A Newsletter for the Members of the Wyoming ACEP Chapter

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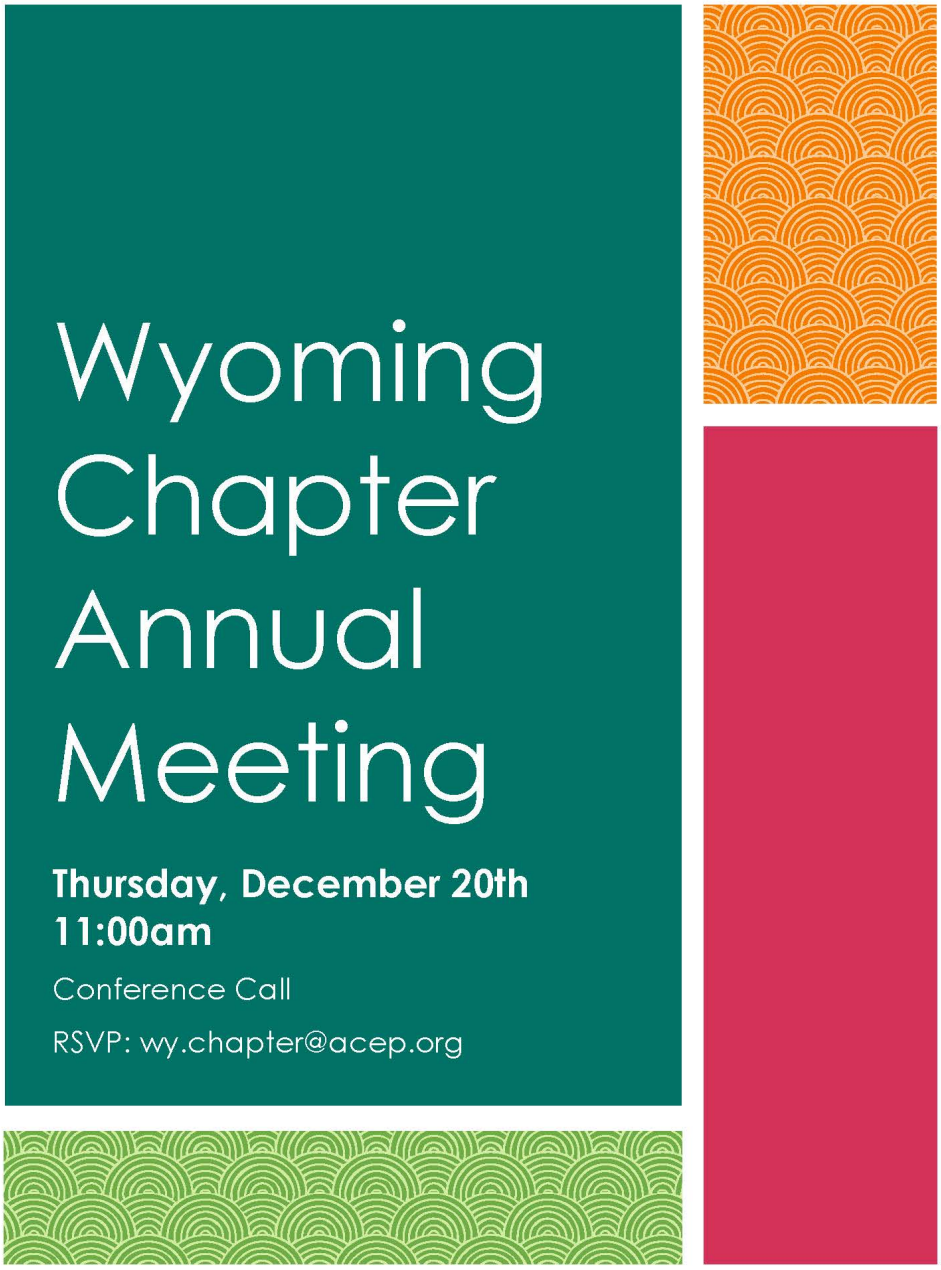
From the President
Buck W. Wallace, MD, FACEP

