



ANNUAL 2022 MEETING

January 10-15, 2022
Manchester Grand Hyatt | San Diego, CA



Monday, January 10, 2022

PRE-CONFERENCE WORKSHOPS

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 DAY 1

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. 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.

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

- 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 NAEMSP Quality and Safety Year-Long Course 2022.*

8:00 p.m. – 5:00 p.m.

Wilderness EMS Medical Director Course DAY 1

Fundamental to this two-day course is the belief that virtually all geographic areas have wilderness tracts that require specialized response to ensure that the sick and injured receive care that meets a standard, and is within appropriate regulatory and legal boundaries that are help to define the practice of EMS medicine. Understanding that many EMS medical directors will not have expertise in wilderness response, and many wilderness medicine enthusiasts don't have expertise in EMS oversight, the course is designed to be flexible to meet the needs of the students, while also ensuring that all course participants exit the course with the fundamentals of wilderness EMS medical direction. The Wilderness EMS Medical Director Course was initially developed through a Delphi project and has been co-supported by NAEMSP and the Wilderness Medical Society (WMS). The four course co-directors each bring their unique experiences and expertise to the course in a manner that presents the students with a variety of methods

Course Co-Directors:
Michael G. Millin, MD, MPH
Seth C. Hawkins, MD
William R. Smith, MD
Benjamin Abo, DO, PMD,
FAWM

to manage the unique challenges to wilderness EMS medical direction and oversight.

Tactical Emergency Casualty Care for ALS/BLS Providers

The Tactical Emergency Casualty Care (TECC) guidelines represent a set of evidenced-based best practices for the immediate medical management of wounded in all prehospital high-risk scenarios. TECC is not tactical medicine; instead, it is intended for situations with on-going threat to the provider and patient. Translated from military medical guidelines for appropriate use by civilians, TECC balances the on-going threats, civilian scope of practice, population, medical equipment, and the variable response resources in civilian atypical emergencies. This certification course will be taught by two of the founders of TECC.

Course Co-Directors:
E. Reed Smith, MD
Geoffrey Shapiro

8:00 a.m. – 5:00 p.m.

Leadership Enhancement and Development

EMS Medical Directors are not often given direct training in leadership skills, much like EMS organizational leaders. This program was developed using various professional competencies and focused on the needs of physician medical directors of EMS agencies. We will discuss in depth the Just Culture framework, how to apply it to various events, and how to conduct the actual incident investigation process. We will also discuss communications techniques, including the cycle of communications, specific skills, conflict resolution techniques, and mission/vision/values.

Course Co-Directors:
Matthew R. Streger, JD
Michelle A. Kobayashi,
MBS, MSN, RN, CMTE,
EMT

8:00 a.m. – 5:00 p.m.

Tuesday, January 11, 2022

PRE-CONFERENCE WORKSHOPS

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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 DAY 2

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. 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.

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

8:00 a.m. – 5:00 p.m.

- 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. Faculty 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. *This course or another Quality and Safety Course is a prerequisite for participation in the year-long NAEMSP Quality and Safety Course.*

Wilderness EMS Medical Director Course DAY 2

8:00 p.m. – 5:00 p.m.

Fundamental to this two-day course is the belief that virtually all geographic areas have wilderness tracts that require specialized response to ensure that the sick and injured receive care that meets a standard, and is within appropriate regulatory and legal boundaries that are help to define the practice of EMS medicine. Understanding that many EMS medical directors will not have expertise in wilderness response, and many wilderness medicine enthusiasts don't have expertise in EMS oversight, the course is designed to be flexible to meet the needs of the students, while also ensuring that all course participants exit the course with the fundamentals of wilderness EMS medical direction. The Wilderness EMS Medical Director Course was initially developed through a Delphi project and has been co-supported by NAEMSP and the Wilderness Medical Society (WMS). The four course co-directors each bring their unique experiences and expertise to the course in a manner that presents the students with a variety of methods to manage the unique challenges to wilderness EMS medical direction and oversight.

Course Co-Directors:
Michael G. Millin, MD, MPH
Seth C. Hawkins, MD
William R. Smith, MD
Benjamin Abo, DO, PMD,
FAWM

Mass Gathering Medicine Workshop

8:00 a.m. – 12:00 p.m.

The focus of this workshop is to discuss the key principles of Mass Gathering Medicine, including nuances to patient care presentations, recommended on-site medical formularies, and discussing clinical conundrums that have arisen in the past.

Course Co-Directors:
Matt S. Friedman, MD
Asa Margolis, DO, MPH
Anthony Pugliese, NRP

RAPToR Course (Resuscitation Adjuncts: Prehospital Transfusion and REBOA)

1:00 p.m. – 5:00 p.m.

We face a significant burden from preventable prehospital death due to hemorrhage. In particular, non-compressible torso hemorrhage can be particularly challenging to address. There is an increasing need to bring resuscitation room interventions to the point of insult or injury. Recently, the US military's Joint Trauma System recommended adding the use of whole blood and REBOA to Tactical Combat Casualty Care. Termed Advanced Resuscitative Care (ARC), these interventions are aimed to buy time to get the patient to definitive care. Through a series of classroom lectures, simulation, and cadaveric training, the RAPToR course will equip you, the prehospital resuscitation specialist, with the knowledge and skills to safely and responsibly incorporate these tools into your prehospital practice.

Course Director: Zaffer Qasim, MBBS, FRCEM, FRCPC(EM) EDIC

Wednesday, January 12, 2022

PRE-CONFERENCE WORKSHOPS

NAEMSP® National EMS Medical Directors Course & Practicum®

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8:00 a.m. – 4:00 p.m.

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

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.

8:00 a.m. – 5:00 p.m.

Course Director:
Jeff Beeson, DO, FAEMS

Fostering Lifelong Learning in EMS

The ideal EMS provider of the future is one that is a lifelong learner, ready to adapt to the rapidly evolving field of EMS medicine. Modern EMS medical direction includes frequent contacts with learners of different

8:00 a.m. – 5:00 p.m.

