand against drugs and show intolerance for illicit drug use and the consequences to all Americans.

The many ways to celebrate Red Ribbon Week include: sponsoring essay and poster contests; organizing drug-free races; decorating buildings in red; handing out red ribbons to customers; holding parades or community events; and by publicizing the value of a drug-free, healthy lifestyle.

# The Mercury 9 October 2010 Medics struggled in first Korean War battle

#### by Andy Watson

Sixty years ago the Korean War began when North Korean Forces crossed the 38th parallel and invaded South Korea on June 25, 1950. The ensuing conflict transformed the military and altered the use of medical personnel. Soldiers of the Korean War often demonstrated innovation and courage that were needed to prevail in combat marked by intense fighting and ever-changing lines.

In order to commemorate the Korean War, and in recognition of the achievements of its veterans, the Medical History Office will publish a series of articles in conjunction with exhibits at the AMEDD Museum, and other programs. The commemoration is scheduled from 2010 through 2013. The intent is to continue documentation of the war as well as to convey its history.



Many current operational successes have origins in the Korean War. Unfortunately, there were also many hard lessons learned. As remote battles unfolded, newer methods of evacuation and care were developed, most notably with the use of helicopters.

One of the first actions between U.S. and North Korean Forces took place near Osan, South Korea. During the battle, Soldiers from Task Force Smith (21st Infantry Regiment, 24th Division) were overwhelmed by a larger North Korean force equipped with tanks. Considered a demonstration of American resolve to halt the forces of North Korea, the battle soon devolved into a delaying action.

Three accounts of medical personnel from Task Force Smith and the Battle of Osan are available online at the Office of Medical His-



tory's website: http://history.amedd. army.mil/books.html. COL (then CPT) Edwin L. Overholt, the task force surgeon, COL (then 1LT) Raymond E. "Bodie" Adams, assistant battalion surgeon, and SFC (then SGT) Ezra "Phil" Burke, NCOIC of Task Force Smith's medical platoon, describe their experiences.



SFC Ezra Burke

#### Excerpts:

"First aid was rendered, splint the part, stop the bleeding, and give the patient reassurance, morphine if indicated, appropriate tags, etc. These simple procedures were difficult because of three factors: (1) We were out in the rain. Tape would not stick so all bandages had to be tied on. (2) Several rounds landed in our area and often scattered the corpsmen into their foxholes. (3) General confusion. This was their first combat!" - Overholt

"In getting off the hill, we took off in several directions and thus had a tendency to keep the enemy dispersed. All the vehicles had been destroyed in action and the Reds held road to the South. There was no question that we were cut off and would have to get out on foot, up to a point this was good. It kept the enemy scattered, and guessing where we were." - Adams

"It was raining and at approximately 0900 hours, we started receiving casualties. After a short time, we received one seriously wounded man with a sucking chest wound and he was losing a lot of blood. We tried to seal the chest wound and gave him plasma." ----Burke

For other great information please also visit the office of medical history at: http://history.amedd. army.mil/. (Office of medical history)

COL Edwin L. Overholt



COL Raymond E. Adams

# Rules define how medical facilities are named

#### by MAJ Ken Koyle

Madigan. Bayne-Jones. DeWitt. The names of our Army hospitals, clinics and other medical facilities are quite familiar to medical personnel. But where did these names originate? How were these eponyms attached to their medical facilities?

MEDCOM Reg 1-3 governs memorializations

The memorialization program of the Army Medical Department (AMEDD), administered by the office of medical history under MEDCOM's directorate of strategic communication, provides the means by which AMEDD facilities are named in memory of deceased AMEDD personnel who "served with valor or distinction." The program is governed by MEDCOM Regulation 1-3, The U.S. Army Medical Command Memorial Program, which provides The Surgeon General's guidance for implementation of AR 1-33, the Army Memorial Program.

When a unit or installation wants to name a medical facility after a deceased member of the medical department, the local commander starts the process by submitting a request through the chain of command to the MEDCOM commander. The office of medical history receives the request and prepares a memorialization packet for consideration by the AMEDD Memorialization Board. The board members submit their input to the office of medical history, which compiles all of the comments and forwards the board's recommendation to the MEDCOM commander.

