Monday, January 6

8:00 a.m. – 4:30 p.m.  
**NAEMSP® National EMS Medical Directors Course & Practicum®**  
This course will include:  
- A foundation upon which to function effectively as an EMS medical director regardless of EMS system type  
- Specific management tools, which may be of use in your local EMS system  
- Dialogue with EMS physicians and professionals from a number of different systems that will develop a network for future problem solving  
- An understanding of how EMS functions within the broader emergency care system at a local, state, and national level  
- A foundation for a career in EMS  

Course Co-Directors:  
Beth Adams, MA, RN, NREMT-P  
Robert Swor, DO

8:00 a.m. – 5:00 p.m.  
**EMS Quality Improvement and Safety Workshop**  
Are you interested in stepping up the quality of your agency or EMS system? This is the course for you! Designed for EMS medical directors and quality leaders who want to improve the clinical quality of their service and need the tools to be more effective, the course will apply the lessons of healthcare improvement to the challenges of EMS and out-of-hospital care. During the course you will learn the tenets of improvement science and how to practically apply these lessons to your environment, be it a small agency, a larger EMS system or a state-wide effort. The course is designed flexibly – two days are recommended, but each day works independently, depending on your experience with quality improvement.  
- **Day 1:** This day will take participants through an immersive hands-on experience, including the basic structure of quality improvement and patient safety in EMS. The aim of the day is to build the framework for an improvement project in your system using workshop and small group format. This is appropriate for individuals who are starting their improvement learning or working to create a foundation for quality improvement within their organization. Prerequisite for the year-long NAEMSP Quality and Safety Course 2020.  

Course Co-Directors:  
Scott Bourn, PhD, RN, EMT-P  
Michael Redlener, MD, FAEMS

Tuesday, January 7

8:00 a.m. – 5:00 p.m.  
**NAEMSP® National EMS Medical Directors Course & Practicum®**  
This course will include:  
- A foundation upon which to function effectively as an EMS medical director regardless of EMS system type  
- Specific management tools, which may be of use in your local EMS system  
- Dialogue with EMS physicians and professionals from a number of different systems that will develop a network for future problem solving  
- An understanding of how EMS functions within the broader emergency care system at a local, state and national level  
- A foundation for a career in EMS  

Course Co-Directors:  
Beth Adams, MA, RN, NREMT-P  
Robert Swor, DO

8:00 a.m. – 5:00 p.m.  
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- **Day 1:** This day will take participants through an immersive hands-on experience, including the basic structure of quality improvement and patient safety in EMS. The aim of the day is to build the framework for an improvement project in your system using workshop and small group format. This is appropriate for individuals who are starting their improvement learning or working to create a foundation for quality improvement within their organization. Prerequisite for the year-long NAEMSP Quality and Safety Course 2020.  

Course Co-Directors:  
Scott Bourn, PhD, RN, EMT-P  
Michael Redlener, MD
agency, a larger EMS system or a state-wide effort. This year we are expanding the course to a two-day format. The course is designed flexibly—two days are recommended, but each day works independently, depending on your experience with quality improvement.

- **Day 2 – ADVANCED QUALITY IMPROVEMENT**: Designed to build on the topics of Day 1, Day 2’s Advanced Quality Improvement program is designed for individuals who have at least some experience in quality improvement, as well as those seeking a forum to support the improvement work they are doing in their own system. Course faculty and participants from the 2019 Quality and Safety Course will guide participants through prior projects and case studies to highlight challenges and lessons learned regarding data, leading change, project management and more. Day 1 is NOT a prerequisite, but is encouraged. Prerequisite for the year-long NAEMSP Quality and Safety Course 2020.

**8:00 a.m. – 5:00 p.m.**  
**EMS Medical Directors Advanced Hazmat Life Support for Tox-Medics™**  
This preconference course highlights a new addition to the Advance Hazmat Life Support (AHLS™) family of courses, AHLS for Tox-medics™. This new course was developed specifically to address the educational needs of paramedics who care for patients exposed to hazardous materials in the out-of-hospital environment. This workshop will deliver the education and training specifically for medical directors who oversee Tox Medic, will provide participants with an introduction to the AHLS for Tox Medic™ curriculum, the knowledge to care for victims of hazmat emergencies and an overview of the AHLS for Tox Medic™ patient care guidelines. This full-day pre-conference is a stand-alone course focusing on providing expertprehospital care for victims of hazmat incidents. This pre-conference workshop does not require a prerequisite AHLS provider course.

