



## Thursday 5 December 2019 Sessions and Abstracts

As of 11/10/19

**CE** = CE/CME credits available (ACCME, ANCC, AANP, ACPE, APA)



= sessions approved for dental ADA CERP, as well other professional accreditations listed above.

### Thursday Plenary Session

#### ***MHS Transformation: Shaping the Future of Military Medicine*** **CE**

Speaker: LTG Ronald Place, MC, USA, Defense Health Agency Director

### Breakout Sessions:

#### ***Health Service Support in a Globally Integrated World – How the Military Healthcare System Leverages Relevance and Readiness for the 21st Century and Beyond*** **CE**

Keynote and Moderator: MG Jonathan Woodson, MD, Commanding General, Army Reserve Medical Command; Panelists: MG Lee Payne, MD, Assistant Director, Combat Support, Defense Health Agency; BG Paul Friedrichs, MD – Command Surgeon, Headquarters Air Combat Command (incoming Joint Staff Surgeon); BG Lisa Doumont – Commanding General, Medical Readiness and Training Command

Abstract: The nature of Globally Integrated Operations creates many challenges for the Military Healthcare System when it comes to maintaining relevancy and readiness. Multi-domain conflict, near peer competitors, state and non-state actors, healthcare cost and reimbursement, and the evolution of healthcare technology are all challenges and opportunities to the provision of the best quality healthcare for our Soldiers, Sailors, Airman, Marines, and Coast Guardsmen. In addition, creating an environment where the Military Health System can attract and retain the best clinical talent and ensure opportunities exist to maintain the necessary skill sets is critical to the complexity of modern military medicine. Creating the structures required to credential and privilege physicians and other providers is an important linkage in this infrastructure that will need to ultimately be applied in the Joint Force environment of Military Treatment Facilities. Finally, Large Scale Ground Combat Operations which have the potential to create a significant amount of patient flow from Point of Injury to definitive medical care provided in a Medical Treatment Facility will require not just the infrastructure of the Department of Defense but in addition the capability and capacity of the Veterans Administration and the National Disaster Medical System to adequately manage the flow of patients.

All of these factors create a context that demands the way we organize, train, and equip our military medical forces ensures relevancy and readiness from the bedside to the conference room. Combatant Commanders must be able to execute with confidence Globally Integrated Operations knowing they have the right medical force at the right place and time. In order to meet these demands, we must realize that this is not just an issue for the Active Component of our military. The Reserve Component will play a significant role to ensure the relevancy of our Military Healthcare System. Models for clinical training and skill development will come from Reserve Component sources and relationships. The ability to grow

capacity and capability to support expeditionary medical care is inherent in the Reserve Component. The skills and experiences of Reserve Component clinical providers can be applied to the challenges and opportunities of our modern environment in a manner that not only increases the ability of the Joint Force to execute missions but can enable the continuum of healthcare services to meet the relevance and readiness requirements of the 21st century and beyond.

Learning Objectives:

1. Summarize the medical support concepts for Globally Integrated Operations.
  2. Recognize medical capabilities provided by the Reserve Component to the Military Healthcare System.
  3. Apply clinical training and skills development techniques in a Joint Force environment.
  4. Describe ways to enhance the relevance of Health Service Support to the Combatant Commander.
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## ***A Revolution in Healthcare AI CE Pending, 🦹 Pending***

Speaker: Hye Sun Na, Digital Product Manager, Artificial Intelligence, GE Healthcare

Learning Objectives:

1. Understand the unique opportunities AI offers in delivering precision medicine
  2. Understand why healthcare needs an AI ecosystem composed of government, academics and ISVs to achieve more affordable, quality patient outcomes
  3. Share learnings and offer attendees suggestions on how to accelerate their own AI transformation serving their own unique population
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## ***Addressing and Measuring Substance Misuse DoD-Wide CE, 🦹***

