

2019 USPHS Symposium
Wednesday, May 8
Physician Category Agenda

Wednesday, May 8

8:00 AM - A PHS Physician's Experience at the United States Air Force Critical Care Air Transport Team
8:20 AM Training

CDR Leah Crisafi, MD

CCATT-Initial is an intensive two-week course at the US Air Force School of Aerospace Medicine where members of the US Air Force, and now, Commissioned Corps officers, are trained to provide ICU care on the back of an aircraft. This new partnership with USAF aims to train Commissioned Corps officers to potentially augment Department of Defense in aeromedical evacuation. I was one of seven Commissioned Officers and the only physician to participate in the first joint course in June 2018. We learned about how the aerospace environment affects us, to include experiencing special disorientation in a Barany chair and hypoxia at 25,000 feet in an altitude chamber. We underwent an intensive review of management of critically ill patients highlighting the effects of altitude on these patients as well as the types of injuries and challenges encountered in the USAF 20-year CCATT experience. We participated in highly realistic simulations on mock aircraft using headsets and working under the light of our headlamps, providing care for patients with complex injuries and complications. We also trained extensively in the equipment, an understanding of which is critical to successful management of deteriorating patients in the "austere" aerospace setting.

At the conclusion of this session participants will be able to:

1. Describe the typical makeup of a Critical Care Air Transport Team.
2. Identify the Joint Trauma System Clinical Practice Guidelines.
3. Describe elements of Critical Care Air Transport Team training.

8:20 AM - Racial Disparities in Maternal Mortality - United States, 2006-2015
8:40 AM

LCDR Emily Petersen, MD

Background: About 700 women die during or within one year of the end of pregnancy annually in the United States as a result of pregnancy-related complications (pregnancy-related deaths). We studied racial disparities in pregnancy-related mortality.

Methods: We analyzed 2006-2015 data from CDC's Pregnancy Mortality Surveillance System (PMSS). PMSS is a national surveillance system which requests 52 reporting areas (50 states, New York City, and District of Columbia) voluntarily send death certificates for all women who died during pregnancy or within one year of pregnancy, and matching birth or fetal death certificates. Information about each death was reviewed by medically trained epidemiologists to determine the cause of death and whether it was related to the pregnancy. We analyzed pregnancy-related mortality ratios (pregnancy-related deaths per 100,000 live births per year; PRMR) by maternal race and age, education, nativity and state.

Results: For 2006-2015, the national PRMR was 16.6 pregnancy-related deaths per 100,000 births. The PRMR for non-Hispanic black women (black) was 43.7, compared

with 14.0 for non-Hispanic white women (white). The PRMR for college-educated black women was greater than white women with less than a high school degree. For the states in the lowest, middle and highest terciles of PRMR, the PRMR for black women was 3.1, 2.7, and 3.1 times higher than white women, respectively.

Conclusions: Black women experience higher PRMR compared to white women. This disparity is persistent when analyzed by education level, and persists even in states with low PRMR.

At the conclusion of this session participants will be able to:

1. Define pregnancy-related death and pregnancy-related mortality ratio.
2. Describe the state of pregnancy-related mortality in the United States.
3. Discuss existing disparities in pregnancy-related mortality.

8:40 AM - IHS Partnerships to Improve Patient Care
9:00 AM ***CAPT Paul Jung, MD, MPH, FACPM***

IHS faces clinical provider staffing challenges. Since 2015, three large academic health centers have founded fellowship programs that provide a mix of training and direct service at remote IHS sites. These include the University of California San Francisco HEAL (Health, Equity, Action, Leadership) Fellowship, the Massachusetts General Hospital Fellowship Program in Rural Health Leadership, and the University of Washington Global and Rural Health Fellowship. This presentation will provide an overview of each partnership program, to emphasize A) the presence/absence of a global health training component; B) size and fellow specialty mix; C) staffing/contracting arrangements; and D) community partner site characteristics. The presentation will also discuss next steps for the programs, which include ways to better support graduating fellows, manners in which to enhance staffing/contracting agreements, and areas for growth to other disciplines. Finally, the presentation will discuss opportunities for development of new, similar programs at other academic centers and community sites with a focus on collaboration with the Indian Health Service.

At the conclusion of this session participants will be able to:

1. Describe workforce needs in the Indian Health Service
2. Identify three academic medical centers that currently have fellowship partnerships with IHS
3. Explain the benefits of having partnerships at the medical fellowship level

9:00 AM - Caring for the Most Vulnerable of the Vulnerable: A Model Suicide Prevention Program Among
9:20 AM Native Americans
LCDR Joy McQuery, MD

Suicide is the 6th leading cause of death for American Indians/Alaska Natives (AI/AN). The highest suicide risk among AI/AN is found in men, aged 25-44. Men aged 25-44 are difficult to engage in health care settings because do not carry a heavy burden of chronic disease and hence do not have significant contact with the medical system. Within the Native community under study in this investigation, the most high risk population was discovered to be incarcerated males. Through a collaboration with the Tribal Justice system, a multipronged suicide prevention program was created. Since

this program inception, the suicide rate has decreased by 400% and there has been significant shifts in the suicide demographics in this community.

