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PRESIDENT'S MESSAGE



Brahim Ardolic, MD FACEP
Chair, Department of Emergency Medicine
Vice President, Department of Research
Staten Island University Hospital

Last week I lost a colleague and a friend, when Dr. Michael Guttenberg was taken from us. I wanted our membership to know that Emergency Medicine also lost one of its biggest advocates who worked tirelessly to improve Emergency Medical Services and Emergency Medicine throughout his career. There are so many things that I have learned from Mike, both about being an ED doc and a human being.

I met Mike when we were both residents at different EM residencies in Brooklyn. We were both rotating in the same hospital and became friends. He was the most unassuming, humble person I have ever met. His humility was only superseded by his passion for his craft and specifically for EMS. Mike,

who had been a paramedic, still knew every protocol cold and would talk you through what algorithm had been used to get your patient to you. He was hard not to like. He was also hard to keep up with! Mike worked hard, every day, every hour. You had to hustle not to look bad.

I lost touch with Mike for a few years, but wasn't surprised that Mike had gone from EM resident to EMS fellow to ED attending to ED Director in essentially five years. He had been a 9/11 first responder and had spent weeks on the pile. The reason we connected again was because we had both found another passion in New York ACEP. We had both served on committees and were soon on the board together. Within a short period, Mike became one of the strongest voices for EMS

on the board. He also played active roles in so many initiatives in Albany, as well as at REMAC. What is truly remarkable is how he did this: Mike never expected any recognition. He just wanted to do whatever he could to protect your ability to practice Emergency Medicine. When his board term ended, Mike returned to committee work and stayed on the Council. He served in any way he was asked and expected nothing. In short, he was one of New York ACEP's go to contributors for over a decade.

Four years ago, Mike told us that he had a terrible disease. He also told us he was going to fight, and that he wasn't going anywhere. Then he went back to work and back to his work at

"The real giants leave legacies that they built without realizing it. Dr. Michael Guttenberg was a giant in emergency medicine."

ACEP. One thing did change though. Mike gave a voice to all of the seriously ill patients who can feel so dehumanized by everything that is happening to them. He was passionate in expressing what it was like on the other side, and made many of us stop and reflect upon our patients' experiences.

I believe the saddest thing for Mike was that he got his dream job just as he was told he had a terminal disease. For the last two years, Mike served as the EMS Medical Director for Northwell Health, one of the largest fleets in the state. In that time, he revolutionized the relationship between EMS and the emergency departments. He brought EMS and EM together in a way that no one could have imagined two years earlier. Mike created a legacy

that will provide benefits to his doctors, EMTs and paramedics for years to come.

Mike worked until the end. He maintained his New York ACEP responsibilities until the end. He gave so much to all of us throughout his short life. He was such an amazing colleague, friend and mentor to so many people. We will not see many like him. He will be missed in so many ways.

The real giants leave legacies that they built without realizing it. Dr. Michael Guttenberg was a giant in emergency medicine. He will be missed.

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SOUND ROUNDS



Penelope C. Lema, MD RDMS FACEP
 Director, Emergency Ultrasound Division and Fellowship
 Assistant Professor, Department of Emergency Medicine,
 University at Buffalo

Ultrasonographic Evaluation of a Peritonsillar Abscess with a “Hockey Stick”



Edward Carlin, MD
 Emergency Ultrasound Fellow
 Department of Emergency Medicine
 Northwell Health
 Northshore University Hospital



Richard Tan, MD
 Emergency Medicine Resident
 Department of Emergency Medicine
 Northwell Health
 Northshore University Hospital



Mathew J. Nelson, DO FACEP
 Program Site Director, Emergency Medicine Residency
 North Shore University
 Chief, Division of Emergency Ultrasound
 Northwell Health

Case

A 29-year-old female with no significant past medical history presented to the Emergency Department with the complaint of a left sided sore throat for three days. The patient took Amoxicillin one day prior. On the day of presentation, she began to note that her voice was muffled and hoarse and the pain in her throat was worse. She denied fever, cough, vomiting, drooling or difficulty breathing. However, she did report some increased pain and difficulty with swallowing.

On initial presentation, she appeared in no acute distress. Her voice was audibly muffled. She had no stridor or drooling on exam. Inspection of her oropharynx revealed an enlarged and edematous left tonsil with rightward deviation of her uvula. The right tonsil appeared normal. The remainder of her oropharynx appeared normal.

The patient's physical exam findings were suspicious for a possible peritonsillar abscess (PTA), prompting the treating physicians to perform a point of care ultrasound (POCUS) to assess for an abscess of the left tonsil. Images were obtained with a Zonare Z.One PRO (Mountain View, CA) portable ultrasound machine, using a high frequency linear probe (L14-5sp “hockey stick” array) to capture images via intraoral approach. Imaging of the right tonsil yielded a 1-2 cm diameter normal appearing tonsil with a homogenous structure of decreased echogenicity compared to the surrounding tissue. (Figure 1A). Ultrasonography of the left tonsil revealed an enlarged tonsil with a large posterior hypoechoic structure (Figure 1B) distorting the normal anatomy of the tonsil. Color flow Doppler of the tonsils revealed a grossly normal flow pattern in the right tonsil (Figure 1C), yet markedly increased flow in the left tonsil (Figure 1D, near-field). The hypoechoic region posterior to the left tonsil only had a circumferential flow (Figure 1D, far-field). The peripheral color flow represents a hyperemic ring, commonly known as a “ring of fire,” and is often seen surrounding an abscess. Also noted is the significant amount of posterior enhancement despite the fact that the abscess activity is not completely anechoic.

After sonographic confirmation of the presence of a PTA, ENT was consulted. A small (<0.5 cm) incision was initially made in the left tonsil without retrieval of any purulent material. Upon further review of the ultrasound images (Figure 1), there was visualization of the abscess posteriorly leading to successful needle aspiration of the PTA with re-

moval of 3 milliliters of purulent material from the area and immediate symptomatic improvement by the patient. The patient was subsequently discharged from the ED. Two days later, the patient reported continued improvement in her symptoms.

Abstract

Peritonsillar abscesses can be difficult to differentiate from cellulitis, especially with physical exam alone. Intraoral ultrasound, particularly enhanced by the high frequency linear probe (L14-5sp “hockey stick” array), is the optimal imaging modality.¹ Adjuncts such as color flow Doppler can also help differentiate between abscess and cellulitis.

Introduction

A peritonsillar abscess (PTA) is one of the most common suppurative deep space infections of the neck, occurring as a consequence of certain cases of acute tonsillitis and peritonsillar cellulitis.² The incidence of PTA in the United States is approximately 1 in 10,000 individuals, peaking in adolescents and adults < 40 years old.² It can be difficult to distinguish PTA from other soft tissue neck infections, such as peritonsillar cellulitis, based on clinical exam alone. Point-of-care intraoral ultrasound has been a particularly useful adjunct in differentiating between peritonsillar abscess and cellulitis, with a sensitivity of 89% and specificity approaching nearly 100% for the diagnosis of PTA.³

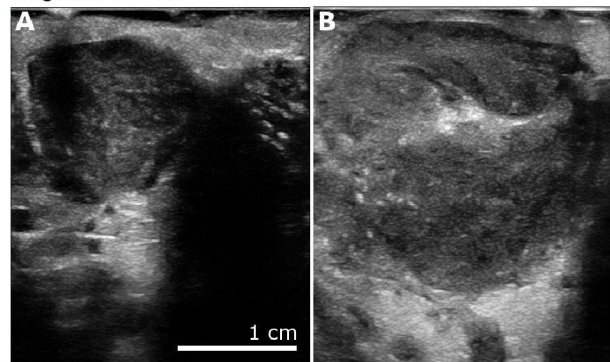


Figure A. Intraoral ultrasound of the normal right tonsil with normal appearing anatomy, with a homogenous structure of lower echogenicity compared to the surrounding tissue.

Figure B. Ultrasound image of an enlarged left tonsil with a large posterior hypoechoic structure distorting the normal anatomy of the tonsil.

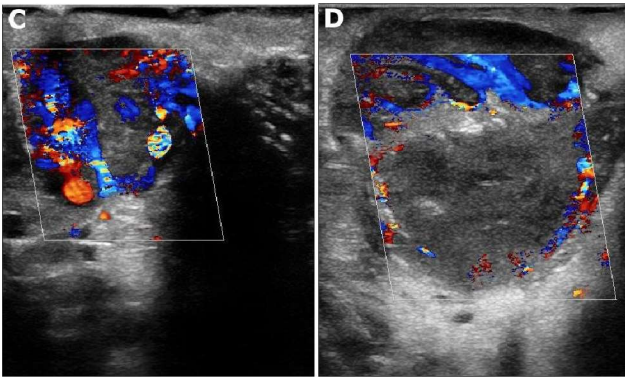


Figure C. Ultrasound with color flow Doppler of the right tonsil with a normal flow pattern.

Figure D. Ultrasound with color flow Doppler of the left tonsil revealing markedly increased flow in the left tonsil (near-field), while the hypoechoic region posterior to the left tonsil only has a “ring-of-fire” perimeter of flow (far-field).

Discussion

The peritonsillar abscess often appears as a heterogeneous and cystic structure, whereas enlarged tonsils (>20mm) with a homogeneous or striated appearance are considered to be peritonsillar cellulitis.² Color flow is paramount to the identification of the abscess and surrounding structures, such as the carotid artery and palatine tonsils. The perimeter of color flow represents a hyperemic ring, commonly known as a “ring of fire,” and is often seen surrounding an abscess. Close evaluation of the hypoechoic material under dynamic pressure can help differentiate between abscess and cellulitis, as the hypoechoic material is most likely pus if it is moving with subtle changes in pressure. Lastly, of importance, is the presence of posterior enhancement, which despite the lack of typical anechoic or hypoechoic appearance is helpful in identifying abscesses.

A novel approach utilized in this case is the intraoral approach using a high frequency linear probe (L14-5sp linear array, a.k.a “hockey stick”) as opposed to the traditional endocavitary probe.¹ The “hockey stick” array offers multiple advantages to the traditional endocavitary probe. This probe is shorter than typical endocavitary probes, as well as thinner than typical linear array probes. The smaller size is more comfortable to the patient and provides easier access, especially if the patient is experiencing significant trismus. The handling of the probe limits the amount of pressure on the area of interest, decreasing the amount of pain the patient experiences. In addition, its flat footprint is better suited for bulging tonsils, as opposed to the endocavitary probe, which is designed for concave structures. The linear probe offers higher resolution due to its 14 MHz frequency, as opposed to the endocavitary probe with an upper limit of 8 MHz. Alternatively, a transcutaneous approach can also be utilized if the patient has significant trismus, though at a cost of decreased sensitivity and specificity.

Indications

- Sore throat
- Trismus
- Muffled “hot-potato” voice
- Drooling
- Dysphagia
- Odynophagia

Technique

- Place the patient in a comfortable position, preferably the sitting position at 90 degrees.
- Spray the oropharynx with local anesthetic spray.
- Use a linear “hockey stick” array transducer (5-14 MIz) or an endocavitary probe, covered with a sterile sheath filled with ultrasound gel and covered with a sterile lubricant.
- Introduce the transducer carefully with the imaging plane transversely oriented with the probe marker directed to the patient’s right. Apply gentle pressure directly on the tonsillar tissue.
- Initially visualize the unaffected side for reference.
- Fan the probe to optimize the view of the tonsillar tissue and abscess.
- Turn the probe in a sagittal plane if needed to optimize the view of the abscess.

Tips

- Hold the linear probe like a pencil.
- Ensure that copious ultrasound gel is used to provide adequate contact between the interface of the flat transducer and the convex tonsillar tissue.
- Use adequate local anesthetic.
- Allow the patient to spit and relax muscles to reduce any discomfort.
- Introduce the probe transversely to accommodate for trismus.
- Scan in an orthogonal plane to better visualize the abscess.
- Use color flow Doppler to assess vascular flow and the presence of a hyperemic ring in the periphery.
- Apply gentle pressure to detect the presence of mobile hypoechoic material (pus).
- Use the non dominant hand to manipulate the ultrasound while using the dominant hand to guide the needle or scalpel for drainage.

Pitfalls and Limitations

- Operator experience.
- Trismus can limit intraoral use of ultrasound, but can be overcome with a smaller probe or a transcutaneous, submandibular approach.
- The carotid artery can appear hypoechoic. Differentiate vessel from an abscess with the use of color flow Doppler.
- Additional imaging such as CT of the neck may be required to evaluate the full extent of neck pathology, especially if other pathologies such as retropharyngeal abscess are being considered.

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PRACTICE MANAGEMENT



Keith E. Grams, MD FACEP
Chair of Emergency Medicine
Rochester Regional Health

Narcotics in the Emergency Department

As we all know, narcotic prescription rates increased significantly over the last decade or so. These increases seem to have resulted in several negative patient outcomes. For those still not aware (or potentially still in denial), I encourage you to do some more investigation. I would refer you to some of the experts in our field for data and their conclusions. This article is focused on the process that we used to review and address these recommendations.

A few years ago, we were accused of providing too many narcotics to patients. Armed with the knowledge that emergency departments provide less than four percent of narcotics, we set out to prove these accusers wrong. I relished the opportunity to review our practices and put this claim to rest. Unfortunately, there was that silly thing call “data”. After objectively excavating the data mines we reluctantly discovered that we did have a number of opportunities. Thankfully, this analysis did show that the emergency department’s were only a small part of the problem, with others in the house of medicine holding a greater share. Rather than point fingers, we decided to lead the charge and fix our own shop with the hopes that others would follow.

Our journey started sometime during mid-2015. With the help of the electronic medical record we were able to analyze our controlled substances (narcotics and benzodiazepines) utilization for treat-and-release patients, looking back to 2012. There was a bit of surprise when we discovered our initial rates as high as 20 prescriptions per 100 visits (pp100v - seemingly the best way to measure). Thankfully we did see a significant drop in March of 2014. As you likely recall, this was the implementation of the New York Prescription Monitoring Program (PMP). Reluctantly, we had to admit that the PMP did result in over a 50% absolute decrease in prescriptions – down to around 8 pp100v.

The initial temptation with these findings was to dust off our hands and call success. Though someone felt the need to dig a bit deeper and ask, “What is an appropriate rate?” (sometimes I really don’t like that guy). Obviously, there is no benchmark or comparison data in this realm. We essentially had to set up our own comparisons based upon past trends. We also began individual case review to determine any further opportunities. Once again, the objective review of the data highlighted additional discoveries.

