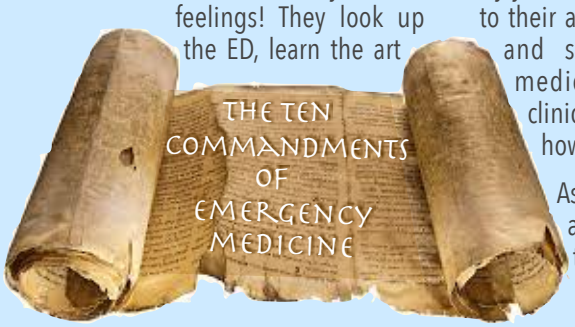
by Abena Akomeah, MD

THE INTERNS ARE HERE!

July is here along with our new interns! They don their long white coats, or the more contemporary equivalent, UMEM jackets, with the Hippocratic oath freshly imprinted on their minds as they walk the halls of the ED. They are ready. They are scared. They feel like imposters. They feel humbled by how much they don't know and overwhelmed by how much they yet have to learn. They are feeling all the feelings! They look up to their attending to interpret the chaos of the ED, learn the art and science of prioritizing various medical tasks, communicate with clinical staff and patients, and know how to act in different situations.



As we guide our new interns this academic year, let's take it back to the basics.

Here are **The 10 Commandments of Emergency Medicine,** written by Drs. Wrenn and Slovis (revised by Dr. Evans).

1. Secure the ABCs carefully
   a. Quickly assess the following: Is the airway intact? Are they handling secretions? Do you hear bilateral breath sounds? Any concern for respiratory failure? Is there a pulse? Is bleeding controlled? Are they in shock?
   b. Learn to quickly assess the ABCs and call in the calvary to assist in managing any threats to ABCs.
2. Remember naloxone, glucose & thiamine
   a. Your differential for AMS, especially in the setting of pinpoint pupils and respiratory depression, should include opioid overdose. Administer naloxone for significant respiratory depression.
   b. POC glucose should be in your workup for AMS and consider thiamine administration for malnourished patients such as those with alcohol abuse history.
3. Administer a pregnancy test
   a. Any woman of child bearing age with a uterus gets a pregnancy test, especially if presenting with abdominal and/or genitourinary complaints.
4. Don't send unstable patients to radiology…
   a. …but if you must, don't let them go alone

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The Interns Are Here! - continued from p. 1

5. Assume the worst case scenario

a. One of our jobs is to rule out life threatening diagnoses first. Broaden the differential and re-evaluate your patient for a possible missed diagnosis, especially if your initial diagnosis does not fit the clinical picture or if there is an unexpected deterioration.

b. Be careful with patient labels such as "frequent flyer" or "drug abuser", especially when the history and presentation is inconsistent with the label. They could have a true medical or traumatic illness!

6. Seek out the red flags

a. Notice and investigate abnormalities in vital signs and diagnostics

b. Evaluate for red flag signs, symptoms and history associated with the chief complaint.

7. Trust no one and believe nothing (not even the EMR)

a. Obtain your own medical history and verify with the patient what is in the electronic medical record.

b. Verify recommendations from consultants in the event of inconsistencies with guidelines. Don't blindly follow.

8. Learn from your mistakes

a. Mistakes will happen. Do not hide them. Be honest and discuss with your senior/attending to help identify the cause and to create an opportunity for learning. Identify ways to reduce/avoid errors as some may require department/system level interventions for risk mitigation

9. Do unto others as you would yourself and your family

a. All humans deserve respect and to be treated fairly with dignity.

b. Involve the patients in their own medical care and take into consideration how they would want to be treated, even if it is different from how you would treat your own family

c. Treat your coworkers and co-residents as you would your family, respecting how they want to be treated. They are crucial to your training.

10. When in doubt, act in your patient's best interest and safety.

a. Advocate for your patient's care. Your patients know themselves better than you do.

