LAC WRAP-UP

Together Again, Fighting for EM

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Bacterial Blowouts & Lumbar Puncture

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TOX Q&A

Venom Dilemma

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WILEY

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The Official Voice of Emergency Medicine

SEPTEMBER 2021 Volume 40 Number 9 FACEBOOK/ACEPFAN TWITTER/ACEPNOW ACEPNOW.COM

PLUS

EMF

EMF Grant Enabled Dr. Blanchard to Study Pandemic Burnout

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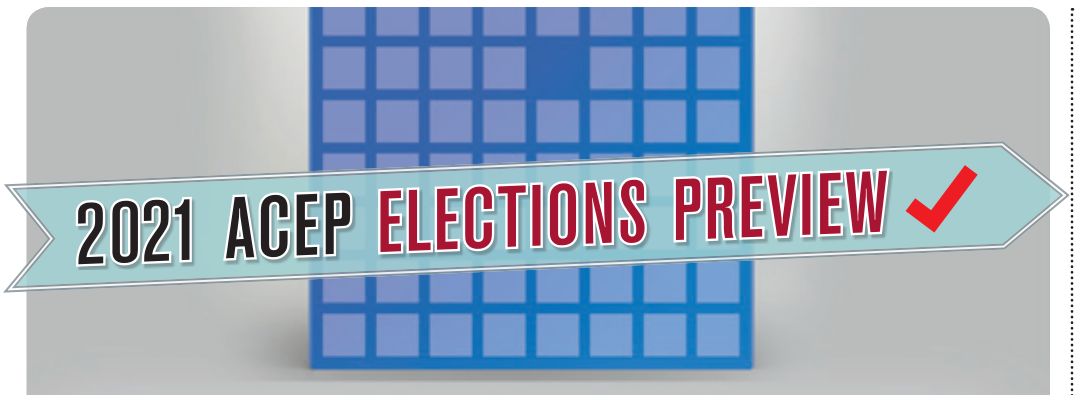
www.acepnow.com



MEET THE PRESIDENT-ELECT AND BOARD CANDIDATES

The candidates discuss ACEP strategy and members' needs

Each year, ACEP's Council elects new leaders for the College at its meeting. The Council, which represents all 53 chapters, 40 sections of membership, the Association of Academic Chairs of Emergency Medicine, the Council of Emergency Medicine Residency Directors, the Emergency Medicine Residents' Association, and the Society for Academic Emergency Medicine, will elect the College's President-Elect, Council Speaker and Vice Speaker, and four members to the ACEP Board of Directors when it meets in October. Last month, we met the Council officer candidates. Here, we'll meet the President-Elect and Board candidates.

CONTINUED *on page 12*

SKEPTICS' GUIDE TO EMERGENCY MEDICINE

Antibiotics for Pneumonia

How many days should we treat kids?

by KEN MILNE, MD

The Case

A 5-year-old girl comes into your emergency department with what seems like community-acquired pneumonia (CAP). She has been febrile with a temp of 102° F and is mildly tachypneic but shows no real signs of respiratory distress. On examination, you can hear some crackles in the right mid-zone. Her chest X-ray (CXR) confirms your findings of CAP, and she is well enough to be treated as an outpatient with oral antibiotics.

Clinical Question

Is five days of oral antibiotic therapy noninferior to 10 days to achieve clinical cure in children with CAP?

Background

Pediatric CAP is a common occurrence.[1,2] The Infectious Diseases Society of America (IDSA) guidelines from 2011 make several recommendations in the management of these children:[3]

- They do *not* support routinely obtaining a chest X-ray to confirm the diagnosis

CONTINUED *on page 21*

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Functional Injury Assessment

- **Brain Function Index:** Scales with severity of injury[3]
- **Concussion Index:** Aids in evaluation of concussion at time of injury & throughout recovery, may be used to establish baseline[4]

✓ **Works with drug & alcohol impaired patients[5]**

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Intended Use Patient Population Structural Injury Classifier & Brain Function Index: 18-85y of age, GCS 13-15, within 72 hours of injury. Concussion Index: 13-25y of age, GCS 15, within 72 hours of acute injury, at baseline, & throughout recovery.

