EMS FORWARD
10 Topics that will move EMS forward in 2017.
Mission

To provide creative culture solutions to improve patient safety.
WHAT IS EMSFORWARD?
EMSFORWARD is a campaign to improve patient and provider safety in EMS.

WHY PATIENT SAFETY?
Patient safety is an area that hasn’t been studied in depth or researched intensively in EMS. Likewise, there are still many educational challenges as well as misconceptions that exist when it comes to patient safety. Some of these include the thought that patient safety is only about the provider not making a mistake; and if one occurs, it was because they were careless. Contrary to that belief, we should start by learning what medical errors are occurring, why they occur and then apply methods to prevent them.

WHY THESE TEN TOPICS?
The 10 topics were identified by CPS based upon voluntary data submitted to the CPS PSO. Patient safety experts utilized the PSO’s database of actual event information from EMS providers nationwide. The topics selected for this year came from the analysis which showed culture to be either a direct casual factor or contributory factor that led to safety events.

WHO SHOULD READ THIS?
Everyone who wants to improve EMS patient and provider safety.

HOW TO USE THE REPORT?
Use the report to learn about 10 topics, then ask yourself the question posed on each page.

THEN WHAT?
Stay tuned for updates and the ANSWER to each question posed on our website and social media. In the meantime, take action to improve your safety culture and the system designs or processes in delivering emergency care.
A MESSAGE FROM THE CENTER FOR PATIENT SAFETY

Every day, the men and women in Emergency Medical Services (EMS) answer the call to help those in their hour of need. These professionals bring compassion, enthusiasm and dependability in, often, very challenging environments. The Center for Patient Safety (CPS) is honored to be an EMS partner in safety. CPS envisions a healthcare environment safe for all patients and healthcare providers, in all processes, all the time.

Similar to the 2016 release, the 2017 EMSFORWARD campaign is presenting 10 topics in EMS that pose risk to patients and providers. However, this year’s campaign is looking at 10 topics with an emphasis on patient and provider safety culture. The topics selected for this year came from the CPS PSO data base where analysis showed culture to be either a direct casual factor or contributory factor that led to safety events.
While culture is a complex topic, CPS hopes to establish a basic framework and understanding about patient and provider safety culture. In addition, by using the research and work of James Reason, you will see how culture influences and shapes the foundation of an organization. By weaving together a cyclical safety culture and posing a question to the reader around each topic, CPS hopes to drive awareness conversation, and action to improve safety culture.

Many EMS organizations have taken steps to improve their patient and provider safety culture. This includes leaders who have placed it as a core value then invested the necessary resources to improve the cultural climate for safety. Others have been watching closely, learning where to start, while some are waiting to take those first steps. Regardless, safety culture is a journey and not a race. No matter where you are on the journey, taking the first step is the most important part.
Patient and provider safety should be on the minds of everyone in EMS, but the advancement of EMS safety rests on the shoulders of EMS leadership across the nation. While there are many components to safety, the most basic foundation is reflected in the attitudes and perceptions of those who practice, teach and lead the EMS profession. This foundation supports the framework for patient and provider safety in the EMS profession.

**Shared Accountability** - A culture based on the open sourced principles and philosophies of just culture.

**Transparency** - A cultural climate where trust exists for the sharing of information about mistakes, almost events and unsafe situations.

**Knowledge** - Using science and other proven methodology as a foundation to understand why mistakes happen.

**Continual Learning** - Process improvements based on the information from reporting and the science of safety.

**Flexibility** - Proactive steps taken by leaders in a positive manner to implement changes that provide safer care rather than the reliance on reactive methods for organizational change.

**The Epicenter of the System**

The point during the decision or action that rests on the shoulders of individuals, requiring them to be Empowered, Prepared, and Motivated to make the right choice.

*Source: Foundations of Safety, James Reason with CPS interpretation shown.*
“Culture plays a foundational role in any organization as it shapes the attitudes and perceptions of leaders as well as front line coworkers. The National EMS Safety Council understands that developing and cultivating a culture of safety is critical.”

**THE SCENARIO.** There has been a mistake during a call. An EMS crew of two seasoned providers recognize that the mistake could affect the patient’s outcome. They want to report it and know that reporting it is the right thing to do, but, privately, they are worried about what may happen to them and what others will think. The crew reports the event to the emergency department nurse and physician and then contacts their supervisor before leaving the hospital.

