A Dialogue on Gun Control

Opinions abound on gun ownership, but do the data make the issue any clearer?

GUN VIOLENCE is an ever-growing concern in the United States, and there’s no question that emergency physicians are at the front line for treating its victims. But how far should emergency medicine go in advocating for or against gun control?

ACEP Now asked two physicians with opposing views for their opinions on the matter. The following is a summary of their conversation.

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SPECIAL COVERAGE: FIREARMS

A Marriage of Old Data and New Concepts

Many question if the newly released sepsis definitions are a good match for emergency physicians.

Sepsis can be a difficult condition to diagnose thanks in part to non-specific criteria; the definitions of sepsis and septic shock were last revised in 2001. This February, the Journal of the American Medical Association (JAMA) published “The Third International Consensus Definitions for Sepsis and Septic Shock (Sepsis-3)” to evaluate and update these definitions. (The definitions can be accessed at http://jama.jamanetwork.com/article.aspx?articleid=2492881.)

But how accurate are these definitions, and are they useful in clinical emergency medicine practice? ACEP Now medical editor-in-chief Dr. Kevin Klauer recently had a conversation with physicians who work with septic patients and are involved with sepsis survival care to get their opinions.

Continued on page 12

NEW COLUMN: EM CASES

Pumping Iron

Should EDs do fewer red cell transfusions and more IV iron?

SEE PAGE 16

CONTINUED
YOUR NEXT PATIENT EXPOSED TO SMOKE MAY HAVE CYANIDE POISONING

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ACEP Issues Statement on Orlando Mass Shooting

In response to the mass shooting in Orlando, Florida, ACEP President Jay Kaplan, MD, FACEP, issued the following statement:

“On behalf of the nation’s emergency physicians, I wish to express our deepest condolences to the families and friends of those who were murdered in Orlando this weekend. In addition, we extend our prayers for healing and recovery to the many injured who are still fighting for their lives. While the shock and grief from this horrific tragedy are still fresh, we are resolved to redouble our efforts at dealing with what has unfortunately become a regular occurrence in our nation.

“In January of this year, ACEP approved the creation of the multidisciplinary High Threat Emergency Casualty Task Force dedicated to understanding, tracking, and responding most effectively to mass casualty incidents of this kind. Since the inception of the specialty, emergency physicians have been on the front lines in the prehospital environment and in our nation’s emergency departments, responding to incidents of violent mass casualty, such as this one. As a specialty, we will continue to lead and to collaborate with partners across the emergency response continuum in efforts aimed at reducing potentially preventable deaths and disability due to these horrific attacks.

“ACEP’s High Threat Task Force will continue to leverage the extensive expertise of its membership as it works to improve responses to future violent incidents. Specifically, the ACEP Task Force will:

1. Work to develop a process by which we may more rapidly capture and disseminate critical lessons learned from incidents to the first response community across the U.S.

2. Collaborate with multidisciplinary researchers and public policy experts to develop a repository for data on wound patterns and causes of death for victims of mass violence. ACEP and its partners will spearhead efforts to gather and analyze this data in order to create evidence-based response guidelines.

3. Coordinate efforts with our partners across the spectrum of violent mass casualty responders (fire, EMS, law enforcement) and providers of trauma care to gather, analyze, and validate best practices for prehospital and hospital-based response to such incidents, from bystander response to surgical care and emotional recovery.

4. Advocate for resources to help our community prepare for, respond to, and recover from similar violent incidents that have yet to occur. Information is power. At this moment when we feel powerless, we must focus on learning from this tragedy to improve our response in the future.”

EMF Earns Highest Possible Rating from Charity Navigator

For the second year in a row, the Emergent Medicine Foundation (EMF) has earned the coveted rating. A letter from Michael Thatcher, Charity Navigator President and CEO, states that approximately a quarter of charities evaluated have received the same rating, indicating that EMF “exceeds industry standards and outperforms other charities in [our] area of work.”

Founded in 1972, EMF’s mission is to develop career emergency medicine researchers and improve patient care and effective health policy. To date, EMF has awarded more than $12 million in research grants to advance emergency medicine science and health policy. Thanks to its generous donors, EMF awards more than $500,000 in emergency medicine grants each year. To help EMF further the science and policy of emergency medicine, get involved at EMFoundation.org.

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Prescription Drug Monitoring Programs
Regulatory burden or necessary EP function?

by RACHEL SOLNICK, MD

had always assumed that I would remember my first code. I don’t. But I do remember my first time coding a patient who could have been my peer. He was young and otherwise healthy. His housemates had heard a loud thud but ignored it. Later, they found him lying lifeless on the ground. He was a known heroin user. In those days, like in many states, prescription medications are the most common drugs of abuse.1 Prescription opioids are known gateways to heroin as patients seek stronger, cheaper, and easier-to-acquire agents. Patients addicted to opioid medication are 60 times more likely to be addicted to heroin.2 More than two-thirds of heroin addicts previously abused prescription opioids.3 One major driver of the opioid epidemic has been the proliferation of prescription pain medicine. The United States consumes nearly all (98 percent) the world’s supply of hydrocodone.4

How did this happen? In 1999, in response to popularized claims that chronic pain was undertreated at epidemic proportions, the Veterans Health Administration launched the “Pain as the 5th Vital Sign” initiative, requiring a pain-intensity rating at all patient encounters.5 This was disseminated to the rest of the health care system two years later by The Joint Commission, which instituted pain management standards. Pharmacuetical companies seized the opportunity and aggressively campaigned, convincing physicians, patients, and regulators that opioids were safe for chronic non-cancer pain. The misinformation was so explicit that Purdue Pharma, makers of Oxycontin, eventually pled guilty to federal criminal charges.6 From 1999 to 2013, Oxycontin prescriptions skyrocketed from 76 million to nearly 207 million annually. As the prescriptions increased, so did the number of related ED visits, which more than doubled between 2006 and 2011.7 More recently, the trend has turned le-thal. Opioid-related deaths doubled in just one year, killing 5,500 in 2014.8

Well aware of these deadly trends, I initially welcomed the arrival of Connecticut’s prescription drug monitoring program (PDMP), a central database holding statewide accounts of Schedule II-controlled substances. Signed into law in the summer of 2015, Public Act 15-198 was hailed as legislation that took “necessary and smart steps” to combat prescription drug abuse and overdose deaths.9

Unfortunately, the bill creates busywork for doctors, and new evidence suggests that the extra work is not making an impact. The bill mandates that practitioners check each patient’s record in the PDMP. We must check every controlled substance prescription written to last more than three days. For patients who receive prescriptions chronically, providers must recheck the PDMP every 90 days. PDMPs have sprung up nationwide over the past decade with much fanfare. Sadly, their impact hasn’t lived up to their hype in decreasing prescription opioids, especially when looking at data from states that instituted mandates. According to a study from Brandeis University, after adopting mandates, Kentucky, New York, and Tennessee had decreases in opioid prescriptions rates ranging from 7 percent to 11.6 percent for commonly prescribed opiates.10 When taking into consideration that at the same time nationwide opioid prescribing decreased by 4.6 percent, there is even less association between PDMPs and prescribing behavior. Over a similar time frame, Florida launched a PDMP that was not mandatory and had similar results as the states in which it was mandated—the rate of Schedule II opiates dropped by 12.5 percent and total pain prescriptions dropped by 71 percent.11

The trouble largely lies in theory versus practice. Initially, I heard some rumbles around our department about the new alert popping up on our electronic medical record log in screen. As with all alarms, it soon faded into the background noise of irrelevant red boxes that clogged the screen. Connecticut’s experience does not appear to be isolated. In California, only 9.8 percent of prescribers and pharmacists registered to use its PDMP in 2014.12 While one study in Annals of Emergency Medicine found a change in prescribing behavior after viewing a PDMP query, this finding is suspect. In that study, 17 physicians had research assistants running their queries.13 Funny, I can’t seem to find my research assistants.