Speakers: Sarah Murtaza; Kimberly Elenberg

Abstract: Tobacco use, alcohol misuse, prescription drug misuse, and illicit drug use, are threats to military readiness and resilience. Overall, substance misuse has cost the Department of Defense (DoD) billions of dollars in medical costs, prevented deployments and contributed to loss of productivity. The DoD adopts a comprehensive strategy to address substance misuse among Service members, including the development and execution of policies, programs, and strategic communication campaigns that address tobacco cessation, responsible drinking, prescription drug misuse, and illicit drug use. The campaigns serve as helpful resources in support of substance misuse programs and initiatives among the Services. This presentation will describe the DoD's approach to addressing substance misuse among military populations, and how policy, programs, and strategic communications come together as essential elements of a larger prevention framework. The presentation will also highlight the approach to measure the effectiveness of the campaigns, gaps in understanding the extent of the adverse effects of substance misuse, and lessons learned in reviewing and assessing unique data collection methodologies and trends among the Services. Future recommendations for a long-term strategy to synchronize policies, data collection methodologies, and substance misuse definitions across the DoD will be proposed to best support the health and readiness of the Total Force.

Learning Objectives:

1. Describe how substance misuse affects military readiness and resiliency.
2. Identify the Department of Defense's (DoD) multi-pronged approach to addressing substance misuse, including policies, programs and health communications.
3. Outline gaps in understanding and assessing the impact of substance misuse in the military

including data limitations and collection methodologies.

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## ***Nicotine Use Disorders: Addressing Nicotine Addiction Irrespective of Formulation Using Integrated Approaches* CE, 🦷**

Speakers: CAPT David Lau, DPM; CAPT Kimberly Elenberg, DNP; Sheila Pinter, MPH; Brenna VanFrank, MD; Michael Verdugo, PharmD, CDR Jing Li, PharmD: LCDR Gayle Tuckett, PharmD

Abstract: The use of electronic nicotine delivery systems (ENDS) is on the rise across the Nation, particularly within the youth and populations that are already burdened with a disproportionately high rate of combustible tobacco product use. Complexities exist when treating patients who present with nicotine use disorders since available practice guidelines do not provide direction on how to treat patients who use ENDS and are exposed to varying levels of nicotine concentration depending on the product and how it is used. Federal healthcare providers are encountering patients with nicotine use disorders in their practice, some who also combine the use of ENDS with combustible tobacco products. Effectively treating such patients necessitates a deeper understanding of the pharmacology of nicotine, the neurobiology of addiction, the formulation of ENDS products, and novel pharmacotherapeutic approaches to relieve the physiologic effects of nicotine use as part of comprehensive models to address the biological, psychological, and socio-cultural factors of nicotine addiction. This session will utilize subject matter experts from the Federal Health System to provide participants with the scientific and clinical practice pearls necessary to implement rational, integrated approaches to treating nicotine use disorders and mitigating the health and economic consequences at a patient and population level.

Learning Objectives:

1. Describe the nature and impact of the biological, psychological, and socio-cultural factors that produce and promote nicotine use disorders.
  2. Discuss the aspects of the formulation of ENDS products that influence the health risks and inform rational approaches in the treatment of nicotine use disorders.
  3. To formulate a rational pharmacotherapeutic regimen to be delivered within the context of active social support, coping skills building and relapse prevention strategies to enable patients to successfully quit the use of all nicotine containing products.
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## ***Dental Readiness...Critical Operational Support - Yesterday - Today – Tomorrow* CE, 🦷**

Speaker: Col Thaddeus H. Philips III, Air Force Expeditionary Consultant

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## ***Differentiating Nerve Agent Poisoning from Opioid Poisoning - Clinical Signs, Detection and Diagnostics* CE, 🦷**

Speaker: LTC PD Dr. Timo Wille, Bundeswehr Institute of Pharmacology and Toxicology

Abstract: Recent nerve agent (NA) attacks against war fighters and civilians underline the need for preparedness against these vicious weapons. NAs inhibit the pivotal enzyme acetylcholinesterase (AChE) resulting in accumulation of the neurotransmitter acetylcholine with subsequent cholinergic crisis. Confusion is a sign of early NA poisoning. Pinpoint pupils, loss of consciousness and respiratory failure appear later. However, similar clinical signs are observed in the far more common opioid poisoning hampering discrimination between these two groups by clinical signs. Fentanyl is highly potent synthetic opioids with lethal doses comparable to NAs and might be misused as chemical weapons. If not

treated quickly with antidotes both NA and opioid poisoning may be lethal. Therefore, quick detection and diagnosis are key triggers to react.