During this review, we evaluated individual provider utilization rates. These rates varied to differing extremes. Further review demonstrated that folks on the higher end seemed to provider pain medications that could potentially be described as “excessive”. We also did find that certain patients may have received more than their share of these types of medications. With a collective groan, we realized that we had to work a bit harder and weren’t quite ready to dust off the hands.

Our initial intervention was similar to past process improvement interventions – measure and report. We implemented monthly monitoring and the provision of reports to the provider and nursing team. We did observe a mild decrease in utilization, however it didn’t seem to be significant – with the rate dropping only to around 7.5 pp100v.

Therefore, we had to try a different approach and determine what other contributing factors were present.

The Myth of Patient Experience

We all have likely heard this one – to make patients happy, you have to give them narcotics. Several of our team also had this misperception, believing that narcotic prescriptions drive customer satisfaction. While not fully statistically validated, we were able to identify some basic trends and demonstrate to the team. We found that providers with higher narcotic utilization rates, did not necessarily have higher patient satisfaction scores. If anything, the inverse was more commonly observed. We observed that providers that tended to communicate well with the patient tended to have higher satisfaction scores. Having defeated this Gorgon, we could move on to the next barrier.

Battling the Fifth Sign

The implementation of pain as the fifth vital sign resulted in several unfortunate downstream effects; with one of them being the wild proliferation of pain med prescriptions. This seemed simple – measure and document the pain score that was required, but take more appropriate actions. It also seemed simple that we no longer needed to strive for the elusive zero out of ten. Yeah... not quite so simple. We had to promote and support this plan with the team for some time, as this has been so ingrained over the years into the psyche. We also needed an internal change from several hospital departments – quality, regulatory, patient advocate, etc. – to help provide support. This took some time but dedicated efforts prevailed and continued to pave the way to the next challenge.

Hospital Support

This is quite similar to the previous barrier, but a little more in depth. We noted that there were several patients presenting to the emergency department, demanding pain medications. They often cited past experiences which continued to drive current ED provider prescription habits. At times providers feared deviating from this expectation, as past patient complaints were sometimes upheld by certain hospital departments. A perceived reprimand would then ensue. Thankfully, after showing the current findings and current issues, we receive ample hospital support to change practices. With the help of our administrative team and quality team, we were able to overcome this challenge.

Medical Staff Support

One other influencing factor that was cited were “extreme external provider expectations”. It was fairly common for primary care offices to send patients to the emergency department for “pain management”. This was often interpreted as a euphemism for “we don’t have time to deal with the patient today, just give them some narcotics”. With the assistance of the medical dental staff and hospital leadership, we were able to change the expectations. We were able to implement and propagate certain practices. Patients would no longer receive their chronic

PRACTICE MANAGEMENT

narcotics, medication refills and lost medications replacements from the ED. Citing best practice, these would only be provided by their primary care physician or pain management specialist.

Intradepartmental Variation

Having spent quite a bit of time with the data and chart review, it was no surprise that we had a significant amount of “intradepartmental variation”. Some providers will provide narcotic medications for certain conditions, whereas other providers would not. At times, certain provider practices could be a little more “ample”. We met together as an ED leadership team, initially with the medical directors. We also enlisted the support of our nursing leaders, nursing team and other members of the health care team to ensure we covered all bases. We developed a proposed list of conditions for which narcotics would not be indicated. This list was then taken to the provider team for approval, and subsequent practice implementation. The initial round of conditions was kept relatively “black-and-white”. We did not want to limit clinical practice, however there were obvious conditions for which narcotics did not appear to be warranted. By setting up an open dialogue with the provider team, we are able to subsequently implement some expected standard practice. We expanded the monthly review to review “potential fallout” that are circulated among the provider team. The providers are welcome to review their case and provide additional support, and this closed loop feedback provided a constant stream of reminders for the practice change.

The Patient Expectation

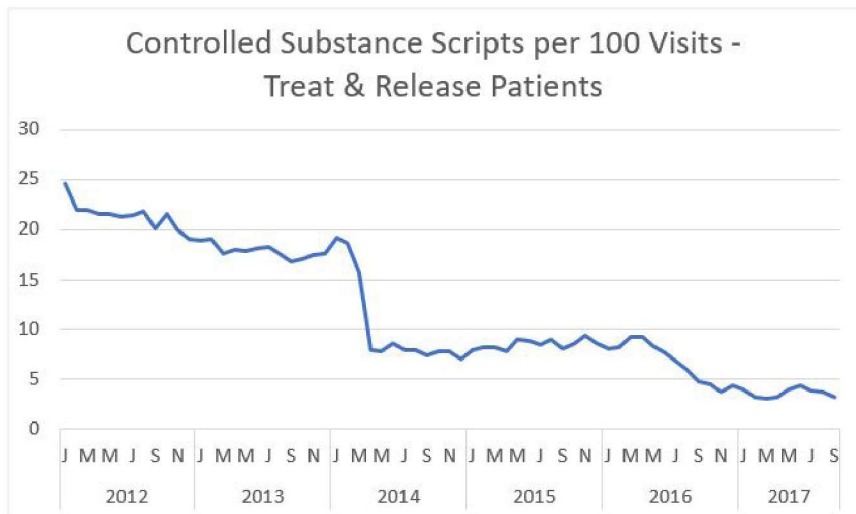
During the initial phases of the process we were somewhat reluctant to put anything more formal in place for patient education. Of course, we circulated that we were no longer providing prescription refills or

replacements of lost medication. It took us a bit longer to take the next step. Once we determined the departmental expectations, we developed something for patient education. We published a brief and direct method communication that could be included with discharge instructions. This education provided some of the details why we had made the change and indicated the conditions that didn’t warrant the use of narcotics. These guidelines helped assist the provider team with their patient conversations, especially the more challenging ones.

Even with recognition of these six elements above, we needed to provide continual support for any episodes that would arise. Our team needed to see that they would be fully backed should a patient complaint arise. They needed to get examples where the director was at their side when a complaint came from a primary care provider that had sent the patient to the ED for “pain management”. We were able to provide this new framework to support the team anytime one of the above factors reared itself. After a bit of time the behaviors began to change since they had witnessed the needed help whenever there was an issue.

The Current Results

A graph is worth a thousand words... After addressing all the above factors, we have been able to drive down our utilization. We are currently seeing prescription rates of less than 4 pp100v - a decrease of approximately 80% over the years of measurement (when you include the drop due to the PMP as well). We still haven’t called success yet. There still appears to be some opportunity, but it’s encouraging to see the significantly reduced rates. We are also now reviewing all departments within our system to determine current rates and drive these as low as possible. As with all our efforts, we continue to work to make the system safer for patients and their families.



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Livia M. Santiago-Rosado, MD FACEP
Vice Chair, Department of Emergency Medicine,
Nassau University Medical Center

Is the New (York) Normal?

As I recently engaged in the guilty pleasure of following social media, I ran into a post of a *Daily News* article about a lawsuit filed by a New York City Emergency Department Assistant Director of Nursing (ADN) against her former employee. The ADN claimed that she had repeatedly raised concerns to hospital administration in regards to “thin” staffing levels in the ED, and that she was wrongfully terminated as a result. Her lawsuit claimed that the hospital’s ED was “chronically understaffed”, resulting in prolonged admission waits and patient deaths. The poster, an emergency physician, shared the article without comment on a popular nationwide social media group composed entirely of EPs. The article quoted the complainant as stating that “nurses were required to manage at least 13 patients simultaneously.” Its headline exploded with inflammatory rhetoric: “...ER Killing Patients, Ex-Worker Claims”.

The article itself caught my eye, of course; I usually pause when I read about someone or something “killing patients,” but maybe that’s just me. But it was the aggregate of EM physician responses and comments that struck me the most. Not surprising given what we know about our specialty, several responses amounted to snide comments dripping in dry humor. The rest were easily divided into two camps: non-New Yorkers expressing outrage at the nursing coverage described (“Uhhhh what???”), and New Yorkers (and ex-New Yorkers) basically stating, “Yeah, that’s about right... on a good day.” Worse, many of those ex-New Yorkers expressed their relief at having left New York, with some adding they would never work here again.

It is not entirely a New York City issue, and not all New York City facilities have lower staffing levels relative to patient volume. But we should stipulate that “lean” ED staffing abounds in New York City, and it seems there is a fair amount of spillover of this reality to the rest of the State and surrounding areas. This pattern is common in ED nursing, not just in terms of registered nurses, but frequently also as far as practical nurses, aides and patient care associates (PCAs). Similarly, many of these same facilities also have relative provider shortages, compounding delays and potentially threatening patient safety. This pattern is often found elsewhere in hospitals and may not be entirely ED-based, but its acuity, and its impact on patient flow, is most salient in ED-based settings.

The issue cascades into a vicious cycle: when we work “short”, the great majority of our hours in the ED are exceedingly hectic and frustrating, leading some to leave the field or the geographical area, thereby aggravating shortages in the available pool for a given region, and creating a worsening staffing situation, which means we often work “shorter”. And then when working shorter and feeling abused, staff members feel burned out, and are more likely to call out sick for their next shift, meaning the remaining crew is working shorter still, again exacerbating the vicious cycle.

Adding insult to injury, these working conditions tend to engender high turnover rates. The less retention of experienced staff, the more

frequently we work in environments where newbies are learning a new system and new culture. Not only is constant turnover expensive to an organization or group, as training time needs to be reimbursed and the ramp-up to full productivity subsidized, it also results in decreased efficiency that strains the department as a whole when veteran staff members are interrupted, asked to help a colleague or required to intervene in patient management conundrums.

Furthermore, when nurses are working short, more tasks fall upon providers. Providers who spend any significant amount of time drawing blood, putting patients on bedpans, answering phones, searching for supplies or putting new sheets on a stretcher are by definition not able to see as many patients (or as promptly), which makes patients dissatisfied (not to mention potentially unsafe), increasing interruptions, slowing us down further in another vicious cycle. I think all of us who have trained and work in these institutions recognize these patterns.

How did we get here?

Is this really our normal?

The Problem with Falling Short

Optimally staffing an ED means striving for adequate coverage the majority of the time. By definition, it is impossible to have ample coverage all of the time, as most ED shifts will have periods of over- and understaffing simply due to variability in volume. Beyond the total number of visits, EDs are also subject to an uneven distribution of arrivals and acuity at different hours of the day, and from busiest to slowest days. The Emergency Nurses’ Association (ENA) has put forth a position statement in regards to ED staffing, recognizing that failure to staff appropriately may lead to:

- Elevated patient throughput times.
- An unacceptably high left-without-being-seen rate.
- Unacceptably low patient satisfaction.
- Concerns about emergency department clinician behavior in a stressful environment.
- Low rates of clinician satisfaction and retention.

In 2003, ENA published staffing guidelines utilizing a complicated formula incorporating patient volume, acuity, ED beds, nursing tasks and other variables. Subsequent exercises have taken into account time observations and predicted tasks per patient to determine how different staffing models might perform. The calculations are complex, and incorporate a large number of variables, so it’s difficult to determine exactly how “short” our EDs really are. At the very least, ED nurses in New York may routinely carry more patients at any one time than their counterparts elsewhere. This has led the New York State Nurses’ Association (NYSNA) to push for setting nurse-to-patient ratios in New York; for the ED, the proposed ratio was 1:3. The proposed legislation, the Safe Staffing for Quality Care Act, was passed by the New York State Assembly in June 2016. Since then, it has gone to the State Senate

and remains “in committee,” apparently trying to die a slow death.

To further complicate the current quandary, the Health Resources and Services Administration projects that the demand for nurses will increase by 21% from 2012 to 2025, with a resulting shortfall in the supply of nurses in at least 16 states. As baby boomers age and life expectancy continues to rise, the predicted acuity and increased complexity of ED patients is likely to require increased numbers of emergency nurses. There are also reimbursement-related pressures dictating longer and more complex workups while the patient is under the purview of the ED in order to justify an inpatient level of care, workups that previously might have been only started in the ED to be continued after the point of admission.

Staffing Our EDs—Beyond Nursing

To focus on nursing lines exclusively is short-sighted. Certain states, for example, have legislated ED nurse-to-patient ratios, but unintended consequences have been described. Anecdotally, when nurses are “capped” at a certain number of patients, they have an incentive to be less efficient because the longer they keep an individual patient on their list, the longer it will be before they receive the next “hit.” Furthermore, in order to cover increased RN needs in such EDs, institutions may opt to decrease other ancillary lines, in effect increasing the workload on remaining nurses and physicians. As ENA’s website notes, “It is possible that in order to maintain zero budgets as the number of nurses were increased in California hospitals, the number of unlicensed assistive personnel (UAP) may have decreased, resulting in nurses being required to perform tasks previously performed by UAPs.” A corollary of this is that a dearth of clerical lines, transporters, aides and technicians can impact the ED team’s ability to efficiently care for patients.

The issue becomes complicated by the task/responsibility overlap that necessarily occurs in an ED. Activities around patient care in the ED range from codes and open thoracotomies, to administering medications or finding a laceration repair kit, to getting a patient ice chips or helping them walk to the bathroom. The ED team may be comprised of members with distinct functions including emergency medicine and Pediatric EM providers, nurses, PCAs or nursing assistants, transporters, clerical staff, and ED social workers. While there are many tasks that can be performed by many staff members/job descriptions (e.g. providing a patient with a blanket), and others that may be performed by several job descriptions (e.g. phlebotomy), the task of seeing the next patient and writing orders to direct their care can only be performed by the provider (especially in a State whose Board of Education generally prohibits nurses from initiating protocols or carrying out standing orders). If the PCAs that are scheduled to assist with patient care, draw blood or perform EKGs are all being utilized for 1:1 observation of high-risk patients, a pending task floats up the proverbial ladder to the nurse. And when there is no nurse available because they are busy with the 12th of 14 simultaneous patients, guess who is on the hook to answer that ringing phone?

The trickle-up effect is that too many “non-exclusive” tasks fall on the provider as a result of compromised ancillary services. Having just paged a consultant, the provider must wait nearby so as not to miss the return call (and their would-be next patient is forced to wait as well!) The phone finally rings and they pick up to find instead someone is calling to find out about a relative that came to the ED the day prior (and did I mention there is no clerk on shift to help this poor soul find their

relative?). The issue is not that we are “too good” to answer the phone or get a bedpan for a patient; the point is that we or any staff member could do those tasks, but only we can examine and direct the care of the next patient. Yet we are not freed up to see the next patient expeditiously because there is no one to do all the other tasks that need to be done.