For busy ED providers, time spent accessing a multistep website distracts from real patient care. Just as we don’t blindly check troponins on every patient with chest pain, it makes as little sense to check the PDMP for every patient with pain who may receive opioids. Moreover, emergency physicians only write 5 percent of all opioid prescriptions despite handling 28 percent of all acute care visits.14 Without sufficient outcomes to justify its burden in the ED, PDMP appears to be little more than a shiny new toy for politicians to pay lip service to a social epidemic while villifying physicians for overprescribing.

While our new law does not specifically punish doctors for noncompliance, physicians not following the mandates may be at risk for liability. The state statute is under the controlled substance section of the law, which carries serious penalties for noncompliance. Recently, a doctor in Texas was investigated after his patient (to whom he had prescribed controlled substances) caused a deadly motor vehicle crash. The police were able to seek a search warrant for the clinic, citing the doctor failed to follow the state medical boards rules for treating chronic pain including a pain management agreement.15 Ultimately, he was found guilty of fraudulent actions, but the case shines light on the potential for legal repercussions of opioid prescribing.

We should be willing to accept some responsibility for the epidemic, but so should the general community. Patient education has a role to play. For example, in New York City and in California, governing bodies issued voluntary ED guidelines and created posters for educating patients on opioid restrictions.16 Temple University Hospital in Philadelphia saw a 20 percent decrease in opioid prescriptions for chronic pain after introducing voluntary guidelines; this reduction was maintained over a year later. All 31 eligible prescribing physicians completed a survey, and 100 percent supported the use of those guidelines.17

PDMPs may yet prove their worth in the fight against the opioid epidemic. Targeting and integrating alerts into electronic medical records would seem useful. Although at least 31 states have the authority to send such alerts, relatively few states do. Massachusetts piloted unsolicited targeted electronic alerts and found that 82 percent of providers did not realize their patients were inappropriately receiving prescriptions from multiple prescribers. After six months, detected doctor shopping activity was reduced by 50 percent.18

We must not deny that physician behavior is part of the opioid problem, and we can be a part of the solution. However, our maximum impact is unlikely to be realized if we act merely as automatons of states’ ineffec-tual policing. With government cooperation improving PDMPs, developing initiatives to decrease pressure to prescribe potentially harmful drugs, and providing increased patient support, we should see improvements in curbing addiction. This can be accomplished while retaining the right to rationally prescribe without viewing our patients as guilty until proven innocent.

DR. SOLNICK is an emergency medicine resident at the Yale Emergency Medicine Program in New Haven, Connecticut.

References
8. 198 was hailed as legislation that took “necessary and smart steps” to fight the 5th Vital Sign. J Emerg Med. 2015;49(5):633-642.
SPECIAL COVERAGE: FIREARMS

Participants

Andrew Fenton, MD, FACEP, Medical Director, Napa Valley Emergency Medical Group, Queen of the Valley Medical Center, Past President, California ACEP; past member, ACEP State Legislative/Regulatory Committee

Marco Coppola, DO, FACEP, CMO, FamilyER + Urgent Care; Chair, ACEP Leadership Development Advisory Group and National/Chapter Relations Committee; past ACEP Council Speaker; and Operation Iraqi Freedom Veteran

Moderator

Kevin Klauer, DO, EJD, FACEP, chief medical officer—emergency medicine and chief risk officer for TeamHealth, executive director of the TeamHealth Patient Safety Organization, and medical editor-in-chief for ACEP Now

A Dialogue on GUN CONTROL

CONTINUED FROM PAGE 1

KK: Do you think that ACEP should be weighing in on Second Amendment rights?

AP: I think that we should be active on certain things that are specifically relevant to physicians. Regarding the Second Amendment, it’s the law of the land, and I don’t think there’s any debate about that. I think there are certain bills that are more relevant to our members, and those are the ones we should take a position on.

MC: Firearm injury is a very important topic in emergency medicine because we’re on the front lines. However, there are some facts that need to be addressed.

According to the Centers for Disease Control and Prevention, the top-four most common non-fatal accidents in 2007 were caused by falls, motor vehicle accidents, other specified injuries, and poisonings. Non-fatal accidents and hospitalizations due to firearms were second from the bottom; only dog bites were lower.

As far as fatal accidents in 2007, only 0.5 percent were from accidental firearm fatalities and injuries. The top four that year were motor vehicle accidents, poisonings, falls, and otherwise unspecified, and at the very bottom were firearms. Since 1993, gun violence in this country has dramatically dropped, from 15.2 to 10.5 deaths by firearm per 100,000 people, in 2013. We cannot infringe on the right to bear arms, the Second Amendment. Andrew’s right about that.

KK: Andrew, Marco has given a bunch of stats and his perspective on things, and I want to give you an opportunity to respond. I assume that you don’t necessarily agree with everything he said.

AP: I don’t agree with everything he said. One thing I will respond to is the issue of mental health. I think it’s a big issue, and it’s important. I think more funding for mental health treatment is absolutely necessary in this discussion, and we do have to keep in mind that those individuals with a mental health diagnosis have actually been shown to be less likely involved in firearm violence, but we know that anyone who commits suicide is mentally ill.

We also need more funding toward research. We’re all aware that Congress restricted funding in the late 1990s to the CDC and the National Institutes of Health, preventing them from doing adequate studies on firearm injury prevention. These are difficult things to study, but there have been well-designed studies on this issue that have given us some answers; there just haven’t been enough. If you look at the last 50 years, there have been 65 cases of rabies in this country, yet the NIH has funded 89 studies about rabies. In the meantime, in the last 40 years, there has been over 4 million people killed by firearms, and the NIH has funded only three studies on firearm injury prevention. That’s sad.

I’ve seen different statistics than those Marco refers to. You have to look at homicides and suicides to see the whole picture. Obviously, medical treatment of firearm injuries has gotten better, though most firearm injuries are still fatal. I think there’s some evidence that shows things are getting better, but all you have to do is open up the newspaper to know that we still have a major problem in this country. Since the Sandy Hook Elementary shooting, there has been an average of one school shooting a week in this country, and the number of mass shootings has also increased. There were 290,000 deaths from firearms last year. Eighty-seven percent of all deaths come from firearms, and what our communities have done since Sandy Hook, has been inadequate at best.

KK: Do you think we need stricter statutes and more regulation of firearm ownership?

AP: I think we could be doing a lot more. I’ve mentioned that we need to reinstitute the research funding that was cut by Congress so that we can understand the issue better. I do think there are some commonsense firearm regulations that can be put into place, like expanded background checks. Most people agree with that. I think that we could do more when it comes to regulating gun sellers and making certain that when someone purchases a firearm he or she is safe to own it. With regard to background checks, 40 percent of firearms transactions don’t
include a background check, and you can go online and buy a gun without one. There are a lot of things we need to do as a society to address this issue (eg, addressing mental health), and we just haven’t taken any definitive steps.

MK: Marco, any response regarding firearm regulation? ▼

MC: What is the actual number of mass murders since Newtown (Sandy Hook)? Andrew, I admire you immensely because of your passion. But with increased numbers of people who are able to carry a gun, either concealed or openly, the crime rates in those states have plummeted. There’s a correlation, yes, but is there cause and effect? We don’t know because in a lot of those states, crime rates are coming down.