CLOT OVERLOAD:

Definition and Management of Submassive and Massive PE in the ED

by Stephanie Cardona, DO and Jessica Downing, MD

Submassive pulmonary embolism (PE) is defined by **signs of right ventricular (RV) strain in the setting of normal blood pressure (BP)**. RV strain is evidenced by lab biomarkers (BNP, troponin), ECHO findings (abnormal TAPSE, RV dilation, McConnell's sign), or CT findings (RV dilation). Mortality rates among patients with submassive PE range from 15-40%. To be considered "massive," a PE must cause hemodynamic instability **defined as SBP <90 mmHg for 15 mins, bradycardia, need for vasopressors, or cardiac arrest.**

Patients with submassive PE should be promptly anticoagulated with lovenox or heparin. The BOVA Score should be calculated to assess risk of decompensation, complications, and mortality. Patients in the intermediate and high risk BOVA categories, respectively, have an 18% and 42% risk of PE related complications including death. For these risk groups, the BOVA score can provide guidance on appropriate level of care and potential transfer to a tertiary care center facility for additional interventions alongside anticoagulation (e.g., ECMO, catheter-directed therapy, or surgical thrombectomy). Transfer should also be considered for lower-risk patients with absolute contraindications to anticoagulation. Recent studies have shown a potential short-term benefit associated with thrombolytics and pulmonary vasodilators (MOPETT trial, iNOPE trial), though the evidence is limited. Thrombolytics should be considered only in patients with high risk submassive PEs, for whom the risk of impending decompensation and potential arrest is thought to outweigh that of bleeding. This typically requires consultation with a PE response team and/or an intensivist. Patients with massive PE should be considered for emergent transfer to a tertiary care center for advanced care and interventions and treated with both heparin and thrombolytics. Thrombolytics are not a contraindication to ECMO or other subsequent interventions. **The patient's goals-of-care must be considered prior to tPA or any invasive treatments.**

EXTENDED BOVA SCORE

CALCULATION	INTERPRETATION		
HR > 109	1 point	1-2 points	Stage 1: Low Risk
SBP 90-99	2 points	3-5 points	Stage 2: Intermediate Risk
RV Dysfunction	2 points	6-10 points	Stage 3: High Risk
Elevated Troponin	2 points		
Lactate >2mg/dL	3 points		

PE CLASSIFICATION	SUBMASSIVE PE	MASSIVE PE
DEFINITION	RV strain, no HD compromise	HD compromise
RISK ASSESSMENT	PESI Score, BOVA Score	High Risk
ED TREATMENT	Heparin or lovenox	Heparin and thrombolytics
OTHER TREATMENT OPTIONS	Thrombolytics, pulmonary vasodilators	Pulmonary vasodilators, surgical therapies, catheter directed therapies, ECMO
DISPOSITION	Telemetry, IMC, or ICU based on risk stratification. Consider transfer to tertiary center for high risk patient	ICU, consider transfer to tertiary center

recognizing Human Trafficking in the Emergency Department

by Michele Callahan, MD

Human Trafficking *involves the use of force, fraud, or coercion to obtain some type of labor and/or commercial sex act.* It affects over 200 million people worldwide. One study found that only 4.8% of Emergency Department (ED) clinicians reported being confident in their ability to recognize a victim of human trafficking.

The most widely recognized form of human trafficking is sex trafficking, but it can take several forms. Traffickers maintain control over victims through physical, sexual, and emotional violence with manipulation. We are in a unique position as ED clinicians because victims of trafficking seek medical attention for the physical and psychological consequences of assault as well as neglected health conditions. If we don't consider trafficking in our differential, we won't be able to recognize it and offer help.

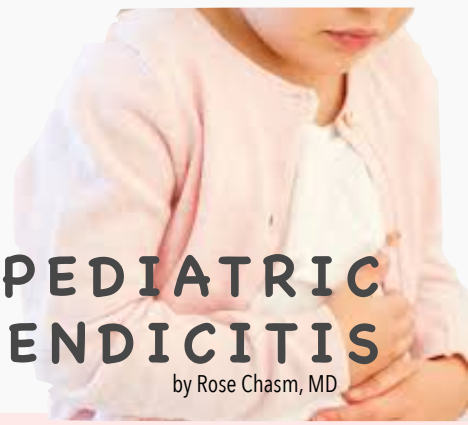
Although research is limited due to the insidious nature of trafficking, it has been reported that **up to 88% of trafficked persons seek medical care while being exploited and 63% of these do so in an Emergency Department.** Approximately 85% of confirmed sex trafficking victims are US citizens younger than 25.