It would be possible, for instance, to staff a hypothetical ED with one provider, three nurses, two techs and one clerk; you might get hypothetically similar productivity and throughput with two providers, two nurses and one clerk by shifting all “tech” activities, and the third nurse’s tasks, to the remaining clinicians. I would argue, however, that those nurses and providers in the second example are dissatisfied and frustrated by spending much of their time on activities that grossly underutilize their skills and their licensure. Worse, too often in New York we don’t even get the second model with the hypothetically-similar productivity; we might have two providers and two nurses scheduled, but the second nurse called out sick, and the clerk has no coverage for their break, so there’s the provider answering the phone again.

The constant frustration of not being able to work to the “top of our license” takes its toll over time. We in emergency medicine already have the most “burnout” among all other specialties, according to the Medscape survey done this year, with 59% of EM respondents reporting burnout. It is interesting to note that this study also showed that there are many reasons behind burnout, among which are electronic health records, “too many” patients, and “too many difficult patients”; however, the number one reason EM physicians burn out is “too many bureaucratic tasks.” Chronic ancillary understaffing creates conditions where bureaucratic tasks take up the majority of the provider’s time. Perhaps these conditions are creating a modified brain drain where many come to New York to train, but then take off for greener pastures.

Staffing in New York? Fuhgeddaboutit!

Many of our institutions suffer from chronic shortages among many or all job descriptions. Shortages may be organic (more demand than supply of a given job description in a given geographic area) or iatrogenic (institutional hiring freezes, misaligned administrative priorities or uncooperative C-suites), but their effects are the same. New York, one of the five most populous States, may have challenges related to its vast geography and population, but there are issues that set New York apart even when compared to other high-population States. According to 2012 data from the National Center for Health Statistics (NCHS), 92% of ED visits in New York occur in urban and metropolitan areas, compared to 85% nationally. NYSNA’s website quotes a New York City ED nurse: “We are always short-staffed, always, always. We are overloaded because other area hospitals have closed. There are shifts where an RN cares for 15 or 16 patients in the ER. On a good day you can have 10.” Are the identified trends in staffing a reflection of a preponderance of “urban” EDs? Or are there other variables that impact New York disproportionately?

According to the recent article, “2017’s Best and Worst States for Doctors,” when analysts compared all 50 states and the District of Columbia on 14 key metrics including wages, malpractice environment and the quality of public hospital systems, New York ranked 51st. As of 2010, according to Press Ganey data, New York ranked 46th in length of stay (LOS) in the ED. Our EDs are functionally short-staffed, our patients wait for us longer, and then linger with us longer, and patient satisfaction suffers accordingly. Patients who spend more than two

hours in the ED report less overall satisfaction with their visits than those who are there less than two hours. Since much of the time in the ED is spent waiting — in the waiting room, in the exam area, for tests, for social work intervention, for discharge— prolonged wait times have a direct negative impact on patient satisfaction.

Increased ED LOS is also correlated with prolonged door-to-doc times, which in turn may compromise quality and safety. Longer ED stays also mean increased “time in process” waiting for results or disposition, which creates more impetus and opportunity for patients to interrupt staff members or escalate a complaint. Alarmingly, prolonged ED LOS is also associated with ED crowding, as both cause and effect, creating another vicious cycle. The best way to get patients treated and discharged from the ED is to address crowding in general and get the critical patients through the ED and to the appropriate floor faster, freeing up resources for the less-critical patients to be cared for and discharged from the ED. But to get patients treated and released requires adequate staffing. Instead, New York EDs are crowded with waiting patients whose prolonged presence and associated interruptions disrupt productivity.

In addition to the work environment, relatively poor compensation may help perpetuate this New York affliction. A report looking at emergency physicians compensation for 2016-17 notes that the Northeast region has many of the nation’s lowest regional incomes, ironic since the region also has among the highest costs of living in the country. New York specifically remains among the bottom 10 States in terms of compensation nationwide. Last year, in New York State the average hourly wage was \$171/hr, in New York City the average annual salary amounted to \$270K. Compare those numbers to, for instance, Texas and California, which like New York are populous and diverse states. But in Texas the average wage is \$252/hr, and EPs average \$380K per year working in the desirable areas of Austin or San Antonio. In California, the equivalent numbers are \$241/hr and \$418K annually. Parenthetically, the gap might be even greater had much of New York City’s EM workforce not had significant bump-ups generated by recent mergers and acquisitions affecting multiple institutions and EM groups in the City.

This Is NOT Normal

This is the culture we have been raised in, and inherited. What can we do in the face of this alarming reality?

We should start by understanding, and telling anyone who will listen, that this is not normal. That ED staffing is a patient safety issue, a quality of care issue, a staff retention issue and a patient satisfaction issue. That we need to be promoting that our EDs house the appropriate mix and numbers of personnel to care for our patients. That we should be working toward achieving environments where each of our colleagues is supported in working to the top of their respective license for the benefit of patient care and throughput. We need to demand and participate in creating a culture change for our patients’ benefit.

Many of those New Yorkers (and ex-New Yorkers) weighing in on social media looked back wistfully at their training, when if they wanted their patient to get an IV they would have to start it, or reminisced about having to wheel patients to Radiology because no one else was available to do it. I worry that we are training (and maintaining) our physicians on a self-defeating course, where their labor is watered down and loses value. An administrator may decide you are adequately

staffed (or worse, overstaffed) on the provider side based on old metrics derived from god-knows-where. But these metrics were derived before electronic medical records, before managed care admission denials, before days-long boarding in the ED, back when inpatient beds were rife. In an adequately staffed ED (on all sides and including appropriate ancillary staffing), many providers might be able to see a given number of patients on a sustained basis; our current situation makes it impossible to achieve these metrics.

The dedicated clinicians and ancillary staff who serve in our EDs day in and day out deserve better. That includes our nursing colleagues as well as physicians and other ED providers. Most importantly, our patients deserve better. Current conditions are clearly problematic for us, but it’s our patients who continue to be stuck with the short end of the stick. A comment in the *Daily News* article about the self-described whistleblower ADN was striking: “It’s no wonder my [physician] daughter... will never return to New York.” Can you envision a future in which New York stands out as a coveted place to practice (not just train in) emergency medicine? Advocate vocally for working conditions that will attract and retain dedicated individuals that you will enjoy working with. Hone those PowerPoint skills, put a brief presentation together, and request to schedule an “in-service” for your C-suite. Get your community involved; explain to your neighbors how ED staffing might one day impact them or their loved ones. We all need to speak out and put our patient advocacy hats on; call or email local legislators; support your nursing colleagues’ efforts in attaining safer staffing.

This shouldn’t be our normal, nor anybody else’s.

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#IAMNYACEP



Jessica Noonan, MD FACEP

Jessica Noonan, MD FACEP, Assistant Professor of Emergency Medicine; Assistant Residency Program Director, Department of Emergency Medicine, Albany Medical Center

Jessica attended New York Medical College in Valhalla, NY and completed her residency training in emergency medicine at St. Luke's Roosevelt Hospital Center in Manhattan. She is faculty at Albany Medical Center and serves as an assistant program director for the emergency medicine residency. She has a strong interest in medical education and was the winner of the 2017 New York ACEP New Speaker Forum.

"New York ACEP is an amazing group of women and men, serving on the front line of medical care, who inspire me everyday both in and out of the ED."



Trent She, MD

Trent She, MD, Emergency Medicine Resident (PGY-3) Department of Emergency Medicine, Mount Sinai Beth Israel

Trent is a chief resident at Mount Sinai Beth Israel in Manhattan, NY and he was named Chair of New York ACEP's Emergency Medicine Residency Committee (EMRC) this year. He has an interest in ultrasound, medical education and social media and is pursuing a fellowship in Emergency Ultrasound after residency graduation in June 2018.

"New York ACEP has given me the opportunity to meet and work with mentors across the state and I have had a fulfilling and productive several years as member, Vice Chair and now Chair of the EMRC."



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Department of Emergency Medicine
St. Barnabas Hospital



Arlene S. Chung, MD MACM
Associate Program Director
Residency Site Director, Elmhurst Hospital
Mount Sinai Emergency Medicine Residency Program



Laura Riley, DO
Emergency Medicine Resident
Department of Emergency Medicine
St. Barnabas Hospital

Emergency Medicine Faculty In Loco Parentis

Committed faculty in residency training programs reflect frequently about how best to grow healthy, vibrant, emergency physicians from medical student rootstock. We devote tremendous effort to improving as clinical instructors and we endeavor to be role model purveyors of evidence-based practice. To our residents we are teachers (and they our students), we are masters of our craft (and they our apprentices), and we are supervisors or “bosses” (and they our employees). Within each of these three relationship paradigms are fiduciary duties which we faculty try hard to perfect. There is, though, an additional duty to our residents that is not prescribed by any of these three models: in certain carefully selected situations, residents’ needs require that faculty assume a role in loco parentis.

In loco parentis is a Latin term meaning, “in place of a parent,” and has been widely applied in discussions on the relationship between students and institutes of learning. To quell immediately any visceral reaction to the idea of a parental role for emergency medicine faculty, I stipulate that residents are adults, not children, and the analogy of in loco parentis should not be taken beyond the narrowly argued points that follow. Particularly, the use of this analogy is not intended to suggest that any political or social indoctrination by faculty unto residents (as is the right of actual parents) is appropriate. Furthermore, the connotation associated with being “paternalistic” or “patronizing” should also be dismissed. Rather, I suggest that there are certain difficult moments in the life of a resident that call for faculty involvement in such a way that does not fit within the confines of the teacher-student, master-apprentice, or boss-employee model. These situations, an exposition of which follows, are of the sort that might be the purview of their close friends, or a spouse, or a parent, but often those figures lack the contextual understanding to provide meaningful assistance. What’s needed is the support of someone who cares about them, is versed in the details of medicine and of their residency, and who is their learned senior in matters professional.

An example of my recent failure to provide such support is illustrative. Dr. Laura Riley, a second-year EM resident, suffered a needle stick exposure while at work. I provided her a cursory initial PEP talk (yes, that’s a double entendre) and in the weeks that followed I occasionally asked in passing how she was feeling, but it was only after the ordeal concluded did I come to know how underserved she was by her faculty.

LR- *I got a needle stick during my ICU rotation. Immediately after getting stuck, my first thought was anger at myself. I walked out of the*

room and the anger was soon replaced with embarrassment. On my way down to the ED, when things were quiet and I had a moment to let it sink in, I was scared.

Registering in the ED was an uncomfortable experience. This was mostly due to the amount of attention I got while sitting next to the triage nurse. Being on an off-service rotation, I had not been in the ED recently and many people came over to say, “Hi” and ask me what I was doing there. I was embarrassed to tell people what had happened and I felt very exposed.

The only people I told what had happened were my mother, my sister, and my boyfriend. Telling my boyfriend was a particularly challenging situation. When I applied to medical school I knew that there was a risk of exposure to illnesses (and I knew that I would probably be at a higher risk going into emergency medicine), but I made that decision—my boyfriend, however, is not in medicine and made no such decision. He might not have known that risk when we first started dating. I felt incredibly guilty that my decision might put him at risk. I did not know how to tell him and I did not know what it would mean for our future.

I felt very sick on the PEP medications. I had frequent migraines and nausea and had two pre-syncopal episodes at work. I became woe-fully constipated and I was constantly tired. It was hard to work.

The experience made me question medicine and whether it’s all worth it. Those thoughts were most obvious immediately after the needle stick and while I was feeling at my worst on the PEP medications. It was emotionally tiring. During the following weeks the thought of HIV-seroconverting would randomly surface, but I was even more concerned about Hepatitis C.

I would have appreciated having someone to talk to about the PEP experience. It was hard, but I tried to ignore it and just push through because I knew other people had been on the medications. I thought that I was being a wimp. But I really felt sick, and there was a day I probably should have called out. I still feel that the needle stick should not have happened and I’m still angry with myself.

While some of Dr. Riley’s concerns could have been addressed by her “teacher” (risk of seroconversion) or by her “boss” (accommodation of sick-time as needed), the experience was a personal-professional-emotional-existential crisis that called for the sage, loving, counsel that one normally seeks from a parent, except that an actual parent is not equipped to render real support. Faculty acting in loco parentis is required.

EDUCATION

There are other examples. Who other than faculty acting in loco parentis can lend support to the resident involved in a malpractice case, when what's needed is both an understanding of the potential career ramifications as well as an ear for the emotional and possibly practice-altering effects? Who other than faculty acting in loco parentis can offer career guidance to a resident with an understanding of both the professional landscape as well as their personal family situation and student-debt position?

I hope that the need for this additional category of faculty-resident relationship is now manifest. But awareness is insufficient; we must labor to do it well. Just as we endeavor to improve as teachers, masters, and bosses, we should do the same with our occasional in loco parentis role because there are a number of dangers inherent to wading into the personal lives of residents. One danger is the tendency to assume this role selectively. That is to say, just as we strive to provide the same clinical education to all residents without regard to their personality, so too should we be prepared to stand in loco parentis for any resident (not just those with whose personalities we get along well). A second danger is that, whereas adult children are free to accept or reject support from their actual parents, any foray into the personal or emotional life of a resident must be invited. Finally, standing in loco parentis to render assistance with a difficult situation must always be done with a keen awareness of boundaries, because an overextension of this role has the potential to cause real damage to our ability to function as teachers, masters and bosses.

I failed Dr. Riley, as I was late in offering myself to her in loco parentis.* Because she is emotionally intelligent and reflective she was

able to grow from this experience despite the absence of meaningful support.

LR - Despite my occasional doubts about medicine, there is nothing else I would rather be doing. The physical symptoms of the PEP medications were temporary. The fatigue improved and I became excited to go to work again. Though the needle stick and subsequent PEP course were taxing physically and emotionally, it was ultimately an informative experience. I came to better accept my limitations. I learned that I need to care for myself to be able to care for my patients and part of taking care of myself is acknowledging when I need help. While I have a strong social support network in family and friends, they were ill equipped to address the difficulty I was experiencing. They have been supportive throughout my education but in this case my anxiety only gave them anxiety. This was a new situation for us and I found myself trying to ease their concerns while ignoring my own. Having a trusted advisor who is familiar with PEP and the daily struggles of emergency medicine would have alleviated the stress and apprehension with which I struggled.

Her peace was too long in coming and other residents in her position might never have discovered this wisdom unassisted. She suffered silently for several weeks because her faculty failed her. So with care and purpose we should reflect on how in moments of need we might serve our residents in loco parentis, for we faculty are uniquely positioned to do it.