I struggle with the concept that the opioid problem is a public health emergency as I firmly believe poor planning does not constitute an emergency. I struggle more with those who believe we physicians are to blame. I lost a nephew to heroin three years ago and my sister continues to assert that he got addicted to street drugs after doctors failed to treat his pain appropriately during his many ER visits. Yet, when I had asked what was causing his pain he never had a formal medical diagnosis other than addiction. The opioid problem has been a long time in the making and I believe we could have acted on it years ago but it would have taken cooperation between regulatory agencies, medical societies, the insurance industry, and pharmaceutical companies as well as a redirection of where our culture is going. I almost think drug addiction is "in". Whether I witness this at the gym with the array of pre-workout stimulants and other chemicals ingested or reading my college "tweet" that 70% of students acquire adderall to study and are "at a disadvantage" if they do not, it seems to me that our younger generations are perfectly comfortable with quick fixes to what are really old struggles. I still stand strongly opposed to medically supervised shoot-up centers and narcan pre-packs. Shouldn't I be able to give my working non-compliant hypertensive or diabetic a pre-pack of something?

I am troubled even more by hearing that Teton County, Albany County, and Goshen County are suing Purdue Pharmaceutical (maker of Oxycontin) more than 10 years after the company already paid $634.5 million in fines for wrongful branding of their product. I was practicing medicine when the FDA approved Oxycontin and I can assure you every physician was aware of its addiction and diversion potential. I even called the Wyoming Board of Pharmacy back in 2010 when a patient I had was injecting his crushed up Oxycontin thinking I could help put a block on his prescriptions only to be told there was nothing they or I could do. The pharmaceutical companies are not to blame for the opioid problem, they are simply an easy target for political gain. Is the FDA or DEA responsible? Its akin to suing Winchester Repeating Arms for the latest mass shooting.

I warn you this is a toned down version of my strong beliefs on this problem, but why am I sharing? Perhaps you can debate me in person at our annual meeting before ***ACEP19*** in Denver? You may be surprised that I recently completed my 8 hours of training to obtain an x-waiver so I could prescribe suboxone and am encouraging every practicing Wyoming physicians to do the same. WHY? because it is "in". I mean this in jest but I believe as a physician we must keep up with trends in medicine and as much as I disagree with the politics of the opioid epidemic I believe as a physician I have a duty to act in the best interest of my patients. Besides, without the training I really would have paused when a patient on suboxone might have presented with renal colic--perhaps I would have tried 100 mg of IV lidocaine not knowing that fentanyl is still going to work. Oh, and the course was free from the American Society for Addiction Medicine and I completed it online during some slow night shifts. Unfortunately, as is typical in the "sickness billing industrial complex" we call medicine, there is big money in Pain Management/Opioid Treatment and I suspect some will add this to their doctor's bag with financial targets in mind. Like diabetes, I can assure you the opioid crisis will be around even at the end of my career. I hope I am wrong!

Upcoming Chapter Event



From the President-Elect
Carol L. Wright-Becker, MD, FACEP

The Massive Post-Partum Hemorrhage

Written with patient permission

Like many hospitals in Wyoming, our hospital has the Emergency Department Physicians provide code coverage in after hours situations. This is where this case begins...

It is a typical night when they page out a Code Blue in the Operating Room. You arrive to find a female intubated on the table receiving chest compressions. You discover that she is G5P3->4 who had "seizure-like activity" during induction of labor and then post-ictal, was taken to the OR for Emergency C-Section, but then had a vacuum assist vaginal delivery. After delivery she starts to hemorrhage...

Additional history reveals normal induction of labor with Pitocin when patient went unresponsive and had seizure activity with associated loss of fetal heart tones, then into fetal bradycardia. Magnesium was given, patient taken to the OR for emergent C-section, however, patient's cervix was complete, and baby was delivered with vacuum assist. Then she started having profuse vaginal bleeding. The post-partum hemorrhage was noted and methergine was given - but she was still actively bleeding - the Massive Transfusion protocol was activated. A Bakari balloon was placed, but unable to achieve hemostasis. Additional bleeding still noted, thus Cytotec rectal was given. At this time, Bakari balloon is not holding x 2 failed attempts. Blood transfusion is started, and the uterus is packed. 2 units PRBC and 2 units FFP given, then a central line is placed. After 3rd PRBC, 2 FFP and 1 platelet, patient taken to the OR for emergent hysterectomy. It was noted that she was still profusely bleeding from the lower uterine segment and then she went into PEA and Code Blue was activated.