Trafficking victims are unlikely to identify themselves as such due to fear of their captor, distrust of authority, unfamiliarity with the regional language and culture, and/or sense of shame about their situation.

Since Emergency Department clinicians are ideally situated to interact with these victims, we need to educate ourselves on the recognition of overt and subtle red flags and learn about options for intervention when it is suspected.

How can we identify these patients in the ED?

Common presenting complaints include multiple or recurrent sexually transmitted infections, frequent pregnancies, somatization symptoms (recurrent/chronic abdominal pain, headaches, backaches) and fatigue. Unfortunately, we see a large population of patients who present with these same complaints, so we must



PEDIATRIC APPENDICITIS

by Rose Chasm, MD

Appendicitis is the most common reason for emergent abdominal surgery in children. Despite its frequency, it still presents a diagnostic challenge, especially in children younger than five years of age and post-menarchal adolescent females due to nonspecific symptoms and other causes of abdominal pain leading to delayed diagnosis and advanced disease. Perforation is the most common complication, and it is directly related to duration of symptoms, occurring most commonly in neonates and children less than five years of age.

History and physical examination are key components to the diagnosis and have remained unchanged through the years. Diagnostic imaging, especially CT and US, have already been extensively reviewed in the literature. Our focus will be on recent and newer evaluation modalities.

LABORATORY VALUES

Labs have been helpful in diagnosing pediatric appendicitis, but are variable and nonspecific. **Elevations in the peripheral WBC count, ANC, and CRP levels are typical in children with appendicitis.**

WBC and ANC – **Either the WBC or the ANC is elevated in up to 96 percent of children with appendicitis.** It is nonspecific, as many other diseases that mimic appendicitis such as pelvic inflammatory disease and gastroenteritis also cause such elevations. *However, a normal WBC or ANC in children prior to surgery is associated with a negative appendectomy.*

CRP – Elevation of CRP is typical in children with appendicitis, but sensitivities and specificities are inconsistent and range widely. CRP is less sensitive when patients have had symptoms for less than 24 hours, but more sensitive than WBC for patients with symptoms for 24 to 48 hours. **When both CRP and WBC are elevated, specificity for appendicitis is approximately 90 percent, although sensitivity remains low at approximately 40 percent.**

Procalcitonin – While studies have shown procalcitonin levels (PCT) were higher in patients with definitive appendicitis, *WBC or CRP was better able to identify these patients compared to PCT.*

CLINICAL DECISION TOOLS

The four major validated, prospectively studied **clinical scoring systems** for the diagnosis of appendicitis include the *Pediatric Appendicitis Score (PAS),* the refined *Low-Risk Appendicitis Score,* the *Alvarado (or MANTRELS) score*, and the *Pediatric Appendicitis Risk Calculator (pARC).* These clinical scoring systems risk-stratify patients into groups that are at low, moderate, and high risk for appendicitis and provide a standardized approach to determine which patients warrant further investigation with diagnostic imaging or evaluation by surgery. Diagnostic imaging is associated with a lower negative appendectomy rate. Scoring systems, when used in isolation, cannot definitively make the diagnosis of appendicitis because none have shown improved diagnostic outcomes when compared to assessment by experienced physicians.

continued on p.4

THE 4X1:

Don't Drop the Stick

EMS communication & handoffs

by Karen Baker, MD

When receiving the baton, the focus is often on speed, but the desire to take the handoff expediently can end up with the baton getting dropped and kicked along the track instead. Even on the Olympic level, handoffs are rife with risk. Our critical patients undergo a continuum of handoffs:

911 → Dispatch → First Responder → ALS → ED → ICU

This high stakes game of telephone is prone to information attrition and these miscommunications can lead to medical errors and delay in appropriate care.

Enabling and empowering EMS to provide a clear, concise report shows respect for our EMS colleagues and better incorporates them into the care team while potentially improving information transfer.

MIST is a frequently used standardized handoff tool that applies to medical and trauma patients. Ideally, the report would be given prior to the patient being moved onto the hospital stretcher to decrease distractions and allow better attention, but this is frequently done concurrently because of patient acuity. Not all components are relevant or necessary for every patient. However, its consistent use can improve EMS delivery of pertinent information as well as the receiving teams' ability to retain such information.