* At press time she had forgiven me.

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Theodore J. Gaeta, DO MPH FACEP
Residency Program Director
New York-Presbyterian Brooklyn Methodist Hospital

A Prospective Feasibility Trial of a Novel Intravascular Catheter System with Retractable Coiled Tip Guidewire Placed in Difficult Intravascular Access (DIVA) Patients in the Emergency Department.

Raio C, Elsperrmann R, Kittisarapong N, Stankard B, Bajaj T, Modayil V, Nelson M, Chiricolo G, Wie B, Snock A, Mackay M, Ash A; Department of Emergency Medicine, North Shore University Hospital; Intern Emerg Med. 2017 Sep 14.

The primary study objective was to evaluate insertion success rates. Secondary objectives included patient satisfaction, procedure time, complication rates, completion of therapy and dwell time of the novel AccuCath(®) 2.25" Blood Control (BC) Catheter System (FDA approved) placed in difficult-access patients. This was a single-arm feasibility trial evaluating the AccuCath(®) 2.25" BC Catheter System in a convenience sample of DIVA patients defined as at least two failed initial attempts or a history of difficult access plus the inability to directly visualize or palpate a target vein. All enrolled patients were 18 years of age or older. A total of 120 patients were enrolled. These patients had an average of 3.7 and median of 3 prior attempts at vascular access prior to AccuCath placement. Successful access was gained in 100% of the patients, 77% on the first attempt and all within three attempts; 88.5% of patients completed therapy, with the remaining 12.5% experiencing minor complications that required discontinuation of the catheter. The average patient satisfaction score on a 5-point Likert scale was highly positive at 4.6. Preliminary results show that the AccuCath(®) 2.25" BC Catheter System has excellent success rates in gaining vascular access in an extremely difficult patient population. The device did not lead to any significant complications. Patients were also very satisfied with the procedure.

Head CT for Minor Head Injury Presenting to the Emergency Department in the Era of Choosing Wisely.

DeAngelis J, Lou V, Li T, Tran H, Bremjit P, McCann M, Crane P, Jones CMC; Department of Emergency Medicine, University of Rochester Medical Center; West J Emerg Med. 2017 Aug; 18(5):821-829.

INTRODUCTION: The Choosing Wisely campaign currently recommends avoiding computed tomography (CT) of the head in low-risk emergency department (ED) patients with minor head injury, based on validated decision rules. However, the degree of adherence to this guideline in clinical practice is unknown. The objective of this study was to evaluate adherence to the Choosing Wisely campaign's recommendations regarding head CT imaging of patients with minor head injury in the ED.

METHODS: We conducted a retrospective cohort study of adult ED patients at a Level I trauma center. Patients aged ≥ 18 years who presented to the ED with minor head injury were identified via International Classification of Diseases, 9th Revision, Clinical Modification codes. Medical record abstraction was conducted to determine the presence of clinical symptoms of the NEXUS II criteria, medical resource use, and head CT findings. We used descriptive statistics to characterize the study sample, and proportions were used to quantify guidelines adherence.

RESULTS: A total of 489 subjects met inclusion criteria. ED providers appropriately applied the Choosing Wisely criteria for 75.5% of patients, obtaining head CTs when indicated by the NEXUS II rule (41.5%), and not obtaining head CTs when the NEXUS II criteria were not met (34.0%). However, ED providers obtained non-indicated CTs in 23.1% of patients. Less than 2% of the sample did not receive a head CT when imaging was indicated by NEXUS II.

CONCLUSION: ED providers in our sample had variable adherence to the Choosing Wisely head-CT recommendation, especially for patients who did not meet the NEXUS II criteria.

Variability in Interpretation of Cardiac Standstill Among Physician Sonographers.

Hu K, Gupta N, Teran F, Saul T, Nelson BP, Andrus P; Icahn School of Medicine at Mount Sinai, Department of Emergency Medicine; Ann Emerg Med. 2017 Sep 1.

INTRODUCTION: Cardiac standstill on point-of-care ultrasonography has been widely studied as a marker of prognosis

in cardiac arrest. Return of spontaneous circulation has been reported in as few as 0% and as many as 45% of patients with cardiac standstill. When explicitly documented, the definition of cardiac activity in these studies varied from any slight change in echogenicity of the myocardium to any kinetic cardiac activity. We hypothesize that the variability in research definitions of cardiac activity may affect interpretation of video clips of patients in cardiac arrest. The goal of this study is to assess the variability in interpretation of standstill among physician sonographers.

METHODS: We surveyed physician sonographers at six conferences held at three academic medical centers in the Greater New York area. Survey respondents were allotted 20 seconds per slide to determine whether each of 15 video clips of patients in cardiac arrest were standstill or not. Data were collected anonymously with radio frequency remotes.

RESULTS: There were 127 total participants, including faculty, fellows and resident physicians specializing in emergency medicine, critical care and cardiology. There was only moderate interrater agreement among all participants ($\alpha=0.47$). This lack of agreement persisted across specialties, self-reported training levels, and self-reported ultrasonographic expertise.

CONCLUSION: According to the results of our study, there appears to be considerable variability in interpretation of cardiac standstill among physician sonographers. Consensus definitions of cardiac activity and standstill would improve the quality of cardiac arrest ultrasonographic research and standardize the use of this technology at the bedside.

Transgender and Gender Nonconforming in Emergency Departments: A Qualitative Report of Patient Experiences.

Chisolm-Straker M, Jardine L, Bennouna C, Morency-Brassard N, Coy L, Egemba MO, Shearer PL; Department of Emergency Medicine, Icahn School of Medicine at Mount Sinai; Transgend Health; 2017 Feb 1;2(1):8-16.

BACKGROUND: Individuals who have a transgender or gender nonconforming (TGG-NC) experience belong to a marginalized segment of the U.S. population, and health-

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care can be difficult for them to navigate. Although emergency departments (EDs) traditionally serve as healthcare “safety nets” for vulnerable populations, quantitative studies outside the United States have found that TGGNC-experienced persons tend to avoid EDs and/or have negative experiences. This qualitative study primarily describes the ED experiences of people with a TGGNC history; furthermore, the study explores reasons why this population avoids U.S. EDs and their recommendations for improvements to ED care.

METHODS: This qualitative study used data about TGGNC-historied persons’ experiences in U.S. EDs from retrospective, anonymous written surveys (paper or web based). National data collection took place from June 2012 through December 2014. Participant responses (n=240) were examined using thematic analysis.

RESULTS: Using a framework that recognized positive and negative responses, the themes of Self-Efficacy and Power Inequity surfaced. These themes exposed the tension between patients with TGGNC experiences and clinicians who were perceived to lack training in this area, resulting in negative patient experiences. When practitioners had specific training about this population, participants reported positive care experiences.

CONCLUSIONS: This study indicates that many TGGNC-historied persons who use U.S. EDs have negative experiences, largely due to lack of provider sensitivity toward and training about this patient population. Data from this investigation suggest that training of U.S. ED providers and institutional support would help improve care for this marginalized group.

Use of the Low-Frequency/High-Frequency Ratio of Heart Rate Variability to Predict Short-term Deterioration in Emergency Department Patients with Sepsis.

Barnaby DP, Fernando SM, Ferrick KJ, Herry CL, Seely AJE, Bijur PE, Gallagher EJ. Department of Emergency Medicine, Albert Einstein College of Medicine; *Emerg Med J.* 2017 Aug 18.

OBJECTIVE: To examine the ability of the low-frequency/high-frequency (LF/HF) ratio of heart rate variability (HRV) analysis to identify patients with sepsis at risk of early deterioration.

METHODS: This is a prospective observational cohort study of patients with sepsis presenting to the Montefiore Medical Center ED from December 2014 through September 2015. On presentation, a single ECG Holter

recording was obtained and analysed to obtain the LF/HF ratio of HRV. Initial Sequential Organ Failure Assessment (SOFA) scores were computed. Patients were followed for 72 hours to identify those with early deterioration.

RESULTS: 466 patients presenting to the ED with sepsis were analysed. Thirty-two (7%) reached at least one endpoint within 72 hours. An LF/HF ratio <1 had a sensitivity and specificity of 34% (95% CI (19% to 53%)) and 82% (95% CI (78% to 85%)), respectively, with positive and negative likelihood ratios of 1.9 (95% CI (1.1 to 3.2)) and 0.8 (95% CI (0.6 to 1.0)). An initial SOFA score ≥ 3 had a sensitivity and specificity of 38% (95% CI (22% to 56%)) and 92% (95% CI (89% to 95%)), with positive and negative likelihood ratios of 4.9 (95% CI (2.8 to 8.6)) and 0.7 (95% CI (0.5 to 0.9)). The composite measure of HRV+SOFA had improved sensitivity (56%, 95% CI (38% to 73%)) but at the expense of specificity (77%, 95% CI (72% to 80%)), with positive and negative likelihood ratios of 2.4 (95% CI (1.7 to 3.4)) and 0.6 (95% CI (0.4 to 0.9)). Receiver operating characteristic analysis did not identify a superior alternate threshold for the LF/HF ratio. Kaplan-Meier survival functions differed significantly ($p=0.02$) between low (<1) and high (≥ 1) LF/HF groups.

CONCLUSIONS: While we found a statistically significant relationship between HRV, SOFA and HRV+SOFA, and early deterioration, none reliably functioned as a clinical predictive tool. More complex multivariable models will likely be required to construct models with clinical utility.

Serial Sonographic Assessment of Pulmonary Edema in Patients with Hypertensive Acute Heart Failure.

Martindale JL, Secko M, Kilpatrick JF, deSouza IS, Paladino L, Aherne A, Mehta N, Conigliaro A, Sinert R. *J Ultrasound Med.* 2017 Jul 31.

OBJECTIVES: Objective measures of clinical improvement in patients with acute heart failure (AHF) are lacking. The aim of this study was to determine whether repeated lung sonography could semiquantitatively capture changes in pulmonary edema (B-lines) in patients with hypertensive AHF early in the course of treatment.

METHODS: We conducted a feasibility study in a cohort of adults with acute onset of dyspnea, severe hypertension in the field or at triage (systolic blood pressure ≥ 180 mm Hg), and a presumptive diagnosis of AHF.

Patients underwent repeated dyspnea and lung sonographic assessments using a 10-cm visual analog scale (VAS) and an 8-zone scanning protocol. Lung sonographic assessments were performed at the time of triage, initial VAS improvement, and disposition from the emergency department. Sonographic pulmonary edema was independently scored offline in a randomized and blinded fashion by using a scoring method that accounted for both the sum of discrete B-lines and degree of B-line fusion.

RESULTS: Sonographic pulmonary edema scores decreased significantly from initial to final sonographic assessments ($P<.001$). The median percentage decrease among the 20 included patient encounters was 81% (interquartile range, 55%-91%). Although sonographic pulmonary edema scores correlated with VAS scores ($\rho=0.64$; $P<.001$), the magnitude of the change in these scores did not correlate with each other ($\rho=-0.04$; $P=.89$).

CONCLUSIONS: Changes in sonographic pulmonary edema can be semiquantitatively measured by serial 8-zone lung sonography using a scoring method that accounts for B-line fusion. Sonographic pulmonary edema improves in patients with hypertensive AHF during the initial hours of treatment.

“Futile Care”- An Emergency Medicine Approach: Ethical and Legal Considerations.

Simon JR, Kraus C, Rosenberg M, Wang DH, Clayborne EP, Dersse; Department of Emergency Medicine, Columbia University; *AR. Ann Emerg Med.* 2017 Jul 26.

Futility often serves as a proposed reason for withholding or withdrawing medical treatment, even in the face of patient and family requests. Although there is substantial literature describing the meaning and use of futility, little of it is specific to emergency medicine. Furthermore, the literature does not provide a widely accepted definition of futility, and thus is difficult if not impossible to apply. Some argue that even a clear concept of futility would be inappropriate to use. This article will review the origins of and meanings suggested for futility, specific challenges such cases create in the emergency department (ED), and the relevant legal background. It will then propose an approach to cases of perceived futility that is applicable in the ED and does not rely on unilateral decisions to withhold treatment, but rather on avoiding and resolving the conflicts that lead to physicians’ believing that patients are asking them to provide “futile” care.

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Effect of an Emergency Department Opioid Prescription Policy on Prescribing Patterns.

Chacko J, Greenstein J, Ardolic B, Berwald N; Department of Emergency Medicine, Staten Island University Hospital, Northwell Health; *Am J Emerg Med.* 2017 Sep;35(9):1327-1329.

BACKGROUND: Staten Island University Hospital is located in NYC, where the opioid epidemic has resulted in significant mortalities from unintentional overdoses. In 2013 as a response to the rising threat to our community, our Emergency Department (ED) administration adopted a clinical practice policy focused on decreasing the prescription of controlled substances. The effects of this policy on our provider prescription patterns are presented here.

METHODS: A retrospective chart review of patients prescribed opioids from the ED before and after policy implementation was performed. Dates chosen for analysis was November 1, 2012 through January 31, 2013 and November 1, 2013 through January 31, 2014; these time periods were used to serve as a seasonally comparative group pre and post clinical practice policy implementation. Opioids written for the treatment of cough, and for children under eighteen were excluded from analysis. Patient age, sex, diagnoses, and prescription formulation, strength, and pill number was recorded for each patient receiving an opioid prescription.

RESULTS: There was a drop in the total prescriptions from 1,756 to 1,128 without a change in the average number of pills (12.78 vs 12.44) or average total dose prescribed (69.39 vs 68.98) mg of morphine equivalent per prescription. Additionally, there were sizable reductions in opioid prescriptions written for arthralgias/myalgias, dental pain, soft tissue injuries, and headaches.

CONCLUSION: The opioid clinical policy had a clear effect in decreasing the number of patients prescribed opioids. Such policies may be the key to reducing the epidemic and saving lives from unintentional opioid overdoses.

The Effect of the Apneic Period on the Respiratory Physiology of Patients Undergoing Intubation in the ED.

West JR, Scoccimarro A, Kramer C, Caputo ND; Department of Emergency Medicine, Lincoln Medical and Mental Health Center; *Am J Emerg Med.* 2017 Sep;35(9):1320-1323.

OBJECTIVES: We sought to examine the

physiological impact the apneic period has on the respiratory physiology of patients undergoing intubation in the emergency department and whether DAO, the delivery of 15L oxygen by nasal cannula during apnea, can affect the development of respiratory acidosis.