1. Hanley D, et al. *Academic Emergency Medicine*. 2017; 24(5):617-627. **2.** Naunheim R, et al. *American J Emergency Medicine*. 2019; 37(10):1987-1988. **3.** Hanley D, et al. *Journal Neurotrauma*. 2018; 35(1):41-47. **4.** Bazarian J, et al. *JAMA Network Open*. 2021;4(2) e2037349. **5.** Michelson EA, et al. *J Neuroscience Nursing*. 2019; 51(2):62-66.

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NEWS FROM THE COLLEGE

UPDATES AND ALERTS FROM ACEP

ACEP Hosts Special Edition Research Forum

In August, the ACEP Research Committee organized the first-ever Research Forum Special Edition: COVID-19, funded through a grant from the Centers for Disease Control and Prevention. The conference brought together public health leaders, academic researchers, and top-notch educators with perspectives on basic science, prevention, treatment, resiliency, and advocacy. It showcased some of the best and latest research data alongside didactic and panel presentations by world-renowned experts. Research topics included immunology, vaccinations, resiliency, innovations in care delivery, disparities in care, telemedicine, risk factor identification, novel treatments, and education. All abstracts were published in a special supplement of *Annals of Emergency Medicine*, available at www.annemergmed.com/issue/S0196-0644(21)X0008-X.

ACEP's traditional Research Forum will still be held during ACEP21, with these COVID-19 presentations as bonus content.

Senate Passes Lorna Breen Bill

In early August, the Senate approved S 610, the Dr. Lorna Breen Health Care Provider Protection Act. This comes on the heels of hundreds of ACEP members joining together to lobby for this legislation during last month's Leadership & Advocacy Conference, conducting 287 meetings with legislators and staffers from 44 states (read more on page 6). S 610 and its bipartisan House counterpart, HR 1667, are focused on researching and developing policies to prevent burnout and improve mental health among health care clinicians, along with removing barriers to accessing care and treatment (including consideration of stigma and licensing concerns). Learn more about next steps for this bill at www.acep.org/senate-passes-breen-bill.

PALS Requirement Removed for EM Physicians in ACS Pediatric Centers

The American College of Surgeons (ACS) removed the pediatric advanced life support (PALS) certification requirement from its recently published *2021 Optimal Resources for Children's Surgical Care*, which means emergency physicians working in ACS pediatric surgery centers no longer need to fulfill this requirement. ACEP and other emergency medicine organizations had partnered through the Coalition to Oppose Medical Merit Badges to push back against requiring this certification of board-certified emergency physicians.

Follow the EM Workforce Progress

The best place to stay apprised of all progress, discussions, and resources related to the emergency medicine workforce efforts is www.acep.org/workforce. There, you will find the latest news, including the full report from *Annals of Emergency Medicine*, a town hall held during the recent ACEP Leadership & Advocacy Conference, and more.

ACEP Now Adding More Editors

ACEP Now is expanding its editorial team to include two new roles: Associate Editor and Assistant Editor. Working in conjunction with the Medical Editor in Chief, the Associate Editor will primarily oversee the evidence-based medicine content within the magazine while expanding its international perspective. The Assistant Editor will primarily oversee the *ACEP Now* podcast and multimedia content, including social media. Learn more at www.acepnow.com/article/join-acep-now-editorial-team.

Emergency Physician Named New ABEM NAM Fellow

The National Academy of Medicine (NAM) selected Tracy Madsen, MD, PhD, as its 2021–2023 American Board of Emergency Medicine (ABEM) NAM Fellow. Dr. Madsen is an associate professor in the departments of emergency medicine and epidemiology, co-director of the Rhode Island Hospital Comprehensive Stroke Center and the Miriam Hospital Stroke Center, and associate director of the division of sex and gender at the Warren Alpert Medical School of Brown University/Brown University School of Public Health/Rhode Island Hospital in Providence. The ABEM NAM Fellowship provides talented, early-career health science scholars in emergency medicine an opportunity to experience and participate in evidence-based care or public health studies that improve patient care in domestic and global health systems.

Correction

The article "Working Up Double Vision" (July 2021) incorrectly stated that patients with CN VI palsy "present with outward deviation most apparent when looking toward the affected side." They present with medial deviation of the eye.

RESIDENCY SPOTLIGHT

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Twitter: @Sbh_EM_Res

Location: Bronx, New York

Year founded: 1990

Number of residents: 60

Program length: 4 years

What makes your program unique?