At the conclusion of this session participants will be able to:

1. Describe the demographics for suicide completers in this community, which are in keeping with the national trends for AI/AN
2. Describe court ordered behavioral health treatment as a suicide prevention strategy.
3. Explain collaboration strategies for partnering with the Tribal Courts and the Tribal Detention Center to enable identification of and intervention with individuals at risk for suicide

9:20 AM -
10:00 AM

Food and Drug Administration (FDA): Regulation and Beyond

CDR Erica Radden, MD; LCDR Lei Xu, MD, PhD; CAPT Jason Woo, MD, MPH, FACCOG; CAPT John Hariadi, MD, FAAFP; CAPT Kimberly Lindsey, MD, MA DABS

The mission of the FDA is to protect the public health by ensuring the safety, efficacy, and security of human and veterinary drugs, biological products, and medical devices; and by ensuring the safety of our nation's food supply, cosmetics, and products that emit radiation. To fulfill such a large mission, the FDA is an incredibly expansive organization with multiple offices and centers with locations all over the country but whose headquarters reside in Silver Spring, MD. The majority of medical officers work under the Office of Medical Products and Tobacco, which is comprised of 4 centers (Center for Drug Evaluation and Research [CDER], Center for Biologics Evaluation and Research [CBER], Center for Devices and Radiological Health [CDRH], and Center for Tobacco Products [CTP]). The roles and responsibilities of these medical officers are quite varied but draw from their clinical expertise and experience as well as public health knowledge. Regulatory medicine is not something routinely taught in the medical training of physicians, and, thus, for everyone, there is a steep learning curve when first starting at the FDA. Although medical officers at the FDA do not provide direct patient care or conduct their own research, they do promote the availability of safe and effective products to even the most vulnerable populations through interactions with the community, industry, and academia; regulation of products at nearly every stage of development; and collaboration with other international regulatory entities and government agencies.

At the conclusion of this session participants will be able to:

1. Describe the FDA's unique role in protecting the public health of the nation
2. Discuss the process of regulatory medicine and the varied work of medical officers at the FDA
3. Highlight specific FDA efforts to address the US Surgeon General's priorities and advance the PHS mission

12:00 PM -
1:30 PM

Physician Luncheon and Keynote: Innovations in Partnership For Better Health: Where Are We Going and How Will We Get There

Dr. Reed V. Tuckson, MD, FACP

Dr. Tuckson will describe the key contextual forces, and their interrelationship, that will determine the character of the health and medical care delivery system relevant to U.S. Public Health Services Professionals and their engagement with key and diverse partner

stakeholders.

Specifically, attendees will come away with a more complete understanding of the determinant forces that shape the mandate for change and innovation in preventive and clinical care delivery.

- Cost escalation
- Suboptimal quality and safety
- The escalation of preventable chronic illness
- The changing organization and financing of healthcare delivery, with special attention on new consolidation strategies in the private sector
- The challenges associated with fragmentation in care delivery and medically necessary social support

At the conclusion of this session participants will be able to:

1. Explain the importance, confluence, and applicability to their work of the conceptual paradigm shift towards value-based reimbursement, population health, and precision medicine. The attendees will specifically be able to better synthesize the emergent synergies being developed between traditional public health population models, new clinical care models that incorporate population health and social determinants perspectives, and the growing consumerism movement.
2. Describe how data and new analytic innovations can, are, and should support optimal new synergies and partnerships to advance a continuum of care arrangements that lead to optimal health and clinical outcomes.
3. List the characteristics and requirements necessary for value-added partnerships with health related entities, social service organizations, and new private sector players who are bringing new knowledge, capabilities and skills into traditional health and medical care delivery.

1:30 PM -
2:00 PM

Smallpox: Training Clinical Public Health Responders Need About Smallpox Countermeasures
CDR Agam Rao, MD; CDR Brett Petersen, MD MPH

Smallpox is a life-threatening acute illness caused by the variola virus, a member of the orthopoxvirus family. It has been eradicated worldwide after a massive decades long public health effort. However, it is among the top infectious illnesses that might occur again in large numbers, specifically as a result of nefarious and intentional exposures, e.g., during a bioterror event.

At the conclusion of this session participants will be able to:

1. Describe the clinical presentation and treatment of smallpox
2. Apply the procedures for proper administration of smallpox vaccination using a bifurcated needle
3. Recognize adverse events from smallpox vaccination

2:00 PM -
2:20 PM

An Update on Uniformed Service Transgender Policy: Another Coastie's Experience
CDR Glen MacPherson, MD, MPH

An update to the 2017 talk: "DoD and Coast Guard Transgender Policy: One Servicemember's Experience," this talk describes the current policy of the Pentagon

toward Transgender Servicemembers through the lens of an enlisted Coast Guard member who identified as transgender June 2016.