METHODS: This was a prospective observational cohort study conducted at an urban academic level 1 trauma center. A convenience sample of 100 patients was taken. Timed data collection forms were completed during the periintubation period. We report the mean ABG and end-tidal CO₂ (EtCO₂) values between those with normal and prolonged apnea times (>60s) and between those who received DAO and those who did not.

RESULTS: 100 patients met our inclusion criteria. There were no significant differences in the pre-RSI ABG values between those who received DAO and those who did not and between those with apnea times less than or >60s. Only in the group of patients with apnea times >60s did significant changes in respiratory physiology occur. DAO did not alter the trend in respiratory acidosis during the periintubation period. EtCO₂ increased as apnea times were prolonged, and DAO altered this trend.

CONCLUSIONS: Post-RSI EtCO₂ increased as apnea times were prolonged. DAO may alter this trend. Statistically significant changes in pH and PaCO₂ (mean differences of 0.15 and 12.5, respectively) occurred in the group of patients who had mean apnea times of >60s but not in those with apnea times <60s.

Early Sepsis Bundle Compliance for Non-Hypotensive Patients with Intermediate versus Severe Hyperlactemia.

Leisman DE, Zimmel D'Amore JA, Gribben JL, Ward MF, Masick KD, Bianculli AR, Bradburn KH, D'Angelo JK, Doerfler ME; Department of Emergency Medicine, Hofstra-Northwell School of Medicine; *Am J Emerg Med.* 2017 Jun;35(6):811-818.

OBJECTIVE: To compare the association of 3-h sepsis bundle compliance with hospital mortality in non-hypotensive sepsis patients with intermediate versus severe hyperlactemia.

METHODS: This was a cohort study of all non-hypotensive, hyperlactemic sepsis patients captured in a prospective quality-improvement database, treated October 2014 to September 2015 at five tertiary-care centers. We defined sepsis as 1) infection, 2) ≥ 2 SIRS

criteria, and 3) ≥ 1 organ dysfunction criterion. "Time-zero" was the first time a patient met all sepsis criteria.

INCLUSION CRITERIA: Systolic blood pressure >90 mmHg, mean arterial pressure >65 mmHg, and serum lactate ≥ 2.2 mmol/L. Primary exposures: 1) intermediate (2.2-3.9 mmol/L) versus severe (≥ 4.0 mmol/L) hyperlactemia and 2) full 3-h bundle compliance. Bundle elements: The primary outcome was 60-day in-hospital mortality.

RESULTS: 2,417 patients met inclusion criteria. 704(29%) had lactate ≥ 4.0 mmol/L versus 1,775 patients with lactate 2.2-3.9 mmol/L. Compliance was 75% for antibiotics and 53% for fluids. Full-compliance was comparable between lactate groups (n=200(29%) and 488(28%), respectively). We observed 424(17.5%) mortalities: intermediate/non-compliant - 182(14.9%), intermediate/compliant - 41(8.4%), severe/non-compliant - 147(29.2%), severe/compliant - 54(27.0%) [difference-of-differences=4.3%, CI=2.6-5.9%]. In multivariable regression, mortality predictors included severe hyperlactemia (OR=1.99, CI=1.51-2.63) and bundle compliance (OR=0.62, CI=0.42-0.90), and their interaction was significant: p(interaction)=0.022.

CONCLUSION: We observed a significant interaction between 3-h bundle compliance and initial hyperlactemia. Bundle compliance may be associated with greater mortality benefit for non-hypotensive sepsis patients with less severe hyperlactemia.

Missed Myocardial Infarctions in ED Patients Prospectively Categorized as Low Risk by Established Risk Scores .

Singer AJ, Than MP, Smith S, McCullough P, Barrett TW, Birkhahn R, Reed M, Thode HC, Arnold WD, Daniels LB, de Filippi C, Headden G, Peacock WF; Department of Emergency Medicine, Stony Brook University; *Am J Emerg Med.* 2017 May;35(5):704-709.

OBJECTIVES: Few studies have prospectively compared multiple cardiac risk prediction scores. We compared the rate of missed acute myocardial infarction (AMI) in chest pain patients prospectively categorized as low risk by unstructured clinical impression, and by HEART, TIMI, GRACE, and EDACS scores, in combination with two negative contemporary cardiac troponins (cTn) available in the U.S.

METHODS: We enrolled 434 patients with chest pain presenting to one of seven emer-

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gency departments (ED). Risk scores were prospectively calculated and included the first two cTn. Low risk was defined for each score as HEART \leq 3, TIMI \leq 0, GRACE \leq 50, and EDACS \leq 15. AMI incidence was calculated for low risk patients and compared across scores using X (2) tests and C statistics.

RESULTS: The patients' median age was 57, 58% were male, 60% white, and 80 (18%) had AMI. The missed AMI rate in low risk patients for each of the scores when combined with 2 cTn were HEART 3.6%, TIMI 0%, GRACE 6.3%, EDACS 0.9%, and unstructured clinical impression 0%. The C-statistic was greatest for the EDACS score, 0.94 (95% CI, 0.92-0.97).

CONCLUSIONS: Using their recommended cutpoints and non-high sensitivity cTn, TIMI and unstructured clinical impression were the only scores with no missed cases of AMI. Using lower cutpoints (GRACE \leq 48, TIMI=0, EDACS \leq 11, HEART \leq 2) missed no case of AMI, but classified less patients as low-risk.

Intranasal Fentanyl for Initial Treatment of Vaso-occlusive Crisis in Sickle Cell Disease.

Fein DM, Avner JR, Scharbach K, Manwani D, Khine H; Division of Pediatric Emergency Medicine, Department of Pediatrics, Children's Hospital at Montefiore, Albert Einstein College of Medicine.

BACKGROUND: Analgesia administration for children with vaso-occlusive crises is often delayed in the emergency department. Intranasal fentanyl (INF) has been shown to be safe and effective in providing rapid analgesia for other painful conditions. Our objective was to determine if children with a vaso-occlusive crisis (VOC) who received initial treatment with INF compared to placebo achieved a greater decrease in pain score after 20 min.

PROCEDURE: This was a randomized, double-blind, placebo-controlled trial. Children with sickle cell disease, 3-20 years old, not taking daily opiates were eligible for the study. Subjects who presented to the emergency department with a pain score \geq 6 were randomized to either a single dose of INF (2 μ g/kg, maximum 100 μ g) or an equivalent volume of intranasal saline. Pain scores were obtained using a modified Wong-Baker FACES pain scale prior to the administration of study drug and at 10, 20, and 30 min afterward. Additional analgesic medication was given per standard protocol.

RESULTS: Forty-nine subjects completed the study (24 fentanyl and 25 placebo). Subjects who received INF had a greater decrease in median pain score at 20 min compared to placebo (2 [interquartile range, (IQR) 0.5-4] vs. 1 [IQR 0-2], P = 0.048), but not at 10 or 30 min. There were no serious adverse events in either group.

CONCLUSION: Children who received INF had a greater decrease in pain score at 20 min compared to those who received placebo. Further studies should evaluate how to best incorporate INF into the emergency care of a child with a VOC.

Pediatric Patients Discharged from the Emergency Department with Abnormal Vital Signs.

Winter J, Waxman MJ, Waterman G, Ata A, Frisch A, Collins KP, King C; Department of Emergency Medicine, Albany Medical College; West J Emerg Med. 2017 Aug;18(5):878-883.

INTRODUCTION: Children often present to the emergency department (ED) with minor conditions such as fever and have persistently abnormal vital signs. We hypothesized that a significant portion of children discharged from the ED would have abnormal vital signs and that those discharged with abnormal vital signs would experience very few adverse events.

METHODS: We performed a retrospective chart review encompassing a 44-month period of all pediatric patients (aged two months to 17 years) who were discharged from the ED with an abnormal pulse rate, respiratory rate, temperature or oxygen saturation. We used a local quality assurance database to identify pre-defined adverse events after discharge in this population. Our primary aim was to determine the proportion of children discharged with abnormal vital signs and the frequency and nature of adverse events. Additionally, we performed a sub-analysis comparing the rate of adverse events in children discharged with normal vs. abnormal vital signs, as well as a standardized review of the nature of each adverse event.

RESULTS: Of 33,185 children discharged during the study period, 5,540 (17%) of these patients had at least one abnormal vital sign. There were 24/5,540 (0.43%) adverse events in the children with at least one abnormal vital sign vs. 47/27,645 (0.17%) adverse events in the children with normal vital signs [relative risk = 2.5 (95% confidence interval, 1.6 to 2.4)]. However, upon review of each

adverse event we found only one case that was related to the index visit, was potentially preventable by a 23-hour hospital observation, and caused permanent disability.

CONCLUSION: In our study population, 17% of the children were discharged with at least one abnormal vital sign, and there were very few adverse (0.43%) events associated with this practice. Heart rate was the most common abnormal vital sign leading to an adverse event. Severe adverse events that were potentially related to the abnormal vital sign (s) were exceedingly rare. Additional research is needed in broader populations to better determine the rate of adverse events and possible methods of avoiding them.

Rapid Primary Care Follow-up from the ED to Reduce Avoidable Hospital Admissions.

Carmel AS, Steel P, Tanouye R, Novikov A, Clark S, Sinha S, Tung J; Department of Emergency Medicine, Weill Cornell Medical College; West J Emerg Med. 2017 Aug;18(5):870-877.

INTRODUCTION: Hospital admissions from the emergency department (ED) now account for approximately 50% of all admissions. Some patients admitted from the ED may not require inpatient care if outpatient care could be optimized. However, access to primary care especially immediately after ED discharge is challenging. Studies have not addressed the extent to which hospital admissions from the ED may be averted with access to rapid (next business day) primary care follow-up. We evaluated the impact of an ED-to-rapid-primary-care protocol on avoidance of hospitalizations in a large, urban medical center.

METHODS: We conducted a retrospective review of patients referred from the ED to primary care (Weill Cornell Internal Medicine Associates - WCIMA) through a rapid-access-to-primary-care program developed at New York-Presbyterian/Weill Cornell Medical Center. Referrals were classified as either an avoided admission or not, and classifications were performed by both emergency physician (EP) and internal medicine physician reviewers. We also collected outcome data on rapid visit completion, ED revisits, hospitalizations and primary care engagement.

RESULTS: EPs classified 26 (16%) of referrals for rapid primary care follow-up as avoided admissions. Of the 162 patients referred for rapid follow-up, 118 (73%) arrived for their rapid appointment. There were no

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differences in rates of ED revisits or subsequent hospitalizations between those who attended the rapid follow-up and those who did not attend. Patients who attended the rapid appointment were significantly more likely to attend at least one subsequent appointment at WCIMA during the six months after the index ED visit [N=55 (47%) vs. N=8 (18%), P=0.001].

CONCLUSION: A rapid-ED-to-primary-care-access program may allow EPs to avoid admitting patients to the hospital without risking ED revisits or subsequent hospitalizations. This protocol has the potential to save costs over time. A program such as this can also provide a safe and reliable ED discharge option that is also an effective mechanism for engaging patients in primary care.

Can Patients with Non-Convulsive Seizure be Identified in the Emergency Department?

Roodsari GS, Chari G, Mera B, Zehtabchi S; Department of Emergency Medicine, State University of New York, Downstate Medical Center; *World J Emerg Med.* 2017;8(3):190-194.

BACKGROUND: Non-convulsive seizure (NCS) is an underdiagnosed, potentially treatable emergency with significant mortality and morbidity. The objective of this study is to examine the characteristics of patients with NCS presenting with altered mental status (AMS) and diagnosed with electroencephalography (EEG), to identify the factors that could increase the pre-test probability of NCS.

METHODS: Retrospective study using the data collected prospectively. Inclusion criteria: patients older than 13 years with AMS. Exclusion criteria: (1) immediately correctable AMS (e.g., hypoglycemia, opioid overdose); (2) inability to undergo EEG; (3) hemodynamic instability. Outcomes compared between NCS and non-NCS cases: vital signs, lactate level, gender, witnessed seizure, use of anticonvulsive in the field or in the ED, history of seizure or stroke,

head injury, abnormal neurological finding and new abnormal findings on head CT. Data presented as medians and quartiles for categorical and percentages with 95% CI for continuous variables. Univariate analyses were performed with Man-Whitney U and Fisher's Exact tests. A multivariate analysis model was used to test the predictive value of clinical variables in identifying NCS.

RESULTS: From 332 patients (median age 66 years, quartiles 50-78), 16 were diagnosed with NCS (5%, 95%CI 3%-8%). Only age was significantly different between the NCS vs. non-NCS groups in both univariate (P=0.032) and multivariate analyses (P=0.016).

CONCLUSION: Other than age, no other clinically useful variable could identify patients at high risk of NCS. ED physicians should have a high suspicion for NCS and should order EEG for these patients more liberally.

Patterns and Outcomes Associated with Timeliness of Initial Crystalloid Resuscitation in a Prospective Sepsis and Septic Shock Cohort.

Leisman DE, Goldman C, Doerfler ME, Masick KD, Dries S, Hamilton E, Narasimhan M, Zaidi G, D'Amore JA, D'Angelo JK; Department of Emergency Medicine, Hofstra-Northwell School of Medicine; *Crit Care Med.* 2017 Oct;45(10):1596-1606.

OBJECTIVES: The objectives of this study were to 1) assess patterns of early crystalloid resuscitation provided to sepsis and septic shock patients at initial presentation and 2) determine the association between time to initial crystalloid resuscitation with hospital mortality, mechanical ventilation, ICU utilization, and length of stay.

DESIGN: Consecutive-sample observational cohort.

SETTING: Nine tertiary and community hospitals over 1.5 years.

PATIENTS: Adult sepsis and septic shock patients captured in a prospective quality

improvement database inclusion criteria: suspected or confirmed infection, greater than or equal to two systemic inflammatory response criteria, greater than or equal to one organ-dysfunction criteria.

INTERVENTIONS: The primary exposure was crystalloid initiation within 30 minutes or lesser, 31-120 minutes, or more than 120 minutes from sepsis identification.

RESULTS: We identified 11,182 patients. Crystalloid initiation was faster for emergency department patients (β , -141 min; CI, -159 to -125; $p < 0.001$), baseline hypotension (β , -39 min; CI, -48 to -32; $p < 0.001$), fever, urinary or skin/soft-tissue source of infection. Initiation was slower with heart failure (β , 20 min; CI, 14-25; $p < 0.001$), and renal failure (β , 16 min; CI, 10-22; $p < 0.001$). Five thousand three hundred thirty-six patients (48%) had crystalloid initiated in 30 minutes or lesser versus 2,388 (21%) in 31-120 minutes, and 3,458 (31%) in more than 120 minutes. The patients receiving fluids within 30 minutes had lowest mortality (949 [17.8%]) versus 31-120 minutes (446 [18.7%]) and more than 120 minutes (846 [24.5%]).