KK: Marco, do you think that more guns or fewer guns will improve safety regarding firearms? ▼

MC: There are a lot of gun studies in the medical literature that are biased and methodologically flawed. Andrew’s correct: The NIH doesn’t fund many gun control studies, but there are a lot of studies in the economics and criminal justice literature based on data readily available from the CDC and other sources that show that more guns in the hands of law-abiding citizens are not associated with more crime. The data clearly show that crime is reduced in states that have enacted right-to-carry laws.

KK: Andrew, are more or fewer guns better? AF: I can’t imagine how more guns could make us safer. We already have about as many guns in this country as we have citizens. There are more guns in this country per capita than in any other country. I just don’t think that we can shoot our way out of this problem.

The data out there and the studies that have been done have some methodological flaws, I agree, and that includes a recent study that showed that in states that have tighter firearm regulations there’s less firearm violence. They didn’t prove causation, but there was a correlation. Another study noted that someone who has a firearm and is an assault victim is four to five times more likely to be shot and killed. So, in general, the more you increase firearms in a community, the more firearm violence you’re going to have.

KK: If you or your family was threatened and you had access to a firearm, would you use it? ▼

AF: I don’t own a gun, Kevin. I do keep a 2 iron underneath my bed because I figure I might get some use out of that club that way. For the average person, though, when you bring a gun into the home, it does increase your risk of someone dying by homicide two to three times. The risk of suicide in that household goes up five times.

KK: Marco? ▼

MC: In recent years, children have been involved in accidental shootings, but there have been fewer than 10 per year. More kids die from drowning in a 5-gallon bucket than they do from an accidental discharge at home. Most accidental discharges occur with men who have long histories of violent crime, alcoholism, and suspended or revoked driver’s licenses. Would I use a weapon if I had access to one? The question for me is not if I have a weapon but how many.

MC: Can I ask you, though, who’s going to do that at home? What right-minded individual is going to leave a gun at home for a kid to play with?

KK: If you had one wish that you could accomplish regarding this issue, what would it be? ▼

MC: I feel that the majority, if not 100 percent, of the injuries are caused by people who are mentally ill and need treatment. It is my wish that we live in a nation where people who are suffering from mental illness would have access to and receive treatment for their illness.

AF: My wish would be to take the issue seriously, take the politics out of it, and for us to truly treat this as the public health epidemic that it is. Incidences like Sandy Hook should never happen again in our country.

Thoughts on Orlando

GUN VIOLENCE WAS AGAIN AT THE FOREFRONT OF THE NEWS IN JUNE, with the June 12 shooting at the Pulse nightclub in Orlando where 50 people, including the shooter, died, making it the deadliest mass shooting by a single shooter in American history. ACEP Now asked Dr. Fenton and Dr. Coppola for their thoughts.

AF: After the unthinkable tragedy at Sandy Hook Elementary, our country was resolved to address the senseless violence within our communities and our culture that was killing even our youngest citizens. Because of opposition, our public leaders dithered, our resolve withered, and daily distractions led to national inaction.

Since that day in December 2012, more than 100,000 of our citizens have died through firearm violence, and there have been over 1,000 mass shootings. Now our country mourns again after the latest and worst mass shooting in American history. We again have the responsibility to honor the memory of those who were murdered by creating needed change in our country.

Since the Orlando tragedy, the American Medical Association has shown leadership by recognizing firearm violence as a “public health crisis” and by committing to actively overturn the Congressional ban on firearm violence research. ACEP needs to demonstrate similar resolve and to also lead in confronting this crisis. Only through strong and sustained action can we honor those who have been victims while creating a safer and saner future for our children.

MC: The killings in Orlando were horrific, and my thoughts and prayers are with the victims, their families, and friends. It is abhorrent that many, including our so-called leaders, have taken this tragedy to further a misguided agenda with calls for gun control. Turning this terrible event into demands for gun control is insulting to the victims and it detracts from the real issues. What happened in Orlando has less to do with gun control than with extremism, terrorism, intolerance, and this administration’s failed policies to combat ISIS. Data have consistently shown that crime rates are lowest in states with concealed-carry or open-carry laws, and crime- and firearm-related deaths are highest in cities with the strictest of gun control. Perhaps if one of the patrons at Pulse that night was trained in firearms, the number of those killed and injured would have been a lot less.
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- In a retrospective study of glucagon in esophageal impactions, results were similar to patients not receiving it (only 14% v 10%).
- In 8 stroke trials of 1,313 cases of thrombectomy vs 1,110 receiving tPA, functional independence at 90 days was 45% vs 32% (NNT 8).
- In severe peds asthma, a 50mg/kg/hr mag infusion for 4 hrs was associated with 9/19 discharges at 24 hours vs 2/12 getting a 1-hour one.
- In a retrospective study of 76 patients with severe brain injury, RSI with SUX was associated with an OR for mortality of 4.1 vs ROC.

...And This List Covers Less Than Half of the 30 Papers in the July Issue of EMA.
Firearms: A Continued Topic of Discussion

American College of Surgeons committee considers promoting firearm safety and injury prevention

BY DEBRA PERINA, MD, FACEP

FIREARM SAFETY is a topic not only being discussed within ACEP but also of interest to other professional societies. At the most recent American College of Surgeons Committee on Trauma (ACS COT), a town hall was devoted to this topic, providing a lively open exchange among their members on the role they might play in promoting firearm safety and injury prevention.
Advocating for a public health/trauma system approach to firearm injury prevention seems core to ACS COT’s mission. However, there were two contrasting, strongly held opinions among their members regarding gun ownership: Guns equal freedom and safety, or guns cause limitation of freedom and create violence. These two opinions are mirrored in society and also within ACEP. Many of us have heard this debate in our own Council several times. The ACS COT discussions took a different slant and approach. ACS COT leadership said that organizations want their decisions to be data-driven (and rightly so), but this is often derailed by emotions surrounding a particularly polarizing topic.

**RULES OF CIVILITY**

The goal of the town hall was to provide a forum for a civil, collegial, and professional dialogue toward developing consensus regarding interventions aimed at reducing firearm injuries and deaths. Setting the tone for the upcoming debate, Ronald Stewart, MD, chair of ACS COT, introduced the “conscious” leadership concept, where what a person perceives as facts are sometimes instead just “stories” without a true basis in demonstrable data.¹

We as a society, and particularly as health care professionals, place a high premium on facts. However, those “facts” can actually be based on unintentionally made-up stories and be the cause of upset, drama, and distress around a difficult, polarizing topic. For example, a post on social media says that they’ve never seen so many people with guns in the city before. After several tellings to others, that post may unintentionally become the basis of a “study I read somewhere” about the rise of gun ownership. It turns out members were evenly divided, with roughly half being gun owners and half not wishing to own a gun or even favoring some form of gun control. Despite members’ differences, discussion and debate centered around bridging the gap between beliefs and developing short- and long-term strategies to reduce firearm injuries and deaths without limiting the personal freedom of legitimate, responsible gun owners. Debate was both passionate and thoughtful, representing the full breadth of opinions, from gun ownership as a constitutional right representing freedom to guns being regulated and banned from general ownership.

Even with such polarity within the group, using the rule for civil discourse laid down at the beginning of the town hall as the basis for respectful discussions allowed members to achieve agreement on two principles:

- With freedom to own guns comes responsibility.
- Injury prevention programs should focus on responsible ownership and proper securing of guns to avoid misuse.