Listen for the information:

M - Mechanism/Medical Complaint including some demographics and pertinent historical components.

I - Injuries/Illness findings on exam including EKG or stroke scale.

S - Signs and Symptoms includes your GCS and vitals, specifically the initial and lowest BP.

T - Treatments such as IVs, defib use, meds and splints.

Delivery of this report should be followed by the ability to ask questions as well as a written form of communication (MIEMSS short form should be handed to nursing during report if full online report is incomplete). Our ability to communicate effectively and professionally reflects upon our ability to work together for our patients' benefit.

In summary, pause. Give your attention. Request silence in the room. Fight the innate ED urge to multitask or speed through the handoff too quickly. And make sure you have **MIST** by the end of EMS handoff. We'd all like to make it to the finish line with at least the same information as when the patient's care began.

EMS TIME OUT REPORT

M	**Mechanism** or **Medical** Complaint	Name, Age, Sex **Mechanism**: Speed, Mass, Height, Restraints, Number and Type of Collisions, Helmet Use and Damage, Weapon Type **Medical**: Onset, Duration, History
I	**Injuries** or **Illness Identified**	**Head to Toe** Pain, Deformity, Injury Patterns STEMI—12-Lead / Stroke— Cincinnati
S	**Signs** and **Symptoms**	**Symptoms and Vitals** Initial, Current, Lowest Confirmed BP HR, BP, SPO_2, RR, $ETCO_2$, BG GCS: Eyes ____ Verbal ____ Motor ____
T	**Treatments**	Tubes, Lines (Location and Size), Fluids, Medications and Response, Dressings, Splints Defibrillation / Pacing

Pediatric Appendicitis - continued from p.3

TREATMENT

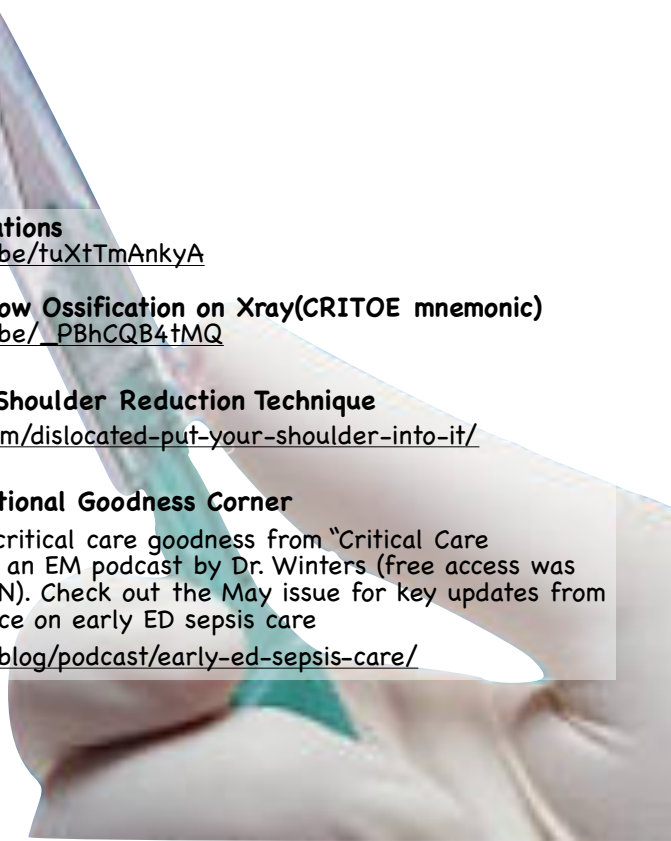
Urgent management with appendectomy is traditionally the standard of care with the goal of timely surgery while also balancing rates of negative appendectomy. Even with the extensive evaluation already mentioned, there are still false positive diagnoses leading to unnecessary surgery. In the last 20 years there has been growing evidence supporting non-operative antibiotic-alone management in older children with short duration of symptoms, who have no evidence of appendicolith or perforation on imaging. Not surprisingly, it's been shown that a portion of children with appendicitis who are treated with antibiotic-only management without surgery will have recurrent appendicitis.