Our four-year program in a diverse, inner-city location provides great training. One of the things that makes our program unique is the Track Program, which allows residents to concentrate elective time on a "niche" of emergency medicine. This expands your knowledge, exposure, and portfolio in a corner of emergency medicine, which prepares you for fellowships or can help to jump-start your career.

Why is your city a great place to live?

It's New York City. The city, as it returns to its vibrant form, has all kinds of sites to see, experiences to take part in, and ways to spend your free time. Two experiences that are five minutes away from the hospital are the Bronx Zoo and New York Botanical Garden, which are fantastic ways to spend a day.

Recent publication of note:

Opiate use disorder is a crisis for our county but especially the population we serve, and therefore, we are the busiest site for a New York City Department of Health and Mental Hygiene project that aims to get naloxone into the community. The project is ongoing; however, our toxicologists are also working on buprenorphine treatment. One recent publication—authored by Howard G. Greller, MD, director of research and medical toxicology at SBH Health System, and colleagues—demonstrates that we are focused on this issue daily and are sharing our clinical experiences with other clinicians across the United States.[1]

What is a fun fact about your city or program?

We are at the corner of Arthur Avenue, which in 2016 was named one of "America's Greatest Streets" by the American Planning Association.

—Scott J. Leuchten, DO, program director

Reference

1. Chenworth M, Perrone J, Love JS, et al. Buprenorphine initiation in the emergency department: a thematic content analysis of a #firesidetox Tweetchat. *J Med Toxicol.* 2020;16(3):262-268.

MITCH MCMANUS

Dr. Genevra “Gevvie” Stone and double sculls partner Kristi Wagner train together in summer 2021.

ROWING FOR TEAM USA

After competing in Tokyo, Olympic rower returns to EM residency

by JORDAN GRANTHAM

Genevra “Gevvie” Stone, MD, was working at a summer camp when she realized emergency medicine was the perfect specialty for her.

Ominous thunderstorms were rolling in fast. Dr. Stone, the camp’s lead sailing instructor, was responsible for getting every young sailor back to shore immediately so they could shelter from the storm. For 10 frenzied minutes, Dr. Stone calmly orchestrated the safe return of every camper. Managing the waterfront chaos brought out the best in her, and she relished the adrenaline rush. “I realized that this is what I get to do every day in the emergency department—help people and manage chaos,” she remembered. “I felt so lucky.”

Despite her sailing experience, Dr. Stone’s ability to manage pressure-packed situations was formed in a different type of boat. The daughter of two Olympic rowers, she tried other sports before her natural ability in the shell was too much to ignore. She rowed for Princeton University’s crew before moving on to the USRowing under-23 circuit. While she was getting faster and faster on the water, she never let off the gas with her medical training.

Balancing Medicine and Rowing

For the past decade, she has been a duck, gliding smoothly between her scrubs and scull, all while paddling furiously underwater—literally and figuratively—to keep everything afloat. After an incredible career spanning three Olympic appearances and one silver medal, Dr. Stone made the transition from one high-stakes situation to another in August 2021, trading her red, white, and blue unisuit for the pastel personal protective equipment donned by her newest crew at Beth Israel Deaconess Medical Center in Boston.

Like many athletes on the path to the Tokyo Olympics, Dr. Stone was deeply disappointed when the pandemic forced the games to be delayed a year. The decision to train for the 2020 Games wasn’t one she took lightly. Back in 2017, she was rowing recreationally but clocking faster times than ever. When she started beating her own silver medal time from the Rio Olympics, she couldn’t help thinking about trying for Tokyo. She already had an on-again, off-again schedule with medical school and residency because of her previous two Olympic cycles, so she knew taking time away during her residency would pose challenges.

With the support of her residency director and her fellow residents as some of her biggest cheerleaders, she decided to take a two-year leave from her residency to train for Tokyo 2020. “Not many people have this opportunity,” they told her. “You have to do it!”

Dr. Stone stayed as involved with her EM program as she could, participating in didactics and research projects.

By spring 2020, she was in peak physical condition and ready for the USRowing trials. When the delay was announced, the prospect of adding a full year of rigorous training to her calendar was a hard adjustment. “My mind and body were not prepared for it,” Dr. Stone explained. Even though the finish line kept moving further away, she kept going.