Course Director:  
Amber Rice, MD

**8:00 a.m. – 12:00 p.m.**  
**Teaching to Adult Learners: Improving Your Skills as an Educator**  
The education of EMS professionals plays a key role in the role of any medical director or EMS leader. Effective education techniques which address EMS professional needs as adult learners are essential to implementation of quality patient care and organizational change. The goal of this half day workshop is to provide participants with tools to become more effective educators. Topics to be covered will include development of goals and objectives, presentation design, asynchronous and interactive educational formats. This will be done only in part through didactic format and predominantly through interactive methods which exemplify the techniques discussed.

Course Director:  
Maia Dorsett, MD, PhD

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**Wednesday, January 8**

**8:00 a.m. – 4:00 p.m.**  
**NAEMSP® National EMS Medical Directors Course & Practicum®**  
This course will include:

- A foundation upon which to function effectively as an EMS medical director regardless of EMS system type
- Specific management tools, which may be of use in your local EMS system
- Dialogue with EMS physicians and professionals from a number of different systems that will develop a network for future problem solving
- An understanding of how EMS functions within the broader emergency care system at a local, state, and national level
- A foundation for a career in EMS

Course Co-Directors:  
Beth Adams, MA, RN, NREMT-P  
Robert Swor, DO

**8:00 a.m. – 5:00 p.m.**  
**NAEMSP® Advanced Topics in Medical Direction™**  
This unique one-day workshop is designed for practicing EMS Medical Directors and others who engage in clinical supervision of functioning emergency medical dispatchers, emergency medical technicians, and paramedics.

Course Director:  
Jeff Beeson, DO, FAEMS
8:00 a.m. – 12:00 p.m.  
**All Things Airway: Airway Management in the Fresh Cadaver**  
This workshop will offer a unique combination of the exceptional anatomic and procedural process of the cadaver lab with the airway lab. Here, several different types of video laryngoscopy devices and supraglottic airways will be integrated and demonstrated using the cadavers. In addition, this workshop will provide other unique opportunities to review the relevant anatomy associated with critical care and lifesaving procedures. The relevant review of the anatomy will include airway, chest cavity, and vascular access landmarks. Faculty includes nationally-known EMS medical directors and experienced emergency medical services providers. Under expert instruction, participants will have the opportunity to practice the following procedural skills: basic airway management, direct and video laryngoscope intubation, intraosseous access, and various other emergency procedures. The participants will have the opportunity for anatomical exploration as it relates to these procedures providing a unique appreciation of the anatomy and the impact of the disease process. An analysis of the unnecessary risk and the potential for complications when these procedures are performed in suboptimal conditions will be explored.

Course Co-Directors:  
Jacob Keeperman, MD, FAEMS, FACEP  
Andrew McCoy, MD, MS  
Dan Spaite, MD, FACEP  
Marvin Wayne, MD

1:00 p.m. – 5:00 p.m.  
**Out-of-Hospital Critical Procedure Cadaver Lab**  
The purpose of this workshop is to provide a unique opportunity to review relevant anatomy associated with critical care and life-saving emergency procedures. Participants will enhance their understanding of the various procedures and the associated risks and benefits through the hands-on practicum. The relevant review of the anatomy will include airway, chest cavity and vascular access landmarks. Key opinion leaders, nationally known EMS medical directors, and emergency medical services providers serve as faculty for this program. Under expert instruction, participants will have the opportunity to practice the following procedural skills: basic airway management, direct and video laryngoscope intubation, intraosseous access and various other emergency procedures. The participants will have the opportunity for anatomical exploration as it relates to these procedures providing a unique appreciation of the anatomy and the impact of the disease process. An analysis of the unnecessary risk and the potential for complications when these procedures are performed in suboptimal conditions will be explored.

Course Director:  
Jacob Keeperman, MD, FAEMS, FACEP

1:00 p.m. – 5:00 p.m.  
**Preparing Your Research for Publication**  
This session will help EMS researchers learn the processes needed to convert a research project into a publishable manuscript. EMS physicians and other professionals can help advance the profession by contributing to EMS literature, and this aspect of the research process is one that is not often taught.

Course Director:  
David Cone, MD

4:00 p.m. – 6:00 p.m.  
**Committee Meeting - Standards & Practice**

4:00 p.m. – 6:00 p.m.  
**Committee Meeting - Council of EMS Fellowship Directors**

6:00 p.m. – 6:45 p.m.  
**New Member Reception**

6:45 p.m. – 8:00 p.m.  
**Welcome Reception in the Exhibit Hall**

8:00 p.m. – 8:45 p.m.  
**Certified Emergency Medicine/FAEMS Reception**

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**Thursday, January 9**

7:00 a.m. – 5:00 p.m.  
**Registration**

7:00 a.m. – 8:15 a.m.  
**PEC Breakfast (invitation only)**

7:00 a.m. – 8:15 a.m.  
**Continental Breakfast**

7:00 a.m. – 8:15 a.m.  
**Committee Meetings**

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**GENERAL SESSIONS**

8:00 a.m. – 8:15 a.m.  
**Welcome & President’s Address**  
David Tan, MD, EMT-T, FAEMS