Course Co-Directors:
Tom Grawey, DO
Maia Dorsett, MD, PhD

capabilities in multiple settings. Often, the time allocated to engage directly with learners is limited. It is vital for EMS medical directors and other EMS leaders to be effective educators and cultivate lifelong learning in local EMS systems.

RAPToR Course (Resuscitation Adjuncts: Prehospital Transfusion and REBOA)

We face a significant burden from preventable prehospital death due to hemorrhage. Non-compressible torso hemorrhage can be particularly challenging to address. There is an increasing need to bring resuscitation room interventions to the point of insult or injury. Recently, the US military's Joint Trauma System recommended adding the use of whole blood and REBOA to Tactical Combat Casualty Care. Termed Advanced Resuscitative Care (ARC), these interventions are aimed to buy time to get the patient to definitive care. Through a series of classroom lectures, simulation, and cadaveric training, the RAPToR course will equip the resuscitation specialist with the knowledge and skills to safely and responsibly incorporate these tools into prehospital practice.

Course Director: Zaffer Qasim, MBBS, FRCCEM, FRCPC(EM) EDIC

8:00 a.m. – 5:00 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.

Course Co-Directors:
Andrew McCoy, MD, MS
Marvin Wayne, MD

8:00 a.m. – 12:00 p.m.

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.

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 lifesaving 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.

Course Director:
Jacob Keeperman, MD

1:00 p.m. – 5:00 p.m.

Under expert instruction, participants will have the opportunity to practice the following procedural skills: intraosseous access; pericardiocentesis; supraglottic airway; needle thoracostomy; direct laryngoscopy; finger thoracostomy; video laryngoscopy; tube thoracostomy; needle cricothyroidotomy; thoracotomy; surgical cricothyroidotomy; lateral canthotomy; tourniquet application; peri-mortem crash c-section; field amputation

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. – 8:45 p.m.

Welcome Reception – Sponsored by Global Medical Response

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

GENERAL SESSIONS

8:00 a.m. – 8:15 a.m.	Welcome & President’s Address	Michael Levy, MD, FAEMS
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Keynote Address: Black Fire Brigade

As a young man growing up in Chicago’s Cabrini Green neighborhood, Lieutenant/EMT Question Curtis was fascinated by fire trucks and the firefighters who protected the neighborhood. He was welcomed into the fire station by those same men and encouraged to follow their path – and so began a lifelong passion for the fire service. After graduating from Near North Career Magnet High School, Lieutenant Curtis entered the fire service at a young age. He began working full-time as a firefighter for the Chicago Fire Department in 1988. He was then promoted Fire Lieutenant and worked in some of the busiest areas in the city, including being a scuba diver and a member of Squad 1 for 22 years. Lieutenant Curtis was also a member of the response teams for the E2 tragedy, World Trade Center September 11th, and hurricane Katrina. He has over 40 state and federal Certifications. As Lt. Curtis approaches retirement next year with over 30 years of service, he reflected back on his exciting career and wanted to give back and open the doors to fire safety and EMS in the Black communities. June 2018 Lieutenant Curtis opened The Black Fire Brigade, the country’s first such organization, to promote and protect the fire rescue service and EMS personnel, provide continuing education and networking opportunities to members, and preserve the history and heritage of African-American fire and EMS service people. It also represents members’ interest on public issues, discussions, and decisions affecting fire rescue and EMS rescue services, and promotes fundraising for those services. In August of 2018 Lieutenant Curtis raised thousands of dollars to send 45 young adults to Emergency Medical Technical School. In December 2018 they graduated with an exciting career in fire safety. Lt. Curtis is changing the narrative in the Black community one student at a time.

8:15 a.m. – 9:00 a.m.		LTC Question Curtis
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9:00 a.m. – 9:45 a.m.	EMS Medical Direction: The Prequel	Michael Levy, MD, FAEMS; Paul Pepe, MD, MPH; Robert Swor, DO, FAEMS; Raymond Fowler, MD, FAEMS; Jon Krohmer, MD, FAEMS
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EMS Grand Rounds: NAEMSP Prehospital Airway Management Position Statement Compendium

This inaugural session of EMS Grand Rounds will present the NAEMSP/PEC airway compendium. This special supplement to the January issue of *Prehospital Emergency Care* includes 15 NAEMSP position statements and accompanying resource documents on all aspects of prehospital airway management, greatly expanding upon and updating the association’s prior airway position statements. Topics range from clinical topics such as manual ventilation, mechanical ventilation, and drug-assisted airway management, to airway education and training of EMS personnel, and quality management of EMS airway programs. Project leader Henry Wang, NAEMSP president Mike Levy, and incoming PEC editor-in-chief Dave Cone will discuss the project’s conception, processes, and output.