She stayed in touch through her residency’s active group text thread, watching her friends use humor to cope with the stress of pandemic conditions. She offered to return to help at the hospital, but her program directors didn’t want to risk exposing her to the virus.

She empathized with her EM peers, but she was living a different reality. After a few too many “thanks for all you do” comments from well-wishers at the grocery store, she stopped wearing her favorite scrubs as sweatpants. When pandemic guilt threatened to distract her too much, Dr. Stone refocused on what she could control. She wanted to see her Olympic dreams through as a thank-you to everyone who made her dual dreams possible. “I had to fully engage [in my training] and make them proud,” Dr. Stone said.

At the USRowing trials, she placed second with one of her fastest times ever for single sculls, but only the first-place finisher gets to race the single at the Olympics. In true emergency physician fashion, she moved immediately to plan B. She teamed up with a partner and successfully earned her spot on her third consecutive Olympic team, this time competing in double sculls.

Tokyo and Beyond

Dr. Stone’s experience in Tokyo was an exciting and somewhat bizarre whirlwind, set apart from her previous Olympic appearances by the frequent COVID testing and plexiglass partitions in every cafeteria. “We got really good at thinking about lemons while we spit in tubes,” she said with a laugh. It was weird that fans couldn’t attend the races, but she joked, “We’re rowers, so we’re not used to having a lot of spectators at our events!”

Dr. Stone and her teammate raced well enough to make the finals in Tokyo, finishing in fifth place. After that race, she embraced the end of her championship career (she’ll be moving on to masters-level rowing competitions now) and was ready to turn her attention back to emergency medicine. Still, her Olympic appearances may not be over. She hopes to complete a sports fellowship with the goal of becoming a team physician for USRowing.

Returning to residency in the middle of a COVID-19 surge isn’t how she pictured it, but her time on the water has taught her how to weather tough conditions. “I had someone ask me in an interview, ‘Won’t it be hard to return to medicine?’ I told them yes, it will absolutely be challenging. But something being challenging has never stopped me before.”

MS. GRANTHAM is ACEP communications manager.

Together Again, Fighting for EM

Live from the 2021 ACEP Leadership & Advocacy Conference

by L. ANTHONY CIRILLO, MD, FACEP

For the first time since February 2019, the ACEP community came back together for an in-person meeting. The annual Leadership & Advocacy Conference (LAC) was held July 25–28 in Washington, D.C. With extra precautions because of the specter of the Delta variant of COVID-19, 324 ACEP members from 44 states met to get the latest updates on federal and state issues, hear from members of Congress and key congressional staffers, and participate in 273 virtual Capitol Hill visits. Given the realities and challenges of holding the meeting, it was most definitely a remarkable success. Perhaps most important, the members who attended were able to personally reconnect with friends and colleagues within the ACEP family. Being together and providing one another with validation of the importance of the hard work we do was an incredibly powerful experience.

Before I share more about the substance of the conference, I want to recognize the ACEP D.C. and educational meetings teams for making the conference a reality. The rapidly evolving COVID-19 situation required unique and careful planning; the conference was held with special precautions to maximize the safety of all participants.

The first day of the educational program covered many topics, including opportunities for the future of telemedicine in emergency medicine practice, the perceptions and use of social media on Capitol Hill, and an interactive session on the EM workforce issue with leaders from ACEP, the Emergency Medicine Residents' Association (EMRA), the Council of Emergency Medicine Residency Directors, and the Accreditation Council for Graduate Medical Education. And once again, props to the ACEP Young Physicians Section and EMRA for hosting their annual pre-conference Health Policy Primer educational program.

Connecting with Congress

As with every LAC, the College developed a set of "asks" and talking points for the Capitol Hill visits. Identifying the "right" issues to focus on during the meeting requires a thoughtful and strategic approach to increase our likelihood of advocacy success. That strategy is based upon identifying issues that both are important for emergency medicine *and* will resonate on Capitol Hill given the political climate and priorities of the current Congress and the President's administration. Our goal, as always, is to remind legislators that we do the work of the people every day and that we need their support to be able to continue that work. With a heavy overtone of the worsening situation created by the Delta COVID-19 variant, our issues and topics this year were:

- Support for the Dr. Lorna Breen Health Care Provider Protection Act (S 610/HR 1667) [***Editor's note:*** The Dr. Breen Act was passed by the Senate in early August. Thank you to everyone who advocated for it!]
- Advocating for elimination of the X-waiver registration requirement
- Preventing pending cuts to 2022 Medicare payments for emergency physicians

During the second day of the conference, we got to hear from and speak with key members of Congress including Sen. Tim Kaine (D-VA) who was a primary sponsor of the Dr. Breen Act, and the two co-chairs of the bipartisan Problem Solvers Caucus in the U.S. House, Rep. Josh Gottheimer (D-NJ-05) and Rep. Brian Fitzpatrick (R-PA-01). ACEP members shared their very real firsthand experiences of how their emergency departments, hospitals, and communities have been overwhelmed by COVID-19 with these members of Congress and key committee and congressional senior staffers.

The stories conveyed not just the clinical challenges we face but also how difficult it has been for emergency physicians to withstand the worst of COVID-19 while so many refuse to get vaccinated, wear masks, and put the public health of the nation ahead of their own beliefs.

Although we were hopeful for a return to the traditional "on the Hill" congressional visits, the U.S. Capitol was still not completely open to the public for constituent visits. Despite that, the Virtual Hill Day was very effective and successful. Everyone on Capitol Hill is now *very* comfortable with virtual meetings and it has become part of the "new normal" for congressional offices. Telling our stories directly to members of Congress and staffers is invaluable in helping them understand who we are, what we do, and how important we are to protecting the health of the nation. Sharing the sobering clinical data and statistics of COVID-19 is important when talking with a member of Congress. More importantly, sharing true accounts of real people who are their constituents whose lives have been affected—or ended—by COVID-19 is critical. Telling these narratives helps legislators and staffers understand that what our work is about real people and not just politics. Inevitably, when we tell these stories, we tell them not just about our patients but also about us and how hard our work has been for now over a year and half.

A Voice for EM

Each year, while those of us who attend LAC get to tell our anecdotes, we also understand that we are representing emergency physicians across the country and telling your stories too. Although a few hundred of us can do that, there is nothing more powerful than bringing more voices to the Hill. The future of COVID-19 is still unwritten, but we certainly hope that by 2022 we can all be together again, in person, and on Capitol Hill advocating for our fellow physicians, our patients, and our specialty.

So please come next year to LAC and add your voice! In the meantime, join the 911 Grassroots Network at www.acep.org/911grassrootsnetwork to stay informed on federal and state issues. You can also support ACEP by contributing to NEMPAC, the National Emergency Medicine Political Action Committee, and help ACEP amplify your voice on the issues that matter most to emergency medicine.

DR. CIRILLO serves on the ACEP Board of Directors. He still actively practices emergency medicine and serves as the director of government affairs for US Acute Care Solutions.

ACEP

Top Left: ACEP members listen to one of the informative sessions from LAC21.
Top Right: ACEP President-Elect Gillian Schmitz, MD, FACEP (right), speaks with Rep. Gregory Murphy (NC-3).
Bottom: Attendees enjoy refreshments at the conclusion of a busy day of advocacy on behalf of emergency physicians.

LAC: A First-Timer's Perspective

by LINDSEY A. WILLIAMS, MD

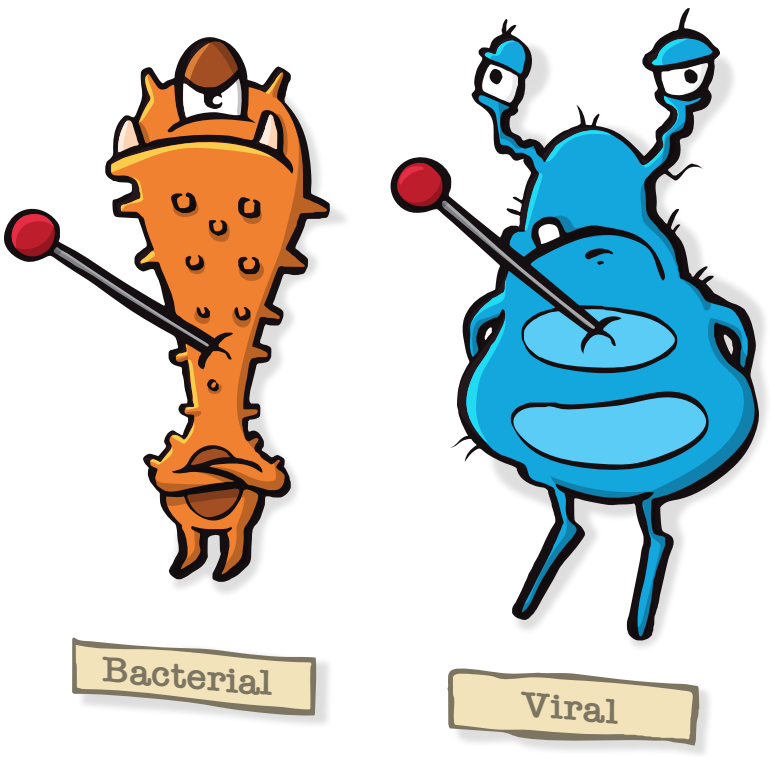
As emergency physicians, we have spent nearly the last two years caring for patients with a novel disease, worrying about personal protective equipment, and wondering when we will be able to safely hug our loved ones again.

