Thursday 16 February
Session Descriptions

8:00 - 9:00am
Breakfast & Breakout Sessions

1. **Strange symptoms; no active disease? Join VA clinicians and researchers on a journey to help Long COVID patients!** (CE)

Elizabeth Brill, MD, MBA, FACOG Deputy Assistant Undersecretary for Health for Clinical Services, VA;
David Atkins, MD, MPH, Director, Health Services Research and Development, VA;
Norbert Brau, MD, MBA, Infectious Diseases Physician & Co-Director, Post-COVID Recovery Program, VA

The Department of Veterans Affairs (VA) has treated more than 600,000 Veterans diagnosed with COVID-19. It is estimated that 4% to 7% of Veterans who had COVID-19 will develop Long COVID. Long COVID can impact anyone who has had COVID-19 and is defined as new or worsening symptoms that persist 4 or more weeks after initial infection. Symptoms can include physical symptoms such as shortness of breath, fatigue, or heart palpitations as well as mental health symptoms, including anxiety and depression. VA is responding by developing standard clinical guidance and establishing a system in which Long COVID care, support, and services are accessible to all Veterans across VA no matter where they live. A community of practice (COP) organically developed to learn from one another, collaborate, and identify opportunities to share novel practices. It has grown to over 225 clinician members. There are over 20 Long COVID programs across VA, with dozens more under development. VA is piloting several models of care designed to be tailored to meet the needs of Veterans and provide equitable access to Long COVID care. These include a Long COVID interdisciplinary team model and a nation-wide Long COVID tele-health consultative care model.
VA researchers have made significant contributions to the nation's understanding of Long COVID. They were among the first to document the broad array of clinical conditions associated with prior COVID-19 infection including diabetes, neurologic, mental health, cardiovascular and renal disorders and helped assess the protective effect of vaccines against Long COVID. A COVID Outcomes Research Collaboratory has been established to coordinate Long COVID research and conduct a national study of outcomes using the electronic health records of over 200,000 infected Veterans. VA is collaborating with the Department of Defense on a study following 3,000 patients from first diagnosis of COVID-19 with regular blood tests and surveys to identify individual, genetic, and immune factors affecting Long COVID. VA is establishing a VA-wide Practice-Based Research Network (PBRN) which will allow rapid dissemination of new knowledge to be infused into clinical practice. The PBRN is launching in fall 2022. As candidate treatments emerge, the PBRN will serve as a platform for recruiting patients into prospective clinical trials as well as collaborate with the COP to rapidly integrate novel evidence into clinical practice.

In response to the April 5, 2022, White House Memorandum on Addressing the Long-Term Effects of COVID-19, VA was a co-lead (under Health and Human Services' leadership) of two Interagency Long-Term Impacts of COVID-19 workgroups which developed two reports - one clinical and one research-based. *The Services and Supports for Longer-Term Impacts of COVID-19* report outlines the existing federal programs, including those at VA, that can provide resources and support for three broad groups: those with Long COVID and associated conditions; those experiencing behavioral health challenges; and those experiencing bereavement. *The Whole of Government National Research Action Plan on Long COVID* report provides a US government-wide initial national research agenda focused on understanding and treating Long COVID.

2. **US Space Force Medical Operations--Airmen Medics Enabling the Guardian Warfighters of Today and Tomorrow** (CE)

Col L. Stana Ilcus, USAF, MC, SFS (USAF) Deputy Director, Medical Operations for USSF

In this one-hour discussion, we will highlight the organizational structure of the United States Space Force (USSF) and the tenets of the Guardian ideal. We will explain the current role of United States Air Force (USAF) medics in support of the USSF Guardians. And we will discuss current and future medical, physiologic and innovation considerations (including requirements, gaps and education/training/development courses of action).

3. **Bolstering Blood Availability Across the Spectrum of Care for Future Combat Operations in USINDOPACOM** (CE)

LCDR Frederic C Jewett III, USN NavHosp Okinawa JA (USN); CDR Jason B Brill, USN USARMY MEDCOM TAMC (USN); LCDR Russell P Wier, USN NAVMEDCEN SAN CA (USN)

During combat operations in CENTCOM in the last two decades, US forces experienced logistical supremacy, and fully screened and tested blood components were generally delivered to Role 2 teams. Walking blood banks were contingent source of blood at Role 2/3 facilities only when stores of blood component therapies were limited. By contrast, potential large-scale combat operations in USINDOPACOM against a peer/near-peer adversary across vast territory threatens the validity of the pre-existing model, and we must re-tool our methods to adapt to this contested environment. Data collected from CENTCOM casualties revealed the most common cause of preventable death was hemorrhage, which could be dramatically reduced by early blood transfusion prior to arrival at Role 2 facilities. While battlespace and logistical constraints make the use of component therapies untenable here, pre-screened emergency whole blood use may yet yield a live, warm, non-coagulopathic upon arrival at Role 2.