You arrive and help establish ACLS care, advanced procedures and help with the management. **It is recognized that she has had an amniotic fluid embolism with post partum hemorrhage which then became DIC and started on the massive transfusion protocol.** The ISTAT chemistry shows a Hemoglobin of 3. In the OR, total of 29 units of blood including PRBC, FFP, Platelets, Cryoprecitate as well as Calcium, Magnesium, Bicarb, Levophed, Dopamine, K Centra, Vitamin K, TXA are given between a central line and a Cordis to allow for fast infusion. Labs immediately after CPR of PEA, showed pH of 6.72, pCO2 85.4, Lactic acid 17.

In the ICU with consultation of Hematology, she was given Factor 7 (off label use with risk of stroke) as well after suffering from two more additional episodes of bradycardia into PEA.

Her labs where classic DIC with---elevated INR, PTT, decreased fibringen, platelets, massively elevated D dimer. Eventually, she is taken for hysterectomy and noted to also have epigastric vessel hemorrhage with retroperitoneal hemorrhage.

Case Outcome

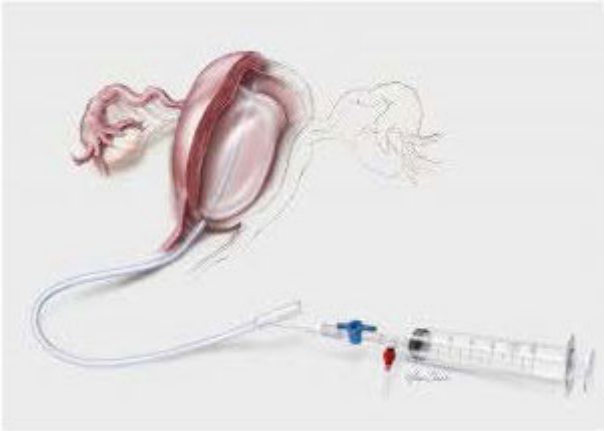
ICU course complicated by abdominal compartment syndrome with bladder pressure of 30 and abdomen left open. Shock liver and anuric and started on dialysis. She has a prolonged hospital stay complicated by intra- abdominal infections and slowly regaining renal function. However, the patient survived and is mentally intact.

Discussion

This case highlights several important rare but vital to know aspects of emergency medicine:

Bakari Balloon

Used for temporizing post-partum hemorrhages. Made of silicone and help with tamponade of the uterus. It is infused with approximately 500cc of saline.



Amniotic Fluid Embolism Syndrome (AFES)

AFES is felt to be a type of allergic reaction in which amniotic fluid enters the maternal circulation and triggers a serious of cascading events. Mortality depending on literature 40-80% and represents approximately 10% of maternal mortality (Stein, Paul. 2016). **Source**.

AMNIOTIC FLUID EMBOLISM

By Stanford Anesthesia Cognitive Aid Group

SIGNS

Consider amniotic fluid embolism if there is the sudden onset of the following in a pregnant or post-partum patient:

1. Respiratory distress, decreased O_2 saturation
2. Cardiovascular collapse: hypotension, tachycardia, arrhythmias, cardiac arrest
3. Coagulopathy +/- Disseminated intravascular coagulation (DIC)
4. Seizures
5. Altered mental status
6. Unexplained fetal compromise

CALL FOR HELP  **CODE CART**

INFORM TEAM

TREATMENT

1. Anticipate possible **cardiopulmonary arrest** and **emergent C-section**
2. Place patient in left uterine displacement (**LUD**)
3. Increase to **100% O_2**, high flow
4. Establish large volume **IV access** (upper body best)
5. Support circulation with **IV fluid, vasopressors, and inotropes**
6. **Prepare for emergent intubation**
7. When possible, place arterial line. Consider central venous access or IO line in humerus
8. Anticipate **massive hemorrhage** and DIC. **Go to** Hemorrhage - MTG event
9. Consider **circulatory support**: IABP/ECMO/CPB