9:45 a.m. – 10:15 a.m.		Michael Levy, MD, FAEMS Henry Wang, MD, MS David Cone, MD
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10:15 a.m. – 10:45 a.m.	Break in the Exhibit Hall
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10:45 a.m. – 10:55 a.m.	Board Certification Update	Brian Clemency, DO, MBA, FAEMS Douglas Kupas, MD, FAEMS
10:55 a.m. – 11:00 a.m.	PEC Journal Update	David Cone, MD
11:00 a.m. – 12:00 p.m.	Research Oral Abstract Presentations	Research Presenters
12:00 p.m. – 1:20 p.m.	Boxed Lunches in the Exhibit Hall	
12:00 p.m. – 1:20 p.m.	Committee Meetings	
CONCURRENT TRACK 1: Preparedness/COVID		
1:30 p.m. – 2:00 p.m.	<p>1A. Overcoming Obstacles in the Implementation of COVID Surge Plans: Lessons Learned for the Future</p> <p>COVID-19 overwhelmed many EMS and hospital systems which prompted EMS medical directors across the country to implement COVID-19 surge plans. However, based on interviews conducted with EMS medical directors, many faced significant challenges in implementation of the utilization of telemedicine, treatment in place, alternative destination protocols, no response protocols, and other portions of COVID-19 surge plans. In this presentation, participants will briefly review the findings of this qualitative study of obstacles faced by EMS medical directors in implementing COVID-19 surge plans.</p>	Meg Marino, MD, FAAP
2:00 p.m. – 2:30 p.m.	<p>1B. Dog Days of Summer: Civil Unrest Operations during a Pandemic in August 2020</p> <p>The presenter will provide an overview and case study of EMS response challenges during civil unrest operations in Austin during the summer of 2020. Large, moving, and sometimes hostile crowds, the variety of illnesses and injuries and multiple casualty incidents, interface with other public safety units as well as ad-hoc civilian medical organizations complicated preparedness in ways not often faced with other mass gathering events. Prolonged operational medical support unmasked challenges of maintaining health protection at a time when COVID cases in Austin were skyrocketing.</p>	Jason Pickett, MD
2:30 p.m. – 3:00 p.m.	<p>1C. A Global Pandemic, EMS, and Civil Unrest, Minneapolis 2020</p> <p>In the heat of the SARS-CoV-2 global pandemic, Minneapolis, Minnesota encountered unexpected and sudden civil unrest in May of 2020 in response to the tragic death of George Floyd. Violence swept across the city, endangering citizens and first responders and causing significant damage to businesses and homes. We focus our presentation on EMS response to “hot zones” and how our patient extrication and care delivery changed, prioritizing safety for our prehospital providers as well as our patients, and how EMS command staff and medical direction conducted operations. Civil unrest is on the rise throughout the country, and strategic planning is crucial to prioritize safety for prehospital providers and maintain delivery of outstanding care.</p>	Gregg Jones, MD Paul Nystrom, MD Aaron Robinson, MD Nicholas Simpson, MD, FACEP, FAEMS
3:00 p.m. – 3:30 p.m.	<p>1D. COVID-19 and EMS Crisis Standards of Care: What Are We Learning?</p> <p>Crisis conditions require adapting to demand across dispatch, response, and treatment, with multiple adjustments possible depending on the challenge. EMS systems experienced many challenges through COVID-19. A panel of EMS medical directors will discuss challenges and adaptations from major urban to regional to rural and what needs to be done for future events to assure strategies are planned, triggers for implementation known, and applicable regulations and liability issues addressed.</p>	John Hick, MD

CONCURRENT TRACK 2: Management/Quality

2A Cardiac Arrest Registry to Enhance Survival: Lessons Learned over the Past Two Decades from CARES

1:30 p.m. – 2:00 p.m.

The Cardiac Arrest Registry to Enhance Survival (CARES) founded by the CDC and Emory University in 2004, is a secure web-based data management system (<https://mycares.net>), linking three sources of information that define the continuum of emergency care for out-of-hospital cardiac arrest (OHCA) events: 1) 911 dispatch centers, 2) EMS providers, and 3) hospitals, to create a single record for an OHCA event. Registry data collection is critical to improving patient care and survival rates. It allows communities and public health organizations to monitor quality of care, measure and benchmark performance for effectiveness research, and creates a platform for intervention implementation. Communities can confidentially compare their performance at the local, state, or national level to improve their performance. CARES includes 29 state-based registries covering 51% of the U.S. population. Dr. McNally will review lessons learned from CARES over the past two decades while highlighting future activities to improve survival outcomes.

Bryan McNally, MD

2B. Cases in Just Culture: Applying Concept to Reality

2:00 p.m. – 2:30 p.m.

As EMS leaders, EMS physicians and directors often find themselves having to investigate circumstances surrounding errors, mishaps and untoward events. The concepts surrounding a just culture (JC) represent a shared accountability approach to error analysis that seeks to understand how an error occurred, in an effort to help build safer systems and prevent future errors. In this fast-paced, interactive, lecture we will briefly review the main concepts of a just culture, describe the main kind of errors, and provide a facilitated discussion through analysis of several error cases. After a very brief review of JC the speakers will present 3 unique EMS JC real-world cases for which the audience will gain practice in applying the principles of JC. Using audience participation technologies, participants will be given the opportunity to incorporate their own input into how they would handle each case.

Matthew Levy, DO, MSc.,
FAEMS, FACEP
Matthew Streger, Esq.

2C. Data Visualization: Prehospital Centered Design

2:30 p.m. – 3:00 p.m.

EMS systems have a wide range of data collection and visualization tools. The variety and quality of data delivered in these tools will determine how useful clinicians and administrators find them. Equally important will be how the information is delivered. User-centered design (UCD) is a formal approach to ensuring that new tools incorporate the needs, wants, skills, and preferences of the user throughout the tool's development. In this case, "prehospital" centered design focuses on the barriers and unique challenges of EMS and improving clinical decisions support through data visualization. Recent studies have shown an improvement in the dissemination of new information leading to a reduction of medical errors and overall better outcomes for critical patients.

Rachel Stemerman, PhD

2D. NEMSQA: A National Quality Project: Putting National Quality Measures to Work for Improvement

3:00 p.m. – 3:30 p.m.

The National EMS Quality Alliance approved the first set of national quality measures in 2019. Since that time, the organization has been working with partners across the country to implement projects that utilize these national measures. From local projects focused on improving one measure to the concept of a "National Quality Project" where a collaborative embarks on widespread improvement efforts, this presentation will highlight the opportunities presented to the EMS community and other healthcare partners when putting national measures to work.

Michael Redlener, MD,
FAEMS

CONCURRENT TRACK 3: New Speakers Series

1:30 p.m. – 3:30 p.m.

3A. New Speakers Series

Moderator: Brian Clemency,
DO, MBA, FAEMS

Speakers who have not previously presented at a national meeting will be given an opportunity to present at the conference. The winner will be given an opportunity to present at the NAEMSP Annual Meeting in 2023.

3:30 p.m. – 4:00 p.m.

Break in the Exhibit Hall

6:45 p.m. – 8:00 p.m.

Reception – Sponsored by FirstNet, Built with AT&T

GENERAL SESSIONS

4:00 p.m. – 5:00 p.m.

Research Oral Abstract Presentations

Research Presenters

5:30 p.m. – 6:45 p.m.

Research Poster Session 1

Poster Presenters

5:30 p.m. – 6:45 p.m.