In addition, members agreed on the need to implement evidenced-based firearm violence prevention programs through their network of trauma centers. Concluding the town hall, organizers said that these goals resonated with ACS COT’s core mission and professional responsibility to advocate for public health and injury prevention as their members deal with firearm injuries on a daily basis. Work is now in progress on a model firearm safety injury prevention outreach program that can be adapted by individual trauma programs.²

**REFERENCES**


Once considered places of sanctuary from violence, hospitals are now becoming desecrated by the ravages of a society where polite discourse seems to be easily forsaken in favor of gunpowder and lead. Surveys show that emergency department personnel are assaulted far too frequently. Data also demonstrate that patients and visitors are arriving armed to the teeth. How can we prepare ourselves to survive when the mean streets spill into our corridors and bullets fly?

There are steps that can be taken to prevent gun violence in the ED. It’s well past time to examine the risks and learn how to react if you find yourself in the middle of the nightmarish scenario of an active shooter in your department.

Prevent the Problem

Data are remarkably clear on two points. First, our patients and their visitors are armed. They arrive carrying knives, Tasers, mace, brass knuckles, and guns. Second, and not surprisingly, the number of firearms brought to a facility drops after metal detectors are installed. Surprisingly, however, data demonstrate that more than one-quarter of all shootings on hospital grounds involved a law enforcement officer shooting at a perpetrator. The most common reason for police shootings in hospitals was that a perpetrator disarmed a law enforcement officer and a second officer engaged with deadly force. The number of law enforcement-involved shootings is even higher in the emergency department—as many as one half of all ED shootings occurred in this manner.

Given the effectiveness of metal detectors in reducing the number of guns brought to the emergency department, they should be standard equipment. Given the frequency of law enforcement officers being disarmed, leading to shootings, the presence of armed security officers in the emergency department should be thoughtfully discussed and examined.

Understand the Risks

It’s important to understand the patterns and risks of shootings in emergency departments. The definition that the FBI uses for an “active shooter” (the type of shooting highlighted in the news, including events like the tragedies at Sandy Hook Elementary School; Aurora, Colorado; or Orlando, Florida) is “an individual actively engaged in killing or attempting to kill people in a confined and populated area.” Implicit in the definition is the use of a firearm.

An active-shooter event in an emergency department is unbelievably rare. According to FBI statistics, 160 active-shooter events occurred in the United States between 2000 and 2013. Of those, four occurred in healthcare facilities (three hospitals and one nursing home); only one took place in an emergency department.

More common, although still rare, are other types of shootings. As discussed above, the most common is an officer-involved shooting. Across two studies of gun discharges in the ED, more than three-quarters of the events involved one individual seeking a specific individual to harm (eg, mercy killings, murder-suicides, domestic disputes, and/or suicide). Only 5 percent of events involved an individual looking to do harm to the “system” and not another individual. There were also two accidental discharges out of 47 events in one study.

Many emergency departments have lockdown procedures. These are states of advanced readiness or awareness that are deployed when an increased risk for a shooting is perceived by the staff. Unfortunately, these are more often directed at society’s perception of risk (eg, gang shootings, intimidating physical features of the patient) than toward the demonstrated historical risks (eg, prisoners, domestic violence, and suicide). Ideally, lockdown procedures should be constantly in place. If they are to be deployed intermittently in response to local conditions, the available data on historical events and risk factors should be used to determine when to deploy these resources.

Nurses, physicians, and ED staff should be trained to recognize situations with in-
creased risk of gun violence, either by the patient or by those around them.

Facing an Active Shooter

The overwhelming majority of gunfire in the emergency department isn’t the result of an active shooter. Most are targeted at a specific goal (eg, escape or avoiding capture) or a specific person. However, should there be an active shooter in the department, the three steps to take are simple: Run; if you can’t run, hide; and if you can’t hide, fight.

- **RUN:** Leaving patients in the emergency department to evacuate is anathema to ED personnel, but that perception needs to be changed. An active shooter should be considered in the same way one would consider a fast leak of a deadly gas: The only realistic option is to leave—fast! This will sound harsh, and it’s meant to be: You cannot save your patients. Don’t try. It’s simply too dangerous. Always know two directions to exit the emergency department that don’t require key access or door codes. These devices may slow you during an emergency evacuation.

- **HIDE:** If you can’t run (eg, the shooter is between you and the door), then hide. Ideally, hide someplace that’s difficult to see into, and out of the path of the shooter. In many emergency departments, the medication rooms, dirty or clean utility rooms, and/or stockrooms make good hiding spots. Radiology departments, with their multiple treatment rooms and lead-lined walls, may prove a good location as well.

- **FIGHT:** If you can’t hide, fight—but if you fight, understand that you’re in a fight for your life. The shooter wants to kill you; you must do anything you can to stop them. Again, much like leaving a patient to evacuate the department, fighting with the intent of severely injuring or even killing the shooter is anathema to the EM mindset. However, in this situation, it’s your only hope. If you have to fight, don’t fight fair. Rally as many people as you can to join the attack. Use whatever is on hand (eg, sedative medications, fire extinguishers, chairs, crutches, even Mayo stands) to strike at or disable the shooter. The more surprising and widespread the counterattack, the more likely it is to succeed.

A free episode of EM:Rap features a discussion with a SWAT team paramedic describing this situation; find it at emrap.com/wp-content/uploads/2013/12/EMRAP-2013-12-Active-Shooter.mp3.

The shooter wants to kill you; you must do anything you can to stop them. Again, much like leaving a patient to evacuate the department, fighting with the intent of severely injuring or even killing the shooter is anathema to the EM mindset.

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**References**

KK: We know that there were new sepsis definitions launched and published in February. What was the primary reason for drafting these new definitions?

DY: A group of experts primarily in critical care medicine from Europe and the United States had noted that it had been over a decade since the working definitions of sepsis in place had been evaluated. The experts found strengths and weaknesses with the previous definitions. It began not as a scheduled but as a not-surprising relook at a set of conditions.

KK: I appreciate that extra detail. Was there some critical event that happened, perhaps with the ProCESS [Protocolized Care for Early Septic Shock] trial? Do you think there was really something critical that happened that forced people to take a look and reevaluate?

DY: I do think that with all three trials [ProCESS, ProMIse [Protocolised Management in Sepsis trial] and ARISE [Australasian Resuscitation in Sepsis Evaluation trial] showing the overall improvement in sepsis care, there was a pocket of people who wondered whether it was all true or whether maybe the improvement is really a bit more muted than what was shown.

TO: Tiffany, given your work with the Surviving Sepsis Campaign, how do you see these definitions now being applied, and what are some of the potential obstacles to applying them to the Surviving Sepsis Campaign or guidelines?

TO: Part of the issue is that you have two ICU groups that came together and said, “We want to redefine what sepsis is.” There was a lot of consternation about the use of SIRS [systemic inflammatory response syndrome] as a definition because if you walked up the stairs too fast and had a cough, you could probably screen positive for SIRS.
patients you have in your denominator; if you’re looking for really sick patients, you have to get a lot more patients to find that subset you’re looking for.

It wasn’t until I went back and listened to Morgan’s video that I realized. When I read a quote from the podcast, “As discussed later, the qSOFA [sequential organ failure assessment] score is not intended to be used as a tool for patient management, but as a means to clinically categorize a septic patient.” However, listed in their paper in big red letters is, “Screening for Patients Likely to Have Sepsis.”