For detection and early diagnosis, drug wipe tests were established for opioids used as recreational drugs. However, these tests were developed before the broad range of potent synthetic opioids emerged and it is unclear whether all compounds are covered. For NA poisoning, the generic OP skin disclosure kit and a mobile AChE test kit as point-of-care device were recently developed.

The OP skin disclosure kit includes a cotton swab for skin sampling, a test tube filled with buffer for dissolving sampled agent, a cap filled with lyophilized erythrocyte membranes as acetylcholinesterase source and a cap with chemicals to facilitate a color reaction. The lower limit of detection with V-type NAs on glass slides was in the range of 50-100 ng and 200 ng on rat skin being several orders of magnitude lower than estimated incapacitating or lethal doses.

The mobile AChE test kit diagnoses exposure to NAs by determination of decreased acetylcholinesterase activity in capillary blood samples. It can be used by any medic after short training and without any additional medical infrastructure, e.g. on deployments. The device translates numerical values into recommended medical operations. Small size and easy menu-driven-use advocate procurement where NA exposure is possible.

Learning Objectives:

1. List clinical signs of nerve agent and opioid poisoning
2. Know that highly potent opioids might be misused as chemical weapon
3. To know on-site devices for diagnosis of opioid and nerve agent poisoning

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## **Implementing Genetic Screening into Clinical Practice** CE,

Speaker: Dr. Catherine Hajek

Abstract: Sanford Imagenetics was started in 2014 with a \$125 million gift from philanthropist Denny Sanford. The Imagenetics program's mission was to integrate genetics and precision medicine into primary care through initiatives in clinical care, education, and research at Sanford Health, a large health system based in the Dakotas.

Imagenetics launched a genetic screening test called the Sanford Chip in 2018. The Sanford Chip involved extensive education for Sanford's providers and patients. This blood test returns results related to pharmacogenetics (PGx) and the ACMG 59 conditions. Sanford has built clinical decision support within the EHR as well as a process of pharmacist review to assist providers with managing PGx results. Sanford also employs a large team of genetic counselors to assist with positive findings and other general support for patients and providers.

Sanford is beginning to study the outcomes of this Sanford Chip program with a focus on:

- whether providers are prepared to incorporate genetic information into everyday practice
- whether genetic results change patient/provider behavior
- whether there are improved health outcomes or cost savings
- whether there is a broader familial impact as other family members get tested

Initial data is showing that over 90% of patients have at least one PGx variant that would be actionable if the patient was ever put on a particular medication. Sanford is also seeing 2-3% of its population testing positive for an ACMG 59 condition. Other related data may be shared as well as the challenges with implementing this innovative program into clinical practice.

Finally, it could be noted as particular interest to the AMSUS audience that Sanford is collaborating with the Department of Veterans Affairs to provide free pharmacogenetic testing to VA patients thanks to a gift from Denny Sanford.

Learning Objectives:

1. Discuss the clinical value of testing for pharmacogenetics and medically actionable predispositions
  2. Outline the challenges to provider and patient engagement
  3. Describe the educational programs and resources for providers and patients
  4. Discuss the tools embedded in the electronic health record to allow ongoing use of genetic data
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### ***Public-Private Collaboration to Sustain DoD Currency* CE**

Moderators: Tom Hove, MPO, MHA, University of Wisconsin; Todd E. Rasmussen, MD FACS Colonel USAF MC; Speakers: McAllister & Quinn Managing Partner Andy Quinn COL Jason Seery, MD, US Army/Cooper Health Partnership; Dr. Dan Grabo, WVU Medical Center; Margaret Knudson, MD, MHS Strategic Partnership, American College of Surgeons; Col Jeremy Cannon, AF Surgeon, Section Chief, UPenn & Presbyterian Medical Center; Dr. Jeff Kerby, UAB Birmingham; LTC David Millia, MD USAR/TCAA; Capt Eric Elster, MD, USUHS; COL (Dr) Kirby Gross, Army Trauma Training Center, Miami

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### ***The DHA as a Combat Support Agency* CE**

Speaker Maj Gen Lee Payne, Assistant Director, Combat Support, Defense Health Agency