Compared with more than 120 minutes, the adjusted odds ratio for mortality was 0.76 (CI, 0.64-0.90; $p = 0.002$) for 30 minutes or lesser and 0.76 (CI, 0.62-0.92; $p = 0.004$) for 31-120 minutes. When assessed continuously, mortality odds increased by 1.09 with each hour to initiation (CI, 1.03-1.16; $p = 0.002$). We observed similar patterns for mechanical ventilation, ICU utilization, and length of stay. We did not observe significant interaction for mortality risk between initiation time and baseline heart failure, renal failure, hypotension, acute kidney injury, altered gas exchange, or emergency department (vs inpatient) presentation.

CONCLUSIONS: Crystalloid was initiated significantly later with comorbid heart failure and renal failure, with absence of fever or hypotension, and in inpatient-presenting sepsis. Earlier crystalloid initiation was associated with decreased mortality. Comorbidities and severity did not modify this effect.

Save the Date

2018 ED Director Forum
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 Medical Director, Prehospital Care Division;
 Associate Medical Director, Department of Emergency Medicine
 Maimonides Medical Center

Responding to a Disaster: How Can I Get Involved?

In the wake of a severe hurricane season, earthquakes in Mexico, and wildfires in the Northwest of the country, many of us feel compelled to support relief efforts. This month's contribution from the Emergency Medical Services Committee is a compilation of information and resources to support our neighbors who have been struck by tragedy.

In the immediate phases of disaster response, the priorities are the simplest basic needs: food, water, shelter, fuel and funds are the most immediate. Blood donations are frequently needed in situations associated with traumatic injury. Many affected people lost their homes and are left with just the clothes on their back or maybe a few items they could carry. Immediate needs can be simple: toothpaste, toilet paper, medications, cash, clothing and food. Many communities form collection sites and the Red Cross is one such organization. For those in the New York City region, the Greater New York Hospital Association (GNYHA) is currently taking contributions of supplies, as well as organizing teams of medical professionals specifically for the relief efforts in Puerto Rico.

Recruitment tends to soar in the setting of acute well-publicized events, however, relief organizations operate year-round, and are always looking for sustained commitments to their efforts. The efforts of recruiting and credentialing a medical professional is time consuming and from a practical perspective, if they only provide a few days of service, not a good investment. From the disaster management perspective: training, planning and preparation are the foundations of disaster response. The contributions of medical professionals during the preparatory phase are more important than the active deployment. That is why aligning with an organization in advance of a disaster is the ideal way to offer services. The organizations that coordinate responses will be able to establish your credentials, provide training, and in the event of deployment may be able to provide credentialing across state lines and through mutual aid agreements. Many people don't realize, even in a disaster, state and federal laws may prohibit carrying controlled substances across state or regional borders. Aid organizations will often be able to provide liability protection as well. Finally, aid organizations will maintain records of your deployment including your own personal health issues and emergency contacts - after all disaster areas are high-risk environments, and your safety is important too. By planning in advance to be part of a response, you have the opportunity to train, and acquaint yourself with the people and equipment that you will have to work with on deployment. Local Medical Reserve Corps have formed to aid in emergency responses and contribute to community health maintenance.

Providing medical aid as a provider is appreciated, but there are a few caveats to consider before embarking on this form of aid. ACEP recommends all efforts to be coordinated with the jurisdiction's Incident Command System (ICS). Responding teams should expect to be self-sufficient for at least 3 days, providing their own food, water, shelter, and fuel. Most organizations advise against unofficial deployments (also known as freelancing), as stranded volunteers can contribute to the burden of care and can get seriously hurt themselves. Personnel should also be prepared to work under stressful conditions, with minimalistic accommodations, compromised sanitation, and limited electrical and running water access. Volunteers need to be up to date on immunizations prior to deployment, and have adequate supplies of daily

medications including extra prescription lenses if needed. While items like hand sanitizer, sun protection and insect repellent may seem like a no-brainer, keep in mind that after flooding and hurricanes one of the biggest concerns is the spread of insect and water-borne illness.

There are numerous organizations that are well known and frequently respond to disaster situations. Some such groups are: Doctors Without Borders (Medecins Sans Frontieres) operates primarily as an international relief organization. Their president Dr. Joanne Liu is a Pediatric Emergency Physician who completed her PEM fellowship here in New York. In the recruitment area of their website, they do indicate that new recruits are requested to pledge 9-12 months of service.

AmeriCares is a volunteer organization whose relief efforts and physicians were recently showcased in a *New York Times* article regarding their medical relief efforts in Puerto Rico. Their website offers opportunities for cash donations as well as volunteers. Their efforts are international, and long-term contributions are sought.

Project Hope is an international relief organization founded in 1958. They are actively recruiting and do indicate a need for emergency physicians in the immediate relief effort to Puerto Rico.

The Disaster Medical Assistance Team (DMAT) is a regional response team made up of individuals of several disciplines to respond on an emergency basis. DMATs are part of the National Disaster Medical System (NDMS) under the Department of Health and Human Services. DMAT members are intermittent federal employees while deployed and work under federal government rules and benefits such as federal torts. DMAT teams may be called upon to respond to help hospitals and healthcare facilities, support medical sites and shelters, or may provide immunizations in an outbreak, or standby at a major event. The mission of the DMAT is to provide expert patient care protecting patient health and promoting national health security. This system is federal government based, requiring an extensive background check and credentialing, as well as completion of online training materials. My DMAT team is currently scheduled for deployment at the end of the month, and I will report back afterwards. Physicians and medical personnel interested in joining a DMAT should apply at www.usajobs.gov.

In summary, despite that we emergency physicians frequently work under less than ideal circumstances, and are at the center of community health crises when they happen, the disaster response will be a new experience to many of us. The greatest issues that many of the disaster victims face right now are resources: so once more, be generous, money, food and clothing drives, and blood donations are all essential to the recovery effort. If you choose to respond as a volunteer, be prepared, plan in advance, and consider long-term involvement with an aid organization.

Resources

- 1) Project Hope: www.projecthope.org
- 2) AmeriCares: www.americares.org
- 3) American Red Cross: www.redcross.org
- 4) Doctors Without Borders (Medicins sans Frontieres): <http://www.doctorswithoutborders.org/>
- 5) Greater New York Hospital Association: www.gnyha.org
- 6) Medical Reserve Corps: <https://mrc.hhs.gov/>
- 7) DMAT / NDMS: www.usajobs.gov

PEDIATRICS



Denis R. Pauzé, MD FACEP
 Vice Chairman Operations and Associate
 Professor of Emergency Medicine and Pediatrics
 Department of Emergency Medicine
 Albany Medical Center

Dentures, Tourniquets and Near Misses

Vignettes

A 14-year-old male arrives with an anaphylactic reaction to peanuts. He presents with stridor, labored breathing, diffuse wheezing, and is covered in hives. You order IV steroids, IV benadryl, and IM epinephrine. Two minutes later, as you peer up onto the monitor, you see a lengthy run of ventricular tachycardia. Your knees start to buckle. “What’s going on?” The nurse replies that the epinephrine was mistakenly given intravenously.

You finish procedural sedation with ketamine for a two year old girl with a significant lip and facial laceration. You are “completely psyched” on how well the repair went, and you didn’t even need to call Plastics. As the child is coming out of sedation, you walk outside the room and tell the parents that everything went well. “She did great. No complications to the sedation. The laceration came together very nicely.” The mother is happy, and then asks you “what about the other laceration, the large one behind her left leg..... was that one difficult to repair?” You cringe, as you did not see it or know about it...you were anchored and only focused on her facial laceration.....

You see a 12-year-old male with a rather significant ATV accident. You decided to order a Head CT, as he is a multi-trauma patient

with a GCS of 13. As you click on the patient’s name, you turn away for a moment to speak with a colleague. At that point, your electronic medical records tracker board refreshes, landing you on another patient, a two year old with a cold and runny nose. Unknowingly, you order a Head CT on this two year old patient. 45 minutes later, the CT tech asks you why you are ordering a Head CT on a child with a cold....

Articles

Have you ever had a near miss in EM? Ever have a nurse or tech or family member save you and the patient from a mistake? Ever seen a mistake that almost caused significant harm? I am sure most of us have. Emergency Medicine is one of the most humbling jobs..... chaotic, overcrowded, and fast paced. We are often asked to make decisions with incomplete or inadequate information. It is the environment we live in.

Table 1 lists just a few articles on errors and pediatric safety events; errors in radiology, pharmacy, communication, procedures, and cardiac arrest, just to name a few. If you think about it, nearly every patient encounter is at risk for an adverse event, error, or a near miss. Nearly every patient encounter!

Table 1

Article	Journal & Date	Authors	Hypothesis	Finding
Errors in a Busy Emergency Department.	Annals of Emergency Medicine. September 2003	Fordyce J, Blank FS, et. al.	Prospective observational study looked at errors in a busy ED. Over a 7 day period, they looked at 1,935 patient encounters. All staff (Providers, Nurses, Clerical, Techs etc.) were asked about errors during their shift. If they saw or knew of an error, they completed an error report.	*346 errors. *Categorized errors as 22% diagnostic studies, 16% administrative procedures, 16% pharmacotherapy, 13% documentation, 12% communication, 11% environmental, and 9% other. *18 errors per every 100 patients treated. 2% of these errors resulted in adverse events.
Safety Events in Pediatric Out-of-Hospital Cardiac Arrest.	Am J Emergency Medicine. August 2017	Hensen M, Eriksson C et. al.	This study looked at patient safety events during out of hospital pediatric cardiac arrest.	Of the 497 critical transports they reviewed, 35 cases were cardiac arrest cases. Of these 35, 87% had a safety event identified, including epinephrine overdoses, medication errors and airway management errors.
Radiology Safety Events within a Pediatric Emergency Medicine Network.	Pediatric Emergency Care. February 2017	Blumberg SM, Mahajan PV et. al;	Evaluation of radiographic errors.	Radiographic errors included changed read, delay in testing, wrong test, wrong patient, wrong site and excess exposure to radiation.
Pediatric Weight Errors and Resultant Medication Dosing Errors in the Emergency Department.	Pediatric Emergency Care. October 2017	Hirata KM, Kang AH et. al.	Looked at weight errors in children < 5 years of age.	0.63% weight errors found among three emergency departments; weight errors led to medication dosing errors 34% of the time.

PEDIATRICS

Another Frightening Near Miss

One of the most frightening near misses I have ever heard of happened several years ago. An elderly gentleman was brought in from the Nursing Home with respiratory distress. He was gasping for air... choking...hypoxic... sats in the low 80's.

"Doctor, he has a DNR/DNI" the nurse stated, as they went through the medical notebook sent in from the Nursing Home.

"OK. Sir, we are going to keep you as comfortable as possible" the EM physician replied. Oxygen, labs and a portable chest x-ray were ordered.

Shortly after, the doctor received a call from a family member, the patient's son, who just happened to also be an EM Doc! The conversation went something like this...

EM Doc 1: "Your father is sick. He is hypoxic, sats in the 80's... he is not looking well. Maybe pneumonia or potentially his COPD. "

Son (EM Doc 2): Ok, does he need to be intubated?

EM Doc 1: As you know, he has a DNR/DNI, so we are giving him oxygen. I have ordered some labs and a chest x-ray, and maybe we can start some Bipap. Steroids, Nebs, and

Son interrupts. "WHAT? HE IS NOT A DNR! HE IS NOT A DNR! HE IS A FULL CODE!!! WHY DO YOU THINK HE IS A DNR? HE IS NOT A DNR!!!!"

The EM Doc taking care of the patient ran back into the patient's room and took a closer look at the enclosed DNR form. What he saw shocked him.....It was another patient's DNR form! Another patient's DNR form was inside his patient's medical binder!!! The patient he was taking care of was a full code, did not have a DNR/DNI, and was choking and gasping for air.....

"They put someone else's DNR form in your father's medical book. I am so sorry. Let me go help him, I will call you back!"

The emergency department staff frantically ran back into the room and subsequently performed RSI. It was a tense situation as the patient was hypoxic and bagging wouldn't lift his sats up. The EM Doc then decided to intubate with sats in the 60's.....

At the bottom of the pharynx was a set of dentures causing a partial airway obstruction. The dentures were removed. The patient ended up okay. A potentially disastrous and catastrophic outcome was avoided.

A near miss.

The Tourniquet

We all have near misses. Some we talk about and cringe as to what could have happened. I think these are important to share as we can learn from them. They help us become better doctors. Here is mine.

It was a typical busy chaotic day. Patients everywhere. In the midst of all this busyness was a young autistic boy brought in for penile swelling. His symptoms were one day in duration, with no associated fever, vomiting, pain, or reported trauma. No history of UTIs. The mother thought he was circumcised, but she was not completely sure. (I didn't understand this either, but that is what I was told). Prior to the physical exam, his mother told me that it will be difficult to examine him, and "you will have to hold him down or knock him out..... he doesn't like doctors or being in the hospi-

tal...it makes him very anxious...too many needles in the past." I certainly didn't want to sedate him, although I considered intranasal midazolam, but thought that would be too much. I decided to try and get a quick exam, with a nurse and a tech in the room to help. After all, how tough could it be? His examination revealed a circumcised penis. The penile shaft was normal, but the glans was swollen. It was not erythematous or discolored. There was no rash or signs of trauma. There was no blood at the meatus. Other than the swelling, everything appeared normal.

Unfortunately, this was a very, very, very brief exam, as the child was screaming, crying, and kept moving around. The mother was right (as they always are).

"Other than the swelling, I don't see anything obvious. But I will check a urine sample and come back and chat with you." I said.

I only had a brief...very brief exam. Seeing only edema, without any other clinical findings, I ordered a urine. But I wasn't quite sure what was going on. So some time went by, and more than two hours later the urine results came back and were normal. Shortly after, the mother came out of the room and asked what was going on. "Do you have an answer? Are the results back yet? What are we waiting for? We are ready to leave, and we can follow up with our pediatrician tomorrow." I contemplated what to do next. I was not quite sure what was causing the swelling. Should I send them home? Refer to the PMD? Send them to pediatric urology? My inner ED voice kept telling me that something was wrong --- but admittedly, I wasn't quite sure what I was really missing. There was just isolated edema, and no evidence of paraphimosis, trauma or infection. The child was comfortable and in no pain. But I knew my exam was too brief. I could easily discharge, and they can get follow up..... but...I only had a brief exam. Maybe I should do another? My inner ED voice told me I would worry about this if I didn't look further. Subsequently, I went back into the room and asked the mother if we could do another exam, as the first one was very brief and I wanted to be complete and thorough. I brought in more help, and this time we played a cartoon for him on one of our electrical devices. It was a great distraction!