In most cases, the MEDCOM commander is the decision authority for AMEDD memorialization requests. The office of medical history notifies the requesting unit as soon as the MEDCOM commander has issued a decision on the request. If the request is approved, the unit is then free to conduct an appropriate ceremony to name the facility.

There are a few cases wherein the approval decision lies with someone other than the MED-COM commander. If the person being memorialized is a former U.S. president, Army chief of staff, or general of the Army, the request requires the approval of the assistant secretary of the Army for manpower and reserve affairs. If the request is to memorialize a deceased Medal of Honor recipient, the commander of Army Human Resources Command is the approving authority. These rules are intended to prevent the confusion that could result from naming multiple medical and non-medical facilities after the same prominent individuals.

If the request is for an AMEDD facility in a foreign country it must be approved by the American Battle Monuments Commission, which has statutory control over all memorials to the U.S. Armed Forces overseas.

In addition to outlining the memorialization process, MEDCOM Reg 1-3 provides some guidance regarding who should be memorialized. For example, facilities should be named for someone who held a rank comparable to their main users.

It is also preferable to name facilities after someone with a geographic tie to the installation, as opposed to a unit affiliation, because units can shift from base to base. If a clinic at Fort Carson, Colo., was named for a medic from the 3rd Armored Cavalry Regiment, and subsequently the 3rd ACR moved from Fort Carson to a different installation, the name might seem irrelevant to future Fort Carson units. If the same clinic was named for a medic who grew up in Colorado Springs, the name would be appropriate regardless of which unit occupied it.

Finally, it is important to remember that the memorialization program is intended to honor deceased AMEDD personnel, not those who are still living. Although it is possible under rare circumstances to obtain Secretary of the Army approval to memorialize a living person, such actions are very unusual and do not fit the purpose of the program as defined in MEDCOM Reg 1-3.

To learn more about the memorialization program or any other aspect of AMEDD history, visit the office of medical history Website at http://history.amedd.army.mil. (Office of medical history)

# New awards recognize good work in preventive medicine

#### Public health experts meet in annual Force Health Protection conference

#### by Jane Gervasoni

A new noncommissioned officer award and four other Excellence in Preventive Medicine awards were presented at the 13th Annual Force Health Protection Conference in Phoenix, Ariz. BG Timothy K. Adams, The Surgeon General's functional proponent for preventive medicine and commander of Public Health Command (Provisional), honored each award winner with a special trophy during the ceremony.

#### **Exemplary contributions**

The five multi-disciplinary, individual and unit awards are made in recognition of exemplary contributions to the Army mission of providing preventive medicine, public health, and health promotion and wellness leadership and services.

"SFC Stacey Love's leadership, professionalism and technical expertise directly contributed to the prevention of disease and non-battle injuries among DoD, coalition and Iraqi security forces during the delicate, responsible drawdown of forces," according to CPT Owen Price, commander of the 223rd Medical Detachment, in his nomination of Love for the first preventive medicine NCO excellence award.

Members of the 223rd Medical Detachment also received the deployed unit award for their levels II and III preventive medicine support to U.S. and coalition forces throughout their area of operations. COL Michael L. Place, commander of the 10th Combat Support Hospital, commended the unit's commitment to excellence as shown by its achievements and remarkable professionalism.

The deployed individual award was presented to SPC Carlos A. Warfield for his work as a

Officers and NCOs recognized

preventive medicine specialist with the 701st Brigade Support Battalion. Warfield performed duties far beyond his primary responsibilities, pay grade and experience to support the health of his fellow Soldiers, according to 2LT Robert D. White, brigade environmental science officer.

LTC Michael Bell was awarded the garrison individual award for his leadership of the Behavioral and Social Health Outcomes Program at Public Health Command (Prov). Exceeding the original parameters of the new program, Bell led his team and senior Army leaders to better understand the risk factors associated with suicide and other violent behaviors, explained LTC Steven Cersovsky, head of PHC's epidemiology and disease surveillance directorate, who nominated Bell for the award.

