COMBAT & CASUALTY CARE

WINTER 2016/2017

COMMANDER'S CORNER

COL (Dr.) Shawn C. Nessen
Commander, U.S. Army Institute of Surgical Research (USAISR)
Ft. Sam Houston, TX

Health Record Modernization
Ms. Stacy A. Cummings
Program Executive Officer
Defense Healthcare Management Systems

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COUNTERING THE INFECTIOUS THREAT

Walter Reed Army Institute of Research (WRAIR) is preparing deploying personnel with an Operational Clinical Infectious Disease (OCID) course on infectious diseases endemic to certain regions.

By Christian Sheehy

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LEADERSHIP PERSPECTIVE

Modernizing for Adaptable Healthcare

By Ms. Stacy Cummings PEO DHMS

COMMANDER'S CORNER

Innovating to Maximize Positive Outcomes
U.S. Army Institute of Surgical Research (USAISR) optimizes techniques in casualty care

Interview with COL (Dr.) Shawn Nessen, Commander, USAISR
Ft. Sam Houston, TX

VA SPOTLIGHT

Advancing the Provision of Advanced Care
The U.S. Veteran's Administration's MyVA Program addresses agency efforts to re-invest in patient care through enhanced facility management, supply chain, management training, and overall cost reduction.

By Rodney Norman

Targeting Full-Spectrum Dental Care
Through a partnership for Defense Health (LPDH), DoD is implementing a dental solution to the Electronic Health Record (EHR) Military Health System.

By Kevin Bunker

Closing the Field to Facility Care Gap
U.S. Army Medical Department provides realistic training for flight paramedics employing state-of-the-art simulation for positive real-world outcomes.

By Kevin Hunter

Restoring a Sense of Touch
U.S. Defense Advanced Projects Agency (DARPA) is testing interactive brain to prosthetic sensory connectivity for achieving movement in cases of limb paralysis or amputation.

By DARPA public affairs

INDUSTRY PARTNER

Mission Resiliency
In 2008, Mission Resiliency, an Active Duty Treatment Program was begun at Laurel Ridge Treatment Center, San Antonio, TX, for servicemembers struggling with PTSD, substance abuse issues, suicidal ideation, and other mental health issues.

By Rodney Norman

Cover: Casualty Carry
Installation emergency service first responders carry an Army pilot role-playing a casualty from a simulated crashed HH-60 Black Hawk helicopter during an exercise at Fort Bragg, NC. (Army photo by Capt. Adan Cazarez)

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In support of the global mission that DoD is undertaking to secure American interests in a multi-threat world, U.S. combat medics and medical personnel are prepared to risk life and limb in support of their fellow personnel, doing so with a confident grace. It is in this vein that Tactical Defense Media dedicates the Winter 2016/2017 issue of its Combat & Casualty Care publication to the well-being of those who serve.

Leading off is a look at the single largest military healthcare system records-keeping overhaul in history. In an exclusive interview with Ms. Stacy Cummings, Program Executive Office Defense Healthcare Management Systems (PEO DHMS), we get a clearer picture regarding PEO DHMS’ role in oversight of a $4.3 billion effort to deliver a modernized, interoperable electronic health record for active servicemembers and their families, as well as veterans. As an integrated system, the program, referred to as MHS GENESIS, is intended to facilitate safe transition of care across the spectrum of military operations to include garrison, operational, and en-route care. From point of injury to military treatment facilities, patients’ health record will be available to providers.

This issue’s Commander’s Corner interview spotlights the U.S. Army Institute of Surgical Research (USAISR) optimizes techniques in casualty care to maximize positive outcomes. An interview with Col (Dr.) Shawn Nessen, Commander, USAISR, speaks to current critical focal efforts including tourniquets and blood utilization on the battlefield, research on blood transfusion for point of trauma application, and advances in burn trauma treatment, to name a few. To continue in a research vein, the latest in U.S. Defense Advanced Projects Agency medical capabilities study offers a look into DARPA’s ongoing work with interactive brain to robotic arm sensory connectivity for achieving movement in cases of limb paralysis or amputation.

From a mobile care perspective, readers gain insight into the targeted training conducted by the U.S. Army Medical Department in providing realistic training for flight paramedic personnel. Employing state-of-the-art simulation tools in real-world application scenarios, the course prepares active, reserve and Guard medical professionals to address the challenges of administering care amidst the challenges of medical evacuation. This issue also shines a light on Walter Reed Army Institute of Research (WRAIR), Silver Spring, MD, specializing in among many areas, the study of infectious diseases on deployed troops in theater. As such, the Institute offers an Operational Clinical Infectious Disease (OCID) Course for deploying personnel to prepare them for avoiding and treating symptoms related to infectious diseases endemic to certain global regions.

As always, we welcome any comments or suggestions. Happy reading!

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MODERNIZING FOR ADAPTABLE HEALTHCARE

The U.S. Department of Defense is deploying a single integrated inpatient and outpatient electronic health record (EHR) to supply Military Health System (MHS) providers throughout the continuum of care, as well as private sector healthcare partners, with the necessary data to collaborate and make the best possible healthcare decisions.

By Ms. Stacy A. Cummings
Program Executive Officer
Defense Healthcare Management Systems

Ms. Stacy Cummings serves as the Program Executive Officer for the Program Executive Office, Defense Healthcare Management Systems. As Program Executive Officer, Ms. Cummings oversees the Department of Defense electronic health record modernization including the operational, data exchange, and interoperability initiatives. Specifically, she provides direction to the following program management offices: the DoD Healthcare Management System Modernization, the Joint Operational Medicine Information Systems, and the Department of Defense/Department of Veterans Affairs Interagency Program Office.

Ms. Cummings previously held senior executive positions at two operating administrations within the Department of Transportation where she established strategic direction, provided executive leadership and managed daily operations. Additionally, Ms. Cummings served as the Department’s executive sponsor for the Joining Forces initiative to connect service members, veterans, and their families with career opportunities in transportation.

Beginning her career as an Acquisition Logistics Intern at the Naval Air Systems Command, Ms. Cummings spent 17 years with the Department of the Navy where she gained expertise in logistics, maintenance support and information technology acquisition and deployment. She held senior positions with the Naval Air Technical Data and Engineering Services Command; Commander, Fleet Readiness Centers; Program Executive Office for Command, Control, Communications, Computers and Intelligence; and the Space and Naval Warfare Systems Command.

The mission of the Program Executive Office Defense Healthcare Management Systems (PEO DHMS) is to transform the delivery of healthcare and advance data sharing through a modernized electronic health record for service members, veterans, and their families. To meet this mission, we are deploying a single integrated inpatient and outpatient electronic health record (EHR), branded MHS GENESIS. The deployment of technology will supply Military Health System (MHS) providers throughout the continuum of care, as well as our private sector healthcare partners, with the necessary data to collaborate and make the best possible healthcare decisions.