8:15 a.m. – 9:00 a.m.  
**Keynote Address: The Science of Quality and Driving Change in EMS**  
The focus on quality in EMS has made a major pivot. No longer is our primary attention looking at errors or compliance. EMS leaders are applying the tools and methods of improvement science to change the system. NAEMSP is leading this new frontier with the yearlong Quality and Safety Course; now starting its third year. Dr. David Williams is an expert...
quality advisor to organizations like the Institute for Healthcare Improvement and has advised and led improvement worldwide. Join Dr. Williams and participants from the NAEMSP Quality and Safety program to learn from quality improvement applied to real problems in practice. See how QI helps us learn deeply and achieve measurable results. Learn how it can help you improve results for patients.

**9:00 a.m. – 9:30 a.m.**

**The 2019 ABEM EMS Subspecialty Exam**  
Presenters will review the results from the 2019 ABEM EMS Subspecialty Exam. This will include the announcing of the aggregate performance from the 2019 exam and placing the results in the context of prior and future exams.

**9:30 a.m. – 10:15 a.m.**

**Supraglottic Airways or Endotracheal Intubation in Out-of-Hospital Cardiac Arrest?**  
Airway management is one of the most prominent interventions in out-of-hospital cardiac arrest (OHCA) resuscitation. In 2018 three of the most important trials in EMS history were published in the *Journal of the American Medical Association*: 1) Cardiac Arrest Airway Management (CAAM) trial took place in France and Belgium and compared the effectiveness of Bag-Valve-Mask ventilation vs. Endotracheal Intubation upon OHCA outcomes. (Jabre, et al., JAMA 2018) 2) Airways-2 took place in the United Kingdom and compared the effectiveness of i-gel vs. intubation upon OHCA outcomes. (Benger, et al., JAMA 2018) 3) Pragmatic Airway Resuscitation Trial (PART) took place in the United States and compared the effectiveness of the King laryngeal tube vs. intubation upon OHCA outcomes (Wang, JAMA 2018) These studies have reignited discussion on whether intubation should be replaced with supraglottic airway management in OHCA. EMS medical directors now have the challenging task of trying to understand and weighing the evidence, choosing whether to implement use of supraglottic airways over the standard practice of endotracheal intubation, and strategizing how to sell the decision to EMS providers.

**10:15 a.m. – 10:45 a.m.**

Break in the Exhibit Hall

**10:45 a.m. – 11:00 a.m.**

PEC Update  
James Menegazzi, PhD

**11:00 a.m. – 12:00 p.m.**

**Research Oral Abstracts 1**

**12:00 p.m. – 1:20 p.m.**

Boxed Lunches in the Exhibit Hall

**Committee Meetings**

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**CONCURRENT SESSION 1A PATIENT SAFETY & QUALITY**

**1:30 p.m. – 2:00 p.m.**

EMS Medical Errors: Recognizing Bias and Improving Decision Making Strategies  
Reducing medical errors in EMS can be achieved by recognizing bias and improving decision making strategies.  
Will Smith, MD, Paramedic, FAEMS

**2:00 p.m. – 2:30 p.m.**

Pediatric Medication Errors: What We Know and Where We Need To Go  
Medication dosing errors for prehospital pediatric patients may be as high as 60% of all doses. Dr. Hoyle will describe the results of an intervention to decrease pediatric medication errors from a federally-funded study of 15 EMS agencies in Michigan. Dosing errors, errors of omission, and errors of commission that occurred in 142 pediatric patient simulations will be discussed, including some that will surprise you. Techniques used to defeat these errors will also be discussed.  
John Hoyle, Jr., MD

**2:30 p.m. – 3:30 p.m.**

Innovations in EMS Quality Panel  
There are innovators in the EMS quality space that are changing the way we oversee medical care in EMS through technology, processes, and other innovative ways. This panel will highlight some innovators and their work. Topics to include using monitor data to evaluate quality of critical care, trigger tools for patient safety, videolaryngoscopy, and other methods  
Veer Vithalani, MD, FACEP, FAEMS
## CONCURRENT SESSION 1B WILDERNESS & RURAL

### 1:30 p.m. – 2:00 p.m.
**Wilderness EMS Considerations for Urban & Suburban EMS**
Wilderness EMS considerations for urban providers - the often forgotten issues until it is too late.