The "Valkyrie" training program at 1st Marine Division trained over 900 conventional corpsmen to safely collect and transfuse low titer O whole blood (LTOWB) at or near the point of injury, minimizing time to transfusion with a logistically feasible blood product. Valkyrie-trained corpsmen proved its utility during the 2021 attack at HKIA airport in Afghanistan.

The Valkyrie program depends upon pre-screening individual donors. One especially robust program of pre-screening exists at United States Naval Hospital Okinawa (USNHO). The location and mission of USNHO presents many of these logistical and operational challenges in the procurement of large quantities of blood, as USNHO will operate as a casualty collection point during conflict, natural disasters, and other mass casualties. In collaboration with the INDOPACOM Armed Services Blood Bank Center and Navy Blood Program, USNHO has implemented an Emergency Fresh Whole Blood program which has the potential to collect hundreds of Whole Blood Units in response to an urgent need of massive amounts of blood.

In comparison to a downrange "Walking Blood Bank," this program not only maintains a prescreened roster of personnel in the local area (to include active duty service members, DOD dependents, beneficiaries, and civilians), but has also implemented procedures to ensure the blood products are Forward Typed through Transfusion Services. This step removes the risk of utilizing low fidelity, in-the-field blood typing or "Eldon Cards" as well as the inherent risk of utilizing lists, ID cards or Dog Tags for blood type identification. The program also includes retrospective transmissible disease testing and tracking in order to ensure the proper screening of patients in the event of donor disease identification.
These mutually supportive programs exemplify realistic solutions to the complex problems of casualty resuscitation, blood product logistics, and prolonged casualty care. As a Marine Corps program, Valkyrie could now serve as the model for a similar Navy program that could expand this needed capability to the surface fleet and submarine community. As this combat transfusion program expands, USNHO's pre-screening program should be used as the model for other military treatment facilities in INDOPACOM and beyond.

4. Impact of Functional Capacity Evaluations on Readiness in Soldier Recovery Units: A 2021 Retrospective Analysis

Dr. Katherine Bentley, DPT, OCS, CSCS; ; Ms. Elena Plionis, MS OTR/L; Mr. Jeffrey S. Kirkpatrick, MS; Michelle Hagan, RN

Retention is one of the pillars of Army end strength. Determining retention potential of a wounded, ill, or injured Soldier can be difficult given the interaction of multiple variables: pain, physical requirements for a Military Occupational Specialty, manifold combinations of conditions and injuries, and individual response to treatment. In January 2021, the Army Recovery Care Program (ARCP) aimed to bring more objectivity into the Soldier Recovery Unit (SRU) Integrated Disability Evaluation Board (IDES) process by training and equipping its embedded SRU occupational and physical therapists to conduct standardized Functional Capacity Evaluations (FCEs) and Return to Work (RTW) programs. The majority of Soldiers who received such an evaluation in 2021 have since processed out of their Soldier Recovery Unit, allowing a comparison of their evaluation results against ARCP program outcomes. This analysis provides feedback on initial planning assumptions, ARCP's proposed decision tree model, and utility of the FCE/RTW initiative regarding: Return to Duty (RTD) status, reclassification into a new MOS, and time to reach Medical Retention Determination Point (MRDP).

5. State of DHA: State of Defense Health Program

Mr. Robert Goodman, SES, FACHE (DHA); Lt Col Donella Beaulieu, USAF, MSC

Provide a brief outlining financial constraints placed upon DHP O&M since FY12 and expectations of 12,800 UMB MILPER billet reductions coupled with an additional reduction of $3.7 billion across the FY23 FYDP on top of the $3 billion in reductions from FY22 O&M resources for the Direct Care System (DCS) that were not returned, sustainment of the DCS status quo is no longer realistic. Brief will provide what are the potential COAs regarding MTF efficiencies that can be pursued to facilitate the best balance to ensure sufficient complex clinical workload, protect resources for medically ready forces and medically-related installation support, while holding purchased care to the slowest possible increases.

Plenary Session
9:15am - 12:30pm

Tri-Service Plenary

1. **Army Medicine in Large Scale Combat Operations (LSCO)**

LTG R. Scott Dingle, Army Surgeon General and Commanding General, US Army Medical Command

- The Army's Medical Modernization Strategy (AMMS) end state is a fundamentally transformed and modernized Army Health System (AHS) – focused on formations, capabilities and people – that enables Multi-Domain Operations (MDO) as part of an integrated, adaptive, responsive, and resilient Joint Medical Force through 2035 and beyond.