As part of the DoD-wide EHR modernization effort, PEO DHMS certified interoperability with the Department of Veterans Affairs (VA) in April 2016. Today, the Department of Defense (DoD) and VA share more health data than any other two major healthcare systems.

From a technology perspective, the modernization effort ensures that data captured from service members’ health records is shared with the VA and commercial/civil healthcare providers as the service member transitions to veteran status. Approximately 60 percent of beneficiaries receive their healthcare from outside the DoD. The relationship between military and civilian healthcare providers, where medical professionals on both sides can access critical patient information, is vital to maximizing positive patient outcomes. Health data sharing is a critical part of the mission we deliver today.

Acquisition of MHS GENESIS

In 2013, the DoD made the decision to move away from home-grown government-developed EHRs to a commercial-off-the-shelf (COTS) capability. Two main factors contributed to this decision. With advances in technology, the needs within the MHS could be
better met by commercial applications. Second, from a life cycle cost and affordability vantage point, the DoD could take advantage of investments in technology and clinical practices made in recent years as well as increased data sharing with civilian partners. Staying current with technology advancements without being the only investment stream will enable the DoD to benefit from some of the best products in health IT without carrying the financial burden alone.

To engage with industry, DoD held a number of industry day gatherings to meet with healthcare providers and organizations in the private sector, and engage with stakeholders within the MHS community to identify requirements and standard workflows. Information gleaned from these meetings and stakeholder engagements led us to develop a robust list of requirements. In the end, the DoD recognized that business processes and workflows within the MHS were similar to the processes used by the commercial sector.

In July 2015, the DoD awarded a $4.3 billion contract to the Leidos Partnership for Defense Health (LPDH) to deliver a modern, interoperable EHR. The LPDH team consists of four core partners, Leidos Inc., as the prime developer, and three primary partners in Cerner Corporation, Accenture, and Henry Schein Inc. MHS GENESIS provides a state of the market COTS solution consisting of Cerner Millennium, an industry-leading EHR, and Henry Schein’s Dentrix, a best of breed dental module.

As an integrated system, MHS GENESIS will facilitate the safe transition of care across the spectrum of military operations to include garrison, operational, & en route care. From point of injury to the military treatment facilities, the patients’ single health record will be available to providers.

**Deployment Strategy**

We are employing industry best practices as we deploy and optimize the delivery of MHS GENESIS. MHS GENESIS will deploy via a “wave” model. Initial fielding sites in the Pacific Northwest are the first wave of MTFs to receive MHS GENESIS beginning February 2017. This will provide an opportunity to perform operational testing activities to ensure MHS GENESIS meets all requirements and to capture lessons learned to subsequent wave deployments.

Currently, there are a variety of ongoing deployment activities. PEO DHMS effectively manages engineering, testing, logistics, business operations, change management, and communications to
ensure a successful deployment of MHS GENESIS to a complex and globally dispersed user base.

To meet military unique needs, MHS GENESIS will interface with select legacy systems. To date, 23 interfaces have been identified as required at initial fielding sites. Additional interfaces will be prioritized and scheduled for completion during initial deployment and subsequent wave deployments.

MHS GENESIS will replace select DoD legacy healthcare systems, including but not limited to: AHLTA, Composite Health Care System (CHCS), inpatient, and components of the Theater Medical Information Program-Joint (TMIP-J).

When fully deployed, MHS GENESIS will provide a single health record for service members, veterans and their families across the continuum of care. It will also enable clinical analytics that will improve healthcare delivery and drive efficiencies and cost savings for years to come.

More info: health.mil/dhms
As a core member of the Leidos Partnership for Defense Health (LPDH), Henry Schein’s, Dentrix Enterprise, to DoD’s Electronic Health Record (EHR) Military Health System (MHS) GENESIS.

By Kevin Bunker, President, Henry Schein North America Dental Practice Solutions

MHS GENESIS provides access to medical and dental information in one record, which helps centralize patient data, simplify multi-location management, and ultimately improves patient care for active duty servicemen and the 9.6 million beneficiaries in the Military Health System receiving services at over 1,200 locations in 16 different countries.

Specifically, Dentrix Enterprise features an appointment book, which maximizes production through visual, goal-oriented scheduling; a patient chart, which tracks patient clinical information, including existing, recommended and completed treatments, or conditions; a treatment planner, which provides patients with easy-to-understand treatment; a periodontal chart, which records mobility, furcation grades, plaque, calculus levels and bone loss, among other health issues; as well as features a continuing care module, which monitors patients’ pending dental care.

Holistic Individualized Approach

At a time when we’re learning more and more about the impact of oral health on overall health, and when the seamless sharing of medical and dental records is paramount, having a complete picture of health is critical for our military service men and women and their beneficiaries. For years, Dentrix Enterprise has been used by numerous community health centers, federally qualified health centers, Indian Health Service (IHS), and other government agencies because it interoperates with numerous medical systems, providing patients with this complete picture of their health.

While most other dental practice management systems used in large group practices and health centers evolved from medical systems, Dentrix Enterprise engineers worked directly with dentists to design a system that delivers the dental-specific workflows they need to run an efficient clinic or practice.

Pushing the Care Envelope

By continuing to meet the market needs of our customers, which includes the DoD, Henry Schein will continue to play a role in helping improve the exchange of vital health information between the public, private, and government medical and dental providers so patient health data becomes more complete and health providers everywhere have all the health information and access they need to provide the best care possible.

More info: henryschein.com
The Flight Paramedic Recertification Course is intense, stressful, fast paced, and most importantly realistic. So realistic in fact that Sergeant Marty Anderson, a certified emergency medical technician (EMT) and member of the Michigan National Guard attending the course said, “Being inside a helicopter trainer is very different than being in the back of an ambulance. We’re wearing full battle rattle, it’s dark, loud, and windy. The intense exercise feels like a real helicopter with a live patient,” said Anderson describing the experience of treating an injured patient inside a UH-60 Blackhawk trainer. Sergeant Anderson is no stranger to emergency medical care. He works as an EMT in Lansing, Michigan. Emergency care is what he does for a living when not serving with his unit Detachment 1, C Company, 3-238th Aviation Battalion. Anderson recommends that every flight paramedic in the U.S. Army attend the course. “I am so glad I came to this class. I’m taking what I learned to my civilian job and Guard unit.”

The U.S. Army Medical Department Center & School (AMEDDC&S), Ft. Sam Houston, TX provides realistic training for flight paramedics employing state-of-the-art simulation in preparing personnel to apply care necessary to affect positive real-world outcomes.