TS: Maybe the terminology was bad, but Tif-fanity is right; qSOFA isn’t really a screening tool. It’s something you use once you already know someone has an infection. The definition authors propose it as a way to look at organ dysfunction, what we would call severe sepsis. You don’t apply qSOFA to every comer into the ED. First, you have to figure out if they’re infected, and then apply SOFA, which is a really complicated way to look at organ failure. SOFA was done in 1996. It’s barely younger than SIRS. They did this massive data crunch, and they came up with qSOFA as a way to say, “In my infected patient population, these are the people I should worry about more.” But you still have to find the infected population first.

KK: We’re still struggling to identify who actually has sepsis. The average reader and average emergency physician are at risk to interpret this new information to mean, “We’re moving away from SIRS, and instead we’re plugging in qSOFA as a screening tool,” even though qSOFA was intended to be used as a risk stratification tool once you’ve identified those with sepsis.

DY: Kevin, I think you’ve hit the nail on the head. I don’t think it’s a question of whether qSOFA is better or worse than SIRS; they’re intended for different purposes. qSOFA is new, and we don’t know how well it will stand up. They do different things.

JR: From the community physician perspective, the definitions aren’t particularly helpful. They seem to be more theoretical. I come away scratching my head thinking, “So, what am I supposed to do?” The answer is that you’re not supposed to do anything different than what you’re already doing. I also worry about leaving out that severe sepsis group, those at high risk for deterioration, and identifying only those at a high risk of mortality (eg, septic shock).

KK: Maybe this whole change in definition is an academic discussion that has no applicability to the bedside. Does it move us any further along our understanding of sepsis and our ability to diagnose it? I recall a quote by Niccolo Machiavelli in The Prince Book III, 1498: “Hectic fever [sepsis] at its inception is difficult to recognize, but easy to treat. Left untreated, it becomes easy to recognize but difficult to treat.” I don’t think we’re much further along with identifying sepsis today than we were when he made this statement.

TO: What the authors have done is very, very difficult, and I give them credit. But one of the problems is that they included only people who saw sepsis in one phase of the disease—the ICU guys. They basically said, “We’ll make the decisions and then send it out for you to comment on.” There was no North American EM group involved in creating or that has endorsed these definitions.

DY: TS: This was really disagreement on the substance. Maybe this whole change in definitions was really disagreement on the substance. As Don points out, we’re in a business of performance, it’s not politics.

KK: From the board’s perspective, John, emergency physicians be endorsed on this and future efforts given the high impact and frequency of sepsis, severe sepsis, and septic shock in the emergency department setting.

—Michael J. Gerardi, MD, FAAP, FACEP, Past President, ACEP, letter to President of Society for Critical Care Medicine regarding release of consensus definitions for sepsis

TS: If you look at the science critically, it looks like really good science. It looks like the authors did this amazing thing, and somehow, came up with qSOFA. But if you look at that final product, it doesn’t really work well for me as an emergency physician. The blood pressure part is simple, but they used a systolic of less than 100; we’re used to using less than 90. Their septic shock definition switched over to use mean arterial pressure (MAP), which makes it confusing. There are plenty of articles that show we’re really bad at agreeing on GCS (Glasgow Coma Scale) scores. How many of us who work in ERs know that everyone’s respiratory rate is 18? If you like historical quotes, in JAMA, 1957, Ross Kory wrote a cynical article about respiratory rate saying that it’s the biggest waste of time in medicine because everyone knows that those numbers aren’t accurate. Putting those three together may have seemed like it worked really well scientifically, but it makes for a really hard tool to use.

JR: When I first heard about qSOFA, I thought, “Great! This is going to make my life so much easier.” Then I looked at it and said, “You really did this by data mining. You haven’t studied it prospectively and validated it, and you want me to throw out SIRS.” Yes, I know SIRS isn’t the best thing since sliced bread, but I think at this point, it is premature to suggest that we should abandon SIRS for qSOFA.

KK: Clinical decision instruments based on associations—broad associations from large groups of patients, which are then extrapolated to one patient at the bedside—are frequently flawed.

DY: I think the Seymour paper (on the guidelines) comes right out and says, “Don’t use this now; it needs more testing prospectively.” I am certain we are going to see a deluge of papers in different settings looking at how this performs.

TO: This was based on retrospective EHR [electronic health record] data from more than 250,000 patients. However, there were some issues associated with that data that made them less than perfect. I want to make sure a couple of things are clear. The authors themselves say the definitions need prospective validation before being implemented. When we talk about qSOFA, we’re talking about a hypotensive, altered patient with tachypnea; it can be any two of those three things. You can take out tachypnea; we’ve already discussed the issues with respiratory rate. If you have an infected, hypotensive patient, or an infected, altered patient, that patient isn’t right; the janitor can tell you that the patient has a problem. When the authors say, “screening for patients likely to have sepsis,” they’re really defining sepsis as “people with infection or organ dysfunction.” qSOFA is easy to measure, doesn’t require labs, and is highly sensitive and highly specific for a bad outcome. But is this where we should start to risk stratify or where should we start our screening?"
Emergency psychiatry options improve care and reduce ED psychiatric patient boarding

BY SCOTT ZELLER, MD, AND REBECCA J. MAO, PHD, MPH

PSYCHIATRIC BOARDING is the phenomenon of mental health patients who are otherwise medically stable waiting for a psychiatric evaluation or disposition while in the emergency department. It’s a systemic problem that has been well-documented in both the medical literature and by the U.S. media. On average, these psychiatric patients wait three times longer than patients waiting for a medical bed, and ED staff spend twice as much effort locating inpatient beds for them. Meanwhile, the psychiatric patients, who may be suffering from hallucinations, paranoia, confusion, or dysphoria, often go untreated (or are merely sedated) and certainly don’t benefit from the delays. In addition, psychiatric patients may cost the emergency department more than $10 per hour on top of all other costs simply by taking up a bed. Commonly, the boarding psychiatric patient isn’t in a situation conducive to mental health healing, often kept under watch by a sitter or restrained to gurneys in hallways or back exam rooms. And this is no rare event; boarding is a frequent occurrence across the nation. A 2008 study by ACP indicated that more than 90 percent of emergency department boarded psychiatric patients on a weekly basis and 55 percent on a daily basis. The problem has only been magnified in subsequent years. Nationwide, the average boarding time for psychiatric patients ranges from eight to 34 hours, and these long waits translate to an average cost of $2,264 to the emergency department for each patient occurrence just for the boarding segment of their visit. The good news, however, is that it’s possible to appropriately and promptly treat these patients, with documented good outcomes—for less than the current cost of boarding.

Solving the Boarding Issue Typically, the boarding issue is framed as one of insufficient inpatient psychiatric beds available for transfer from emergency departments. However, this is the result of a unique situation in medical care for emergency departments—namely, that the default treatment for psychiatric emergencies seems to be “find an inpatient bed,” while in most other EM presentations, the physician will attempt stabilizing treatment and interventions prior to making an admission decision. Imagine if, rather than evaluating and treating chest pain, emergency departments just planned on finding inpatient beds for such patients. How quickly would all medical inpatient beds fill up? In actuality, only about 10 percent of chest pain cases get admitted. Similarly, if interventions begin at the emergency level of care, only a small fraction of psychiatric emergency cases will need hospitalization. How do we change the paradigm from “admit the psychiatric patient” to “initiate psychiatric care promptly and decide on admission later”? Fortunately, there are effective, proven solutions now in operation around the country that can be implemented in any hospital or system, from remote departments that see only a handful of psychiatric patients a week to busy sites that might see a dozen or more psychiatric patients each day. Some options involve facilitating treatment quickly within the emergency department, while others involve alternate designs that can help prevent psychiatric emergency patients from ever coming to those departments in the first place. The key to resolving psychiatric emergencies is getting patients evaluated by a psychiatrist and initiating treatment as soon as possible. With prompt intervention and the right strategies, the great majority of psychiatric emergencies can be resolved in fewer than 24 hours. One drawback to on-demand telepsychiatry, and to telehealth in general, is that as with so many cutting-edge advancements, the technology is far ahead of the regulations.