Innovations EMS Fellowship Education Poster Session

Poster Presenters

Friday, January 14, 2022

7:00 a.m. – 5:00 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.

Surfside Collapse: A Month Lasting a Lifetime

June 24, 2021 at 1:25 in the morning extremely quickly went from a low hazard partial wall collapse/water-flow alarm of a garage to an international incident that was the third largest single building disaster in US history. You will hear first-hand from Miami-Dade Fire Rescue's FLTF-1 USAR physician, Dr. Benjamin Abo, trials and tribulations from that unfortunate event. Within hours, Dr. Abo was on scene with the fire department followed by other EMS physicians and USAR and tech rescue teams throughout the month-long deployment for rescue and recovery. From crush injuries to burns to searches to thunder & lightning to tornado and hurricane watches to hazardous materials and K9 care and beyond... there is so much experience and so many lessons to be learned.

Benjamin Abo, DO, PMD, FAWM

8:30 a.m. – 9:00 a.m.

Variability in Manual Ventilation Performance by EMS Responders: Its Patient Impact and Airflow Physiology

The presenter will examine the variability in manual ventilation performance among providers and factors that may play a role, recent airway physiology research in cadavers, and the need for innovation with standard BVM.

Joseph Holley, MD, FAEMS, FACEP

9:00 a.m. – 9:30 a.m.

Post-Resuscitative Care to Improve OHCA Survival

The presenter will describe the rationale behind slowing scene departure after OHCA ROSC, present an organized approach to post-ROSC care outlining monitoring, medications, and other interventions which should be considered, and show the impact in one system.

Robert Rosenbaum, MD, FAEMS

9:30 a.m. – 10:00 a.m.

Allowing Natural Death: Hospice & Palliative Care In EMS

The EMS system was designed to reduce death and disability and EMS training, protocols and medical direction focus on saving lives through resuscitation, aggressive treatment, and transportation to the Emergency Department. In contrast, Palliative care and Hospice focus on symptom control and maximizing quality of life. It is common for patients enrolled in hospice and palliative care services to interact with EMS and thus it is important that the EMS providers and the EMS system be prepared to care for these patients and their families that is consistent with their goals of care. For EMS providers, death notification and code status clarification can be difficult communication skills to learn. Just like procedural skills,

Amelia Breyre, MD
Kenneth Hanson, MD

communication skills can be learned, honed and improved. For EMS systems, there are policies and protocols that can help support patient and family care preferences near the end of life.

10:00 a.m. – 10:30 a.m.

Break in the Exhibit Hall

CONCURRENT TRACK 4: Special Ops

4A. Hospital-Based Emergency Response Teams (HERT) for EMS Augmentation

EMS physicians are trained and/or experienced in performing advanced clinical care in the out-of-hospital environment, and education of EMS fellows has increased their preparedness for responding to field situations where physician level expertise may be required. In most regions of the United States, there are insufficient EMS-trained physicians available to respond 24 hours a day to complex prehospital emergencies. Local and regional systems will need to harness the services of physicians without EMS training, and/or with minimal experience in prehospital care or care in austere environments. The Hospital Emergency Response Team (HERT) program was developed in Los Angeles County to address the rare event in which physician level care is necessary in the prehospital environment – either after a mass casualty incident or due to a single entrapped patient. This session describes considerations in the development and implementation of the Los Angeles HERTs – hospital-based teams that integrate trauma, emergency and EMS physicians and nurses as an important, although infrequently used, component of our regional EMS and trauma system. This session will be of particular interest to local EMS medical directors looking to ensure round-the-clock expertise in their region, provider agency medical directors looking to formalize relationships with regional trauma centers, and EMS physician educators.

Nichole Bosson, MD, MPH
Marc Cohen, MD
Shira Schlesinger, MD,
MPH

10:30 a.m. – 11:00 a.m.

4B. Establishing a Basic SWAT Class for TEMS Physicians

The presenter will describe the process used to establish a TCOLE approved Basic SWAT for TEMS Physicians class including costs to set up the program, location requirements, and obtaining CME.

James Vretis, DO, FAEMS,
FAAEM

11:00 a.m. – 11:30 a.m.

4C. Is Prehospital REBOA A More Feasible Alternative to ECPR for Refractory Cardiac Arrest?

REBOA is well known as a rescue therapy for trauma patients, but it is also a developing therapy for the treatment of refractory cardiac arrest. Several pilot implementations in the prehospital setting in Europe have been published, and a body of preclinical research supports it. ECPR has become the mechanical circulatory support of choice for refractory cardiac arrest, but it is difficult to implement in the field and ED outside of specialized centers. Is REBOA a lower-barrier approach to refractory cardiac arrest that might be more feasible for EMS and emergency medicine?

Scott Youngquist, MD, MS,
FAEMS, FACEP

11:30 a.m. – 12:00 p.m.

CONCURRENT SESSION 5: Pediatrics

5A. Looking Under the Hood: A Critical Look at the Science of the PALS 2020 Guidelines

The PALS 2020 guidelines have made key changes that will significantly impact outcomes. The science behind these changes were based mainly on 1) in-hospital data, 2) non-randomized studies, and 3) observational data. PALS has separated ways from ILCOR on a key issue, namely ventilation rates in POHCA, and their reason is that the data did not support the change. EMS medical directors should understand the evidence base so they can make decisions for their service that aligns with the patient population they see and the foundational physiologic principles. The topics that will be covered in this presentation will be: 1. Ventilation rates in POHCA, 2. Epinephrine for bradycardia with poor perfusion, 3. Fluids in shock, and 4. Blood in hemorrhagic shock. Dr. Antevy will present the science and allow the audience to formulate their own opinion.

Peter Antevy, MD

10:30 a.m. – 11:00 a.m.