*Benjamin N. Abo, DO, EMT-P, FAWM*

### 2:00 p.m. – 2:30 p.m.
**National Park Service Medicine: Stories from Some of the "Crown Jewels" of the U.S. National Parks**
The U.S. National Park System is a national treasure for all Americans and provides amazing opportunities to see pristine wilderness and wildlife throughout the country. The EMS providers within the National Park Service provide EMS response and care in some of the most remote areas of the U.S. and are faced with logistical and operational concerns that most EMS providers never have to consider. As EMS medical directors for NPS entities throughout the Western U.S., join us as we discuss interesting cases and unique out-of-hospital medicine and practice from the National Park Service EMS system.

*Drew Harrell, MD, FAEMS*

*Will Smith, MD Paramedic, FAEMS*

### 2:30 p.m. – 3:00 p.m.
**Long Distance Transport**
What safe guards do we need to have in place when we have a 3-5 hour transport time and can't fly? How to teach our medics to not only stabilize, but also to maintain patients.

*Kelley Smith*

### 3:00 p.m. – 3:30 p.m.
**Challenges in Pediatric Care for Rural EMS**
How is this era of increasing rural hospital closures and migration of pediatric services to urban areas affecting rural healthcare services, EMS, and patient outcomes? The presenters will discuss rural EMS challenges to quality pediatric care. The speakers will outline the situation and issues, then provide a roadmap of solutions, including EMSC partnerships, quality improvement, education, and research. Using asthma (a common pediatric emergency) and behavioral health (an increasing problem in youth) as examples, the presenters will walk participants through how rural EMS is strained by a lack of primary resources, pediatric emergency infrastructure, and longer transport times.

*Jennifer Fishe, MD*

*Phyllis Hendry, MD*

## CONCURRENT SESSION 1C1 TECHNOLOGY

### 1:30 p.m. – 2:00 p.m.
**Point-of-Care Ultrasound in Out-of-Hospital Cardiac Arrest: A Paramedic-Led Intervention**
An EMS physician and a paramedic captain from Albuquerque Fire Rescue will discuss paramedic-performed cardiac ultrasound on patient's experiencing OHCA. Dr. White will discuss challenges, training, lessons learned, and the added value of having information about cardiac mechanical activity during cardiac arrest management.

*Cpt. Clint Anderson, NRP*

*Jenna M. B. White, MD FAEMS*

### 2:00 p.m. – 2:30 p.m.
**Now You See Me, Now You Don't: Lessons Learned about Body Cameras in EMS**
North Channel EMS providers have worn body cameras for the last three years and have learned invaluable lessons from this technology. These lessons included providing improved medical care by; allowing for focused training of providers, allowing for case critiques and reviews and increasing provider accountability. These lessons also involve novel programs to increase provider safety, including scene awareness and de-escalation techniques. Cameras also increase community accountability. From an administrative perspective the cameras worn by EMS providers can decrease liability and provide legal recourse. Multiple research and performance improvement projects have been performed or are underway to improve patient care. Body cameras at NCEMS have been a positive experience, and we would like to share what we have learned with others in EMS.

*C.J. Winckler, MD*

## CONCURRENT SESSION 1C2 MCI/VIOLENCE

### 2:30 p.m. – 3:00 p.m.
**MCI Triage and Active Assailant Incidents**
The presenters will discuss changes in mass casualty response and triage in mass violence incidents.

*Peter M. Antevy, MD*

*Ed Racht, MD*
Preparing Your Providers for Violence
In 2016, Wake County EMS put its providers through a simulated violent encounter. This was in direct response to several violent encounters against our providers. The results were published in a PEC abstract with a forthcoming manuscript. This discussion will focus on the gaps identified during the simulation exercise. The presenter will explain mental preparation and mindset, pre-incident indicators, situational awareness, and body language. This information will help prepare providers to deal with potential threats. Videos will be used to demonstrate concepts both from simulations and from live law enforcement encounters (body or dash cameras). These concepts and techniques are not new. Law enforcement and the military have used them for decades. With the increase in violence against EMS personnel, it is critical that we find proven best practices to educate our providers and advocate they be taught and included in EMS curricula.

Donald Garner, Jr.

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<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tr>
<td>3:00 p.m. – 3:30 p.m.</td>
<td>Preparing Your Providers for Violence</td>
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<tr>
<td>3:30 p.m. – 4:00 p.m.</td>
<td>Break in the Exhibit Hall</td>
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<tr>
<td>4:00 p.m. – 5:00 p.m.</td>
<td>Research Oral Abstracts 2</td>
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<td>5:30 p.m. – 6:45 p.m.</td>
<td>Research Poster Session 1</td>
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<td>5:30 p.m. – 6:45 p.m.</td>
<td>Innovations EMS Fellowship Education Poster Session</td>
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<td>6:00 p.m. – 7:00 p.m.</td>
<td>Canadian Relations Committee Meeting</td>
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Friday, January 10