By Kevin Hunter, C&CC Editor

The Flight Paramedic Recertification Course is intense, stressful, fast paced, and most importantly realistic. So realistic in fact that Sergeant Marty Anderson, a certified emergency medical technician (EMT) and member of the Michigan National Guard attending the course said, “Being inside a helicopter trainer is very different than being in the back of an ambulance. We’re wearing full battle rattle, it’s dark, loud, and windy. The intense exercise feels like a real helicopter with a live patient,” said Anderson describing the experience of treating an injured patient inside a UH-60 Blackhawk trainer. Sergeant Anderson is no stranger to emergency medical care. He works as an EMT in Lansing, Michigan. Emergency care is what he does for a living when not serving with his unit Detachment 1, C Company, 3-238th Aviation Battalion. Anderson recommends that every flight paramedic in the U.S. Army attend the course. “I am so glad I came to this class. I’m taking what I learned to my civilian job and Guard unit.”

Building on Paramedic-ready

Taught at the U.S. Army Medical Department Center and School (AMEDDC&S) the course provides Army enlisted Health Care Specialists (68W), who are paramedic qualified, two-weeks of training required for paramedic recertification to include 72 hours of continuing education units accredited by Army Emergency Medical Service (EMS). Additionally, students who are flight paramedic certified through the Board of Critical Care Transport Paramedic Certification (BCCTPC) qualify for continuing education units.
Practical exercises include airway management, treatment of extremity trauma, treatment of combat chest wounds, and lifesaving emergency surgical skills on high fidelity simulation manikins. Students conduct scenarios in both clinical environment and high fidelity aircraft environment. All training scenarios and exercises refresh critical care knowledge and provide recertification.

AMEDDC&S is using the most advanced hands-on medical simulators ever made. Synthetic human simulators constructed from polymer composites are replacing tissue in medical education with a realism not possible with older rubber manikins. These innovative devices mimic the mechanical, dielectric and physicochemical properties of relevant living tissue. The skin, organs, ligaments, cardiovascular system, nerves, bones, and flesh textures look and feel authentic, based on actual live tissue tests to mimic the properties of living tissue with an unmatched level of fidelity. These simulators even have beating hearts, breathing lungs, moving limbs, and even pump simulated blood through arteries and veins.

Students can insert their hands and medical instruments then pull back internal body parts for detailed examinations. Tissues respond to all known imaging techniques and medical devices just like live tissue. The materials are about eighty-five percent water, and to prevent dehydration the training simulators are stored in tanks with recirculating fluid. Wireless integrated computer interfaces include controls proving students with vital physiological information on untethered tablets.

These advanced systems are better suited for a new generation of Soldiers who have grown up with Smartphones. The medical patient simulators used at AMEDDC&S have come a long way from the old CPR Annie manikins from the past. While those training manikins...
were hard plastic, featureless device, more like a department store manikin, today's systems are so life-like, even seasoned instructors have difficulty distinguishing them from real tissue.

**Mobile Module on Mission**

The Training Mobile Transport Lab, a life-sized UH-60 platform, offers students stressful experience of being inside a real helicopter with sound, wind, and smoke. Instructors conduct nighttime training scenarios, where flight paramedic students treat patients inside the cargo compartment. The training prepares flight paramedics to load and unload patients on litters and treat them in flight. The training exercise is fast paced and realistic, testing students ability to treat injuries while transporting patients.

Along with the practical classroom exercises, students take part in interactive lectures from insightful subject matter experts, or SMEs, on a host of medical topics. "The small block lectures are phenomenal. We're learning from SMEs with real life experience. This training supersedes anything they received in initial 68W training," said Sergeant Anderson.

As traditional classroom, online, and practical training methods advance, AMEDDC&S continues to invest in new methods and technologies, while preserving the tried and tested techniques that have led to the U.S. military having the highest combat survivability rate in history.

Until recently, 68Ws could only provide immediate first aid while preparing the wounded for transport to a military field hospital facility. A gap existed between treatment at the point of injury and transport to a treatment facility. In the civilian world, air ambulances provide on-scene and in-transit treatment with dedicated, specially trained, and certified flight paramedics. Yet the U.S. Army lacked this life saving ability. To close that gap, AMEDDC&S established the Critical Care Flight Paramedic Program. Now Army helicopters are more than flying ambulances shuttling the injured to a military treatment facility. Advanced trauma management is accessible at or near the point of injury and while flying to a treatment facility.

"I think about how it must have felt to be a flight medic without skills to help an injured Soldier beyond basic first aid," reflected Major Ersan Capan, the officer-in-charge of the Critical Care Flight Paramedic Program, Transport Medical Training Laboratory. "How horrible it was for an Army medic to see critically injured patients and not have the skills to treat them. To take that with them for the rest of their lives. In the past these 68Ws were little more than part of a flight crew with basic medical training. Now we are giving our 68Ws the skills to provide in flight critical care, similar to civilian helicopter flight paramedics," said Capan. He and his team were instrumental in standing up the curriculum for the flight paramedic recertification course.

"We want our students knowing they did everything possible to save lives, and not to think about what they couldn't do," said flight paramedic instructor Sergeant First Class Reid Carpenter. "We give
68Ws capabilities to meet Army needs. To maintain their skills flight paramedics need to continuously train when back at their units. These Soldiers are more than just part of a flight crew; they are now front line critical care medics. There is an overlapping of skills, almost like a hybrid of combat medics, physician assistants, and nurses. These 68Ws also understand medications. Once they complete the course Soldiers then serve as the critical care paramedic for their platoon,” said Carpenter.

“A round is to show Soldiers what it’s like in the field. We want them to know what to expect, so they’re prepared to save lives,” said Major Capan. “The Army has an incredible battlefield injury survival rate. Yet there were a number of Soldiers we weren’t able to save because they didn’t receive critical care treatment in time. Now the Soldiers we’re training in this course are equipped to save those lives. We’re closing the gap with each flight paramedic we train.”

Sergeant Marty Anderson, Detachment 1 C Company, 3-238th Aviation Battalion, Michigan National Guard, monitors the status of a medical patient simulator while onboard a UH-60 Blackhawk trainer. Taught at the U.S. Army Medical Department Center and School, the flight paramedic course trains 68Ws medical enlisted personnel with the knowledge and skills required to conduct advanced critical care pre-Medical Evacuation (MEDEVAC) treatment, loading and unloading patients in MEDEVAC aircraft, and stabilize and treat patients in flight. The life sized UH-60 trainer offers students the opportunity of realistic classroom exercises emulating the sound, wind, and stressful environment of an actual helicopter. The advanced patient simulators used at AMEDDC&S provide students with vital signs, clinical signs, and symptoms mimicking live patients. (Army)

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COL (Dr.) Shawn C. Nessen grew up in the small town of Tremonton, Utah and attended Idaho State University on a football scholarship where he received a Bachelor of Science in Zoology and Biology in 1990 cum laude and also graduated as a Distinguished Military Cadet. He then attended Des Moines University School of Osteopathic Medicine receiving a Doctor of Osteopathic Medicine degree in 1995. He completed his residency in General Surgery at William Beaumont Medical Center in El Paso, Texas in 2000 and in 2011 completed a Fellowship in Acute Care Surgery and Critical Care Surgery at the University of Nevada School of Medicine University Medical Center in Las Vegas, Nevada. He is board certified in general surgery and critical care surgery.