**ASK YOURSELF...** Is your cultural climate based on a model of shared accountability which supports self reporting?
“Pre-hospital airway management is a key component of emergency responders and remains an important task of Emergency Medical Service (EMS) systems worldwide.”


THE SCENARIO. An EMS crew, which includes a new paramedic, responds to a call of a patient in respiratory distress. Upon arrival, the patient is struggling to breathe and in severe distress. The crew proceeds to perform a rapid sequence intubation. They confirmed the tube placement with fogging of tube and breath sounds. The patient is then loaded into the ambulance. Once in the ambulance, the new paramedic notices capnography equipment in the vehicle, but sees the more experienced crew members do not utilize it. He doesn’t say anything. He is still new and assumes the senior paramedics are following the protocol as they see appropriate, however, he feels strongly they should be using the equipment and is now worried about the patient.

ASK YOURSELF… Do you have a culture where providers will speak up if there is something unsafe?
“Evaluation of obese patients presents many challenges to healthcare providers. They are at risk for a multitude of health problems, and it can be difficult to determine the nature of complaints.”

Will Long MD, Brett McGary MD and Edward Jauch MD
MS Carolina Fire and Rescue EMS Journal

THE SCENARIO. An EMS unit is called to a sick case. Dispatch informs the crew it’s a bariatric patient who is complaining of generalized weakness and that the patient has called several times in the past week. During their assessment they find a bed sore that looks infected and believe the patient might be septic. The crew wonders why the other medics who have been with the patient didn’t notice the bed sore during their assessment and catch it earlier. The patient tells the crew not to blame the other medics as she was embarrassed and self-conscious about her condition and didn’t tell them about the bed sore.

ASK YOURSELF... Does your culture include training and an expectation of respect that will generate complete communication in a trusting environment?
“I never know what to expect when I encounter a behavior health patient. Even after many years of working in EMS, they still make me nervous”

Anonymous Paramedic

**THE SCENARIO.** An EMS crew is transporting a patient who is awake, alert, and cooperative. Based on his presentation and comments, the crew sees no indication the patient is at risk for violence. The patient is placed supine on the stretcher with safety belts in preparation for transport to the hospital. While transporting, the patient becomes agitated, quickly removing the belts and trying to get off the stretcher, stating “I want out... now!” The situation escalates rapidly and the crew feels threatened. The patient gets off the stretcher and is yelling obscenities while the driver is slowing down to merge out of traffic and safely stop the ambulance. The patient punches the attendant in the chest, knocking him back into the captain’s chair. The EMT is incapacitated after the blow to the chest. The patient jumps from the back of ambulance into heavy traffic where he is struck by a car and killed.

**ASK YOURSELF...** Are staff members trained in the management of behavioral health scenarios and de-escalation?
“In other words, simply using those shoulder restraints can save our patients’ lives and prevent devastating injuries.”

A National Perspective on Ambulance Crashes and Safety Guidance from the National Highway Traffic Safety Administration on ambulance safety for patients And providers. Noah Smith, MPH, EMT

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STRETCHERS

THE SCENARIO. An EMS crew has arrived at the hospital and is preparing to unload a patient from ambulance. The driver is at the back of the ambulance and is eagerly disengaging the wall locking device that holds the stretcher in place. The attendant is busy unhooking the monitor and oxygen and packaging the patient to be moved out of the ambulance. The driver starts to pull the stretcher out of the ambulance while the attendant remains at the head of the patient. As the stretcher is pulled, the safety hook on the floor of the ambulance fails to engage. The driver continues to pull the stretcher out not realizing the hook is not engaged. The stretcher then free falls out of the back of the ambulance.

ASK YOURSELF... Has your organization implemented a policy of utilization of all 5 straps when transporting and moving a patient? Are expectations about the use of safety equipment frequently reinforced?
“Continuing quality improvement (CQI) reviews reflect that medication administration errors occur in the pre-hospital setting. These include errors involving dose, medication, route, concentration, and treatment.”


THE SCENARIO. A paramedic crew responds to a sick case finding an otherwise healthy 32 year-old male who complains of severe abdominal pain and nausea with vomiting. The patient thinks that he might have food poisoning. After placing an IV, the paramedic administers a fluid bolus followed by an antiemetic. Later, when the crew is cleaning the back of the ambulance, they notice that it wasn’t an antiemetic that was administered, but instead an anti-arrhythmic. The packaging and labeling of the two medications are very similar and the print is small as well as difficult to read.