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<th>Time</th>
<th>Event</th>
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<tr>
<td>6:00 a.m. – 7:00 a.m.</td>
<td>Fun Run/Walk</td>
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<td>7:00 a.m. – 8:00 a.m.</td>
<td>Continental Breakfast</td>
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<td>7:00 a.m. – 8:00 a.m.</td>
<td>Committee Meetings</td>
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GENERAL SESSIONS

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<th>Time</th>
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<tr>
<td>8:00 a.m. – 8:45 a.m.</td>
<td>The EPIC EMS TBI Study: Results and Implications</td>
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<td>The EPIC Study is the largest EMS TBI study ever conducted. It implemented the TBI Treatment Guidelines in a massive effort among more than 130 agencies across Arizona. The remarkable results of this study, and their implications, will be presented in-depth.</td>
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<td>Dan Spaite, MD, FACEP</td>
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<td>8:45 a.m. – 9:30 a.m.</td>
<td>Pediatric Intubation... 30 years of Literature</td>
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<td>Literature review of prehospital ground pediatric intubation.</td>
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<td>Joelle Donofrio, MD, FAEMS</td>
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<td>9:30 a.m. – 10:00 a.m.</td>
<td>Pediatric Seizure Management</td>
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<td>The presenter will provide an in-depth overview of current knowledge and recent advancements in evidence-based, best practice management of a seizing child in the EMS setting.</td>
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<td>Manish I. Shah, MD, MS</td>
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<td>10:00 a.m. – 10:30 a.m.</td>
<td>Break in the Exhibit Hall</td>
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CONCURRENT SESSION 2A MEDICAL OVERSIGHT

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<th>Time</th>
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<tr>
<td>10:30 a.m. – 11:00 a.m.</td>
<td>2019 EMS Practice Analysis: A Description of Current Practice to Shape the Future</td>
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<td>The 2019 EMS Practice Analysis allows us to define the work performed by EMS professionals in the prehospital setting which informs the National Scope of Practice, Education Standards, and test specifications. This presentation describes the methodology behind the 2019 EMS Practice Analysis and its relationship to the National Scope of Practice.</td>
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<td>Ashish Panchal, MD</td>
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<td>11:00 a.m. – 11:30 a.m.</td>
<td>Online Medical Control: Who Needs It?</td>
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<td>&quot;Boxing match&quot; style discussion regarding whether the need for OLMC still exists, and if it does, who should provide it, only EMS MDs? Base station at system hospitals, paramedic in dispatch?</td>
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<td>John Lyng, MD, FAEMS, FACEP, NRP</td>
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<td>John Gallagher, MD, FAEMS, FACEP</td>
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<td>11:30 a.m. – 12:00 p.m.</td>
<td>Answering the Call: Managing In-Flight Medical Emergencies</td>
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<td>Christian Martin-Gill, MD, FAEMS</td>
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At 40,000 feet in a sealed tube with limited medical equipment and far from a hospital – are you ready to take care of a patient with any of a variety of medical complaints? With 4 billion passengers travelling aboard commercial aircraft per year, in-flight medical emergencies (IMEs) are a common out-of-hospital call for assistance in an austere environment that require specialized considerations that EMS physicians and EMS professionals should be familiar with. The presenter will share information gained from a recent systematic review published in JAMA on IME studies from the past 30 years, along with experience from an airline ground-based medical support (GBMS) center proving medical consultations for over 28,000 airline consultations per year. Participants will be familiar with the emergency medical equipment available on board, capabilities of flight crew, considerations for diversion, and how to access GBMS specialists who assist airline crews and onboard medical volunteers in managing these cases.

CONCURRENT SESSION 2B RESEARCH

10:30 a.m. – 11:30 a.m. Research Oral Presentations 3

11:30 a.m. – 12:00 p.m. Using 911 Data for Surveillance
This presentation outlines the importance of 911 data’s contribution to surveillance of disease processes such as influenza and opioid overdoses/deaths. We’ll show specific approaches to mining EMS data, which is notoriously “dirty”.

Silvia Verdugo, MD, MPH
Todd Stout

CONCURRENT SESSION 2C NEW SPEAKERS FORUM

10:30 a.m. – 12:00 p.m. New Speakers Forum
TBD

12:00 p.m. – 1:15 p.m. Boxed Lunches in the Exhibit Hall

12:00 p.m. – 1:15 p.m. Committee Meetings

CONCURRENT SESSION 3A RESUSCITATION

1:15 p.m. – 1:45 p.m. The Objective Perspective
In this session, we’ll discuss the use of objective clinical data – namely cardiac monitor files – and incorporating them into your QA process to discover previously unknown areas of issues, e.g. Unrecognized Failed Airways, poor CPR performance, and the dreaded Sudden Ambulance Death Syndrome (inappropriate stabilization prior to patient transportation).