The final award for the garrison unit was presented to the PHC Military Injury Prevention Consultation Team for production of a supplement to *American Journal of Preventive Medicine* titled, "A Public Health Approach to Injury Prevention: The U.S. Military Experience." The nine-member team led by Michelle Canham-Chervak, epidemiologist, and Bruce Jones, Injury Prevention Program manager, used U.S. military examples to provide a systematic, evidence-based approach to prioritizing and preventing injuries.

#### **Big conference**

More than 2,300 public health professionals attended the conference. Hosted by the Army Public Health Command (Provisional), the conference focuses on education and networking for Department of Defense personnel. This year's conference included a record 700 sessions, most with continuing education credits, and 300 exhibits.

Next year's Force Health Protection Conference will be March 18-25, 2011, at the Hampton Roads Convention Center, Hampton, Va. Details are at http://phc.amedd.army.mil/FHPC/ (Public Health Command (Provisional))

## Veterinary leaders earn awards

#### by Jerry Harben

The Veterinary Corps honored some of its outstanding people during the Force Health Protection Conference in Phoenix, Ariz.

LTC Donald Beckett was awarded the LTC Daniel Holland Leadership award. This award is presented to one VC major or lieutenant colonel who has made significant contributions in leadership. Beckett is veterinary Reserve Component operations officer as well as commander of the Gulf Coast District Veterinary Command. He has deployed three times to Kuwait or Afghanistan.

"LTC Beckett has worked tirelessly to strengthen the bond between the Active and Reserve Components of the US Army Veterinary Corps," according to his award citation.

The COL Cliff L. Walker Leadership award recognizes junior and senior noncommissioned officers who demonstrate outstanding leadership through care and concern for Soldier, Family and mission. It was presented to SFC Jimmy S. Howard, operations NCO for the Gulf Coast District Veterinary Command, and SSG Michael D. Marney, an animal-care specialist at Fort Belvoir, Va.

CW2 Vicente Silvestre received the Veterinary Corps Food Safety Officer Exceptional Service Award. Among his accomplishments were primary instructor for the Europe Region Veterinary Command's 2009 Pasteurized Milk Ordinance training course in Denmark, helping revise VETCOM Circular 40-1, and assisting with training of the 43rd Medical Detachment (VS).

CPT Jennifer Scruggs, assigned to Anderson Air Force Base on Guam, was awarded the Veterinary Corps Officer Exceptional Service Award. She was officer in charge of two veterinary service support squads of the 64th Medical Detachment (VS) in Iraq, providing care to 110 military working dogs and food inspection support to 23 facilities serving 61,000 Coalition forces and detainees. She trained combat support hospital personnel and Iraqi police in care for working dogs.

# Eisenhower staffers cited for infection control success

The present and past chiefs of infection control at Eisenhower Army Medical Center, Fort Gordon, Ga., are among the 12 recipients of the 2010 "Heroes of Infection Prevention" Award, presented by the Association for Professionals in Infection Control and Epidemiology to people who have worked tirelessly to prevent infections and improve patient safety.

Mary Buchanan and Ted Newton implemented many initiatives to cut infection rates. Buchanan (now retired) and Newton developed two process system improvements that significantly improved patient safety, despite a high staff turnover due to deployments.

The first initiative reduced hospital-acquired *Clostridium difficile* (bacteria that cause diarrhea and other intestinal disease when competing bacteria are wiped out by antibiotics) from a 2007 rate of 8.2 per 10,000 patient bed days to a 2008 rate of 6.6. This was achieved by changing the notification process for patients screened for *C. diff* toxins and ensuring patients remained on contact precautions until negative test results were received, posting reminder signs in rooms of patients with suspected or confirmed cases, requiring staff to wash their hands at the sink before leaving the patient's room and cleaning rooms with bleach.

The second undertaking reduced hospitalacquired MRSA from 3.1 cases per 1,000 admissions in 2007 to 1.7 in 2008, and cut hospital-acquired VRE (antibiotic resistant bacteria) from 0.2 cases per 1,000 admissions in 2007 to 0.1 the following year. A hand hygiene campaign raised compliance from 60 percent to 90 percent. The department conducted research to determine which patients had a history of MRSA or VRE, and had not been cleared under precautions. They provided this information to unit managers and physicians daily, to ensure these patients were placed on precautions until they were cleared by culture.