On-Demand Telepsychiatry For emergency departments with few psychiatric patients visits or limited resources, prompt intervention can be done in a cost-effective way via on-demand telepsychiatry. In this version of telehealth, a psychiatrist (who is often a specialist in emergency psychiatry) can be summoned promptly through videoconferencing to evaluate the patient and then recommend treatment and disposition options. Typically, a site will pay for such providers only when they need them. So if several days go by with no psychiatric patients, the hospital or emergency department doesn’t pay as it would have to for onsite or local on-call docs. On-demand telepsychiatry has proven to reduce psychiatric hospitalization rates and is associated with good outcomes and high patient satisfaction. It’s currently available in many states and will likely be an option soon in every state in the country. One drawback to on-demand telepsychiatry, and to telehealth in general, is that as with so many cutting-edge advancements, the technology is far ahead of the regulations. Existing requirements that doctors be licensed in the state the patient is in limit the pool of available telepsychiatrists, especially in smaller-population states. In addition, contracting hospitals will still need each telepsychiatrist to be a fully credentialed, dues-paying member of their medical staff. As it can take as many as 15 to 20 telepsychiatrists to cover each hospital 24 hours a day, seven days a week, 365 days a year, this requirement can be very expensive and time-consuming. Psychiatric Emergency Service While ED on-demand telepsychiatry is a major improvement over the status quo, it still means the patient must spend time in the busy department, with loud noises such as beeps and sirens, flashing lights, people rushing about frantically, and seeing others in severe pain, which can cause real distress. Such an environment is not conducive to mental health healing; on top of that, the logistics of emergency departments mean that, even with telepsychiatry, there usually isn’t an opportunity to initiate treatment and then observe the patient over time for improvement before making a disposition decision. A solution to both of these issues is to create an alternate department just for psychiatric healing. Because only patients who truly have no alternative are admitted, psychiatric hospital beds become far more likely to be available than in systems where the default treatment is hospitalization.

PES/CSUs can be set up to accept transfers from a hospital emergency department or multiple area emergency departments or to directly receive patients from the community, thus avoiding a stop in the department altogether. Such designs greatly reduce boarding times for the surrounding departments. In a 2014 study, a regional PES reduced the psychiatric patient boarding time in local EDs by more than 80 percent below the state average, essentially eliminating the concept of boarding in the region. The per-patient cost of running a PES/CSU can be less than the cost of ED boarding, so operating a financially self-sufficient psychiatric emergency program can be of major benefit to hospitals and health systems. Further, insurers, HMOs, Medicaid, and other government payers will find tremendous savings by being able to avoid expensive psychiatric hospitalizations in a majority of their patients. As a result of these developments, emergency psychiatry is evolving into a desirable and rapidly growing subspecialty that’s attracting both psychiatric and EM physicians. Large medical groups and care systems are now beginning to see the value of adding an emergency psychiatry practice line to their integrated care strategies.

By Scott Zeller, MD, and Rebecca J. Mao, PhD, MPH

One drawback to on-demand telepsychiatry, and to telehealth in general, is that as with so many cutting-edge advancements, the technology is far ahead of the regulations.

References
View From the High Rise Isn’t So Good in V-Fib

Association between survival of out-of-hospital cardiac arrest and building floor of patient contact

by KEN MILNE, MD

CASE: A 49-year-old man calls 911 complaining of chest pain and then collapses while on the phone. EMS is dispatched to his high-rise apartment building where he lives on the 15th floor. The paramedics arrive and buzz his apartment but get no response. They try the superintendent’s number, but it goes to voicemail. The paramedics start buzzing apartments until someone lets them into the building. The elevator finally arrives but will not fit all their equipment, so they have to wait for a second one. They get to the apartment and knock, but there’s no answer. One of the paramedics goes back to the lobby to try the superintendent again, who answers. They proceed back to the 15th floor, gain access to the apartment, and find the man VSA (vital signs absent).

CLINICAL QUESTION: Is there an association between survival of out-of-hospital cardiac arrest (OHCA) and the floor of patient contact?

BACKGROUND: There are about 325,000 EMS-assessed OHCA each year in the United States. More than two-thirds of cardiac arrests happen at a home or residence. Of those EMS-treated patients, about one-quarter have an initial shockable rhythm. Survival rate from initial care to hospital is 5.4 percent. Survival rate from initial care to discharge is 1.8 percent for patients with OHCA. Patients with initial shockable rhythms have a better survival rate compared to those whose rhythms are nonshockable.


• Population: Adults with OHCA of not-obvious cause at private locations.
  • Excluded: Children, witnessed arrests by first responders, traumatic arrests, or with another obvious cause or public location.
  • Intervention (prognostic factor): On or above the 3rd floor.
  • Comparison: Below the 3rd floor.
  • Outcome:
    • Primary Outcome: Survival to hospital discharge.
    • Secondary Outcomes: Subgroup analyses.

AUTHORS’ CONCLUSIONS: “In high-rise buildings, the survival rate after out-of-hospital cardiac arrest was lower for patients residing on higher floors. Interventions aimed at shortening response times to treatment of cardiac arrest in high-rise buildings may increase survival.”

KEY RESULTS: 5,998 patients with OHCA were below the 3rd floor, and 1,846 patients with OHCA were on the 3rd floor or higher. The overall survival to hospital discharge was 3.8 percent.

• The survival rate to hospital discharge for those below the 3rd floor versus those at the 3rd floor or above:
  • 4.2 percent versus 2.6 percent (odds ratio [OR] 0.70; 95 percent CI, 0.50–0.95).
• Variables associated with lower rates of survival to hospital discharge included:
  • Age (OR 0.96; 95 percent CI, 0.95–0.97).
  • Male sex (OR 0.72; 95 percent CI, 0.54–0.95).
  • Longer 911 response time (OR 0.86; 95 percent CI, 0.79–0.92).
• Variables associated with higher rates of survival to hospital discharge included:
  • Initial shockable rhythm (OR 10.68; 95 percent CI, 2.78–41.29).
  • Witnessed arrest (OR 2.93; 95 percent CI, 1.26–6.98).
  • Survival rate for those above the 16th floor was 0.2 percent (2/1,000).
  • Survival rate was 0 percent for those above the 25th floor (0/30).

EBM COMMENTARY: This was an observational trial, and only associations can be demonstrated, not causation. Unmeasured confounders could be responsible for the differences found in this study.

CASE RESOLUTION: Paramedics start CPR and apply the defibrillator pads, which show fine ventricular fibrillation. He is shocked once at 200 joules. An IV is started, 1 mg of epinephrine is given, and the next rhythm check is asystole. The patient is intubated, more epinephrine is given, and his end-tidal CO₂ drops to 10. A call is made to the base hospital, a consultation takes place, and the patient is pronounced dead at the scene.

Thank you to Jay Loosley, RN, superintendent of education for Middlesex London EMS in Ontario, for his help on this review. Remember to be skeptical of anything you learn, even if you heard it on the Skeptics’ Guide to Emergency Medicine.