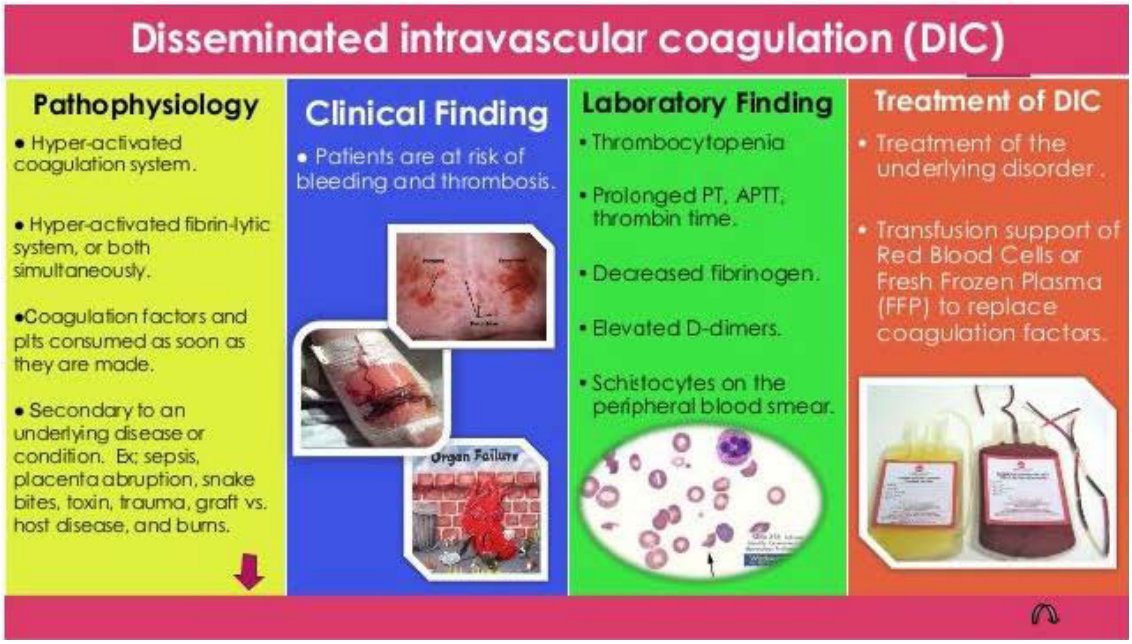
RULE OUT

Rule out other causes that might present in a similar fashion:

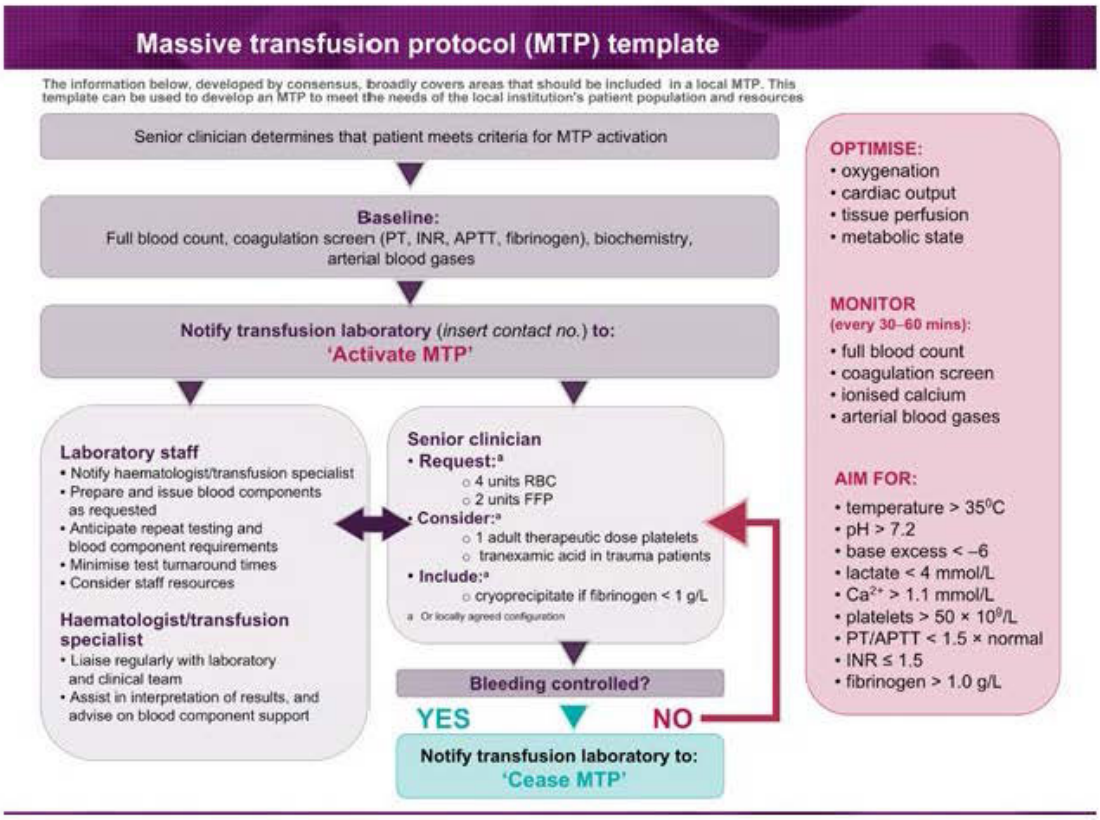
1. Eclampsia
2. Hemorrhage
3. Air embolism
4. Aspiration
5. Anaphylaxis
6. Pulmonary embolism
7. Anesthetic overdose
8. Sepsis
9. Cardiomyopathy/cardiac valvular abnormality/MI
10. Local anesthetic toxicity