A switch to an antiseptic prep product for skin site insertions and in the cardiac catheter lab and operating room — along with integration of blood culture technique training into nurse orientation procedures — reduced the blood culture contamination rate from 2.7 percent to 1.6 percent between 2007 and 2008.

"We had a relatively low rate to begin with," said Buchanan, "but we wanted to take it down as close to zero as we could get it."

They also reduced sharp object injuries from 4 per 10,000 bed days in inpatient units to 2, from 2.6 per 1,000 cases in the operating room to 1.4, and from 1.4 per 10,000 phlebotomy procedures to 0.3 by replacing an outdated type of needle, implementing a sharps safety instruction block for nurse orientation and increasing communication to all staff.

Newton assumed the position as chief of infection control at Eisenhower after Buchanan's retirement in August 2009. (Association for Professionals in Infection Control and Epidemiology)

#### by Jennifer Clampet

Barbara Smith says she never really feared for her life.

The earthquake, the nearby explosions, the armed security everywhere she went — it wasn't the average experience for an occupational health nurse.

"But that's what I did the training for," said Smith, a civilian employee who spent six months in northern Afghanistan as occupational health nurse for the U.S. Army Corps of Engineers.

Smith said she cringed as she watched local national construction workers drive heavy machinery without any shoes on, carry buckets full of cement to a site for the foundation of a new hospital and climb onto scaffolding that looked more like death-defying Cirque du Soleil acts.

When not deployed, Smith works for Public Health Command as occupational health nurse for U.S. Army Garrison Wiesbaden in Germany.

Using their specialized experience and education, occupational health nurses recognize and prevent health effects from hazardous exposures and treat workers' injuries and illnesses. She had to evaluate and inspect the jobs people did and the safety measures they took in order to prevent illness and injuries in the workforce.

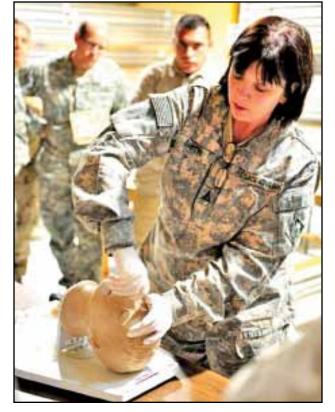
The engineers were providing sustainable development projects for the Afghan people that ultimately promote a stable future for Afghanistan.

On average, Smith's office saw about 150 civilian workers a month dealing with issues such as colds, coughs, sports injuries and referrals for vaccines.

"They'd never had a nurse over there before," said Smith.

"Remember how big the H1N1 was here and in the States?" said Smith. "Think how big (an issue) it is in a third-world country."

Smith arrived in Afghanistan in October 2009. In the airport she was surrounded by people



Barbara Smith leads a combat lifesaver training course in Afghanistan. (Photo courtesy of Barbara Smith)

screaming in a language she didn't understand. She waited for someone to recognize her.

She followed her escort to an armored vehicle outside. She rode in the back seat. The windows were so dirty she could barely see out of them. The ride went fast.

"You don't stop driving in Afghanistan," said Smith referring to the driving tactics. "You never know what will happen to you."

While Smith did not handle occupational health for local nationals, she monitored workers compensation claims for contractors.

About 79 percent of the contract awards are being awarded to Afghan or Afghan-American firms, a realization of the corps' goal to place more work with Afghan nationals and firms.

The Mercury

But in a regular setting where Smith dealt with claims of trips, slips and falls, in Afghanistan she dealt with kidnappings and improvised explosive devices.

"I had to deal with trying to track the issue to make sure the contracting companies filed the claims," said Smith.

A simple trip to the medical clinic included dressing in her desert camouflage uniform, boots and Kevlar, walking into a container with armed guards, crossing a street and walking down a corridor flanked by barbed-wire fencing into another enclosed container.