Veer Vithalani, MD

1:45 p.m. – 2:15 p.m. Low Titer O+ Whole Blood Transfusion (LTOWB)
This lecture will discuss the literature and logic behind the use of LTOWB for patients in hemorrhagic shock. The lecture will cover the history of LTOWB in the military setting and how the UT Health and SAFD translated this novel treatment to a metropolitan city and the region. The presenter will discuss ongoing epidemiology and research taking place in San Antonio and Texas, the deployment plan for day-to-day operations, and the clinical operating guidelines. Dr. Winckler will also cover the active plan to deliver whole blood to the scene of mass casualty incidents and plans for a first-ever Metropolitan walking blood bank, as well as novel research assessing epidemiology and finance for EMS systems.

C.J Winckler, MD

2:15 p.m. – 2:45 p.m. Mobile ECMO for Refractory VF: Description of Two U.S. Programs
ECMO is becoming a technology that is more pervasive throughout the United States. The MN Resuscitation Consortium has now started a cooperative program with several hospitals and EMS systems to bring ECMO to patients in Refractory VF and start their treatment earlier. A unique system and vehicle have been developed to perform this procedure and then safely transport these patients to a CCL for angioplasty and then ECMO to enhance neurologic survival.

Marc Conterato, MD
David Keseg, MD
Success in Pediatric Out-of-Hospital Cardiac Arrest: Understanding the Physiology and Strategies to Effect Good Neurological Outcomes

The likelihood of achieving neurologically-intact survival following pediatric out-of-hospital cardiac arrest (POHCA), particularly in the United States, has been found to be fairly dismal. Beyond the fact that most cases of POHCA result after significant periods of hypoxic-driven brady-asystolic demise, several other factors have been hypothesized as lending to this finding, including delays in care (including scoop and run practices), infrequent skill experience, complicated drug calculation and delivery practices, and inappropriate ventilatory techniques that are commonly used during the low flow state of POHCA. In that regard, several recent studies have now demonstrated that compelling results can be achieved if these factors are effectively addressed. In this session, the speakers review their recent experiences in dramatically improving the likelihood of neuro-intact survival in a large, matured EMS system that had been providing the traditional practices well but with poor outcomes for many years. Most importantly, the speakers will provide the rationale for the non-traditional approaches that were implemented, discuss the individual contributions of the component interventions, and provide important caveats to ensure appropriate introduction of this approach.

Peter M. Antevy, MD
Paul Pepe, MD, MPH, FAEMS

CONCURRENT SESSION 3B EDUCATION

1:15 p.m. – 1:45 p.m. Low-Dose, High-Frequency Education for EMS Providers
The presenter will describe low-dose, high frequency education as a more effective intervention, and describe results of a pilot program and early adopter experience using high fidelity simulation coupled with QI feedback on performance measures to change adult behavior.
Kevin Seaman, MD, FACEP, FAEMS

1:45 p.m. – 2:15 p.m. Alternative EM Resident EMS Education - A Longitudinal 3 Year Curriculum
The presenters will discuss the advantages and the processes needed in moving the EM Resident EMS Education from a one-year to a three-year longitudinal curriculum.
Joanna Adams, MD, MS
Bryan Kitch, MD, FAEMS
Juan March, MD, FAEMS
Roberto Portela, MD, FACEP, FAEMS
Stephen Taylor, MHS, Paramedic
David Thomson, MS, MD, MPA, FAEMS

2:15 p.m. – 2:45 p.m. Balancing Medical Oversight of MIH Programs: Emergency Care or Primary Care?
Operating MIH programs have learned a lot about the role of Medical Oversight for MIH programs. Many programs have a goal of enhancing the relationship between the patients and their PCPs to help reduce EMS and ED use, or prevent readmissions. What is the ideal balance between the role of an EMS Medical Director and the patient’s PCP? When it comes to the need for on-scene medical direction, which doc should have the lead in patient care decisions? This session will outline how MedStar’s medical director balances their role with the role of the patient’s PCP.
Matt Zavadsky, MS-HSA, NREMT

2:45 p.m. – 3:15 p.m. MIH and CP Quality Metrics and Patient Safety
This session will introduce participants to proposed measures for patient safety and quality metrics that are unique to MIH-CP programs.
Dan Swayze, DrPH, MBA, MEMS