- To achieve this end state by 2035, the AHS will modernize **how we support, what we support with,** and **who we are**. This approach nests with the Army Modernization Strategy (AMS) and the People First Strategy and integrates the elements of recruiting, doctrine, organizations, training, materiel, leader development and education, personnel, facilities, and policy (DOTMLPF-P) within the Army and the Joint Force, alongside US allies and partners.

- Soldier Lethality and Synthetic Training Environment efforts will greatly enhance the AHS primary weapon system—**the medical care provider**—improving cognitive abilities, survivability, adaptability, and resiliency.

- Medical multi-domain formations will leverage advanced robotics, AI, and optionally-manned systems with humans' in- or on-the-loop to enable decision making to inform advanced clinical care and prioritize evacuation. These technologically advanced systems will move casualties to the medic, aid the medic in treatment and movement of casualties, or serve as an evacuation platform with autonomous or human-provided care. Autonomous capabilities will provide modular, scalable and tailorable evacuation and/or treatment packages to allow for the spectrum of care from treating working dogs, to damage control surgery, emergency airway management, damage control resuscitation to dental reconstruction. These vehicles will be configured for semi-autonomous operations by relying on alternative fuels and to reduce the logistical burdens and footprint required of 20th century field hospital capabilities.

- By 2035, AHS medical professionals will achieve proficiency through a combination of advanced simulated platforms. Simulated platforms will fundamentally change clinical proficiency from "brick-and-mortar" facilities to advanced simulated training environments. Combining these skills with assignments within DHA's medical facilities or Army/Joint provided sustainment-training platforms will ensure use of modernized capabilities. Additionally, medical personnel will require realistic training center rotations and other premier training exercises such as Global Medic. This will optimally integrate medical forces while conducting MDO.

- The rapid pace of advancements and high casualties expected in MDO will require the Army to develop medical expertise and skills faster than today's standard. Surgeons, with increased training, enhanced simulations, and robust AI enabled feedback will reduce their training time. The goal is to reduce this training time by 50%, which today averages 12-14 years (undergraduate, graduate and general surgery residency).

2. **Navy Medicine's Transformation to the Maritime Headquarters/Maritime Operations Center (MHQ/MOC) Model**

RADM Bruce L. Gillingham, Navy Surgeon General

- We are a maritime force and we are structuring our organization to align to Fleet Command Structure. This will allow for effective communication between our Fleet partners. The Maritime Headquarter and Maritime Operations Centers establishes a process for leveraging cross functional teams, using subject matter experts to come together quickly, and rapidly inform the commander as the mission requires. This effort will also build transparency and speed to decision throughout the organization to position Navy Medicine to support the Fleet and Marine Corps in Distribute Maritime Operations, Expeditionary Advanced Basing Operations, and any other contingency that may arise. In the spirit of "Get Real Get Better" we are a High Reliability Organization that embraces change, leverages subject matter expertise, and will always be learning.
- Learning Objectives: (1) UNDERSTAND the MHQ/MOC and how it facilitates speed to decision, rapid cycle feedback, deference to expertise, and a common language with the operational force. (2) SUMMARIZE our expeditionary medical systems and the paradigm shift to the continuum of care in the maritime environment. (3) EXPLAIN how we are manning, training, equipping, maintaining, sustaining, and certifying our Force while also maintaining the readiness of our service members.

3. **Preparing Ready Medics for Agile Combat Employment/Multi-Modal Conflict**

Lt Gen Robert I. Miller, Air Force Surgeon General and Space Force Surgeon General

1) Understand how medics fit into the AFFORGEN model in the Agile Combat employment environment
2) Identify what it means to be Ready Medics and explain the medical readiness standards to deploy
3) Identify existing and future technologies to aid in delivering health care under attack in a cyber-degraded environment

MEDIC-X will develop a relevant, consistent, standardized, and validated Medical Force through realistic training across the AFMS to ensure all personnel are proficiently trained relative to current world threats. This effort will fundamentally change what defines an "Air Force Medic", extending the capability of all AFMS personnel skillsets and ranks in order to enhance and improve patient outcomes in a contested environment.

Topic for discussion between the three Surgeons General following each 30 minute presentation: Opportunities for Army, Air Force and Navy Medical Departments to Enhance Collaboration and Interoperability for the Medical Support of our Warfighters in Austere Operational Environments.

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