Now we wade into a quagmire where masks and vaccines have been politicized. Health care has always intersected with politics, but we are at a rare time when it is a daily headline. Consequently, I found a reignited sense of duty to encourage better behaviors from myself, my patients, and my elected officials. As physicians, we have a responsibility to practice beyond the walls of the hospital–and our communities depend on it.* One step I took on this path was attending LAC21 in Washington, D.C.

LAC allowed me to dive into various topics with a group that shares this same sense of duty. Being surrounded by people who believe we can and must do better was invigorating. The EMRA and ACEP YPS Health Policy Primer allowed young physicians and those new to health policy, like me, to gather an understanding of current issues. Primer speakers included both young and seasoned physicians who shared stories of working within an ever-changing system. Hearing these stories was invaluable and further confirmed that, despite the obstacles, I am here to fight the good fight. LAC reminded me of an important truth: I am not alone in this fight.

****Editor's note:*** "Medicine as a social science, as the science of human beings, has the obligation to point out problems and to attempt their theoretical solution."–Rudolph Virchow. From *J Epidemiol Community Health*. 2006;60(8):671.

DR. WILLIAMS is a PGY-3 emergency medicine resident at Louisiana State University Health Sciences Center in New Orleans.



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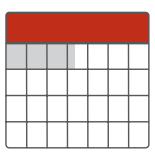
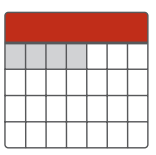
Time to diagnosis–adult patients[1]



3.3-day reduction

Time to diagnosis–pediatric patients[2]



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1. Cailleaux M, et al. 2020. Eur J Clin Micro Infect Dis. 39(2):293. 2. O'Brien MP, et al. (2018) Pediatr Infect Dis J. 37(9):868.

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FOUR PERFECT DAYS *in* BOSTON

WHAT TO DO, SEE, AND EAT AT ACEP21

SHUTTERSTOCK.COM

by ELLANA STINSON, MD, MPH

We all recall sitting at our desks in our history classes (my worst subject ever), learning from our textbooks about events such as the Boston Massacre, the American Revolution, the Boston Tea Party, and the Battle of Bunker Hill. You can't forget the notorious midnight ride by Paul Revere where he warned "The British are coming!" It's not the British this time, but yes, ACEP21 is definitely coming!

Today, Boston is best known as a thriving research center with world-leading medical facilities. This city is also a global pioneer in innovation and entrepreneurship. Boston's rich history is not the only thing we are known for around here. One thing that is least talked about is this city's depth and breadth of diverse culture, with a wide variety of restaurants and neighborhoods that carry their own unique characteristics and style. In my opinion, as a Southerner turned Bostonian, it is quite arguably the best city to host ACEP's Scientific Assembly.

Not only are our medical and innovation centers noteworthy, but so is our "wicked good" clam chowder and lobster rolls. With Boston being a world-class culinary destination, there is honestly something for everyone with an array of foods and restaurants to suit any palate. Just pick your flavor of the day.

This year's conference is in the seaport district of South Boston along the harbor that represents a newer, bolder side of Boston. Here are a few of my favorite spots to ensure that you experience four perfect conference days. [***Editor's note:*** Visit ACEPNow.com to read an extended version of this article with more things to see and do each day.]