CONCURRENT SESSION 3C RESEARCH

1:15 p.m. – 2:15 p.m. Research Oral Abstracts 4

2:15 p.m. – 3:15 p.m. Research Oral Abstracts 5

3:15 p.m. – 3:45 p.m. Refreshment Break

GENERAL SESSIONS

3:45 p.m. – 4:15 p.m. Creating an EMS Data Warehouse: From Acquisition to Visualization
The Seattle Fire Department has created a living database, including dispatch, ePCR, and cardiac arrest performance information across multiple levels of the EMS system. On the back end data is housed on a SQL server which allows information to be seamlessly plugged into the front end (in this case, Tableau) allowing individuals to customize their view of the data as their role within the system dictates. The presenter will
Catherine Counts, PhD, MHA
4:15 p.m. – 4:45 p.m.  
**The Blurred Lines between Research and Improvement Science: A Panel Discussion**  
This panel session will feature members of the Research Committee and the Quality & Safety Committee who will discuss and debate the distinctions between research and improvement science. The panel members will entertain topics such as the ethical implications associated with pursuing different forms of scientific inquiry, the appropriate pathways for dissemination of findings, and the merit of providing a platform for both forms of scientific inquiry at the NAEMSP Annual Meeting.

Elliot Carhart, EdD, NRP, FAEMS  
Mike Taigman

4:45 p.m. – 5:15 p.m.  
**When Simulation Has Very Real Consequences: High Stakes Credentialing in the Sim Center**  
Simulation has long been used for training and has grown to become familiar to many in EMS, but simulation for most people has always been low stakes. A chance to learn, and to make mistakes, but what would happen if simulation counted "for real?" The Wichita/Sedgwick County EMS System has been using high stakes simulation for the last two years as part of the credentialing process, and their simulated cases have had a big impact on real life for the providers of our system.

John Gallagher, MD, FAEMS, FACEP

5:30 p.m. – 6:45 p.m.  
**RESEARCH POSTER SESSION 2**

**Saturday, January 11**

8:30 a.m. – 12:00 p.m.  
Registration

7:00 a.m. – 8:00 a.m.  
Continental Breakfast

7:00 a.m. – 8:00 a.m.  
Committee Meetings

**GENERAL SESSIONS**

8:00 a.m. – 8:30 a.m.  
**The National EMS Quality Alliance Update**  
Funded by National Highway Transportation and Safety Administration to be a national EMS quality measure development organization, the National EMS Quality Alliance (NEMSQA) is working with EMS partner organizations, including NAEMSP, to build the infrastructure for measure development in EMS. The speaker will discuss the development process, the recent release of the updated and validated EMS Compass measures and the future role of NEMSQA in the EMS community.

Michael Redlener, MD, FAEMS

8:30 a.m. – 9:00 a.m.  
**Airway 2020**  
The presenter will provide an overview of the latest research and concepts relevant to prehospital airway management in 2020.

Darren Braude, MD, MPH, EMT-P, FAEMS

**CONCURRENT SESSION 4A LEGAL**

9:00 a.m. – 9:40 a.m.  
**Medical Legal Lit Review - Clinical & Operational**  
This lecture involves a retrospective review of published legal cases for the past two years to identify patterns of clinical liability for EMS agencies and medical directors.

Michael Levy, MD, FACEP, FAEMS  
Matthew R. Streger, Esq.

9:40 a.m. – 10:00 a.m.  
**EMS Medical Director Liability Insurance**  
Just as the practice of medicine in the Emergency Department involves risk, which can be mitigated by malpractice insurance, EMS medical direction involves a different set of liabilities which can be reduced by EMS medical director insurance. Such insurance can be provided by the EMS agency or purchased by the medical director with different costs and coverage. Medical malpractice is a possibility, but the larger risks include employment law, union cases, and interagency or interhospital disagreements. EMS medical director liability insurance is not a panacea, but it can make our jobs more comfortable and less threatening.