Abstract: AD-CS will discuss the Defense Health Agency's (DHA) role in enabling the U.S. Military to provide a medically ready force and ready medical force to Combatant Commands in both peacetime and wartime. As a combat support agency, the DHA is responsible for providing department-level support in preparation for and during contingency operations. The DHA executes on this responsibility by preparing its medical force to care for patients in every scenario, promoting the health of the nation's warfighters so they are prepared to fight tonight, and collaborating with the Services to improve military treatment facility (MTF) readiness and support combat operations. This session will include a discussion of the DHA's role as a combat support agency; the range of unique military medical capabilities the DHA provides to CCMDs to support operational requirements; and a look at key recent successes and DHA CS priorities moving forward.

Learning Objectives:

1. Describe DHA's unique role in military medical combat support, working closely with the JSS, CCMDs, and the Services to provide or augment capabilities to meet operational requirements.
  2. Highlight the resources DHA as a combat support agency brings to the table, and what this means for the CCMDs, MTFs, and the warfighter.
  3. Outline how DHA's combat support assets can be leveraged in support of operational requirements.
  4. Identify the priority areas guiding the DHA's CS mission forward.
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### ***Embracing Change: The Defense Health Agency's Priorities* CE**

Speaker: LTG Ronald Place, Defense Health Agency

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### ***The Physical and Mental Health of Women Service Members: What We Know, or Do We? Women & Infant Clinical Community***

## ***Initiatives & Moving Forward in 2020; Military Women's Psychological Health: Sex and Gender Differences and Diagnostic Bias*** CE, ♀

Moderator and Discussant: LCDR Jorielle Houston, Ph.D., PHCoE; Speakers: Nancy A. Skopp, Ph.D., PHCoE; CAPT Anne McMillan, USPHS; CDR Shannon Lamb, USN

Abstract: Women comprise 16.6 of the total Active duty force and more than 150,000 women serve in the National Guard and Reserves. The Department of Defense (DoD) sought to understand the current state of the science related to the mental health (MH) and substance use disorder (SUD) needs of female service members in order to inform treatment, policy and program design. Presenters will briefly review findings from a literature review conducted to identify peer-reviewed studies published between 2010 and 2016 that examined the MH and SUD prevalence and needs of female service members and veterans (DHA, 2018). MH disorders were more frequently diagnosed in women service members than in men service members in many studies. Adjustment and personality disorders were more than twice as common in women compared to men, and anxiety and depressive disorders were 1.4 to 1.9 times as common (AFHSB, 2012b).

Although the literature review summarized peer-reviewed evidence-based findings, the studies themselves did not examine diagnosis fidelity and the possibility that gender stereotypes can impact diagnosis. Because our mental health diagnostic system is a product of our culture, cultural stereotypes can introduce bias in the way we conceptualize mental health problems. Bias can manifest in a number of ways, including the diagnostic constructs themselves, the diagnostic criteria, and/or the application of diagnostic criteria, in standardized tests, or through use of non-probability samples for prevalence estimates to name a few. Such biases can impede diagnostic assessment and treatment procedures, compromising patient care and prolonging distress. For female service members, such issues may be further complicated by military gender stereotypes and stigma of being a woman in the military. The panel presentation will explore the limitations of the diagnostic system and the potential for gender bias and consequences of labeling. In addition, methods for reducing gender bias in assessment and treatment will be discussed.

Presenters will then speak about the military health system programs, resources and public/private partnerships to address the unique needs and strengths of women service members. In closing, the presenters will provide training and research recommendations to further support the psychological well-being of military women.

Learning Objectives:

1. Describe ways in which clinicians may inadvertently apply gender stereotypes in clinical assessment and treatment contexts.
2. Demonstrate knowledge of methods for reducing potential for gender bias in assessment and treatment.
3. Identify resources available for women service members.