"It was a 20-minute process and walk to get to the clinic," said Smith.

Aside from the obvious security issues of working in a war zone, Smith also dealt with supply issues, medical oversight, creating a memorandum of understanding and writing up policies and procedures that didn't exist before she arrived. Smith was also put in charge of combat lifesaver training.

"It's kind of like what I do now (at U.S. Army Garrison Wiesbaden) plus morphed into a lot more," said Smith.

For Smith, the time went fast. Disbursement of vaccines, training and get-togethers with coworkers — everyday was busy, said Smith.

"I'm just so happy to have accomplished everything I set out to do," said Smith, who left Afghanistan having set up a private office, a database for medical tracking, logistical support for medical supplies, memorandums of understanding, standard operating procedures and taught CLS to more than 100 personnel.

"Just think how long it takes to get things to happen here (in noncombat zones). There I just started with a desk and a chair," said Smith. "I went in, did my job and came home." (Wiesbaden)



Check it out

MAJ Michael Perreault, brigade surgeon of the 4th Stryker Brigade Comat Team, 2nd Infantry Division, examines a patient with breathing complaints at Abu Ghraib, Iraq. Iraqi doctors took the lead in the joint operation. (Photo by SGT Phillip Valentine/366th Mobile Public Affairs Detachment)



#### Rural care PFC Tharius Spearman, a medic in 3rd Battalion, 6th Field Artillery, checks the blood pressure of a man in the village of Narin, Afghanistan. He aided 40 men during a joint mission with Afghan police, while SSG Jessica Walla treated women of the village. (Photo by SPC Blair Neelands/10th Mountain Division)

#### 12 The Mercury October 2010 http://www.armymedicine.army.mil Teleneurosurgery links doctors to patients

#### Story and photo by Joshua L. Wick

For the last six years, the Northern Regional Medical Command (Provisional) has developed and implemented a teleneurosurgery program that provides initial and follow-up neurosurgery patient screening using video teleconference (VTC) technology.

"There's nothing like being in the same room as a surgeon," said Dr. Samuel S. Lyness, director of the program, "but this is the next best thing. It's vastly better than making them [the service member, beneficiary, and/or retiree] take a day to travel here only to be told that they really don't have a surgical problem and can go back home and get physical therapy or medications."

"This process has evolved from doing something like this once every two months to now where we do it every two weeks," said Joe Smith Jr., director and clinical supervisor of the neurosurgical clinic at Womack Army Medical Center, Fort Bragg, N.C.

NRMC's regional virtual clinics see between 20 and 40 patients a week, Lyness said.

"The goal here of teleneurosurgery is to maximize operative cases within our military system, ultimately it's to keep the surgeon in the operating room and out of the



Navy Lieutenant Commander Jonathan Gilhooly prepares for a weekly teleneurosurgery clinic at Walter Reed Army Medical Center.

clinic," added Smith. "We [support staff] basically do all the clinical evaluations, workups and treatments until patients reach the point where they maximized their non-surgical options, or they may be already to a point where they are at an immediate surgical option. We coordinate care on the spot for these patients," he said.

Having done everything possible to avoid surgery, SSG Kort Wilson, a vehicle mechanic in the 82nd Airborne Division, was referred to teleneurosurgery at Womack.

"Actually, it [the VTC] was pretty neat," said Wilson. "It was nice to actually get to sit there with the actual surgeon himself and be able to ask him specific questions about what's going to happen with me. It gave me a better understanding about the whole process."

Wilson, who has a cervical disc herniation between the 4th and 5th vertebras in his neck, met with Smith the first time after his MRI. They did the VTC, and scheduled him for surgery.

Had this been a few years ago, "I would have had to come up here to Walter Reed TDY [temporary duty assignment], then go back and wait a month or two or three or however long it would take to get into surgery. In this case, I didn't have to leave my duty station. I just went over to the hospital, did the VTC with the doctor, and asked him every question that I had. It was easy," said Wilson.

"This has endless amounts of benefits for the Army," said Smith. "We have consistently saved money for the military and taxpayers, essentially paid for ourselves."