Monday

On our first day when we are finally all together again and running into old colleagues, friends, and bosses, you may be wrapped up in soaking in the conference. Consider attending some sessions from *ACEP Now* columnists and Editorial Board members. Early Monday morning, you can catch Richard Cantor, MD, FAAP, FACEP, presenting "Cruising the Literature: Pediatric Emergency Medicine 2021."

As you come off your conference high after learning about the latest scientific advances to help manage the tiniest patients, I recommend unwinding by stepping outside for a bit of fresh air and taking off your mask as you walk over to a quick lunch at Café on D by Deli of Course. I'll be heading to Row 34 for their famous lobster roll and a nice glass of chardonnay.

Following the afternoon sessions, perhaps "What I Learned My First Year as a Director," by Jenice Baker, MD, FACEP, "Rags to Riches" by James M. Dahle, MD, FACEP, or a review of pediatric ECGs by Annalise Sorrentino, MD, FACEP, you may want to unwind with a few cocktails, so check out the Lookout Rooftop at The Envoy Hotel for spectacular harbor and city views. It can get crowded, so you will want to have reservations.

If you'd rather get out of your conference attire before dinner and getting all fancy is not your thing, check out Del Frisco's or Temazcal, both along the harbor, which always provide a friendly atmosphere to meet new friends or meet up with old ones.

Tuesday

Empty morning schedule? No problem! Start the day with a few minutes of relaxation and meditation or maybe grab your yoga mat and get fit. A few ideal outdoor exercising spots are the Lawn on D, Waterfront Park, or Fan Pier Park to take a morning stroll along the Harborwalk.

On your way to the Convention Center, here are a few bakeries for coffee, pastries, or bagels:

- Cardullo's Gourmet Shoppe
- Seaport Café
- Tatte Bakery & Café

On arrival to the Convention Center, find Arun Nagdev, MD, teaching "Upper Body Regional Nerve Blocks" and Ken Milne, MD, discussing some of his "Clinical Pearls from the Recent Medical Literature."

Should you dare to venture out a little further today, maybe catch an Uber or grab your rental car keys and visit the North End. This is Boston's oldest residential neighborhood and is best described as the "Little Italy" of Boston. With narrow streets and colonial-era sites, you will find Paul Revere's house and the Old North Church, along with some of the most quant and flavor-rich Italian restaurants, bakeries, and dessert parlors. Lobster roll alert! Neptune Oyster is by far my favorite lobster roll spot.

Wednesday

You are bound to be tired from the night before, so check out some of the nearby coffee shops before starting your day. I am not the best judge of coffee, but I hear these two are quite popular: La Colombe Coffee Roasters and Sorrel Bakery & Café. Don't worry if you started out late, the rapid fire talk on "Diagnosing Pulmonary Embolism in Pregnancy" by Lauren Westafer, DO, MPH, doesn't start until 12:30 p.m. You will be finished just in time to make it to Larry J's BBQ Café for a filling lunch prior to the afternoon sessions. They close at 3 p.m., so don't stop to talk to too many old friends on your way over or you might miss it.

If you opt to call it an early day, consider the Institute of Contemporary Arts, which has free admission for families.

After a long day of learning, it's time to clean up and get ready to party with old friends. I'll be headed over to The Grand Boston, a high-tech Vegas-style dance club featuring a lineup of top DJs and VIP areas with bottle service. For something a little more low-key, check out Scorpion Bar. If clubbing isn't your style, try an evening of bowling at Kings Dining and Entertainment where you can bowl a few rounds, find good bites at their retro-modern restaurant, and play a few games at the arcade.

Thursday

For those of you not flying out immediately, conclude your conference with Michael Granovsky, MD, FACEP, discussing "RVU Killers" to avoid missing out on maximizing your reimbursement. You'll need a little extra pocket change if you want to spend Thursday afternoon soaking up some local culture. Boston is full of museums, but one of my all-time favorites is the Isabella Stewart Gardner Museum where you can find not only art in her former home, but a glass cased café, a reading room, and a full lineup of events for all age groups, day or night.

Want to unwind and grab a brew? Boston has quite a few breweries to check out. Near the conference you will find Harpoon Brewery, the brewer of New England's original IPA: Harpoon IPA. Catch a tour and check out the beer hall that serves pretzels.