Recommendations for those undergoing nonoperative management of appendicitis include a 24–48-hour initial course of broad-spectrum IV antibiotics followed by oral antibiotics for at least 7 days. There is no consensus on a specific antibiotic regimen. One meta-analysis of adults and children suggested a higher initial treatment success rate with a beta-lactamase with or without penicillin, but the lowest recurrence rate was with a third-generation cephalosporin and metronidazole.

PROCEDURE CORNER

Shared by Sarah Dubbs, MD & Sarah Leeper, MD

It's summer! Outdoor sports and games are on full speed. With that comes the possibility of fractures and dislocations. Here are some references to refresh your memory:



- **Elbow Dislocations**
  https://youtu.be/tuXtTmAnkyA
- **Pediatric Elbow Ossification on Xray(CRITOE mnemonic)**
  https://youtu.be/_PBhCQB4tMQ
- **Sin Nombre Shoulder Reduction Technique**
  https://litfl.com/dislocated-put-your-shoulder-into-it/
- **UMEM Educational Goodness Corner**
  Here is some critical care goodness from "Critical Care Perspectives," an EM podcast by Dr. Winters (free access was given to MEMN). Check out the May issue for key updates from ACEP task force on early ED sepsis care
  https://ccpem.blog/podcast/early-ed-sepsis-care/

THE LIQUID GOLD CONUNDRUM

by Amanda Quiller, PA-C

The urinalysis (UA) is a common test for patients visiting the Emergency Department and is often ordered well before the patient is seen by the clinician. More often than not, we end up with an abnormal UA, prompting us to address the results. And let's be honest...at some point or another, most of us have been guilty of over-diagnosing and over-treating urinary tract infections (UTI). The fear of 'missing-the-diagnosis' is deeply engrained in our souls. It is after all, THE liquid gold.

UTI is ultimately a clinical diagnosis. Without symptoms consistent with UTI in a non-pregnant individual, you are most likely not dealing with a true infection. The symptoms of UTI include dysuria, urinary frequency, urgency, suprapubic discomfort, etc. ACEP guidelines state that in otherwise healthy patients presenting with a very high likelihood of lower uncomplicated UTI, and no history of multidrug resistant organisms, UA may not even be necessary to make the diagnosis. However, as the UA is so frequently ordered in the ED, we need to be comfortable interpreting the results. The UA should be used in conjunction with the clinical presentation. It's generally considered significant, with high sensitivity and specificity for UTI, when there is a pyuria of >10 leukocytes/uL along with nitrites. When the clinical picture fits UTI, go ahead and treat using the most narrow-spectrum antibiotic. While typical options include nitrofurantoin, trimethoprim-sulfamethoxazole, or a beta-lactam, other antibiotics such as amoxicillin-clavulanic acid, cefdinir, cefaclor, or cefpodoxime can also be considered for uncomplicated UTI. Avoid medications with high rates of local antimicrobial resistance such as fluoroquinolones. Reserve additional testing, such as cultures, for complicated UTIs. These include patients requiring admission, those with recurrent UTIs or multiple drug allergies, history of immunosuppression, or if the clinical presentation is not clear-cut. For symptomatic patients providing a midstream urine specimen, a urine culture is typically considered positive within a range of 10^2 CFU/ML to $\geq 10^5$ CFU/mL. Asymptomatic bacteriuria uses $\geq 10^5$ CFU/mL as the cut off.

What are some of the pitfalls associated with over diagnosis and over treatment of UTI?

- Once we are set on the diagnosis of UTI, we are likely to miss other diagnoses. This anchoring bias may result in missing a multitude of other diagnoses outside of the genitourinary realm - especially in the altered patient, where UTI should be considered a diagnosis of exclusion.
- STIs often have symptomatic cross-over with UTIs, and if they are not on our radar when evaluating patients presenting with possible UTI symptoms, we will miss a substantial amount of these infections. Have a low threshold for screening for STIs, and if you're just not sure if it's a UTI, consider sending the urine culture.

Over-diagnosis of UTI and treatment of asymptomatic bacteriuria in non-pregnant, healthy patients can cause harm in a number of ways.