COL Nessen completed his ROTC training in 1988 and was commissioned in the early commissioning program as a 2nd Lt. He then served as an Armor Platoon Leader in the Idaho National Guard until he entered medical school in 1991 on a scholarship from the Armed Forces Health Professions Scholarship Program. Following completion of residency in 2000, he served as a staff surgeon and later Chief of the General Surgery Service at Fort Riley, Kansas where he concurrently served as the flight surgeon for the 82nd Air Ambulance Company. COL Nessen deployed to Iraq during Operation Iraqi Freedom for nine months in 2003. There he served as a surgeon for the 28th Combat Support Hospital and also flew multiple medical officer missions with the 82nd Air Ambulance Company. In 2005, following completion of the U.S. Army Command and General Staff Command, COL Nessen assumed command of the 782nd Forward Surgical Team (Airborne) which later was reflagged as the 541st FST (Airborne). His command of these two units included a humanitarian deployment to New Orleans after Hurricane Katrina and a 15 month deployment in support of Operation Enduring Freedom from October 2006 to February 2008 in Afghanistan. There, his team successfully conducted split based operation in the Paktika and Helminth Provinces and treated over 800 combat wounded, performed over 500 surgeries and procedures, transfused 1,300 units of blood and achieved a 97.64 percent survival rate for all casualties. Upon completion of Fellowship training in 2011, COL Nessen became the Deputy Commander for Clinical Services of the 212th Combat Support Hospital in Mause, Germany. While in this position, he also served as a staff Critical Care Surgeon at Landstuhl Regional Medical Center located in Landstuhl, Germany, and in 2013, COL Nessen became the Chief of the Department of Surgery at LRMC. From Germany, COL Nessen transferred to Martin Army Community Hospital at Fort Benning, GA where he served as the Deputy Commander for Clinical Service.

COL Nessen’s military education includes graduation from the U.S. Army Medicine Department Officer Basic and Advanced Courses, the Army Flight Surgeons and Airborne Courses, and Command and General Staff College where he received a Masters of Military Arts and Sciences in the field of Strategy.

Interview conducted by C&CC Editor Kevin Hunter
I do believe however, that we need to look at the personal dimension; the human dimension. I spent nine months in Combat Support Hospitals in Iraq in 2003 and then 15 months in Afghanistan from October 2007 to early 2008 as a Forward Surgical Team commander. And also, three years in different capacities at Landstuhl Regional Medical Center, so I do have a lot of experience as a trauma surgeon at Role 2, 3 and 4. My experience tells me we can do better. I believe we need to take a hard look at preventable deaths and our outcomes when it comes to the most severely wounded on the battlefield. Are we providing the medical and surgical care required at the or near the point of injury? This is not just a time to surgery issue. It is also a capability issue. Do our forward surgical assets have the capabilities required to achieve the expected outcomes? Do our hospitals? I believe if we analyze the data we have collected over the past three years, we will be able to quantify the risk of mortality based on the available capability. So, we will be taking a look at battlefield surgery from the perspective of preventable deaths for the next two years at least.

C&CC: What are some key areas of focus and how is the USAISR addressing these?

COL Nessen: The ISR has five directorates and 12 Task Areas that cover diverse areas of research ranging from wound specific treatment for burns and blast injury to blood transfusion and dental trauma. To give you some idea of the scope of the research we are doing, consider the ISR had 104 poster and podium presentations presented at the Military Health System Research Symposium last summer. The quality of the research is impressive and continues to advance our understanding of battlefield injuries. We will continue to study blood transfusion, antibiotic efficacy, tissue rejection after transplant, burn injury and many other topics. The ISR has over 700 personnel and the number of research protocols and ongoing projects are numerous, so it is impossible to talk about them all here, but I will say you never know where the next breakthrough will come from and I want to be careful to identify “key areas of focus” because I believe everyone working at ISR is doing important work and I want them to know that. I have never worked in an organization that was more enthusiastic and motivated than the ISR. Everyone understands the importance of their work and it reflects in the esprit de corps that permeates the organization.

C&CC: In terms of field surgical technique, how is the USAISR assisting in taking progress learned in house and applying it to field combat scenarios?

COL Nessen: It is an interesting question and it depends I think on what you consider our house. The Burn Center is part of the ISR and the research questions driven by our care burn victims obviously have a direct correlation to battlefield injury. Our outcomes from our service
members suffering from burns have been remarkable and I have no doubt burn research at ISR is the best in the world. The Joint Trauma System has a little larger house, but it works just like the Burn Center. JTS collect battlefield performance data and then conduct research to improve outcomes. They conduct a weekly worldwide teleconference and discuss specific patients to this day and the theater practice guidelines are a direct result of the data they have collected. JTS also created the Committee on Tactical Combat Casualty Care which has been enormously successful. They have produced and continue to refine the Tactical Combat Casualty Care guidelines which are the standard for combat medics. This is where the end user sees the results of our research as he or she learns to apply a tourniquet, administer antibiotics or treat pain as examples.

The success of the TCCC has been such that JTS is now working to put together a similar committee for tactical combat surgical care. This committee will try to answer some of the questions I spoke of earlier as it pertains to Role 2 and 3. What is the Role 3 basic capability for joint forcible entry operations is one question I would like to address for example. But, there are many others and the collective intellectual capacity of the committee will be a powerful generator of future research at the ISR. The committee approach also allows us to reach outside of the institute for ideas. We have many service members with substantial and diverse experiences on the battlefield and we very much want to tap into that experience. When I deployed in 2007 with my FST, Col. John Holcomb, who was the commander of the ISR at that time, would reach out to me frequently to update me on the latest discoveries and also to ask me what I thought needed to be evaluated. The accurate records we kept via the Joint Theater Trauma Registry later produced three quality papers on FST operations in Afghanistan. So, if we don’t reach out to you, please contact us with your ideas and we will try to help with the IRB and statistical analysis.

To close, I would like to say how proud and honored I am to be the commander of the USAISR! I feel lucky to come to work every day and work with Soldiers, Sailors, Marines, Airmen, and civilians who work here. They represent some of the finest scientific minds our nation has to offer. At the MHSRS meeting I was amazed at how many enlisted Soldiers and Non-commissioned officers presented posters. I was 42 years old and a Lieutenant Colonel when I presented my first poster at MHSRS! The young talent assembled here will make breakthroughs in patient care that I can’t even begin to contemplate. I am confident we will continue to meet our mission to optimize combat casualty care.
LAUREL RIDGE TREATMENT CENTER in San Antonio, Texas, celebrates its 30 Year Anniversary. Laurel Ridge has faithfully served the children, adolescents and adults of San Antonio and South Texas since 1987. Laurel Ridge’s story began with the mission of Saving Families, Healing Lives and Creating Hope for individuals and families in South Texas and has done so with excellence and pride; growing and expanding to now have a compliment of over 600 employees.