BOTTOM LINE: To improve the chain of survival, increased bystander CPR is needed along with rapid access to AEDs and the removal of access barriers for first responders.
Pumping Iron
Should EDs do fewer red cell transfusions and more IV iron?

by ANTON HELMAN, MD, CCFP(EM), CAC, FCFP

You might be surprised to learn that many of the patients who receive red cell transfusions in the emergency department don’t need them. A Canadian study looking at trends in transfusion practice in the emergency department found that about half of transfusions given were deemed unnecessary. If we think of a blood transfusion as a “blood transplant” similar to an organ transplant, then the potential complications including transfusion-associated circulatory overload (TACO), transfusion-related lung injury (TRALI), and alloimmunization become, perhaps, a bit more understandable. When you give someone a transfusion Requirements in Critical Care [trial], patients in septic shock (in the TRISS [Transfusion Requirements in Septic Shock] trial), and patients with gastrointestinal bleeding, are similar to outcomes with traditional higher hemoglobin thresholds of 9 or 10 g/dL.

The American Association of Blood Banks, in conjunction with the American Board of Internal Medicine’s Choosing Wisely campaign, recognized that physicians were being overzealous with our transfusions. One of its five statements on medication overuse declared, “Don’t transfuse iron deficiency without hemodynamic instability.”

How Low Can You Go?
So how low can a patient’s hemoglobin go? In a remarkable study (for ethical reasons) of healthy subjects, hemoglobin concentrations were reduced from 13.1 g/dL to as low as 5 g/dL by replacing aliquots of blood (450–900 mL) with 5 percent human albumin and/or autologous plasma. The researchers found that systemic oxygen delivery was maintained as assessed by change of O2 saturation and plasma lactate concentration. Holter monitor readings suggested that myocardial ischemia was extraordinarily rare in this resting healthy population. Based on this and similar studies, the American Society of Anesthesiologists recommends against red cell transfusions in young, healthy patients with- out ongoing blood loss and a hemoglobin level greater than 6.0 g/dL, unless they are symptomatic or hemodynamically unstable.

It isn’t only healthy subjects who can tolerate incredibly low hemoglobin levels. The FOCUS (Fluoxetine or Control Under Supervision) trial sought to determine whether a higher threshold for blood transfusion would improve recovery in patients who had undergone surgery for a hip fracture. Results showed that even among elderly patients with known coronary artery disease or multiple coronary risk factors, survival rates were higher postoperatively at 30 and 90 days among patients with a transfusion trigger of 8 g/dL compared to those with a higher transfusion trigger.

What Are the Indications for IV Iron?
Current knowledge suggests physicians shouldn’t be giving red cell transfusions to many patients who have severe anemia or blood loss. Nonetheless, these patients with severe anemia (Hb <9 g/dL) do require treatment for symptom management, and the fastest, most effective treatment is IV iron.

The concept of giving IV iron in a subset of ED patients with iron-deficiency anemia might seem foreign to most emergency physicians, but there are indications that should be considered when faced with a patient with iron-deficiency anemia or blood loss in the ED. They include:

- Severe iron-deficiency anemia (Hb <9 g/dL) especially if there is ongoing bleeding
- Rate of bleeding too brisk for oral iron
- Time-sensitive pressures (eg, an urgent surgical procedure; observational studies of the use of IV iron preoperatively for patients with anemia have shown a reduced rate of red cell transfusion being required)
- Severe anemia of chronic disease and evidence of iron deficiency (eg, ferritin <30 µg/L)
- Oral iron being poorly tolerated or the failure of an oral trial
- Poor oral absorption (due to conditions including gastric bypass, celiac disease, and gastritis)

Is IV Iron Safe?
The main contraindications to IV iron are active systemic infection (eg, suspected sepsis), as iron is a good microbial nutrient, and known allergic or hypersensitive reactions in the past. Risks of administration include hypotension (1 to 2 percent) and serious allergic reactions including fatal anaphylaxis in fewer than one in 1 million. In patients with chronic kidney disease, IV iron may result in more infections and cardiovascular complications than oral iron. More common adverse reactions, which generally resolve spontaneously within 24 hours of administration of IV iron, include joint aches, muscle cramps, headache, chest discomfort, nausea, vomiting, and diarrhea.

How Do You Give IV Iron?
IV iron is given as iron sucrose (brand name Venofer) in an infusion of 300 mg in 250 mL of normal saline over two hours. After IV iron, and with ongoing oral supplementation, a patient’s hemoglobin will start to rise in three to seven days. You can expect a 0.2 to 0.2-point rise in the hemoglobin per day; after two to four weeks, the hemoglobin will have risen 2 to 3 g/dL. Ferrous sulfate (300 mg) contains 60 mg of elemental iron, and one tablet can be taken each night on an empty stomach at least two hours after meals with 500 mg of vitamin C to improve absorption. Patients should be counseled to avoid taking iron with calcium or magnesium supplements as they decrease iron absorption.

Resources from Emergency Medicine Cases Website
A special thanks to Dr. Walter Himmel, Dr. Jeannie Callum, and Dr. Katerina Pavenski for their participation in the EM Cases podcast from which this article is based.

EMF is an emergency physician at North York General Hospital in Toronto. He is an assistant professor at the University of Toronto, Division of Emergency Medicine, and the education innovation lead at the Schwartz/Reisman Emergency Medicine Institute. He is the founder and host of Emergency Medicine Cases podcast and website (www.emergencymedicinecases.com).

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By ANTON HELMAN, MD, CCFP(EM), CAC, FCFP

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Readers Speak Up Regarding Call for Female Emergency Physicians

Recent article on how more women are needed in emergency medicine sparks online debate

The April 2016 ACEP Now article, “Emergency Medicine Workforce Needs More Women Physicians” by Kathleen Clem, MD, FACEP, sparked quite a bit of response after it was published online. We are including the comments here to illustrate the breadth of opinions on this topic.

Dan Marcus: So basically, this article could be shortened to read “men should be prepared to pay for women to be off to have a baby and men should work more night shifts to make it easier for their pregnant colleague.” The article suggests that if these changes aren’t made, then patient care will suffer. I don’t support the subsidizing of coworkers’ life choices. I would, however, work extra if my colleague was unable to, whether they are male or female.

MB Lynch: Wow! Who pissed you off? Do you have any children? How would you feel about the mother of your child risking her life and your child’s life because they were so extremely overworked? Have you ever been pregnant? Breast feed a child or been so engorged you wanted to cry?

The author is not saying that men pick up the night shifts, but that everyone (including the non-pregnant females) help out for a few weeks for the mother and child’s health. Just like we do for our colleagues with family and personal emergencies.

You don’t want to pay for my life choices? You mean you don’t want to pay for me to create a life? How about if you get cancer (knock on wood) because you smoke…can I refuse you disability coverage? Additionally, I pay for short-term disability so that I could take maternity leave.

Women now make up 60 percent of medical students. Therefore, if medicine is going to survive, it needs to start to adjust to accommodate women doctors and our “choices to create life.” If men gave birth, I am sure they would demand better maternity leave and you would not have to pump in a bathroom. I’m sure you’d have a recliner with an ESPN on a flat screen.

Get pregnant, give birth, and breast feed a child…then get back to me.

Women and their pesky uteruses are here to stay…get used to it.