Disseminated Intravascular Coagulation (DIC)

DIC is something that we have all learned about however hopefully don't encounter on a regular basis. Quick recognition is of upmost importance in treatment. It causes both clotting and bleeding. DIC itself has a mortality around 20-50% Gando et al 2016. Source: Slide Share.



Massive Transfusion: [Source]



NEWS FROM ACEP

American College of Emergency Physicians
ADVANCING EMERGENCY CARE

New ACEP Information Papers and Resources

The following information papers and resources were recently reviewed by the Board of Directors:

Information Papers:

- Advocating for a Minimum Benefit Standard Linked to the 80th Percentile of a FAIR Health-Type Usual & Customary Charge Database
- Emergency Ultrasound Standard Reporting Guidelines
- Medicaid ED Copayments: Effects on Access to Emergency Care and the Practice of Medicine

Other Resources:

- **Resources for Emergency Physicians – Reducing Firearm Violence and Improving Firearm Injury Prevention**

Smart Phrases for Discharge Summaries:

- **CT Scans for Minor Head Injuries**
- **MRI for Low Back Pain**
- **Sexually Transmitted Infection**
- **Why Narcotics Were Not Prescribed**

Articles of Interest in *Annals of Emergency Medicine* - Fall 2018

Sam Shahid, MBBS, MPH
Practice Management Manager, ACEP

ACEP would like to provide you with very brief synopses of the latest articles in ***Annals of Emergency Medicine***. Some of these have not appeared in print. These synopses are not meant to be thorough analyses of the articles, simply brief introductions. Before incorporating into your practice, you should read the entire articles and interpret them for your specific patient population.

Anderson TS, Thombley R, Dudley RA, Lin GA. **Trends in Hospitalization, Readmission and Diagnostic Testing of Patients Presenting to the Emergency Department with Syncope** The objective of this retrospective population epidemiology study was to determine whether recent guidelines emphasizing limiting hospitalization and advanced diagnostic testing to high-risk patients have changed patterns of syncope care. They used the National Emergency Department Sample from 2006-2014 and the State Inpatient Databases and Emergency Department Databases from 2009 and 2013. The primary outcomes studied were annual incidence rates of syncope ED visits and subsequent hospitalizations, and rates of hospitalization, observation, 30-day revisits, and diagnostic testing comparing 2009 to 2013. Their results showed that although the incidence of ED visits for syncope has increased, hospitalization rates have declined without an adverse effect on ED revisits and that the use of advanced cardiac testing and neuroimaging has increased, driven by growth in testing of patients receiving observation and inpatient care.