Upon closer exam.....What's that?!?! Hidden underneath the swelling was a piece of string or yarn or something....it was a tourniquet, a penile tourniquet! I didn't see it the first time!!!

A near miss.

The ED is busy, overcrowded and often times chaotic. It is fast paced. Near misses are all around us, especially in children. Every patient encounter represents a potential near miss or adverse event. Wrong patient orders, wrong site radiographs. Drug-drug interactions. Weight errors. Anchoring. Think about the number of decisions you make during a shift. Hundreds and hundreds and hundreds. If the swiss cheese aligns, a (major) mistake could happen. Listen to your staff, your colleagues and the patient. When things don't add up, think about starting over again, gather more history or perform a repeat exam. And, most importantly, always listen to your "Inner ED Voice".

It is rarely wrong...

ASK THE EXPERTS



Peter Viccellio, MD FACEP

Vice Chair, Department of Emergency Medicine
Associate Chief Medical Officer
Stony Brook School of Medicine

I had the opportunity to speak with Dr. Peter Viccellio on the topic of Emergency Department (ED) crowding. Dr. Viccellio is the foremost expert on this topic and a pioneer in ED and hospital throughput.

Dr. Viccellio is faculty at Stony Brook School of Medicine where he is the Vice Chairman of the Department of Emergency Medicine and Associate Chief Medical Officer. He has a passion for process improvement impacting patient flow, patient safety, length of stay and patient satisfaction. Dr. Viccellio has implemented several data driven and data proven processes that improve not only ED functionality, but that of the hospital as a whole. The tenets of his work are described here.

I began the interview with an open-ended question, asking about his background and history with ED crowding. Due to Dr. Viccellio's vast knowledge and expertise on the topic, my one question lead to a comprehensive explanation.

“From the first day I worked in an ED, in the early 1980s, crowding was always a problem. We were an adolescent group within domain of medicine and we wanted to blame our patients instead of the system. But frankly, no one knew what to do about the system at that time. The feeling was that there were just too many patients coming, and little could be done. Our reaction was to blame the patient instead of the system.

But crowding is not because of too many sprained ankles or paper cuts, but because we have too many sick patients, and we had outgrown what our facilities can provide. So within that context we came up with a program called the Full Capacity Protocol (FCP) whereby we would move some of the admissions from our hallways to hallways on the floors, and redistribute the problem. The other thing we pushed for was not to call it ED crowding. This is simply because although the crowding is located in the ED, it is not actually an ED problem. It is an institutional problem where we experience the brunt of it”

“The Full Capacity Program got a lot of traction because no one came up with any other clear ideas of how to fix crowding. In the past 10 years I think it has become clear that there are some solutions to crowding that actually fix the problem, and they fix it in a way that does not cost money, or require more staff, and does not require more beds. There are three interventions that have been described that have had a dramatic impact on hospital capacity. In a way all have to do with smoothing; using simple math and queueing theory.”

The First Intervention: Smoothing of Electives

“If you look at admissions from the ED, there are about the same number every day with minor fluctuations. Overall it's pretty smooth. You know next Tuesday roughly how many admissions you will have; you will have 60, maybe 50, maybe 70. But its not 200, and its not 3. So we know that and can predict that.

If you look at elective admissions there are a huge variations. They tend to flood into the hospital on Monday and Tuesdays, much less



Interviewed By: Nicole Berwald, MD FACEP
Associate Chair, Department of Emergency Medicine
Staten Island University Hospital

later in the week, and virtually nothing on the weekends. So why is that important? It's not so much what is going on in the operating rooms, but where those patients go afterwards. If you have a huge influx of operative cases that are going to have to go to the ICUs you know the ED is competing for those ICU beds, as well as patients on the floor who get worse. Now people have to make very difficult decisions and sometimes not transferring patients to the ICUs because of bed availability when the patient would be far better off.

Places who have done elective smoothing – the same number of people come in Monday through Friday, and is smoothed to destination - same number of people will need floor beds, ICU beds, etc, have dramatically reduced or even eliminated boarding.”

Dr. Viccellio noted that the results not only showed benefits to the patients, but the staff, overall flow and translated into millions of dollars to institutional bottom lines. He commented that in one institution where the surgeons resisted it, there were 770 cancelled or rescheduled cases the year prior to smoothing and only six the year after. Ultimately the benefits were to the patients, surgeons and the staff. The effect was eliminating overtime on Mondays and Tuesday, not running the OR until midnight, and improved utilization later in the week.

The Second Intervention: Value of Early Discharges

“There is a fair amount of literature that states early discharges of patients will improve the overall length of stay (LOS) for admissions. Studies show that if you board patients in the ED their LOS increases by about a day. We found that with the Full Capacity Protocol, when we moved patients upstairs it actually reversed; it reduced their LOS by about one day. One institution found that patients who made it to the floor after noon, independent of their diagnosis, had an average LOS of a half-day longer than if they made it up before noon.

So early discharge matters. Let's imagine what happens when you discharge before noon. First, for the patient leaving: If they have a problem with the pharmacy or a follow up appointment, the doctor is still there. They can make a phone call and fix it. But if they are going home in the evening it disrupts that process because now if they call no one knows who they are.

For the patient going upstairs, they are getting roughly the same treatment they were getting in the ED, but they get more expanded care. They see social work and physical therapy, and other downstream services get ordered that day instead of the next day. And that is probably what attributes to the LOS.”

The Third Intervention: Weekend Discharges

“The third is weekend discharges. In NYS we have about half the number of discharges on the weekends as we have on weekdays. The average LOS of patients discharged on a Saturday is approximately four days. If we look at those discharged on a Monday, it's 6.3 days. That's the weekend effect.

ASK THE EXPERTS

If you increased the number of discharges on weekends you have a great opportunity to increase your capacity. At one New York City hospital they worked to increase weekend discharges in the setting of boarding 20-30 patients in their ED every day. At the end of six months of their efforts there was essentially no more boarding in the ED. In fact they were able to close a 30-bed unit because they didn't need it due to their improved capacity. And it represented an approximate 70 million dollar savings to the institution."

The Bottom Line

"You have three big things: Elective smoothing, early discharges and enhancing weekend discharges. These not only help with boarding of patients, but for many institutions can eliminate it. Overall the way I see it is if you have a small problem, if you have 5-10 patients boarding, the full capacity protocol will probably address your needs. But if you have a much more dramatic issue you need to look at these three major interventions to address the problem.

None are easy. And it's not easy because it requires people to work differently than they are used to, and change is always hard, even if it's for the better. But if they do work differently their job becomes easier. They have fewer patients to care for, a smaller census. The nurses have a smaller load, they have better staffing ratios and the patients have a shorter length of stay. If you get over the hump, the change will improve capacity, patient safety, staff satisfaction and the hospital's finances.

Places that have been successful at doing this have been successful because the leadership said we are going to do it.

Interviewer: If you had to pick one of these interventions to start with, which one would you suggest?

Dr. Viccellio: That is somewhat an institutional decision, and the important thing is that they [hospital administration] pick it. It seems that opportunities abound from any of the three. If you are holding 40 or 50 patients, then maybe you need two of the three, but if at your institution 90% of the admissions are from the ED, elective scheduling may not make that much of a difference. You should be able to use simple math to figure out where your big opportunities are. Everyone would get big returns from early discharges. And my guess is that everyone would get big returns from enhanced weekend discharges as well.

Interviewer: How did you determine who to enroll in the Full Capacity Protocol?

Dr. Viccellio: Lower acuity patients, no ICU patients are put in the hallways, but a lot of the floor patients who are sitting in our hallway can just as well sit in a hallway upstairs. And when they do they will have better nurse to patient ratios and get more attention. They will be in a quieter space. When we did a patient preference survey, 87% of patients preferred being upstairs.

Interviewer: Did you exclude patients who require a monitor?

Dr. Viccellio: No. Our most common patient was a telemetry patient. You just have to address a few things. You need to have wireless telemetry, privacy screens, a call bell (which can be wireless), and identify which bathroom they will use.

Interviewer: You mentioned the Full Capacity Protocol was done in conjunction with the New York State Department of Health. Were there other agencies you had to get onboard, the Joint Commission for example?

Dr. Viccellio: "It was done with the sanction of the New York State Department of Health"... "The Joint Commission has been to our place and we have had numerous visits from the Joint Commission over the years, and in fact they sent a research team here to study the Full Capacity Protocol."

Interviewer: Regarding the weekend discharge initiative, was there push back from services that felt they couldn't make an impact on the weekend? For example the ability to interact with the nursing homes, or visiting nurse services?

Dr. Viccellio: One of the things to track is the percentage of patients discharged to home because that wipes out a lot of those excuses of it's the nursing home's fault, it's the ambulance's fault, etc.

We met with nursing homes and confirmed that they are happy to take patients on the weekends. There are insurance issues you have to take care of during the week, but places have been successful in this.

They are driven by the decision that we are going to get better at this, and this is our target: Not "we are going to improve early discharges", but "we are going to move the number to 40%", not "we are going to improve the number of discharges on Saturday and Sunday", but rather "we are going to increase the number of discharges by 20". You have to have a clear target and a timeline to meet that target. That seems to be the formula for success.

Interviewer: With respect to smoothing, would you start with the departments, or go straight to hospital administration?

Dr. Viccellio: I think ultimately it has to come from hospital administration. There are a few things that I think are important and ought to be made clear:

- 1) This is not an ED problem, and you are not doing this to fix the ED. This is an institutional problem, and it is costing a huge amount of money to not change it.
- 2) People die from this. It's not just they might die from this, it is they are dying from this.
- 3) There are clear solutions for this. I understand they are very difficult to implement but the rewards are across the board, for the physicians, the staff, the patients and the finances of the hospital.

There are very few things you can do in process improvement that do not in some way have a cost, ask people to work harder or to work faster. These things are systems improvements that make the job easier for everyone, save money, improve patient safety and satisfaction.

Final Words of Wisdom

"There is one other specific thing that I think is very important. We are all engaged in process improvement and we look for opportunities to make things better. But if your focus is on the small links in the chain and not on the big obstruction, then all of your efforts are for naught. We can see patients more quickly, we can admit them more quickly, but if there are no beds they just sit in the ED and we haven't accomplish anything. Finally, two things are true. First, these solutions work. Second, there really aren't other solutions out there to fix this that don't require more beds, more staff, and more cost."

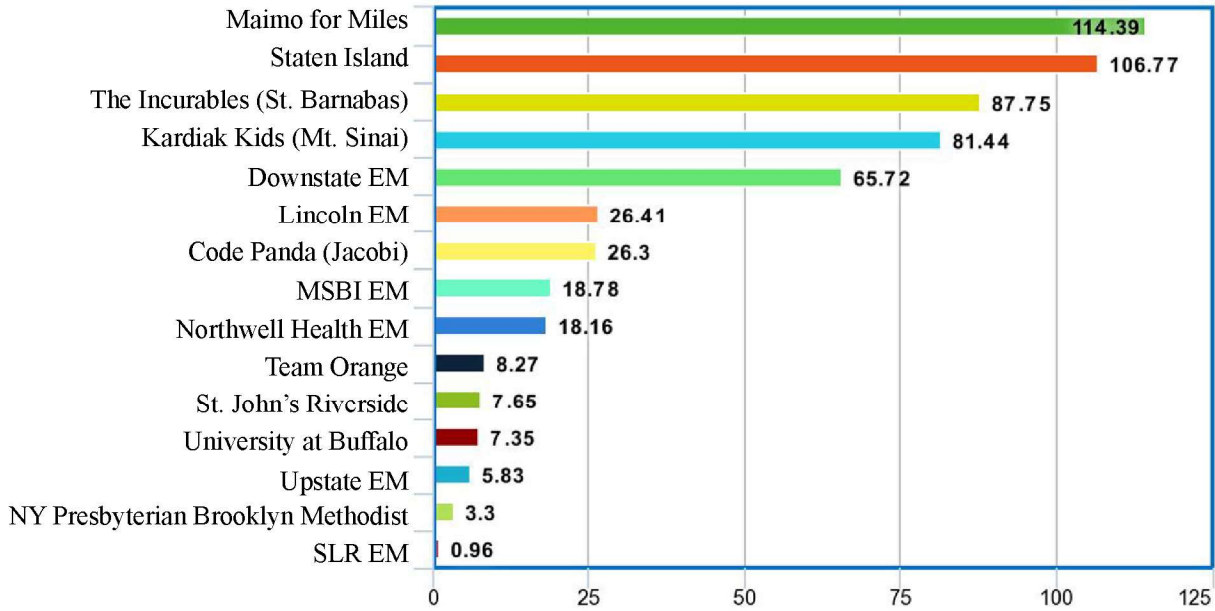
Dr. Viccellio acknowledges that change is not easy, but many institutions have instituted his concepts with significant success and you can too.

EM DAY OF SERVICE

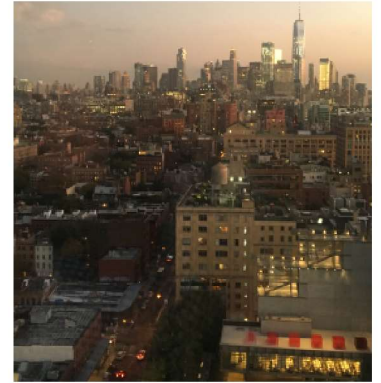
EM Day of Service: September 27, 2017

This year, New York ACEP teamed up with the Charity Miles App for the EM Day of Service. Sixteen residency programs from all over the state competed to see which program could raise the most money for charity.

The teams completed 579 miles and raised \$144 for Stand Up To Cancer. Maimonides took top honors completing 114.39 miles.



St. Barnabas residents walked around NYC and took pictures along the way.