In 2007, Laurel Ridge began to realize the need for private treatment centers to learn more about the issues and challenges facing active duty service members, realizing that the sheer number of those in need of treatment would soon outpace the then military system’s behavioral health treatment capabilities. Laurel Ridge began an effort to come alongside military command and meet the soldier’s treatment needs with the most cutting edge and evidence based treatment programs available.

So, in 2008, Mission Resiliency – Active Duty Treatment Program at Laurel Ridge was born. This dedicated Active Duty unit has 60 beds and all patients on this unit are on a military-specific milieu. Mission Resiliency’s goal is to provide the best treatment, with the least amount of mission disruption as possible while restoring resiliency to the service member.

Since its inception, Laurel Ridge’s Mission Resiliency program has successfully treated thousands of active duty service members struggling with PTSD, substance abuse issues, suicidal ideation, and other mental health issues.

Mission Resiliency is a multi-modal, multi-disciplinary approach to intervention that addresses the patient and his or her family as a whole. Laurel Ridge utilizes evidence-based treatment programs meeting or exceeding TRICARE standards of care. Furthermore, Mission Resiliency continues to monitor outcomes, ensure fidelity of treatment, and implement the most current treatments available.

Nearly 1 in 4 active duty members showed signs of a mental health condition, according to a 2014 study in JAMA Psychiatry. Treatment modalities such as Prolonged Exposure and Cognitive Behavioral Therapy in co-occurring anxiety disorders and Substance Use Disorders has resulted in significant improvements in anxiety symptoms as well as improvements with addressing alcohol and drug use.

Laurel Ridge also treats Active Duty Dependents, realizing deployment related symptoms and issues are not limited to the service member who has been deployed. “We often say the whole family is in service,” says Laurel Ridge CEO, Jacob Cuellar, MD. “When one member of the family is deployed, there is a ripple effect of anxiety, shift in responsibility, and family dynamic that also needs to be addressed.”

Laurel Ridge is perfectly positioned to treat both the service member and the family, as many therapists, nurses and staff are retired military or military spouses. “We not only treat these families, we have been these families,” says Director of Military Services, Rodney Norman, Army.(RET). “Many of us know the struggles, know the pain, have come through to the other side, and are perfectly positioned to point these wonderful service members and their families to hope.”

AND THE PROGRESS CONTINUES...

Laurel Ridge has continued to build on its successful outcomes in treating active duty service members with the opening of Mission Resiliency Active Duty Outpatient Treatment Program in Killeen, Texas. This program, which opened in early 2014, serves Ft. Hood well, adhering to TRICARE standards of care and Laurel Ridge’s own high standards of service excellence.

“We have a debt of honor to the men, women and families who serve,” says Cuellar, CEO. “It’s been a great 30 years at Laurel Ridge, and believe me, we’re just getting started.”
**Navy Medicine Milestone**

Naval Medical Center San Diego recently debuted its latest advancement in patient care when Ophthalmologists here performed their first Femtosecond Laser-assisted Cataract Surgery (FLACS) - the first ever performed at a military medical facility.

“FLACS offers many benefits over the conventional Phacoemulsification Cataract Surgery (PCS), such as increased precision, improved effective lens positioning, and less damage to surrounding tissue. Cataract surgery has evolved greatly over the past two decades and these advances have resulted in increased safety, faster recovery, and outstanding visual outcomes providing a better experience for our patients,” said U.S. Navy Capt. Frank Bishop, lead Ophthalmologist at NMCSD, adding that FLACS uses laser energy to perform many of the steps of cataract surgery, providing surgeons with unprecedented control and accuracy.

Most modern cataract surgery is microsurgery performed by using phacoemulsification, which requires small incisions (wounds) to the eye using a small scalpel-like instrument and the use of a small ultrasonic device to break up and remove a cloudy lens, or cataract, from the eye. In FLACS, the laser makes the wounds, and begins the process of breaking up the cataract lens. Use of the laser increases the precision of these steps. Additionally, the FLACS procedure offers the surgeon the ability to treat astigmatism by making precision corneal incisions that optimize the eye shape and enhance vision.

More info: [med.navy.mil](http://med.navy.mil)

**Fish Skin Solution for Burn Trauma**

Kerecis™, a company which uses fish skin to heal human wounds and tissue damage, this past summer presented clinical results demonstrating the efficacy of its fish-skin technology for treating battlefield wounds. The presentations took place at the Military Health System Research Symposium (MHSRS) in August.

Casualties caused by improvised explosive devices have increased in frequency, size and severity in the past decade. Such casualties, which primarily affect the unprotected areas of the body, are difficult to treat under battlefield conditions. The number of burns from activities in current theatres of operations has almost quadrupled, making their effective medical treatment even more important to the military.

Kerecis is working on several projects with Department of Defense (DOD) entities where the advantages of using fish skin for skin-graft substitution and sparing are being investigated for front-line deployment. Kerecis wound-care product is now available for U.S. Veterans through the Government Services Administration (GSA).

More info: [kerecis.com](http://kerecis.com)

**New Spec Ops Medical Course**

A NATO Special Operations Combat Medic (NSOCM) pilot course debuted at the International Special Training Centre (ISTC) on Oct. 3, 2016.

The newly developed 22-week course will take international special operations forces (SOF) and operators with basic combat lifesaver skills and train them to be combat medics who are able to sustain casualties up to 36 hours.

The NSOCM pilot course will cover 174 NATO-recognized critical tasks in trauma and non-trauma clinical medicine, injuries, illnesses and conditions; and it comes after ISTC’s Advanced Medical First Responder Course that teaches initial treatment and care for a patient on a battlefield.

This multinational NSOCM course will teach theoretical and tactical medicine to 24 students annually, during nine modules taught by international guests, special topic experts and ISTC instructors. The pilot course began with students from Austria, Belgium, Germany, Greece, Italy, the Netherlands, Norway, Poland, Switzerland, and the United States.

More info: [med.navy.mil](http://med.navy.mil)

**New Experts Join Drug Delivery Innovator**

Portal Instruments, Inc., an emerging leader in the development of innovative drug delivery systems, has announced that Robert Langer, Sc.D., MIT Institute Professor, and Peter Hunter, Ph.D., University of Auckland Distinguished Professor have joined the company's Scientific Advisory Board.

“We are thrilled to welcome two esteemed biotechnology leaders, Professor Robert Langer and Professor Peter Hunter, to our team,” said Dr. Patrick Anquetil, Chief Executive Officer of Portal Instruments. "We will benefit greatly from their combined and extensive expertise in drug delivery, physiological modeling, and medical device development, as we transition our efforts from research and development to clinical studies and future commercialization."