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## ***Global Medical Integration*** CE

Speakers: Brig. Gen. (Dr.) Paul Friedrichs, Joint Staff Surgeon; RADM Cathal S. O'Connor, Chief of Staff, J-5, Joint Staff; Colonel (Dr.) John R. Andrus, Command Surgeon, USTRANSCOM

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## ***Virtual Medical Center: From Operational to Garrison*** CE

Speaker: LTC (P) Sean J. Hipp, MD; MAJ Daniel Yourk; Jeff Burgwin, Deputy Director, Virtual Medical Center Defense Health Agency

Abstract: The Military's first Virtual Medical Center (V-MEDCEN) was established on January 4th, 2018 at Brooke Army Medical Center in San Antonio, Texas. The V-MEDCEN is intended to support the administrative and clinical needs for the coordination and delivery of military virtual health (VH) across the globe. This is an expansive mission, but processes have been established to accommodate the needs of the operational force and the virtual experts. Broad gaps that the V-MEDCEN fill include coordination between the tactical experts' program implementation with the Military Health System (MHS) VH Committee strategic vision, care coordination between regions and MTFs, centralized privileging for MHS VH, support for regions/MTFs that lack certain medical specialties or need back-up support due to staffing shortfalls, and program management for operational and readiness programs. Programs created in coordination with the V-MEDCEN nest within the MHS VH strategic goals to 1) develop VH support for the Warfighter, 2) support the MHS clinical communities, 3) use VH to improve access to quality care for MHS beneficiaries, and 4) manage costs through and within VH. The four priorities for the V-MEDCEN in its first year have been: care coordination across the enterprise VH credentialing and privileging, establishing a VH education program, and synchronizing VH support for the operational environment (called operational virtual health or OVH).

Learning Objectives:

1. Upon completion, participant will be able to understand the concept of the Virtual Medical Center
2. Upon completion, participant will be able to know where to go to get information on how to get virtual health support operationally or in garrison.
3. Upon completion, participant will be able to understand how the services interact with the DHA to accomplish virtual health
4. Upon completion, participant will be able to understand how the virtual health governance works in order to implement new programs
5. Upon completion, participant will be able to understand the benefits of virtual health for service members and other DoD beneficiaries

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## ***Defense Health Agency Operations, Plans, and Requirements Division role as Combat Support Agency CE***

Speaker: Donald P. Dahlheimer

Abstract: The purpose of the lecture: To provide the audience with the Capabilities and Functions of the Defense Health Agency-Assistant Director-Combat Support, Operations, Plans, and Requirements (OP&R) Division, in support of our role as a Combat Support Agency.

Learning Objectives:

1. The participant will be able to identify key functions and capabilities of OP&R Operations Branch.
2. The participant will be able to recognize the relationships in OP&R Plans Branch.
3. The participant will be able to identify roles of the Requirements Branch

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## ***Improve Healthcare and Health R&D through Partnership and Technology Transfer CE***

Moderator: Ms. Abby Bharracharyya, Senior Technology Transfer Manager for the Office of Technology Transfer, Defense Health Agency; Speakers: CAPT Sally Hu, PhD, Director of Defense Health Agency Office of Technology Transfer; Mr. Steven M. Ferguson, CLP, Special Advisor for National Institutes of Health Office of Technology Transfer; Mr. Neil Versolo, Intellectual Property Consultant and the former Executive Director, Technology Transfer for Johns Hopkins Technology Ventures; CDR Eric Zhou, PhD, MBA, Regulatory Officer, National Institutes of Health and the 2018 Chair of the Asian Pacific American

Officers Committee.

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### ***Medical Readiness Operational Panel CE***

Moderator: Maj Gen Lee Payne, Assistant Director, Combat Support, Defense Health Agency; Speakers: Col Joe Anderson, USAF, AF Medical Readiness Activity, Former PACAF SG; CAPT Alaric Franzos, USN, BUMED M34; Col Stephanie Navas, ANG, Division Chief Medical Operations, ANG; COL Mike Pelzner, USA, ARNG Surgeon, former Chief, Medical Readiness, OTSG; CAPT Shane Steiner, USCG, Medical Readiness Chief; LTC Jim Fuhriman, USAR, IMR Working Group

Learning Objectives:

1. Describe the differences between IMR data and deployability
  2. Outline the challenges in gathering and reporting readiness data
  3. Explore potential joint medical readiness and deployability system
  4. Discuss challenges in standardizing and documenting the waiver process for accessions and deployments
  5. Improve understanding of Reserve Component challenges in meeting requirements to provide a medically ready force
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