11:00 a.m. – 11:30 a.m.	<p>5B. Tranexamic Acid Use in Pediatric Trauma</p> <p>The presenter will review the mechanism of action of Tranexamic Acid (TXA) and provide a review of the literature describing its use in trauma patients. Dr. Flint will also review TXA use in pediatric trauma patients and provide recommendations/indications for clinical use by first responders and front-line providers in the setting of pediatric trauma.</p>	Jennifer Flint, MD
11:30 a.m. – 12:00 p.m.	<p>5C. World Turned Upside Down: Prehospital Pediatric Behavioral Health Incidents in a Modern-Day Pandemic</p> <p>The long-term mental health effects of the COVID-19 pandemic are far reaching. This presentation will share findings from almost four years (2018-2021) of EMS data across the nation focusing on pediatric behavioral health incidents in order to better understand how a lack of social interactions, in-person learning, mental health support services, and other factors in 2020 had an effect on behavioral health incidents in children and adolescents. Dr. Marino will discuss not only what the research shows, but also challenges faced, lessons learned, and what interventions across the nation influenced the surge in mental health emergencies among pediatric patients</p>	Meg Marino, MD, FAAP
CONCURRENT SESSION 6: Research		
10:30 am – 11:30 a.m.	6A. Research Oral Abstracts Presentations	Research Presenters
11:30 a.m. – 12:00 p.m.	<p>6B. The Power of NEMSIS: Transforming Data into Action and Vision</p> <p>The National EMS Information System has made incredible strides in translating data contained in patient care reports into knowledge that is moving the EMS industry forward in a variety of ways. Dr. Mann will outline how NEMSIS data are revolutionizing EMS research and informing national healthcare initiatives. This aside, the true potential of the NEMSIS system remains, largely, untapped. How will NEMSIS inform the future of EMS? Attend this session to more fully appreciate the value of nationwide EMS data collection.</p>	N. Clay Mann, PhD, MS
12:00 p.m. – 1:15 p.m.	Boxed Lunches in the Exhibit Hall	
12:10 p.m. – 1:15 p.m.	Committee Meetings	
CONCURRENT SESSION 7: Opiates/Rural		
1:15 p.m. – 1:45 p.m.	<p>7A. Police-Initiated Telemedicine and Tele-prescribing of MAT for Opioid Use Disorder (OUD): Roadside Treatment</p> <p>EMS providers routinely interact with OUD patients in the out-of-hospital setting. We have developed a novel opportunity for patients struggling with OUD to be evaluated by an emergency provider (PA, NP, Physician) during an interaction with police. This program is part of a larger program, NY MATTERS (newyorkmatters.org), and is easily replicated! Patients are able to be virtually seen by an emergency provider, offered peer linkage, given an appointment for OUD follow-up, and be issued a voucher covering two weeks of buprenorphine – all from the side of the road.</p>	Joshua Lynch, DO, EMT-P
1:45 p.m. – 2:15 p.m.	<p>7B. Opioid Education and Naloxone Distribution by EMS: Lessons Learned from Ohio's Healing Communities Study</p> <p>The opioid epidemic continues, and prehospital care is evolving from simply treating overdose to being a part of a public health approach. As part of the NIH-funded Healing Communities Study, Ohio has embraced prehospital strategies that target opioid education and naloxone distribution, and the presenters will share their experiences gained working with a variety of agencies across the state. The presentation will include discussion of Ohio's legislative/administrative moves (pharmacy board opinions, etc., to allow distribution), unique funding avenues (HCS, DAWN, etc.) to provide an overview of the landscape. The presenters will discuss finding champions, stigma reduction, documentation, and</p>	Thomas Collins, MD Jason McMullan, MD FAEMS

program assessments, along with different strategies their agencies use (real-time, next day follow-up, station pick-up) and expanded topics (safe medication disposal, QRTs, police leave-behind).

7C. Small EMS QA/QI Programs Can Do Big Things: How a Rural EMS Agency Helped Discover Deadly Hand Sanitizer

As in other areas of medicine, 24-hour returns are an important indicator in EMS quality measurement efforts. EMS run data has long played an important role in public health surveillance. Though these two topics are often addressed in larger EMS agencies, they are important in small rural agencies as well. In the early days of the COVID-19 pandemic, community lockdowns and curfews affected the patterns of alcohol acquisition in certain communities, forcing persons with alcohol use disorder to turn to other substances. Two critically ill patients of the Pueblo of Laguna Fire Rescue Department (LFR) were flagged as 24-hour returns in early 2020. Subsequent hospital follow-up revealed both cases to be methanol poisoning. The New Mexico Poison Center (NMPC), with further assistance from Pueblo of Laguna Police, identified the causative agent to be methanol-containing hand sanitizer. NMPC determined that these cases were part of a larger cohort of similar poisonings regionally, and FDA and CDC warnings were ultimately issued as a result of the cases identified by the LFR EMS QA/QI program. While benefits of EMS QA/QI activities are usually more local, even small, rural programs can have big effects.

Chelsea White, MD, NRP,
FAEMS, FACEP

2:15 p.m. – 2:45 p.m.

7D. “A Working Code Is a Working Fire”: A Universal Role of the Volunteer Fire Service to Enhance the Success of High-Performance CPT in Limited Resource Situations

In 2012, the Seattle-based Resuscitation Academy partnered with the State to create best practices in enhancing survival from out-of-hospital cardiac arrest (OHCA) and created an East Coast Satellite. The state’s High-Performance CPR (HPCPR) program coupled with its 2013 addition of the Termination of Resuscitation Protocol were directly related to this collaboration. However, a limitation of these efforts remains the responding manpower to carry out a successful resuscitation with just EMS clinicians. Rural and suburban fire-based staff are available in many areas with low fire call volumes, and most departments already require a minimum qualification of CPR-trained and/or emergency medical responder. The presenters will discuss how a renewed culture change universalizing the value and efficiency of a coordinated time commitment by fire service partners in responding to OHCA will achieve the goal both disciplines share – saving lives.

Roger Stone, MD, MS,
FACEP, FAAEM
Kevin Seaman, MD,
FAEMS, FACEP

2:45 p.m. – 3:15 p.m.