Professors Langer and Hunter will join current Scientific Advisory Board Chair, Ian Hunter, Ph.D., co-founder of Portal Instruments and MIT Hatsopoulos Professor of Mechanical Engineering, as Portal continues to develop a digitally-controlled, needle-free drug injection system to simultaneously transform the delivery of modern medicines and improve the patient experience.

Anquetil continued, “We look forward to the insights and contributions Professors Langer and Hunter will make, to push our device to the next level. We believe their unique perspectives with regard to the intricacies of delivery physiology, design for inherent patient variability, and the implementation of clinical investigations will provide a strong benefit to the company.”

More info: [portalinstruments.com](http://portalinstruments.com)
A U.S. Defense Advanced Research Projects Agency (DARPA)-funded research team has demonstrated for the first time in a human, a technology that allows an individual to experience the sensation of touch directly in the brain through a neural interface system connected to a robotic arm. By enabling two-way communication between brain and machine—outgoing signals for movement and inbound signals for sensation—the technology could ultimately support new ways for people to engage with each other and with the world.

The work was supported by DARPA’s Revolutionizing Prosthetics program, and performed by the University of Pittsburgh and the University of Pittsburgh Medical Center. The results were detailed in a study published online in the journal, Science Translational Medicine and the technology was among a number of advanced demonstrations presented to President Barack Obama at a White House innovation event in Pittsburgh.

“DARPA has previously demonstrated direct neural control of a robotic arm, and now we’ve completed the circuit, sending information from a robotic arm back to the brain,” said Justin Sanchez, Director...
of DARPA’s Biological Technologies Office and the program manager for Revolutionizing Prosthetics. “This new capability fundamentally changes the relationship between humans and machines.”

**Synching Neural and Sensory**

The volunteer for the study, Nathan Copeland, has lived with quadriplegia from the upper chest down since a 2004 car accident that broke his neck and injured his spinal cord. Nearly ten years following his accident, after agreeing to participate in clinical trials, Nathan underwent surgery to have four microelectrode arrays—each about half the size of a shirt button—placed in his brain, two in the motor cortex and two in the sensory cortex regions that correspond to feeling in his fingers and palm. The researchers ran wires from those arrays to a robotic arm developed by the Applied Physics Laboratory (APL) at Johns Hopkins University. The APL arm contains sophisticated torque sensors that can detect when pressure is being applied to any of its fingers, and can convert those physical “sensations” into electrical signals that the wires carry back to the arrays in Nathan’s brain to provide precise patterns of stimulation to his sensory neurons.

In the very first set of tests, in which researchers gently touched each of the robotic fingers while Nathan was blindfolded, he was able to report with nearly 100 percent accuracy which finger was being touched. The feeling, he reported, was as if his own hand were being touched.

“At one point, instead of pressing one finger, the team decided to press two without telling him,” said Sanchez. “He responded in jest asking whether somebody was trying to play a trick on him. That is when we knew that the feelings he was perceiving through the robotic hand were near-natural.”

These latest results build on a series of DARPA achievements in directly interfacing the brain with a robotic arm. Earlier studies with volunteers Tim Hemmes and Jan Scheuermann demonstrated motor control of the APL arm using a brain-machine interface. “Based on DARPA’s success with those early tests, we asked, ‘Can we do the experiment in reverse and do for sensation what we did for the motor system?’” Sanchez said.

**Nationally-backed Science**

DARPA previewed its success with touch restoration in 2015 at “Wait, What? A Future Technology Forum,” an event that brought together thought leaders and expert scientists and engineers to generate new ideas and accelerate the development of novel capabilities.

The interface system is one of two dozen technological breakthroughs on display at The White House Frontiers Conference, where Nathan and the lead researchers from Pitt talked about the technology, what it could mean for people living with spinal cord injury, and what new possibilities it could open for society.

Part of the President’s Brain Initiative, DARPA’s Revolutionizing Prosthetics program is funding research to refine stimulation patterns and incorporate new types of sensations beyond pressure to achieve the goals of delivering near-natural motor control and sensation to users of prosthetics. Improvements in these and related neuro-technologies could someday lead to near-seamless combinations of the cognitive functions of the human brain and the computing processes of machines.

Revolutionizing Prosthetics is not DARPA’s only program to pursue the restoration of a sense of touch to amputees. The Agency’s Hand Proprioception and Touch Interfaces (HAPTIX) program is pursuing an alternative approach, using the peripheral nervous system to communicate motor commands and sensory feedback between the brain and a prosthetic limb. The program plans to initiate take-home trials of a complete, FDA-approved HAPTIX prosthesis system by 2019.

More info: DARPA.mil
Army Surgeon General Lt. Gen. Nadja Y. West and Army Medical Department Civilian Corps Chief Gregg Stevens presented the 2016 4th quarter Army Medicine Wolf Pack award to the U.S. Army Medical Research and Materiel Command's Total Lifecycle Management Team during a ceremony at Fort Detrick, Maryland, Oct. 11.

The Wolf Pack award recognizes an integrated team of military and civilian members whose accomplishments demonstrate excellence and effective teamwork resulting in significant products or services with the potential for broad impact in support of Army Medicine. The Total Lifecycle Management team was comprised of 20 military and civilian employees from the U.S. Army Medical Materiel Agency and the U.S. Army Medical Materiel Development Activity, both subordinate organizations of USAMRMC.

This quarter’s Wolf Pack award recognized the team’s combined efforts to efficiently and effectively equip and sustain the Army, ensuring a medically ready and a ready medical force. In 2015, USAMMA appointed an accountable officer and supply specialists at each of its stateside medical maintenance depots to ensure an accurate record of property, documents and funds for each of the depots, which total $125 million in medical equipment. USAMMA then completed a 100 percent inventory at all of its medical depots, coordinating with the USAMMA’s Business Support Office to leverage a barcode system that allows for a valid enterprise-wide system of record using the Theater Enterprise Wide Logistics System. TEWLS is an information technology system within the Defense Medical Logistics - Enterprise Solution portfolio that consolidates numerous military logistics functions into a single application and database. This process allowed USAMMA to optimize its existing inventory -- rather than additional funding -- to field to the force approximately $29M worth of life-saving medical equipment in fiscal year 2016. As a result of these efficiencies, USAMMA was able to field or modernize more than 140 Army units in fiscal year 2016 -- twice as much as programmed--while expending the same amount of resources.

Army Medical Readiness Outlook

“Our priority is very simple,” said Lt. Gen. Nadja Y. West, commander of Army Medical Command and surgeon general of the Army. “Chief of Staff of the Army Gen. Mark A. Milley has told me and told us all what that is. It’s readiness. [Milley] says, ‘readiness is number one and there is no other number one.’