"If we weren't doing this forum, they [patients] would be going to the civilian network and that's a huge expense for the Department of Defense to pay," said Navy Lieutenant Commander Jonathan Gilhooly, a surgeon for the integrated department of neurosurgery for Walter Reed and the National Naval Medical Center. "Here, the residents benefit because there are more cases; the staff benefits and the patients benefit. Most of these folks want to get seen in the military system anyway; the outside system is very foreign to them."

All service members, beneficiaries, and retirees are eligible for VTC care, and this application is ideal and certainly transferable within the joint setting, added Smith.

Lyness said there are plans to extend the system to veterans hospitals. Also, there are plans to establish a link between Alaska and Madigan Army Medical Center in Tacoma, Wash.

"There's a gigantic endless need for neurosurgical management," Smith said.

"These cases also provide graduate education for the residents to observe, watch, and train on, so it's a vital part of the training program," said Lyness. (Walter Reed Stripe)

# Neuroradiologist brings rare skill to unusual job

Story and photo by Lorin T. Smith

LTC Yince Loh is one of only two interventional neuroradiologists in the Army. He's one of three Soldiers who specialize in neurocritical care. He's the only one certified in both. And to top it off, he's a Ranger-qualified prior doctor for the Special Forces.

The assumption is that someone with as much medical experience as Loh would avoid most aspects of the Army experience. Yet Loh, from Los Angeles, is a jumpmaster with more than 50 airborne jumps, a six-month deployment last year to Afghanistan with the 3rd Battalion,



LTC Yince Loh practices surgery at Madigan Army Medical Center.

509th Parachute Infantry Regiment, and has nearly every advanced school the Army offers, including Ranger, flight surgery, air assault, and scuba/diving medical officer's schools; even Jumpmaster school in Thailand.

"My mentor (the other Army interventional neuroradiologist and a neurosurgeon) always called [interventional neuroradiology] the Special Forces of medicine," Loh said. "What we do is unconventional and we cover the brain, which is very serious real estate, posing high risks, but sometimes the only way to save the brain or even life."

Loh uses catheters inserted from the groin and fed through the body to the brain, neck or spine to implant tools like glue or coils, to block arteries or blood vessel abnormalities. Putting in catheters at the groin is minimally invasive and safe, he said. Loh can also stent blood vessel narrowings or pull blood clots to reduce or even eliminate the effects of a stroke.

He can treat many different types of issues centered around the brain, but the majority of the patients he sees have acute ischemic stroke (from artery blockage or narrowing of the artery). Got a chronic nose bleed condition? Loh can block the arteries causing that.

Many advantages exist for those who want to use Loh's interventional services. For example, most procedures can be performed on an outpatient basis; general anesthesia usually is not required and recovery time is faster. In 20 to 30 years, Loh said he believes that there will be less need to open skulls for many of the neurosurgical operations performed today. Besides patients, the doctor spends a good deal of time training neurology and radiology residents. While at Madigan, only one resident has shown any real interest in becoming a critical care neurologist. Loh understands that, as he had about seven more years of schooling and resident time beyond becoming a doctor.

"Luckily, I wasn't 40 when I finished my fellowship," he joked.

Loh finished his internship at Walter Reed Army Medical Center, and then went overseas to serve with a Special Forces battalion. He then came back to Walter Reed to finish his residency to become a neurologist, where he studied neurosurgery, neurocritical care and diagnostic neuroradiology — all pre-requisites to becoming a neurointerventional surgeon. Then, he was off to fellowship — first in neurocritical care and then in interventional neuroradiology.

He became a fully-certified neurointensivist and interventional neuroradiologist after spending three years at the UCLA Medical Center. Loh's love for the Army has kept him raising his right hand, extending his commission.

"Who else gets to jump out of planes, scubadive, see almost all of Southeast Asia, deploy to Afghanistan; no one gets this opportunity outside the Army," he said.

While deployed to Afghanistan, Loh spent a great deal of time training medics, conducting mass casualty scenarios and just being a general medical officer; a major more than a doctor.

"I always loved going to the field in ROTC, wearing green, humping the ruck; it was a cool part of my life." (Madigan Mountaineer)