CONCURRENT TRACK 8: Other

8A. EMS and Physician Wellness: How a Month in Alcohol Rehab Restored My Joy in My Work and Made Me a Better Doctor

The COVID-19 pandemic uncovered the need for renewed focus on the well-being and mental health of medical providers of all disciplines. But what happens after you identify a problem in yourself or a colleague? This session unpacks the presenter’s personal experience with workplace trauma, post-traumatic stress disorder, alcohol use disorder, and navigating the challenges of treatment and recovery that are unique to medical practice. Starting with a particularly traumatic clinical experience the presenter will share how this led down a path of self-destruction before ultimately rejuvenating a desperate career. We will look at the data on risk factors and evidence-based interventions for PTSD in the prehospital and emergency department environments, delve into why there is such sparse data on addiction in medical professionals and discuss strategies to focus our research and why this matters, and highlight the challenges and ultimately benefits of professional rehabilitation. Finally, the presenter will share how her experiences have influenced her practice of medicine and fundamentally changed the way that she approaches patients. NAEMSP members of all disciplines and levels of training can learn from this experience as it will provide information on how to identify your own colleagues in distress, discuss improvement strategies for developing this critical component of provider

Amanda Humphries-Ventura

1:15 p.m. – 1:45 p.m.

wellness, and provide a candid look into the medical and rehabilitation world from the patient perspective.

8B. Caring for the Caregivers: An Integrated Approach to Critical Incident Stress Management in First Responders

1:45 p.m. – 2:15 p.m.

EMS physicians can be a crucial resource for prehospital providers when managing critical incident and cumulative stress. There are several approaches to managing the mental wellness of our providers, including peer support, chaplain, and employee assistance programs. In North Carolina, the Department of Public Safety has implemented a team of culturally competent mental health clinicians and social workers to provide confidential, free care to all employees suffering from job-related crises. This approach may be a useful model for other states and agencies.

Diane Miller, MD, MS,
FACEP

8C. The 5 Ts: Application of Cognitive Psychology and Neuroscience to Enhance EMS Education

2:15 p.m. – 2:45 p.m.

As far back as the 1950s, education professionals have been aware that humans possess a finite working memory. Over time, these ideas have been shown to have broad implications for developing instructional material and teaching problem solving, thinking, and reasoning. There is a strong body of evidence in the areas of cognitive psychology and neurophysiology that supports presenting educational materials in a particular manner. Yet, educators don't always heed this information. We often unintentionally overload students with information or present material in a way that imposes extraneous cognitive load, thus reducing retention. This lecture reviews the theory of cognitive load and how we can optimize our educational material, improve comprehension, and maximize retention of important information in emergency medicine and critical care transport. Learners are presented with the 5Ts – five evidenced-based recommendations – that they can apply immediately to improve their educational material.

Michael Lauria, MD

8D. To Fly or Not to Fly, That Is the Question: When and Where Is Air Medical Appropriate?

2:45 p.m. – 3:15 p.m.

The presenters will discuss the advantages and disadvantages of air medical transport and review indications and contraindications for air medical transport. They will explore some of the differences in air medical programs (and cost differences), dispel some of the myths about air medical (for example "air is always faster") and help participants to develop a framework to utilize for how to move their patients from place to place.

Frank Guyette, MD, MPH,
FAEMS
Charles Sheppard, MD,
FAEMS

CONCURRENT TRACK 9: Research

1:15 p.m. – 3:15 p.m.

9A. Research Oral Abstracts

Research Presenters

3:15 p.m. – 3:45 p.m.

Break in the Exhibit Hall

CONCURRENT TRACK 10: Trauma/Wilderness

10A. Prehospital Whole Blood Administration: Overcoming Challenges to Successful Launch in a Community Hospital System

3:45 p.m. – 4:15 p.m.

The presenters will discuss the challenges and logistics of starting a prehospital whole blood transfusion program in a community hospital. Support from the blood bank, trauma, hospital and EMS leadership is needed for a successful launch. He will discuss how the system is set up and go over some of the nitty-gritty of the protocols and procedures. We'll take a look at initial outcomes and adjustments followed by a discussion on anticipated challenges such as O- shortages with O+ substitutions.

Benjamin Litman, DO
Heather Gerbhart

4:15 p.m. – 4:45 p.m.

10B. Too Hot, Too Cold, Too Legit to Quit: Updated Realm of Thermal Emergencies

Benjamin Abo, DO, PMD,
FAWM
Christopher Davis, MD

The presenters will provide specific cases of thermal emergencies historically not considered "southern US" issues or "urban issues". From these they will discuss updated science and practice guidelines.

10C. Wilderness EMS: Kentucky's Novel Model for Improving Wilderness Medical Care

In most parts of the country, SAR/wilderness response is decoupled from EMS. These response teams provide a valuable service to persons injured or requiring assistance in wilderness areas. However, they are unable to provide medical care beyond the first aid level. The presenters will discuss the current state of wilderness response and barriers to integration with EMS. Many patients would benefit from more advanced medical care in the field. The need for advanced medical care is even more apparent when complicated terrain prolongs extrication. State regulators and relevant stakeholders should adopt regulations and protocols to allow for more robust participation of EMS providers in wilderness responses. Kentucky has made significant strides in this area. The state has adopted statutes to create an advanced level of paramedic specializing in wilderness medical care and allow for an expanded scope of practice to those paramedics who meet the criteria. The Kentucky Board of EMS has been charged with developing the criteria, educational standards, and defining the expanded scope of practice. The efforts in Kentucky will be discussed to provide an example to participants interested in developing a similar model in their own states.

David Fifer, MS, NRP,
FAWM
Jeff Thurman, MD

4:45 p.m. – 5:15 p.m.

CONCURRENT TRACK 11: CP / T&R / MIH

11A. When Reality Differs from Theory: Our Experience with Alternative Destinations in the ET3 Program

We enrolled in the ATD arm of ET3 with the theory that 10% of our patient transports could be handled at an urgent care center. Extremely narrow inclusion criteria driven by the urgent cares, limited hours, provider inertia, and other unanticipated factors prevented widespread adoption and enrollment of patients. Additionally, in the first 45 days, 100% of AD patients who we transported to an urgent care had to be re-transported to a hospital-based ED for further care. Current results have the organization leaning toward terminating the program and deeming it a failure.