- Asymptomatic bacteriuria may actually confer protection against symptomatic infections of the urinary tract, so treating it may put our patients at risk of developing UTIs.
- Treating asymptomatic bacteriuria raises healthcare costs from unnecessary diagnostics and antibiotics. It also lengthens the duration of hospitalization for inpatients, especially in the elderly and patients with altered mental status.
- Antibiotics have a multitude of negative side effects that can cause harm to our patients, and their inappropriate use contributes to the ever-growing problem of antimicrobial resistance.

Bottom line? Don't feel pressured to treat that bad-looking urine on a patient without clear-cut UTI symptoms and/or a urinalysis that supports the diagnosis.

Human Trafficking - continued from p.3

THERE ARE MANY RED FLAGS THAT MAY SIGNAL YOUR PATIENT IS A VICTIM OF TRAFFICKING:

Physical Signs:

- Wearing clothing that may be either inappropriate for the weather or provocative
- Malnutrition, dehydration, physical exhaustion
- Traumatic injuries, including bruising, ligature wounds, scars or other unhealed wounds
- Burns, tattooing or branding for identification and/or ownership (male name or nickname on inner thigh, underarm, breast or back of neck)

Behavioral Signs:

- Dominating/submissive relationship with another individual - someone may accompany them and attempt to control the encounter
- Depressed mood, flat affect
- Hyper-vigilance, anxiety, panic attacks
- Frequent emergency care, failure to receive care for chronic medical conditions
- Unexplained/conflicting stories about injuries
- Signs of drug/alcohol abuse
- Lack of control over their money/finances
- Unable to provide their address, have no ID cards or documents, may be unaware of the city or state in which they currently reside

HOW DO WE EVALUATE THESE PATIENTS IN THE ED?

First and foremost, make sure to get the patient alone so that you can establish rapport and provide a safe space for them to open up to you. Be aware that they may not be ready to disclose information. In many cases, the perpetrators will accompany victims to the ED posing as a friend or family member. They may offer to translate for the victim, speak on their behalf, or insist on remaining in the room. These are red flags and should prompt the clinician to get the patient isolated so that additional information can be obtained.

QUESTIONS TO ASK WHEN YOU SUSPECT HUMAN TRAFFICKING:

- What type of work do you do?
- Are you being paid?
- Can you leave your job if you want to?
- Can you come and go as you please?
- Have you or your family been threatened?
- Has your identification and/or documentation been taken away from you?
- What are your living conditions like?
- Have you ever been deprived of water, food, sleep or medical care?
- Is anyone forcing you to do anything that you do not want to do?

by Brett Walters, MD

With the new academic year comes new interns, and for some of us this means turning a new leaf...perhaps on our finances. As with any other knowledge base we should spend some time to learn the basics of financial planning.

In our field there could be a tendency to think that we make enough money to not have to create a budget. Or maybe we feel we can "just wing it." We have been focused on our studies for many years in pursuit of a career. During this journey, we may have procrastinated with learning more about finance. Perhaps we think that we "aren't good at finance." Or maybe we have someone else, such as a significant other or financial advisor who "handles that." We describe our patients in terms of being "alert and oriented", but how *does* someone become oriented to their finances?

A great place to start is by creating a budget. That word may stimulate feelings of stress, or on the other extreme…severe boredom. It only takes a few minutes to create a budget and can really help you gauge your current situation. You can write it down or plug those numbers into an Excel spreadsheet. You could label the columns for monthly/yearly expenses or **outgoing/incoming money**. At the bottom you can generate and view the totals. In reviewing this list, are there things in your budget that you really don't need? Are there things in your budget with which you were unaware? Each month are you creating a **deficit**, breaking even, or do you have a **surplus**?

We have all gotten to where we are now through goal accomplishment. Once you have reviewed your budget, ask yourself: "What are my financial goals?" What are my goals for 2021? 2025? 2040? 2050? Add those details to your budget sheet. Have you been moving towards accomplishing these goals? How have your goals changed over time?

Now ask yourself what you would do with an extra $10,000. What if you had an extra $25,000? What would you do with a million dollars? It would be an ideal problem to have! How would extra money, of any amount, move you towards your goals? Why not plan for it before that extra money comes into your hands.