West and others spoke in September at the Association of the United States Army’s Institute of Land Warfare “hot topics” forum: “Army Medicine: Enabling Army Readiness Today and Tomorrow.” During her remarks, West explained that, when it comes to Army Medicine, she sees readiness as a three-pronged endeavor.

“The first prong is the “current fight.” That means having a force that’s medically ready to undertake any mission or go anywhere when asked. The medical force itself must be ready as well”, West added. “The second prong is the “future fight.” That means having the medical
capability and delivery that the Army and joint force needs. “The third is the “always fight.” West said that means, “always taking care of those entrusted to our care: Soldiers for Life and Family members.”

**Current Fight**

At AUSA, Brig. Gen. Michael J. Talley, command surgeon, Army Forces Command, indicated that the Army is no longer using the Army Forces Generation Model that it used during most of the years Soldiers were deploying to Iraq and Afghanistan. The Army is now using the Sustained Readiness Model, which means all units must be ready to deploy at all times. “Non-deployables are no longer acceptable,” he said, adding that, “demand is too high,” referring to the fact that fewer Soldiers are being asked to do more around the world. The Army has upgraded its e-Profile system by adding a Commander Portal that gives commanders eyes on medical readiness, he pointed out, from the unit level down to the individual Soldier level. The portal gives commanders a real-time view of each Soldier’s medical and dental readiness.

The Commander Portal is boosting readiness, he said. “Populations can no longer hide two to three years” in a non-deployable status.

The medical readiness of the Guard is improving as well, according to Brig. Gen. Jill K. Faris, assistant surgeon general for Mobilization, Readiness and National Guard Affairs, Medical Services Corps. Nationally, it has climbed from 20 percent ready in 2006 to 86.5 percent in 2016, he said.

**Future Fight**

Army researchers in a number of laboratories around the U.S. are working on new technologies that can protect the Soldier of the future on the battlefield and at home.

Col. Matthew Hepburn, an infectious disease physician and program manager at the Defense Advanced Research Projects Agency, said his team is intent on preventing a medical surprise that could impact national security.

“DARPA is working on making devices that will be useful in the future fight,” he said, “including one device, a Mobile Analysis Platform, which is now in active transition to the Department of Defense. The battery-operated, hand-held portable device takes blood samples at the bedside and provides immediate and accurate laboratory readouts.”

“The device could be transformational,” Col Hepburn said. “It could save precious time waiting for lab results to be processed.”

DARPA is also developing a multiplex assay that will be able to diagnose a Soldier with an infectious disease with immediate readouts. The disease could be anything from influenza to dengue fever or Ebola. Hepburn called it a “Swiss Army knife,” because the device is meant to serve so many functions. It’s still in the development stage. The agency is also working on sensors that can be implanted in Soldiers’ skin to monitor such things as oxygen uptake, he said.

More info: crdamc.army.mil
Storied Walter Reed Army Institute of Research (WRAIR), Silver Spring, MD, provides an Operational Clinical Infectious Disease (OCID) course that educates servicemembers on infectious diseases endemic to global regions to which they are deploying.

By Christian Sheehy, C&CC Managing Editor
The Walter Reed Army Institute of Research (WRAIR) is a 123-year old institution tasked with researching ways to counter threats to the health of the U.S. military. "At the WRAIR, we have two fundamental programmatic lines of effort, one of which focuses on mental health, the other on infectious diseases" said COL (Dr.) Michael Zapor, WRAIR Deputy Commander for Operations and OCID Course Director. "The Center for Military Psychiatry and Neuroscience (CMPNS) focuses on the prevention, diagnosis, and treatment of both traumatic brain injury (TBI) as well as post-traumatic stress disorder (PTSD). In contrast, the Center for Military Infectious Diseases Research (CMIDR) researches pathogens that pose a threat to the health of service members." The CMIDR is comprised of a Bacterial Diseases Branch that focuses on enteric (gastrointestinal) infections (primarily bacillary dysentery) and wound infections caused by multidrug resistant bacteria. Similarly, the CMIDR also consists of a Virus Diseases Branch that focuses of flaviviruses such as dengue. "Our researchers have made significant contributions towards the development of a number of viral vaccines including hepatitis A, the Middle East Respiratory Syndrome Corona Virus (MERS-COV), Zika, and Ebola" said COL Zapor. "Moreover, we have an entire program dedicated to researching a vaccine against the Human Immunodeficiency Virus (HIV). The Military HIV Research Program (MHRP), which is congressionally funded, has helped produce the only HIV vaccine to date proven to have any efficacy". The CMIDR also consists of a large Military Malaria Research Program (MMRP). "Malaria is the quintessential infectious disease threat to deployed service members" noted Zapor; and the MMRP has produced or improved most of the antimalarial drugs in use, as well as the only malaria vaccine with any proven efficacy. Infectious diseases research at WRAIR is supported by an Entomology Branch and insectary which breeds, infects, and maintains mosquitoes and sand flies as well as a Veterinary Services Branch that includes a vivarium where rodents, nonhuman primates, and other animals are maintained. Additionally, the WRAIR maintains a pilot bio production facility that produces vaccines and other therapeutics under good manufacturing practice (GMP) standards.

In addition to its main campus in Silver Spring, Maryland, WRAIR has a number of daughter sites both in the Continental United States (CONUS), including one at Joint Base Lewis-McChord in Washington State, as well as Outside the Continental United States (OCONUS), including the Republic of Georgia, Kenya, and Thailand. In turn, the OCONUS sites have a number of smaller field sites, all arranged in a hub-and-spoke manner. "Throughout the WRAIR CONUS and OCONUS labs, research is being done in collaboration with other governments, with industry, and with academia" said Zapor.

Infectious Disease Awareness

The Department of Defense runs a number of tropical medicine courses, including the Military Tropical Medicine Course at the Uniformed Services University of Health Sciences (USUHS). "However, these are graduate level courses that are intended for infectious diseases specialists and other physicians for whom comprehensive training in tropical medicine is appropriate" said Zapor. "In contrast, the Operational Clinical Infectious Disease (OCID) course offered at WRAIR is designed for primary care physicians, physician assistants, medics, and corpsmen who will be deploying to regions in which certain infectious diseases are endemic."

There are two different versions of the OCID course, a 5 day course taught at WRAIR and a 3 day course conducted at the requesting unit's CONUS or OCONUS base or post. Both versions share a similar curriculum consisting of lectures and a laboratory session, but the five day course has an expanded curriculum that addresses some additional pathogens and provides a little more detail. "The curriculum is continuously being adapted, both in response to emerging infectious disease threats as well as response to student feedback" noted Zapor. "We endeavor to ensure that the lectures are relevant, informative, and appropriate for the attendees."

The OCID is funded by the Global Emerging Infections Surveillance (GEIS) section at the Armed Forces Health Surveillance Branch (AFHSB) and is accredited to award either 40 Continuing Medical Education (CME) credits for the 5 day course or 18 CME for the 3 day course.