Timothy Burns, MS, NRP
Alan Butsch, MA, NRP
Benjamin Kaufman

3:45 p.m. – 4:15 p.m.

11B. Community Paramedic vs. Advanced-Practice Provider: What's the Right Tool for Your Toolbox?

The EMS Community has begun the seismic shift from a mode of transportation to a Mobile Community Health platform. As we consider staffing models for this expanding mission, which is the right direction for your agency? Community paramedics or Advanced Practice Providers? What are the pros and cons of each? In this session, Dr. Kazan will share the experience with the Los Angeles County Fire Department Advanced Provider Response Unit program, why they chose that staffing model, and what their results have been.

Clayton Kazan, MD

4:15 p.m. – 4:45 p.m.

11C. Mobile Integrated Health: Fighting Cancer on the Front Lines

Mobile integrated health programs across the country have demonstrated significant success in the reduction of emergency department utilization and preventable readmissions based on various community needs assessments. Our own organization has demonstrated significant reduction in low acuity, high frequency ED visits and hospital admissions for patients with chronic medical conditions such as congestive heart failure and diabetes. We serve as an example for other agencies working to serve their communities in a proactive versus reactive manner. Most recently, we have collaborated with our hospital oncology program to provide treatment to chemotherapy patients in their homes, therefore reducing negative outcomes, emergency department visits, and hospital admissions for this vulnerable population. This has been particularly important during the COVID-19 pandemic as these patients are particularly susceptible to infection. This presentation will highlight how we developed our sustainable revenue model, our collaboration with oncology providers to develop the education, training, guidelines, and

Ian Medoro, MD

4:45 p.m. – 5:15 p.m.

special skills required to safely and appropriately treat cancer patients, and the demonstrated results of cost savings and improved patient outcomes.

CONCURRENT TRACK 12: Technology

3:45 p.m. – 4:15 p.m.	<p>12A. Integration of Telemedicine into a Busy 911 EMS System: Our Experiences</p> <p>With the pandemic has come a significant change in our health care delivery, and part of that delivery has transitioned to being certain that patients are receiving care at the correct location with the correct provider. Telemedicine involvement and using emergency physicians as health care providers allows busy EMS systems to provide better care. It allows for better turnaround times and efficiency with staffing and system availability.</p>	Carrie Fales, MD Sarah Rivenbark, EMT-P, CP
4:15 p.m. – 4:45 p.m.	<p>12B. Communications Revolution: Where We Came from and How Broadband Access Has Enabled a New Era of Public Safety and Field-Provided Health Services</p> <p>It's the year 2021, and did you know that pizza delivery and taxi services can find you and deliver their products faster and more efficiently than emergency services can act or locate you or your loved one in an emergency? In this session, Dr. Weiss will discuss the history of 911 telecommunications, location-based services, and communications for field public safety personnel/EMS providers. He will explore how technology improvements should vastly expand our abilities to care for patients and victims of emergencies in the modern era, but successful launching and use will require research and development, understanding of use cases, and piloting and involvement by our own EMS, 911, and medical communities—in addition to a centralized regulatory and supportive entity. We will discuss how Firstnet, the nationwide public safety broadband network mandated by Congress, is instrumental in this process for both normal, day-to-day, and disaster surge operations. It has grown even more dramatically during the pandemic response period as it provides healthcare and public safety providers and their support systems priority access in a secure, trusted networking environment. This is a matter of our ability to fight against the clock, getting to victims faster and getting them optimal care sooner, while keeping our own field personnel safe with accurate communications and data transmission.</p>	Leonard Weiss, MD, FAEMS
4:45 p.m. – 5:15 p.m.	<p>12C. EMS System Surveillance and Dispatch: Using Data Retrieval Tools and Selected Variables to Adjust Response Resources to Common Dispatch Determinants</p> <p>In 2018, our EMS system began using surveillance software to apply quality management techniques to our ongoing improvement science program. One continuing goal of every system is to neither over- nor under-dispatch resources to emergencies. The presenters will discuss the different response pattern assignments to various severities of incidents created in dispatch software, and the creation of a tool and outcome variables that have allowed safely adjusting those assignments based upon surveillance and evidence. This will help managers and physicians to measure and assign the resources needed in a more efficient manner.</p>	Timothy Burns, MS, NRP Alan Butsch, MA, NRP Roger Stone, MD MS, FAEMS, FAAEM
5:30 p.m. – 6:45 p.m.	Research Poster Session 2	
7:00 p.m. – 8:00 p.m.	Certification Reception	