Trivedi TK, Glenn M, Hern G, Schriger DL, Sporer KA. **EMS Utilization among Patients on Involuntary Psychiatric Holds and the Safety of a Pre-Hospital Screening Protocol to "Medically Clear" Psychiatric Emergencies in the field, 2011-2016**

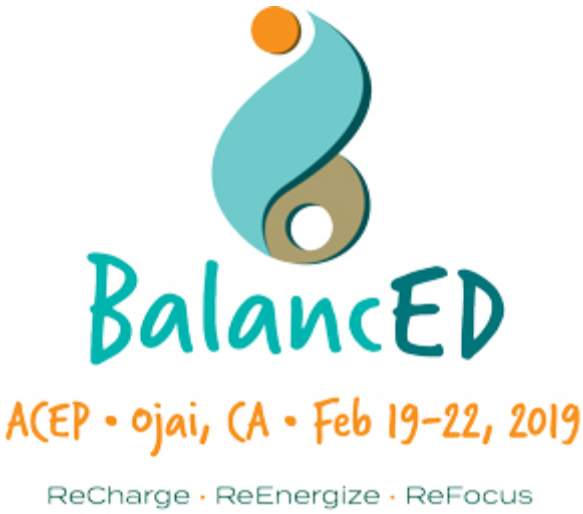
The purpose of this retrospective review was to describe overall EMS utilization for patients on involuntary holds, compare patients placed on involuntary holds to all EMS patients, and evaluate the safety of field medical clearance of an established field-screening protocol in Alameda County, California, using the data for all EMS encounters between November 1st, 2011-2016 using County's standardized dataset. Results showed that 10% of all EMS encounters were for patients on involuntary psychiatric holds and overall, only 0.3% of these encounters required re-transport to a medical ED within 12 hours of arrival to Psychiatric Emergency Services, reinforcing the importance of the effects of mental illness on EMS utilization. **Full text available here**.

Yoshida H, Rutman LE, Chen J, Shaffer ML, Migita RT, Enriquez BK, Woodward GA, Mazor SS. **Waterfalls and Handoffs – A Novel Physician Staffing Model to Decrease Handoffs in a Pediatric Emergency Department**
The objective of this retrospective quality improvement study was to evaluate a novel attending staffing model in an academic pediatric ED that was designed to decrease patient handoffs. The study evaluated the percentage of intradepartmental handoffs before and after implementation of a new novel attending staffing model and included conducting surveys about the perceived impacts of the change. The study analyzed 43,835 patients encounters and found that immediately following implementation of the new model, there was a 25% reduction in the proportion of encounters with patient handoffs. The authors concluded that this new ED physician staffing model with overlapping shifts decreased the proportion of patient handoffs and resulted in improved perceptions of patient safety, ED flow, and job satisfaction in the doctors and charge nurses. **Full text available here**.

Jones AR, Patel RP, Marques MB, Donnelly JP, Griffin RL, Pittet JF, Kerby JD, Stephens SW, DeSantis SM, Hess JR, Wang HE, On behalf of the PROPPR study group. **Older blood is associated with increased mortality and adverse events in massively transfused trauma patients: secondary analysis of the PROPPR trial.**
This study sought to determine the association between PRBC age and mortality among trauma patients requiring massive PRBC transfusion using the data from the Pragmatic, Randomized Optimal Platelet and Plasma Ratios (PROPPR) trial. The authors analyzed data from 678 patients and the primary outcome was 24-hour mortality. The results showed that increasing quantities of older PRBCs are associated with increased likelihood of 24-hour mortality in trauma patients receiving massive PRBC transfusion (≥10 units), but not in those who receive <10 units.

Roberts RM, Hersh AL, Shapiro DJ, Fleming-Dutra K, Hicks LA. **Antibiotic Prescriptions Associated with Dental-Related Emergency Department Visits.**
The objective of this study was to quantify how often, and which dental diagnoses seen in the ED resulted in an antibiotic prescription using the National Hospital Ambulatory Medical Care Survey (NHAMCS) data of visits to the ED for dental conditions during 2011-2015. Based on an unweighted 2,125 observations from the NHAMCS in which a dental-related diagnosis was made, there were an estimated 2.2 million ED visits per year for dental-related conditions, which accounted for 1.6% of ED visits. An antibiotic, most often a narrow spectrum penicillin or

clindamycin, was prescribed in 65% of ED visits with any dental diagnosis, and the most common dental diagnoses for all ages were unspecified disorder of the teeth and supporting structures (44%), periapical abscess without sinus (21%), and dental caries (18%). Given that the recommended treatments for these conditions are usually dental procedures rather than antibiotics, the results may indicate the need for greater access to both preventative and urgent care from dentists and other related specialists as well as the need for clearer clinical guidance and provider education related to oral infections.