At the conclusion of this session participants will be able to:

1. Describe DoD policy related to the enlistment of transgender individuals.
2. Describe DoD policy related to the retention of transgender individuals.
3. Describe DOD police related to the healthcare and transition of transgender individuals.

2:20 PM - Medical Officers on Deployment: Rapid Fire Skills

3:20 PM **CDR Erica Radden, MD, FAAFP; CDR Keren Hilger, MD; LCDR Toya Kelley, MD; LCDR Jane Baumblatt, MD**

Purpose: To train physicians in the common responsibilities during deployment so that they may provide excellent patient care regardless of their clinical background or time spent in clinical settings

Background: The US Public Health Service Physician Category is comprised of numerous board-certified physicians who either do or don't practice clinically. When deployed, physicians do so in a clinical role, with the expectation that they will care for patients, usually in a shelter-like environment. Some physicians might be reluctant to deploy in a clinical capacity because they do not practice clinically on a day-to-day basis. Or perhaps their specialty leaves them vulnerable to caring for patients outside of their trained scope of practice. When deployed as a physician, officers are utilized as general practitioners, with a basic common understanding of medicine and how to care for patients and maintain their usual state of health.

At the conclusion of this session participants will be able to:

1. Identify common presentations of medical conditions presenting to an FMS
2. Describe how to provide life-saving treatment until EMS arrives
3. Explain basic care for common presentations

3:30 PM - TBI and Polytrauma Rehabilitation: Partnership between DVA and DOD

3:50 PM **CAPT Bruno Himmler, MD, MPH; Dr Mary Himmler, MD, FAAPM&R**

This presentation will describe our current understanding of the types of TBI, current demographics for TBI in the Active Duty population and common signs/symptoms. There have been several advances in the last decade regarding treatment for Severe TBI and specific centers of excellence have been established within the Dept of VA and DoD to ensure Active Duty Members receive the best care.

At the conclusion of this session participants will be able to:

1. Describe the current definition for TBI and the various severity levels
2. Describe the current models for documenting level of consciousness and recovery
3. Identify the TBI centers of excellence within the United States for Active Duty Personnel

3:50 PM - Global Partnerships for Improvement of Vaccination Schedules for Children
4:10 PM **LCDR Kristie E. N. Clarke, MD, MSCR, FAAP**

Protection from disease through vaccination is essential to improving and safeguarding child health worldwide. The officers stationed at the US Centers for Disease Control and Prevention's Global Immunization Division, along with their colleagues, actively seek to apply the best evidence and science to advise international bodies on beneficial changes to global vaccination recommendations. However, this effort involves many partners. This session will outline the process of updating global vaccination schedule recommendations from evidence gathering to formulation of new recommendations and funding of the vaccines for lower income countries, highlighting collaboration between the US government and multiple partners, such as the World Health Organization, expert advisory bodies with members from academic institutions worldwide, and funding organizations. The newly recommended booster doses for diphtheria, tetanus, and pertussis (DTP) will be used as a case example.

At the conclusion of this session participants will be able to:

1. Identify the major partner organizations involved in revision of global immunization recommendations
2. Describe the process for revising global immunization recommendations
3. Describe the roles of CDC medical officers in providing evidence to evaluate new vaccines or additional doses of existing vaccines for inclusion in the global immunization recommendations

4:10 PM - The National Opioid Crisis-Are We Winning the War?
4:30 PM **CAPT Meena Vythilingam, M.D.**

Opioid overdose was responsible for an estimated 48,453 American deaths between March 2017 and 2018. Combating the opioid crisis through interagency and interdepartmental efforts and by leveraging public-private partnerships is a top priority for the U.S. Department of Health and Human Services (HHS). The latest science and evidence-based practices were translated into five key strategies to address this public health emergency. The five strategic pillars include: 1. Better pain management, 2. Better access to prevention, treatment, and recovery services, 3. Better data on the epidemic, 4. Better distribution of naloxone and 5. Better research on pain and addiction. Although these upstream and downstream policies and programs across the continuum of care seem to have decreased the rate of increase in opioid related mortality, this lethal epidemic is far from resolved. This presentation will highlight opioid-related efforts led by the Office of the Assistant Secretary for Health, report on leading and lagging measures to assess the effectiveness of the HHS strategy and outline opportunities to actively engage in fighting this epidemic.

At the conclusion of this session participants will be able to:

1. Summarize HHS efforts to combat the opioid crisis.
2. Describe current status of leading and lagging measures.
3. Examine opportunities to contribute to the fight against opioids.

4:30 PM -
5:15 PM

Physicians Professional Advisory Committee Leadership Panel

CAPT John Iskander, MD, MPH; CDR Jaspal Ahluwalia, MD, MPH; CAPT Brian Lewis, MD; CDR Maggie Brewinski Isaacs, MD, MPH

This presentation will provide an update on PPAC activities and initiatives and discuss issues important to the medical category.

At the conclusion of this session participants will be able to:

1. Identify sources for information about Health Professions Special Pays
2. State the number of clinical hours required in one's specialty by January 2020
3. Identify one PHS medical officer recruitment activity