23 St. John's Riverside Charity Miles Challenge participants.



Trent She, MD adding some miles for his team on a late night East River run



Joshua Nogar, MD

Assistant Professor, Department of Emergency Medicine
Fellowship Director, Medical Toxicology
Northwell Health, NSUH/LIJ
Hofstra NSUH/LIJ School of Medicine

Bupropion

Case

A 14 year-old female with a history of depression, presented to an outside emergency department after being found face down with abrasions to her face. She reports an ingestion of 90 tablets of 300 mg bupropion XR. Vital signs: Temp 36.9, HR 102, BP 112/52, 99% on RA. The patient exhibited sinus tachycardia with a QRS of 108 ms, and QTc 501 ms; (Fig 1) she experienced 3 tonic-clonic-like events and was intubated. She received activated charcoal and was transferred to a tertiary facility for further management. Approximately 24 hours after the ingestion, she arrived to the tertiary center on propofol and epinephrine infusions for seizure control and blood pressure support, respectively. Her ECG demonstrated a QRS of 130 ms, and QTc of 700 ms. (Fig 2) Whole bowel irrigation at 2L/hr was administered, as well as multiple boluses of sodium bicarbonate without any further QRS or QTc prolongation. The patient's hemodynamics stabilized approximately 36 hours after the ingestion, and vasopressors were weaned. The propofol was discontinued as well, but her neurologic exam was concerning for absent brainstem reflexes and non-reactive, dilated pupils. Her head CT was unremarkable.

Figure 1

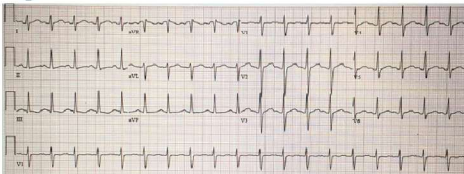
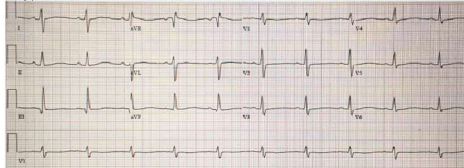


Figure 2



Drug Characteristics & Toxicity

Bupropion is a dopamine/norepinephrine reuptake inhibitor that is typically prescribed for the treatment of major depression. It is the only new generation antidepressant available in the US that does not have appreciable serotonergic activity. It is structurally similar to amphetamine, and in overdose exerts toxicity that can manifest as tachycardia, hypertension,

agitation, hallucinations, seizures, prolonged QTc and QRS intervals on ECG, as well as cardiovascular collapse in large overdoses. Ingestions over 1.5 gm have been associated with QRS and QTc interval prolongation, however, antimuscarinic sinus tachycardia is the most common ECG finding¹. It does not have a favorable dialysis profile: Volume of distribution = 1.6-3.2 L/kg, highly protein bound, & Molecular Weight ~ 250 Da; ideal characteristics of dialyzable drug: Vd < 1L/kg, low protein binding, and MW < 500 Da.

Bupropion & Seizures

The immediate-release preparation was temporarily removed from the market by the FDA from 1986-1989, on account of its dose-dependent pro-convulsive property. The rate of seizure with the IR preparation is estimated at 0.4% for doses 300-400mg/day, while the rate is 2.8% in patients taking 600-900 mg/day. In overdose situations, the rate of seizures has been reported to be as high as 31%.² Although agitation, sinus tachycardia, tremor, or hallucinations indicate an increased risk for seizures, asymptomatic patients who present to the ED > 8 hrs after overdosing have gone on to develop delayed seizures.

Most bupropion overdoses are ingestions, but nasal insufflation of crushed pills has been described with subsequent rapid-onset toxicity. The clinical effects are well-known to manifest as agitation, hallucinations, hypotension, or status epilepticus. Rarely, after very large overdoses, coma with fixed and dilated pupils has been described. EEG recordings during the latter syndrome can demonstrate a pattern of burst-suppression, which is similar to that seen in an anesthesia-like state.³

Management

The management of bupropion overdoses necessitates a stepwise approach. Historical features of the exposure can offer invaluable predictors of the patient's clinical trajectory. The time of exposure, route (crushed/insufflated/injected), quantity (determined from a pill count, if possible), and type of preparation (IR, SR, XR) can all help the provider determine if severe toxicity is expected. However, these data are frequently unavailable, and the clinician must rely on frequent reassessments to identify early toxicity. IV access, ECG, labs

(basic chemistry, anion gap, acetaminophen level, lactate), and serial vitals are indicated. Late toxicity is very difficult to predict, and a 16-24 hr observation period is recommended.

GI Decontamination

Extended release bupropion ingestions typically require 16-24 hour observation due to the risk of delayed toxicity. It is worthwhile to consider GI decontamination after bupropion overdoses in the form of whole-bowel irrigation and/or gastric lavage. Caution should be exercised whenever administering activated charcoal to anyone at risk for seizure activity. In general, gastric lavage should not be routinely utilized to decontaminate patients. Consultation with a medical toxicologist or Poison Control Center is recommended if considering this procedure.

Case Resolution

The patient remained intubated without any sedation or vasopressor support for the next three days. On hospital day four, she began to withdraw from painful stimuli, and was eventually extubated on hospital day five. Brain MRI was unremarkable, and she was discharged to inpatient psychiatry on hospital day six neurologically intact.

Conclusion

Bupropion overdoses pose a unique problem to providers in that it is difficult to predict which patients will develop toxicity, specifically seizures. Given the high incidence and delayed pattern of seizure activity after overdoses, a 24-hour observation period is warranted with serial exams and ECGs. Massive overdoses can mimic a coma-like state with absent brainstem reflexes, which may persist for several days until the patient clears the drug and its metabolites.

References

- 1) Paris PA, Saucier JR. ECG conduction delays associated with massive bupropion overdose. *Journal of Toxicol Clin Toxicol.* 1998; 36:595-8.
- 2) Sheridan DC, Lin A, Horowitz Z. Suicidal bupropion ingestions in adolescents: increased morbidity compared with other antidepressants. *Clinical Toxicology.* 2017; Sep 25:1-5.
- 3) Noda AH, Schu U, Mier T, Knake S, Rosenow F. Epileptic seizures, coma, and EEG burst-suppression from suicidal bupropion intoxication. *Epileptic Disorders.* 2017; 19 (1): 109-113.

ALBANY UPDATE



Reid, McNally & Savage

New York ACEP Legislative & Regulatory Representatives

2017 Legislative Session Update

The Legislature completed the 2017 Legislative Session June 29, 2017. There is a strong chance that they will reconvene for a Special Session prior to end of this year due to cuts to the Medicaid Disproportionate Share Hospital Program. The cuts total more than \$329 million over the next 12 months, and \$2 billion by 2025. Governor Cuomo has stated publicly that if the reductions are not delayed it will be “mathematically impossible” for the State to fill the financial gap.

2018 State Elections

Next year on Tuesday, November 6, all 213 State legislators are up for re-election for another two-year term. The Democrats are expected to hold their super majority in the Assembly.

In the Senate, the Republicans hold a one-seat majority in a house of 63 members with the assistance of one Democrat, Simcha Felder, who caucuses with the Republicans and an alliance with the eight-member Independent Democratic Caucus.

The “mainline” Senate Democrats are mounting an aggressive effort to take over the majority in 2018. Their efforts are complicated by the departure of two Democratic senators, Ruben Diaz, Sr. and George Latimer, who are leaving the Senate for other opportunities. It is not clear whether the Senators will leave their posts this year or in January 2018. Once they vacate their seats, this will trigger a special election which is called by the will of the Governor followed by a second run in November 2018.

2018 State Budget Outlook

New York State’s latest financial plan projects a \$4 billion deficit for the coming year-even without major federal changes to health care or education funding. The deficit is attributable to lower personnel income tax collections which account for nearly a third of the State’s total revenue.

As noted earlier, possible federal cuts to the Medicaid Disproportionate Share Hospital program which have been scheduled but repeatedly delayed since 2014 will compound the deficit. The State also faces significant new costs next year and in future years for new programs such as the Excelsior program which will cost \$732 million by 2021 to subsidize college tuition for students at public universities.

The Governor’s 2018-19 State Budget will be released in early January with a State Constitutional deadline for passage of April 1, 2018.

Date of Discovery Bill Awaits Action by Governor Cuomo

Legislation (S6800 DeFranciso/A8516 Weinstein) to change the statute of limitations for negligent failure to diagnose cancer or a malignant tumor from two-and half years to the date of discovery passed both houses of the Legislature this year but has not yet been transmitted to the Governor by the Legislature. The bill must be transmitted to the Governor before December 31, 2017. Once it is transmitted, the Governor has 10 days, excluding Sundays, to sign or veto the bill.

New York ACEP worked this year and in previous years to defeat regressive liability legislation. Once the bill is on the Governor’s desk, New York ACEP members will receive an Action Alert to call the Governor and urge him to veto the bill.

Off Campus Emergency Departments

On October 10, 2017, the Department of Health (DOH) held a meeting of the Off-Campus Emergency Departments (OCEDs) Working Group as a part of their Regulatory Modernization Initiative. The working group focused on issues relating to certificate of need, ensuring sustainability of OCEDs and determining whether non-hospital affiliated EDs should be able to operate in the State.

Currently, proposals for OCEDs are reviewed by DOH on a case-by-case basis and only those affiliated or owned by a hospital within 35 miles are approved for operations. The group determined that only hospital-affiliated OCEDs should continue to be allowed to operate in the State of New York and DOH should not approve any independent EDs, as they are not required to adhere to the same set of standards as hospital EDs. No conclusion was reached on the development of a statewide certificate of need, however, it was noted that hospital EDs should not be faced with unnecessary competition from OCEDs.

The group did not reach a definitive outcome on any new regulations, however DOH will be making recommendations to the members of the Work Group to determine whether it will be necessary to meet again. As the Department forms their recommendations, New York ACEP submitted a written statement to the Wor Group for consideration. The written statement includes the following recommendations that all free standing emergency departments should:

- Be available to the public 24 hours a day, seven days a week, 365 days per year.
- Be staffed by appropriately qualified emergency physicians.
- Have adequate medical and nursing personnel qualified in emergency care to meet the written emergency procedures and needs anticipated by the facility.
- Be staffed at all times by a registered nurse (RN) with a minimum requirement of current certification in advanced cardiac life support and pediatric advanced life support.
- Have policy agreements and procedures in place to provide effective and efficient transfer to a higher level of care if needed (i.e. cath labs, surgery, ICU).

**New York ACEP 2018 Lobby Day
Tuesday March 13**

New York ACEP Board members, Government Affairs Committee members and residents will travel to Albany, New York Tuesday, March 13, 2018 to meet with state legislators and Governor Andrew Cuomo staff to discuss the State budget and other issues.

With the deadline for passage of the State Budget April 1, 2018, Reid, McNally & Savage and New York ACEP will press elect-

ed officials and policy makers to preserve and protect the emergency services safety net. A proposal that we battled last year to reduce total annual Medicaid expenditures for emergency services by \$25 million through the reduction of “avoidable” emergency visits could resurface. Misguided proposals aimed at stemming the opioid crisis will likely be under discussion again, including eliminating the exemption to consult the Prescription Monitoring Program (PMP) in a hospital emergency department when a

prescription for a controlled substance does not exceed five days, and requiring every practitioner in the ED to notify a patient’s prescriber when there has been an overdose.

The work of New York ACEP in Albany is amplified by the participation of members at the local level who respond to Action Alerts to call and meet with legislators and their staff on key issues. Thank you for your past efforts. Please know that your voice does make a difference in Albany.

Calendar

December 2017

- 6 Emergency Medicine Resident Committee Conference Call, 2:00 pm
- 13 Education Committee Conference Call, 2:45 pm
- 13 Professional Development Conference Call, 3:30 pm
- 14 Practice Management Conference Call, 1:00 pm
- 20 Government Affairs Conference Call, 11:00 am
- 20 Research Committee Conference Call, 3:00 pm
- 21 EMS Committee Conference Call, 2:30 pm

January 2018

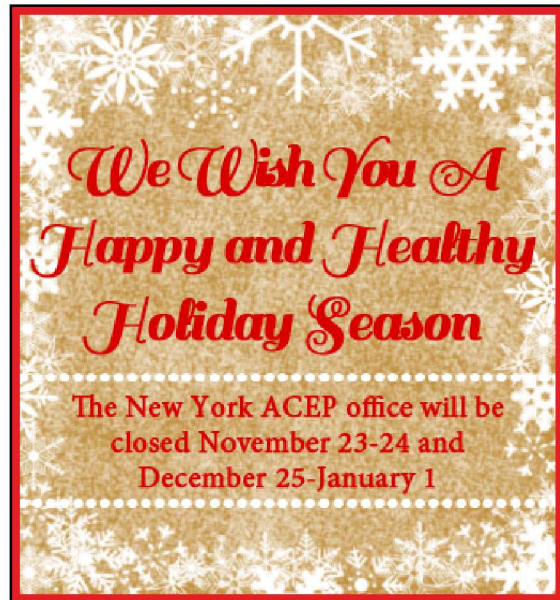
- 3 Emergency Medicine Resident Committee Conference Call, 2:00 pm
- 10 Education Committee Conference Call, 2:45 pm
- 10 Professional Development Conference Call, 3:30 pm
- 11 Practice Management Conference Call, 1:00 pm
- 17 Government Affairs Conference Call, 11:00 am
- 17 Research Committee Conference Call, 3:00 pm
- 18 EMS Committee Conference Call, 2:30 pm

February 2018

- 7 Emergency Medicine Resident Committee Conference Call, 2:00 pm
- 8 Practice Management Conference Call, 1:00 pm
- 14 Education Committee Conference Call, 2:45 pm
- 14 Professional Development Conference Call, 3:30 pm
- 15 EMS Committee Conference Call, 2:30 pm
- 21 Government Affairs Conference Call, 11:00 am
- 21 Research Committee Conference Call, 3:00 pm

March 2018

- 7 Emergency Medicine Resident Committee Conference Call, 2:00 pm
- 8 Practice Management Conference Call, 1:00 pm
- 13 Lobby Day, 9:00 am-1:30 pm
- 13 Board of Directors Meeting, 1:30 pm-4:30 pm
- 14 Education Committee Conference Call, 2:45 pm
- 14 Professional Development Conference Call, 3:30 pm
- 15 EMS Committee Conference Call, 2:30 pm
- 21 Government Affairs Conference Call, 11:00 am
- 21 Research Committee Conference Call, 3:00 pm



Empire State EPIC

EMERGENCY PHYSICIANS' INTERIM COMMUNIQUE

of the New York American College of Emergency Physicians

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NEWS STAFF

JoAnne Tarantelli, Executive Director
Jessica Ireland, Communications and Marketing

New York American College of Emergency Physicians
1130 Crosspointe Lane, Suite 10B Webster, NY 14580-2986
p (585) 872-2417 f (585) 872-2419 www.nyacep.org

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