Introducing BalancED

A new, **physicians-only wellness conference** where you can focus on your well-being in your practice and your daily life. Join us February 19-22, 2019 at the beautiful Ojai Valley Inn in Ojai, CA to learn ways to help reduce stresses in your practice. Then, in the afternoon it's time to get out of the course room and spend time participating in the numerous wellness activities available at the resort.

ACEP Doc Blog!

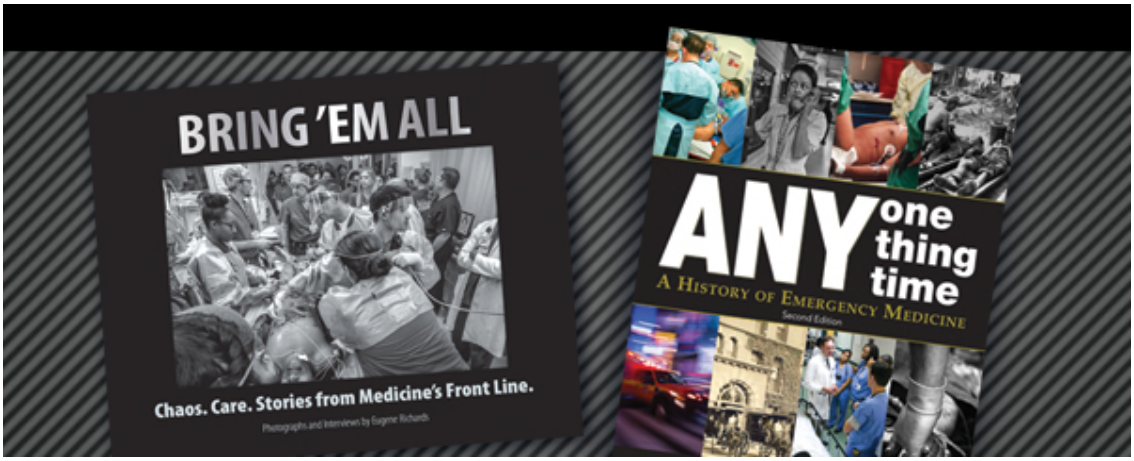
Looking for a way to increase your visibility and reach patients? Consider contributing to the ACEP Doc Blog! The blog lives on the ACEP patient-facing website **www.emergencycareforyou.org**. The Doc Blog offers plainly worded insight and expertise to patients from emergency physicians. Topics include health and safety tips, “day-in-the-life” experiences, passion projects and more. Our goal is to create short (500 word) posts that help put a human face on emergency medicine. Recent posts:

- Cats, Dogs and Dander… Oh, My!
- Dear Patient: A Letter from Your Emergency Physician
- Your Summer Guide to Bug Bites & Skin Rashes
- Heat Stroke and Hot Cars
- Not the Right Time for a Selfie: A Conversation about Hawaii and Volcano Safety

Contact Steve Arnoff to learn more about contributing to the ACEP Doc Blog.

Want to improve your skills managing behavioral or medical emergencies?

Come join the Coalition on Psychiatric Emergencies (CPE) for a pre-conference workshop on Dec. 12th in Las Vegas Nevada. The Coalition is presenting two pre-conferences: **Critical Topics in Behavioral Emergencies for Emergency Physicians and Critical Topics in Emergency Medicine for Psychiatrists**. Come improve your skills and earn CME! The early-bird rate for members is $149. To view the full schedule and to register, visit the pre-conference website.



ACEP's 50th Anniversary Books

Buy one for yourself or give as a gift! Bring 'em All and Anyone, Anything, Anytime available at bookstore.acep.org.