Mark Buettner: Wow! MB Lynch, what a fantastic emotional rant that was. It was perfectly devoid of reason. Kudos to you. Let me give you some answers:
1) I would be very upset if the mother of my child was risking her life and my child’s life, I would not tolerate it at all, as a matter of fact.
2) I would advocate for women not to have children if they live a lifestyle that places them and/or their unborn children in a life-threatening position. This just makes sense, doesn’t it?
3) I probably should not have to tell you but I will remind you that men cannot have babies. Nor can we breast feed babies. We don’t have the right plumbing.
4) Yes, I think you should be able to refuse to pay for somebody’s disability. That should be the responsibility of Dr. Marcus. This would be similar to you taking time away from work should be your responsibility. I am willing to bet that he would agree with me.
5) If you are asserting that medicine is at risk for not surviving because women now make up 60 percent of medical students, perhaps we should seek out more men to enter the field.

Glad to help.

Sincerely,

Mark

George: I respect all the issues. The gender equality issues should not include pregnancy and time-off issues. The numbers are correct and there is a gender gap. I, on the other hand, see a greater crisis. I am a black male in the field of EM. I have watched the numbers of residents, and physicians are very reluctant to risk exposure to infectious diseases such as TB, HIV, trauma, meningitis, chicken pox, mumps, plague, etc. This forces me to risk my life more often than usual.

IDA: Women with “their pesky uteruses” can then work jobs where their uteruses don’t get in the way. Equality means equality, not one group subsidizing another. Women may be 60 percent of medical school graduates but they are not 60 percent of the workforce because they CHOOSE to balance their lives based on multiple factors, one of which is having children. Part of physician shortage is due to having 60 percent women in medical school and then that 60 percent are only working part time. Not a good plan for a national workforce issue. Finding a colleague who is willing to work nights and weekends and long stretches and extra shifts makes that person marketable. That is not gender inequality; it is marketability. Until women are willing to sacrifice personal goals for professional goals, they will not be able to be represented equally. To me, that is fair, not sexist.

El rubio: My residency director in New York City would roll over in his grave. I remember a female resident once called in sick for PMS and another senior female resident drove to her apartment and physically dragged her back to work. I have not missed a day of work in 25 years. In my experience, pregnant students, residents, and physicians are very reluctant to risk exposure to infectious diseases such as TB, HIV, trauma, meningitis, chicken pox, mumps, plag. etc. This forces me to risk my life more often than usual.

CONTINUE THE CONVERSATION
Send emails to acepn@acep.org, letters to ACEP Now, P.O. Box 619491, Dallas, TX 75261-9911, and faxes to 972-580-2816, Attention ACEP Now.

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FOAMcast

Guiding Principles

Guidelines from our non-EM colleagues can make a big difference in our practices

by JEREMY SAMUEL FAUST, MD, MS, MA

In the two years I’ve been doing the FOAMcast podcast, some of the most interesting topics covered have come from fields outside of emergency medicine. This year, I’ve recorded two episodes on new guidelines published by experts from non-EM specialties that have an impact on emergency medicine practices. I believe that keeping up with the latest guidelines from our colleagues in other specialties and covering them in the podcast helps us become more well-rounded emergency physicians.

Diverticulitis Management

In March, I covered a recently released guideline on the management of diverticulitis published by the American Gastroenterological Association (AGA). The topic was inspired by a post on the Emergency Medicine Literature of Note blog (EMLitofnote.com) by Ryan Pat-rick Radecki, MD, MS. Dr. Radecki’s ACEP Now article “Antibiotics, Hospital Admission May Not Help Uncomplicated Diverticulitis” (available online at www.acepnow.com/ar-ticle/antibiotics-hospital-admission-may-not-help-uncomplicated-diverticulitis/) also addressed the topic.

I was surprised to learn that the AGA isn’t routinely recommending antibiotics in the management of CT-confirmed uncomplicated diverticulitis. According to its new guideline, antibiotics neither hasten recovery nor prevent complications and may be used selectively—although it’s worth noting that this recommendation was based on fairly low-quality evidence.

Additionally, I found some of the AGA guidelines and other statements to be simply too funky and irresistible not to repeat here:

• Mainly, I enjoyed the fact that the guideline answered everyone’s essential and crucial question about whether eating popcorn, nuts, or seeds should be avoid-ed in patients with acute diverticulitis. (There’s no need to recommend avoiding these foods.)
• Do probiotics help decrease recurrence, pain, or the need for surgery? (No, no, and no.)
• Should physicians encourage patients with acute diverticulitis to engage in vigorous exercise in an attempt to decrease recurrent disease? (Yes!)
• Finally, I was interested to learn that recommending elective colonic resection for patients suffering from an initial episode of acute uncomplicated diverticulitis isn’t necessary. (Confession: I was less interest-ed in this last recommendation and more than just a little bit surprised that this notion actually needed official clarification.)

Brief Resolved Unexplained Events

Last month, another clinical guideline caught my eye, this time coming from the American Academy of Pediatrics (AAP). The news is that the term “apparent life-threatening event” (ALTE) in neonates and infants has now been replaced by the somewhat less intimidat-ing term “brief resolved unexplained event” (BRUE). This change comes 30 years after the term ALTE was proposed as a replacement for “near-miss sudden infant death syndrome,” as well as the subsequent appearance of a substantial body of literature demonstrating that SIDS and ALTEs were indeed distinct and unrelated clinical entities.

The new AAP guideline states that a BRUE can be diagnosed in an infant younger than 1 year whose symptoms have already resolved by the time of presentation. To qualify as a BRUE, one or more of the following features must have been present: cyanosis or pallor; absent, decreased, or irregular breathing; marked change in body tone, either hypotonia or hypertonia; and an altered level of responsiveness. A BRUE can be diagnosed if a thorough history and physical exam has been conducted and no explanation for the event has been discovered.

From there, risk stratification determines how to proceed with management. While the guideline makes no specific recommenda-tions for higher-risk infants, for lower-risk in-fants (defined as a first-time event occurring in an infant older than 60 days, born full-term or more than 45 weeks corrected gestational age), no CPR by a trained medical professional was required, and given the event lasted less than one minute, remarkably few oblige inter-ventions are needed.

In fact, citing the goal of decreasing the harms of common false-positive findings, the AAP recommends that lower-risk BRUE babies need no routine laboratory testing. The only measures that should routinely be taken are that parents should be educated about BRUE, there should be shared decision making regarding discharge versus admission with par-ents, and resources for learning CPR should be offered to parents and other caregivers. ECG, pertussis testing, and pulse oximetry may be performed but aren’t considered necessary. Automatic admission to the hospital for ob-servation and testing need not be done due to the goal of decreasing health care-associated infections and other safety risks.

In summary, the overall theme of this excel-lent guideline seems to be a de-escalation in terminology in an attempt to move away from unnecessary testing and often fruitless ad-
The biggest culprit medications that cause false-positive results on urine toxicology screens. The topic was inspired by a post on the blog MDAware by Seth Trueger, MD, MPH (available at mdaware.blogspot.com).

The biggest pseudo-surprise (I was not remotely surprised to learn) was that the “hon- or” for the class of drug most likely to cause a false positive on a urine drug toxicology test goes to tricyclic antidepressants (TCAs). TCAs can cause false-positive readings for the following drugs: TCP, LSD, amphetamines, opiates, and methadone. The runners-up for medications causing the most false positives on the urine toxicology test were ibuprofen and first-generation antihistamine medications such as diphenhydramine, hydroxyzine, and promethazine.

Tune in for the next episodes, which will look at unusual seizures (ie, the ones that don’t respond to benzodiazepines).

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Classifieds

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