Saturday, January 15, 2022

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.	<p>EMS Pipeline Career Pathway Programs: Improving Diversity in Our EMS Workforce</p> <p>It is critically important to increase the diversity of our workforce since the current pool of URM EMS providers is extremely small. One successful way to address this growing issue is to implement pipe career pathway programs. The presenters will showcase multiple EMS career pathway programs throughout the country.</p>	<p>Jose Cabanas, MD, MPH, FAEMS Lt. Question Curtis David Page, NRP Rickquel Tripp, MD, MPH</p>
8:30 a.m. – 9:00 a.m.	<p>Can EMS Play a Role in Addressing the Social Determinants of Health?</p> <p>EMS is well-positioned between the interface of public health and the healthcare systems. They are able to observe the effect of non-medical factors, including lack of social support and socio-economic status, affecting health status. Can EMS play a role in utilizing EMS data and referral modalities to improve social determinants of health?</p>	<p>Rachel Stemerman, PhD</p>
9:00 a.m. – 9:30 a.m.	<p>Building a Diverse and Inclusive EMS Agency</p> <p>Participants will be instructed on advantages of developing an inclusive EMS workforce and creating a diverse environment, including the value it brings to employees and employers as well as patients. Participants will be given tools for how to create more equitable hiring and promotion processes, how to better connect with underrepresented populations within their communities, and how to have difficult conversations around prejudices, biases, and harassment within the workplace. Instructors will review literature, including Crowe et al's 2020 assessment of the current workforce (DOI: 10.1080/10903127.2019.1634167) and the position paper from the National Association of EMS Educators regarding the impact of cultural humility in prehospital care (DOI: 10.1080/10903127.2019.1709001). Instructors will also provide case studies and examples from EMS agencies that have embraced diversity engagement programs. Finally, instructors will share a maturity matrix to help leaders track progress toward diversity and inclusion within their agencies. At the end of the presentation, participants will be prompted to develop their own plan to embrace diversity among their current employees, to recruit a diverse group of employees, and to engage the diverse in the communities they serve.</p>	<p>Meg Marino, MD, FAAP Emily Nichols, MD</p>
9:30 a.m. – 10:00 a.m.	<p>Current State of Diversity Research in EMS</p> <p>While some medical fields, including in-hospital emergency medicine, have begun to explore issues and implications of low diversity within their profession, research on the diversity of EMS clinicians has been extremely limited. However, recent research has aimed to characterize the demographics of the EMS clinician population and describe the experience of minority (e.g., Black/African American, LGBTQ+) EMS clinicians on the job. In this panel, we will present these research findings and the methods used to capture them, outline the barriers and facilitators to doing EMS diversity research, and discuss the meaning and importance of diversity promotion and research in the field of EMS.</p>	<p>Remle Crowe, PhD Julianne Cyr, MPH, CPH Emily Hutchens, BS</p>
10:00 a.m. – 10:30 a.m.	<p>Refreshment Break</p>	
10:30 a.m. – 11:15 a.m.	<p>EMS Practice, Insurance Claims Trends, Legal Pitfalls & Legislative Interactions</p> <p>An EMS clinician, EMS lawyer/paramedic and a representative of EMS insurance industry will review real world cases and claims to help guide the attendees on important trends to consider avoiding EMS litigation.</p>	<p>Thomas James Michael Levy, MD, FAEMS Mathew Streger, Esq.</p>
11:15 a.m. – 11:45 a.m.	<p>Inquiries from the Interweb: Questions and Discussions on EMS Physician SoMe Site</p> <p>Social media provides a broadly accessible pathway for novice and experienced EMS physicians to ask questions and exchange ideas. This presentation will help to emphasize the value of such a resource.</p>	<p>John Lyng, MD</p>

11:45 p.m. – 1:15 p.m.	Awards Luncheon – Sponsored by OnStar	
1:30 p.m. – 2:15 p.m.	<p>Medically Directed Rescue</p> <p>No matter what type or style system exists throughout, all claim to have “patient safety and rescue” as underlying missions and goals. However, in real-world applications of technical rescues whether day-to-day motor vehicle collisions or the rare extremely technical rescue, we all need to ask ourselves if all spokes of the wheel of rescue and survival truly practice what is preached. Dr. Abo will tease apart the history and future of rescue where we can continue to improve. Furthermore, we will examine how important the EMS physician role is, whether in the role of on scene management, online medical control, offline medical control, or protocol/training development, to bring things beyond the goal of getting a body out of a situation and to optimizing quality rescues and well-being.</p>	Benjamin Abo, DO, PMD, FAWM
2:15 p.m. – 2:45 p.m.	<p>Training EMS Practitioners in the Skill of Breaking Bad News</p> <p>Recent science supports treating cardiac arrest patients on scene until the resuscitation is successful or is terminated in the field. The technique of breaking bad news or death notification is a skill with specific helpful and harmful actions. Dr. Kupas will review the grieving process and describe how poor communication during breaking bad news can lead to pathologic grief in survivors. The presentation will use the ACEP GRIEV_ING mnemonic and Iserson's Grave Words to present a program to teach EMS practitioners the "dos and don'ts" of death notification.</p>	Douglas Kupas, MD, FAEMS
2:45 p.m. – 3:15 p.m.	<p>The Truth about Ketamine: Facts, Fiction, and Why It's Ideal for Hyperactive Delirium with Severe Agitation Syndrome</p> <p>Over the past 10 years ketamine has been increasingly used by EMS agencies as an agent to manage the highly agitated delirious patient. Yet, in the past year ketamine has come under fire by state legislators, and physicians in other medical specialties, who argue that ketamine should not be in the pharmacopeia in the practice of EMS medicine. Assigned to review the literature, and author the section, on ketamine for the American College of Emergency Physicians (ACEP) Hyperactive Delirium White Paper Task Force, Dr. Millin will explain the scientific basis to the use of ketamine, debunk common myths, outline methods to use ketamine in a safe manner that harnesses its benefits while mitigating against its harms, and discuss the holes in our knowledge that identify needs for future research.</p>	Michael Millin, MD, MPH, FAEMS, FACEP
3:15 p.m. – 3:45 p.m.	Break	
3:45 p.m. – 4:15 p.m.	<p>The Latest Prehospital Pain Management Evidence-Based Guideline</p> <p>Pain is one of the most frequent conditions that EMS professionals encounter. Despite the 2014 publication of an evidence-based guideline (EBG) for prehospital analgesia in trauma, studies since that EBG's publication show that pain is insufficiently assessed and managed in EMS. In 2019, the Agency for Health Research and Quality published a Comparative Effectiveness Review for EMS to use as a resource to reduce acute pain in the prehospital setting. In light of emerging evidence on EMS pain management, the National Association of State EMS Officials received federal funding to recruit a Technical Expert Panel to create a new Prehospital Pain Management EBG. Dr. George Lindbeck, State EMS Medical Director of Virginia, Chair of the NASEMSO Medical Directors Council, and Principal Investigator for the EBG project will summarize its key recommendations, highlight how to best incorporate the EBG into one's own EMS agency protocol, and note key teaching points to make when training EMS providers about the protocol.</p>	Manish Shah, MD, MS George Lindbeck, MD, FAEMS, FACEP Sabina Braithwaite, MD, MPH, FAEMS, FACEP
4:15 p.m. – 4:45 p.m.	Top NAEMSP Position Statements 2021	Frank Guyette, MD, MPH, FAEMS
4:45 p.m. – 5:00 p.m.	Closing Remarks	Joshua Gaither, MD, FAEMS
5:00 p.m. – 6:00 p.m.	Closing Reception	