ASK YOURSELF… When your staff has a “near miss” do they report that so everyone can learn and prevent future, potentially more harmful, events?
“Paramedic EMTs face many challenges in providing high-quality care for children. First, the pre-hospital environment is difficult, chaotic and stressful. Because of these factors, it is prone to error.”

Pediatric Patient Safety In EMS / Meckler, Leonard, AND Hoyle • Vol. 15, No. 1

THE SCENARIO. A paramedic crew responds to a child not breathing. On scene they find CPR in progress on a four-month-old female. The medics have been taught to memorize the treatment protocol and algorithm for pediatric patients. During their training and education they were able to execute care perfectly but in the moment of the call they now feel added stress which affects their ability to recall important steps or medication dosages.

ASK YOURSELF… Does your organization have a system based approach for pediatric emergencies to address possible areas of concern?
“EMS practitioners face challenging and traumatic events that can impact their mental well-being each and every day. The mounting effect of patient needs, family, long workdays, nutrition, physical health, and sleep deprivation all contribute to an individual’s sense of wellness.”

National Association of Emergency Medical Technicians

**THE SCENARIO.** An EMS crew is called to an infant not breathing. The crew arrives on scene and starts resuscitation of a three-month old male who didn’t wake up from a nap. The crew follows a system based approach in the resuscitation without success. They contact medical control, package the patient and continue care as they transport the infant to the hospital. Upon arrival to the emergency department the crew gives report and transfers care of the still non-responsive infant to the staff that is waiting for them. Discouraged, the crew walks outside to take a break and talk about the call. Both paramedics are parents and one of them has a young infant about the same age as their patient. Heading home from work, the call circles around in their minds. They wonder if they could have done something different, or better. In their minds, they can still hear and see the parents grieving the loss of their child.

**ASK YOURSELF...** Has your organization implemented a peer support program?
“Ambulance crashes are a significant risk to prehospital care providers, the patients they are carrying, persons in other vehicles, and pedestrian.”

Ambulance Crash Characteristics in the US Defined by the Popular Press: A Retrospective Analysis
Teri L. Sanddal,1 Nels D. Sanddal,1 Nicolas Ward,2 and Laura Stanley2
Emergency Medicine International
Volume 2010 (2010), Article ID 525979

THE SCENARIO. It’s been a busy shift for an EMS crew with a steady stream of calls and little to no down time. It is nearing shift change when the crew is dispatched to a non-emergent transfer of a patient from the local hospital to a long term care facility. While transporting the patient to the long term care facility, the ambulance is involved in a crash. During the investigation the driver said he was tired and thought maybe he “dozed off” while driving. He said he should have “known better” and should have told someone that he was too tired to be operating the ambulance but he didn’t want to get in trouble.

ASK YOURSELF... Does your organization encourage crew members to openly report when fatigue may make them unsafe to operate a vehicle or provide patient care?
“Clearly defined processes for the contemporaneous face-to-face communication of key information from emergency medical services (EMS) providers to health care providers in an emergency department (ED) are critical to improving patient safety, reducing medico-legal risk, and integrating EMS with the health care system.”

*Transfer of Patient Care Between EMS Providers and Receiving Facilities Volume 63, no. 4 : April 2014*  
*Annals of Emergency Medicine 503*

**THE SCENARIO.** An EMS crew is transporting a geriatric patient with dementia to the hospital. They have called ahead with a patient report but it’s a busy night at the ED and most of the rooms are full. The hospital staff is doing the best they can but are now placing patients on beds in a hallway holding area. The EMS crew waits but needs to return to service and tells the charge nurse they are over their allotted time for being at the hospital. They give the charge nurse a quick verbal report and tell her if there are questions she can read the report or call their supervisor. Later when the physician is seeing the patient there are questions regarding the patients’ history, allergies, medications, and the events leading up to the illness as septic shock is suspected. The electronic EMS chart is not available, nor is there a copy of the verbal report from EMS. The ED staff now must track down the EMS crew for more information.

**ASK YOURSELF...** Has your organization implemented a standardized approach of communication for hand-offs?
Are you ready to start the journey?
Follow the EMSForward Campaign on Twitter, LinkedIn, or Facebook.

Resources and recommendations to support improvement efforts addressed in this booklet are available throughout the year on the CPS website. www.centerforpatientsafety.org/emsforward

Together, we can move #EMSForward.

SAVING LIVES.
EVERY SECOND. EVERY MINUTE. EVERY DAY.

Do you have questions for us?
Contact a patient safety expert today!
573.636.1014

#EMSFORWARD