We spend so many years learning about medicine and thinking about our patients. How much time do you spend thinking about your finances and prosperity? If you haven't done so already, make this academic year the year that you become oriented to your finances and start investing in your future financial wellness.

Human Trafficking - continued from p.5

HOW CAN WE HELP?

The ED evaluation of these individuals should include several components:

- Assess for patient's immediate safety
- Diagnose and address acute medical issues
- Manage untreated chronic medical problems
- Test/treat sexually transmitted infections and check for pregnancy
- Consider the need for forensic examination/evidence collection
- Offer patients a mental health evaluation and/or provide resources
- Engage social workers and case managers to help facilitate housing, food, medical care, legal services, etc.

It's also important to review local mandatory reporting laws. **Engaging local law enforcement may also be appropriate if the patient provides you with consent to do so.**

For victims who aren't ready to come forth and receive help, we can still provide them with resources on discharge papers or business cards. Keep things discreet. Small pieces of paper can be hidden in purses or a shoe. However, if this information is discovered by the perpetrator, it could pose a threat to your patient's safety. Deliver resources in a safe way and encourage them to return when they are ready.

An anonymous way to receive help, report a tip and/or request services:

National Human Trafficking Resource Center
1-888-373-7888

As a part of the School of Public Health, The University of Maryland has created the following after hours resource:

The SAFE Center for Human Trafficking Survivors
(301) 314-7233 or (443) 235-0587

Been thinking about **WRITING, BLOGGING, JOURNALING,** or any other writing besides EMR charting? It's time to let out your inner author or become that writer you envisioned for yourself. We would love to hear from you. Please email us at **aakomeah@som.umaryland.edu** with your ideas for articles or content.

Here's what we're looking for:

- High yield EM clinical content
- 3-5 main practical "take home" points
- Nonclinical content is welcome
- Hot new topics or new takes (what's new or different) on old favorites

THE "Q" WORD:

CORRELATION WITHOUT CAUSATION

Or…what do French fish have to do with it?

By Rajagopal Srinivasan, MD, PhD, FACEP

A RECENT ARTICLE (Memos from the Mullet (1) (1).docx) highlighted the superstitious belief shared by many Emergency Department (ED) staff about the "Q"-word. You know, the word that interns, especially from other services (aka "gawkers") mention, only to get yelled at … and sure enough, the tsunami arrives shortly after the invocation. Yet, well-designed randomized controlled trials keep confirming that uttering that word does not result in the predicted increase in ED volume within any reasonable latency. What could be going on?

MATH MAKES RIGOROUS REASONING EASIER!

1. Human existence seems to "make sense" because of the law of averages: although the exact temperature outside fluctuates from minute to minute, we know that on average Baltimore in August is a sweltering, overheated sauna and we can plan accordingly.
2. Similarly, EDs know in advance roughly how many people will show up on a given day based on past historical data. The exact number this Monday may be different from the number seen last Monday, but intuitively the deviation will be small (formally, the standard deviation is a small fraction of the mean, and the mean is far enough away from zero that we don't realistically have to deal with the concept of negative patient visits). This makes ED staffing predictable enough that "great societies" like ours have passed laws like EMTALA that make some impressive guarantees in this world of significant uncertainty.
3. In an ideal world, the number of patients seen that day divided by the number of hours in a day would yield how many patients check in per hour. A simple way to imagine this "ideal" situation is to space the arrivals out based on daily average, say 24 patients over 24 hours. A similar analysis can be performed for time-varying average rates wherein the probability of a patient checking in the next hour isn't just the daily number divided by 24, but fluctuates predictably during the course of the day: >>| | | | | | | | | | | | | | | | | | | | | | | | |<<
4. The reality is of course different: the arrival times will randomly deviate from the ideal. Here's one of several random arrival patterns of 24 events over 24 hours, which shows the "intern declares that it's quiet" interval followed by at least one "you said the Q word…it's all over!" interval filled with multiple check-ins per hour: >>| | || ||| | | | ||| | || | ||||| | <<
5. Because we know that on average the same number show up day after day, it's easy to see that for that rule to hold true, busy periods must be followed by quiet periods "often enough," and vice versa. This occurs on a time scale that is in between the daily cycle that follows the mean-and-variance Gaussian distribution and the minute-by-minute arrival times of patients which follow Poisson statistics.
6. We seem to be violating some rule of uncertainty because we know that the number of patients who show up every 24 hours isn't really fixed in advance; how can the universe possibly keep track of how many patients have dodged the Reaper that afternoon, and round them up before the deadline? That's not what is happening. Not every quiet period is followed by an exact and equivalent surge, but everyone feels on a visceral level (one's "heart sinks") when the unusually quiet interval is followed by a very busy period. That's generally all it takes for most of us to make associations, and for superstitious critters to attribute causative powers to correlated observations. And boy are physicians the ultimate in dogmatic, ritualistic, rigid-thinking critters! –Our practice starts out based on dogma, because we can't actually repeat each randomized control trial ourselves though perhaps like the physicists, we should. We tend to believe a lot of stuff if it happens to be consistent with our own existing beliefs, then demand "evidence" when some conjecture happens to challenge our existing beliefs. To prove we aren't fudging with the ultimately stochastic nature of this phenomenon, note that by definition we cannot predict when unexpectedly quiet periods occur, nor can we know when the quiet period will end – just that it almost certainly will, and over a larger interval the mean number of arrivals per 24 hours will hover around a knowable average. But yes, at least a few times a year, the disastrous waiting room at 4 pm will last into not only the next calendar day but also derail the 6 am doc, who will whine about it because she or he is used to walking into – wait for it – a "quiet" ED.