The OCID course is highly regarded by medical personnel in field units and there is a high demand for attendance. Iterations of the course are run year round throughout CONUS as well as OCONUS locations such as Germany, Japan, and Nigeria and deconflicting schedules can be a challenge. "We get requests from all of the Services as well as the occasional request from a non-DoD agency such as a civil police department. Requests and repeat requests for course iterations, particularly by folks pending deployment, place a demand on the limited number of course lecturers, all of whom have full time jobs and voluntarily participate as OCID faculty" remarked Zapor.

According to COL Zapor the OCID is patterned like a college course with lectures by core and adjunct faculty, each of whom is selected based on his or her expertise. The curriculum is continuously reviewed and updated in order to keep it topical and relevant. "For example, because the distribution of Plasmodium (malaria) species varies geographically, malaria lectures given to those traveling to Africa may have a different emphasis than those traveling to South America. Similarly, travelers to Africa will spend more time learning about Ebola and related viruses endemic to that continent." Regardless of the course content for a particular iteration, each begins with a lecture titled "Preparing the traveler" which addresses such topics as pre-deployment vaccinations and prescriptions. Moreover, all lectures are similarly structured and begin with background information on the geographic distribution of the pathogen, its reservoir in nature, and its vector (e.g. mosquito), if any. This is followed by clinical presentation (i.e. the signs and symptoms associated with infection), how the disease is diagnosed, how infected patients are treated, and lastly, how infection may be prevented (e.g. by means of vaccination or prophylactic medications). "Unlike the other more comprehensive tropical medicine courses, the OCID course presupposes that the deployed provider will have very limited diagnostic capabilities and a limited formulary" Zapor noted. "Therefore, the OCID course emphasizes such topics as physical exam findings, empiric treatment of disease (i.e. treatment based on experience and observation rather than definitive diagnosis), and when to consider medical evacuation (MEDEVAC) of patients to a higher level of care."

Diagnosis by Teleconsultation

Not part of the OCID program but another resource available to deployed providers is the Army's telemedicine consultation program in infectious diseases (id.consult@us.army.mil). This program
enables deployed medics, physician assistants, and physicians to solicit advice from infectious diseases specialists assigned to Medical Centers (MEDCENS). The typical consultation includes a case presentation consisting of the history of the present illness, physical exam findings, etc. Oftentimes, providers will attach photographs of relevant exam (e.g. rash) or microscopic findings (e.g. questionable malaria on a blood smear). "Once the on-call physician replies to the consultation, it is fair game for other infectious disease docs to weigh in with their opiners" said Zapor. "What ensues is a back-and-forth dialogue between the deployed provider and the consultants consisting of recommendations, updates, and so forth. Thus, no matter how remote a deployed provider may be and no matter how limited the resources, expert consultation is just an email away."

According to COL Zapor, the success of the OCID course is paradoxically its biggest challenge. "The requests from units exceed the availability of our faculty. Consequently, we have to limit the course offerings to one 3 day iteration per month and one 5 day iteration per quarter. Additionally, we have to screen the requests and prioritize them based on need and urgency." Zapor added "We are continuously looking at ways to improve course content and delivery, including recorded lectures and a handbook. Our faculty has substantial expertise in tropical and other infectious diseases that we want to leverage to the benefit of the deployed provider."

For more information on the course and availability, please contact the Deputy Director for Operations, OCID - Mr. Douglas Davis at usarmy.detrick.medcom-wrair.mbx.ocid@mail.mil.
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The second largest federal government installation, the U.S. Veterans Administration or “VA” has a budget of $183B and comprises six enterprise centers and many hundred service level agreements with both government and industry. Recently, the VA has launched an ongoing process enhancement effort entitled MyVA which focuses on improving the Veteran’s experience, employee’s experience and empowerment, shared service excellence, continuous performance improvement, and developing strategic partnerships. The effort aims to achieve shared services excellence is directly focused on improving the Veteran’s experience and delivering consistent Veteran outcomes. VA work to develop and implement an integrated medical surgical supply chain across the enterprise is on track to return over $150M to our medical centers, which in turn can be used to hire additional nurses and clinicians and directly enable more appointments and access for Veterans to high quality healthcare.

“It all began for us by measuring enterprise performance and making good data-driven decisions,” said Thomas Muir, Executive Director, Support Services, MyVA Program Office. “By mapping our performance against our customer’s journey, we are able to focus on metrics that support their performance of business outcomes – measured in improvements to the Veteran and employee experiences, in moments that matter.”

Due to its sheer scale as the second largest agency in the federal government, the VA has unique opportunities to change the federal service landscape through our use of shared services. For example, it has over 35,000 employees delivering service at over 1,600 facilities and points of service in HR, IT, finance and contracting today in a very decentralized, distributed process aligned with unique business lines and often providing variable outcomes. “Imagine a future where VA consolidates and standardizes the work, integrating the latest
information technology and automation, enabling us to focus on exceeding customer’s expectations for service levels, quality and lower costs for the activities that directly impact Veteran’s healthcare, benefits and memorial services,” remarked Muir. “We are at a unique point in history to make substantive changes to our processes to become a more Veteran-centric organization,” he emphasized.

Implementation

The VA is today moving towards implementation of a MyVA mapping capability where the agency delivers improved customer support services when needed. “We had to answer the question and prove how establishing a new HR enterprise center delivers better customer service,” noted Muir. We are early in this journey but have already earned the trust of leadership through proven performance.

For the first time in VA’s history, we are measuring performance of our enterprise centers in a transparent, meaningful way. We are benchmarking our current levels of performance using a dashboard holding us accountable to our customers and governance board.”

What makes the MyVA effort unique is that the Administration manages a $1.1B franchise fund, a revolving fund to recover costs, develop a capital reserve, and make sound investment decisions to innovate and expand services. “By measuring our performance in a transparent, data-driven way, we are able to move at the speed of opportunity and make good business decisions to invest franchise fund reserves to stand up new enterprise centers that solve pain points for our business leaders and facility directors, and directly contribute to better lives for Veterans and their families,” remarked Muir.

“We are literally changing all of our business processes to focus on the Veteran’s journey – to make VA easy, effective and emotionally connected to delivering a consistent Veteran experience at all touch points in their journey to receive the health care and benefits they have earned through their service to our country,” noted Muir. “Our journey is very much like the large private sector company’s journey to shared services – it requires high level buy-in to be successful. We began our journey by redefining the work that supports consistent Veteran outcomes, in particular HR, IT, finance, procurement and leasing.” The VA is looking at work supporting improved employee outcomes like enterprise training. As such, the Administration is re-designing itself to deliver improved customer satisfaction, service quality, while reducing costs across the board.

More info: va.gov

"We are literally changing all of our business processes to focus on the Veterans' journey" — Thomas Muir
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