Seniors make up 43% of all hospitalizations originating in the ED

In recognition of challenges with older adult presentations, **guidelines to improve ED care for older adults** have been established by leaders in emergency medicine. To further improve the care and provide resources needed for these complex older adult presentations, ACEP launched the **Geriatric ED Accreditation Program (GEDA)** to recognize those emergency departments that provide excellent care to older adults. The program outlines the approach to the care of the elderly ED patient according to expertise and available evidence, with implications for physician practice and ED processes of care. GEDA provides specific criteria and goals for emergency clinicians and administrators to target, designed to ensure that our older patients receive well-coordinated, quality care at the appropriate level at every ED encounter.

Become accredited and show the public that your institution is focused on the highest standards of care for your community's older citizens.

Free Medication-Assisted Treatment Training

Eight hours of training on medication-assisted treatment (MAT) is required to obtain a waiver from the Drug Enforcement Agency to prescribe buprenorphine, one of three medications approved by the FDA for the treatment of opioid use disorder. Providers Clinical Support System (PCSS) offers free waiver training for physicians to prescribe medication for the treatment of opioid use disorder. PCSS uses three formats in training on MAT:

- Live eight-hour training
- "Half and Half" format, which involves 3.75 hours of online training and 4.25 hours of face-to-face training.
- Live training (provided in a webinar format) and an online portion that must be completed after participating in the full live training webinar

Trainings are open to all practicing physicians. Residents may take the course and apply for their waiver when they receive their DEA license. For upcoming trainings consult the **MAT Waiver Training Calendar**. For more information on PCSS, **click here**. For more information on MAT training, email **Sam Shahid**.

Funding for this initiative was made possible (in part) by grant no. 1H79TI080816-01 from SAMHSA. The views expressed in written conference materials or publications and by speakers and moderators do not necessarily reflect the official policies of the Department of Health and Human Services; nor does mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government.

Call for Consultants - SAMHSA State Targeted Response Technical Assistance (STR-TA) Initiative

Join over the 500 Treatment Technical Assistance (TA) Consultants already participating in the initiative to target the opioid epidemic. TA Consultant responsibilities would include:

- Supporting local multidisciplinary TA teams to provide expert consultation to providers in the delivery of OUD services (up to 10 hours a week). When asked to provide TA expertise consultants will be compensated $100/hour for up to 10 hours a week.

- Participate in web-based training
- Participate in train-the-trainer activities (as needed)

ACEP is one of the partners in the SAMHSA STR-TA Initiative. Please email **Sam Shahid** for more information.

NEMPAC On Track to Reach Record Fundraising Goal

While celebrating ACEP's 50th Anniversary's in San Diego, hundreds of ACEP members also confirmed and celebrated their commitment to advocacy on behalf of emergency medicine and patients. As in years past, ACEP Council members stepped up to the plate during the NEMPAC Council Challenge to ensure that emergency medicine stays at the top of the leaderboard among medical PACs.

NEMPAC collected a record total of more than $350,000 from Council members. Of note is the strong support by all Council members representing the Emergency Medicine Resident Association (EMRA), who strive each year to be the first group within the Council to reach 100-percent participation at the premier "Give-a-Shift" donor level. Thirty-nine state chapters and the Government Services chapter reached 100-percent participation this year. In addition, 38 Past-Presidents and Past-Council Speakers met the challenge of NEMPAC Chairman Peter Jacoby, MD, FACEP and added their support. Combined with thousands of donations from ACEP members across the country, NEMPAC is well on its way to setting an all-time fundraising record to reach a goal of $2.3 million for the 2018 cycle.

This outpouring of support in a pivotal election year will ensure that NEMPAC can continue to educate new and veteran lawmakers and help emergency medicine identify friends and champions in Congress so that ACEP's ambitious legislative agenda stays on course. NEMPAC is tracking to contribute more than $2 million to 27 Senate candidates and 160 House races. Candidates worthy of NEMPAC support are vetted and approved by the NEMPAC Board of Trustees who value those who will support emergency medicine issues and are committed to bipartisan advocacy.

Read the **full-length article** published in ACEP Now on October 3.

For more information about NEMPAC, visit **our website** or contact **Jeanne Slade**.

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