Tom James
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<thead>
<tr>
<th>Time</th>
<th>Session Title</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>9:00 a.m. – 9:30 a.m.</td>
<td><strong>Our EMS Workforce, Where Is It Going and Why Is It Overworked and Underpaid?</strong>&lt;br&gt;There continues to be a drastic decline in the EMS workforce in the U.S., and there are fewer individuals going into EMS in the U.S. each year. This presentation will address the epidemiology of this loss.</td>
<td>Glenn S. Ekblad, DO, MPH, MSN, BSN, FACEP, FAAEM&lt;br&gt;John Hoyle, Jr., MD</td>
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<td>9:30 a.m. – 10:00 a.m.</td>
<td><strong>Women in EMS: Identifying Buoys and Barriers to Female Leadership in the Prehospital Setting</strong>&lt;br&gt;While women represent 50% of the population, and over 50% of the current enrollees in medical school in the United States, females are underrepresented at every level of EMS. This study is the first to quantify the female representation within NAEMSP. Additionally, we assessed participants’ self-reported experience with gender discrimination, as well as their perceived barriers to advancement. We present our findings, and identify areas of actionable improvements for individual EMS systems and academic programs.</td>
<td>Katherine Staats, MD</td>
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<td>10:00 a.m. – 10:30 a.m.</td>
<td><strong>Break</strong></td>
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<td>10:30 a.m. – 11:15 a.m.</td>
<td><strong>An Addiction Stabilization Center and an Approach to the Opioid Epidemic</strong>&lt;br&gt;Our freestanding addiction stabilization center in Columbus, Ohio opened February 2018, and after one year we have learned some valuable lessons. Having a facility for EMS to directly transport patients with Opiate Use Disorder has been a welcome resource but also has required patience and flexibility. Getting our EMS providers on board and combatting compassion fatigue has been challenging. Does having a facility like this provide tangible benefits to a community afflicted with the opiate epidemic?</td>
<td>David Keseg, MD</td>
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<td>11:15 a.m. – 11:45 a.m.</td>
<td><strong>Field Physician Response: Moving into the Future</strong>&lt;br&gt;MD1 is the NJ Statewide Physician Response Program. It has six vehicles with 15 EMS Physicians covering the state of NJ 24/7. The program responds on approximately 120 calls per month. The vehicles have 7 ultrasound machines, whole blood, REBOA, TEE, bronchoscopy, 70 medications, and seven VLs. Additionally, the program covers 10 tactical jobs per week in an unmarked police vehicle. Each fellow has the vehicle for the year, and faculty have their own response vehicles. The presenter will describe how to initiate a field response program or how to accelerate an existing program, including establishing revenue streams, billing, CQI, non-profit status, and oversights.</td>
<td>Mark A. Merlin, EMT-P, DO, FACEP</td>
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<td>11:45 a.m. – 1:15 p.m.</td>
<td><strong>Awards Luncheon</strong></td>
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<td>1:30 p.m. – 2:15 p.m.</td>
<td><strong>You’re Willing to Pay for That? New Payer Perspectives on EMS Payments</strong>&lt;br&gt;Who will be paying for your services tomorrow? How will they be paying? What will they be paying for? Tomorrow is here, today. Payers are testing new economic models for “EMS” services, both traditional and EMS 3.0 Transformation services. The presenter has been on the bleeding edge of developing and implementing new payment models and will provide detailed information on the new models that have been implemented, and what tools you need to prepare for the changes that are coming to you!</td>
<td>Matt Zavadsky, MS-HSA, NREMT</td>
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<td>2:15 p.m. – 2:45 p.m.</td>
<td><strong>Hail to the Chief: The EMS Medical Director as CMO</strong>&lt;br&gt;The presenter will discuss the role of the EMS Medical Director as the Chief Medical Officer of the EMS system and the value of the title when interacting with health system leadership. EMS systems are increasingly developing mobile integrated health care programs. Many of these however struggle to truly integrate into their local health systems. EMS is an invaluable partner in population health management and value-based purchasing arrangements that are becoming more common for hospital systems. High level health systems discussions often don’t include the EMS Medical Director. This lecture will outline the needs of hospital systems, value-based purchasing programs, tips and techniques for better engagement, and inclusion in the health system.</td>
<td>Paul Hinchey, MD, MBA, FACEP, FAEMS</td>
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<td>2:45 p.m. – 3:15 p.m.</td>
<td><strong>Telephone CPR: Nuances between Adult and Pediatric Cases</strong>&lt;br&gt;T-CPR is now known to provide great benefit to patients in arrest. The adult and pediatric cases, however, vary in a nuanced manner which every EMS medical director should be aware of. After this presentation, every medical director will be able to make rapid changes back in their home town. The presenter will discuss the latest recommendations and data. He will also discuss the NHTSA document CPR life links which includes T-CPR (50% of the document).</td>
<td>Peter M. Antevy, MD</td>
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<td>3:15 p.m. – 3:45 p.m.</td>
<td>Break</td>
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<td>3:45 p.m. – 4:15 p.m.</td>
<td><strong>Application of EMS Data Visualization in Quality Improvement</strong>&lt;br&gt;The presenter will discuss feasible and sustainable ways to apply data visualization in EMS for quality improvement. The goal will be to provide meaningful summaries of applied data visualization projects while highlighting critical performance metrics.</td>
<td>Rachel Stemerman, NRP</td>
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<td>4:15 p.m. – 4:45 p.m.</td>
<td><strong>Top NAEMSP Position Papers of 2019</strong></td>
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<td>4:45 p.m. – 5:00 p.m.</td>
<td><strong>Closing Remarks</strong></td>
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<td>5:00 p.m. – 6:00 p.m.</td>
<td><strong>Farewell Social</strong></td>
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