This phenomenon is predictable enough that I now dread "quiet" times. I dread walking into a shift and seeing a nice clean board with no one in the waiting room. After fifteen years of conditioning, I eat, chug coffee until aggressive or dizzy, sign charts, reply to "work" emails, generally sustain the "berserker" mood for as long as I can … because, odds are, the good times everyone else has soaked up shall leave me with the dregs that the universe has saved for me. I smile on the inside when I walk in and see everyone running around slipping and sliding on their own perspiration and manic spittle, because the universe will eventually reward me with that opportunity to watch funny kitten videos and American Dad clips that someone with more time and skill has curated for me on Google-Tube.

DON'T RISK IT!

By Priya Kuppusamy, MD & Rhamin Ligon, MD

good advice for bad situations

The 3rd surge of the pandemic has us all feeling a bit short-tempered these days. We're spending lots of time talking to intensivists, hospitalists and consultants trying to move patients, with delays due to staffing and lack of capacity. It's hard not to feel frustrated and overwhelmed, and the urge to vent to SOMEBODY is a natural response. Now, while it's perfectly fine to let off steam with colleagues and leadership, it's definitely NOT okay to express your feelings or point out system deficiencies in the medical record - this can end up causing more harm than good. Here are some quick pearls and pitfalls to consider before you take to the keyboard on your next shift:

1. **DON'T throw others under the bus** - The medical record is not a personal journal to express your emotions – it's a legal document that should convey the patient's medical course. While interpersonal conflict with other members of the treatment team may elicit anger and frustration, this should NOT be reflected in the documentation. The chart should memorialize only the facts and keep things as objective as possible. While it may be tempting to defend yourself by pointing out someone else's shortcomings, this may only drag everyone (including YOU!) into a lawsuit.
2. **DON'T point out delays in care**. Plaintiff attorneys look for this documentation because it links perceived gaps in care with a poor outcome. Don't make it easier for them. It's fine to mention unusual issues in a succinct and factual way, such as: "CT scanner is down" or "Lab specimen to be couriered to another facility for processing."
3. **DON'T mention inadequate staffing.** While we certainly all understand the impact of current staffing shortages, plaintiff attorneys will tie this fact to a poor outcome. While not explicitly an MD or APP issue, it can pose a risk to the institution and may lead to a line of questioning revolving around your efforts to mitigate the problem.
4. **DO report concerns about patient safety events** to folks in your chain of command and/or file an **UMMSafe report**. The online report is easy to do and is viewed and acted upon by leadership at the highest levels of the organization. If you're not sure how, your charge nurse can help on shift, or ask the risk management team after the fact. You may not get direct feedback on outcomes from your reporting, but this information is NEVER ignored!

'TIL NEXT TIME, *Rhamin & Priya*