If you are looking for a relaxed, cozy atmosphere, visit Dorchester Brewing Company. Here you can enjoy a roof deck with views of the beautiful Boston skyline. And if you love BBQ, check out the notorious M&M BBQ within Dorchester Brewing Company.

Boston's many neighborhoods fit into one large city filled with centuries of history while simultaneously emerging as a newer, bolder town. Boston brings a variety of different flavors (pun intended) and adventure on just about at every corner. As we prepare to gather in the city of Boston, one of the country's most historic places, I am sure you will find a place or two that remind you of home. Hopefully you stumble across a few spots that will give you that much-needed break from hours of conferencing. Either way, make sure you soak it all in and take a piece of Boston back home with you.

DR. STINSON is in the department of emergency medicine Cooley Dickinson Hospital and President of the New England Medical Association.

By the Numbers

TRAVEL

We polled ***ACEP NOW*** **READERS** about their travel plans for the rest of the year. **HERE'S WHERE YOU'RE GOING.**

TRAVELING FOR FUN

36%
In the U.S.

17%
Internationally

TRAVELING FOR WORK

6%
In the U.S.

4%
Internationally

STAYING HOME

16%

ACEP4U: Get Ready for ACEP Council

OVERVIEW OF THE COUNCIL PROCESS, PLUS A NEW SICKLE CELL TOOL AND VIRTUAL GRAND ROUNDS

by JORDAN GRANTHAM

As we count down to the Scientific Assembly, ACEP is also preparing for the 2021 Council Meeting. Not familiar with the ACEP Council and how it governs ACEP strategy and policy? Here's a quick overview.

The Council is composed of emergency physicians who represent ACEP's chapters (one voting councillor per chapter, plus one additional councillor for every 100 chapter members), sections (one voting councillor per section), and the Emergency Medicine Residents' Association (eight voting councillors), plus one councillor each for the Association of Academic Chairs of Emergency Medicine, the Council of Emergency Medicine Residency Directors, the Society for Academic Emergency Medicine, and the American College of Osteopathic Emergency Physicians.

Council Purview

The Council has several duties. It elects ACEP's Board of Directors, Council officers, and the President-Elect of the College (see page 12 to meet some of this year's candidates). The Council shares responsibility with the Board for initiating policy. In addition to serving as a sounding board and communication network for the Board, the Council also identifies issues for study and evaluation.

Resolutions

ACEP received more resolutions for the 2021 Council Meeting than ever before. Resolutions are formal motions that, if adopted by the Council, will become official Council policy. They provide a path for nonvoting members to weigh in on issues affecting emergency medicine even if they aren't voting councillors. All ACEP members have the right to submit resolutions, but they must be submitted in writing by at least two members at least 90 days prior to the Council Meeting. ACEP chapters, sections, committees, and the Board can also submit resolutions.

Council Meeting

Every year, the Council meets for two days prior to the ACEP Scientific Assembly. Due to the positive response from last year's virtual meeting, ACEP is keeping the asynchronous resolution testimony process that allows all members, not just councillors, to comment on resolutions. The comment period will open no later than Sept. 23, when all resolutions must be released to the Council.

The majority of the work is done in reference committee hearings, which are open to all members, not just councillors. The resolutions are divided between the reference committees so that every committee does not have to deliberate on every resolution. The reference committees, whose members are appointed by the Council Speaker, host hearings where councillors and ACEP members can deliberate about the resolutions. The reference committees may amend resolutions, consolidate kindred resolutions by constructing substitutes, and recommend the usual parliamentary procedures to the Council: adopt, adopt as amended, refer (to the Board, the Council Steering Committee, or the Bylaws Interpretation Committee), or not adopt. This year's meeting will feature four reference committees that will focus on 1) governance and membership issues, 2) advocacy and public policy issues, 3) emergency medicine practice issues, and 4) workforce and scope of practice issues.

After the reference committee hearings, the Council reconvenes, and the reference committees provide oral reports and recommendations from their hearings. Discussion ensues, and eventually each resolution is voted on by the Council. Resolutions adopted by the Council are influential in shaping ACEP policy.

ACEP elections also occur during the ACEP Council Meeting. Nominations for the open ACEP Board of Directors and Council officer positions are accepted in early spring, and the slate of candidates is approved by the Nominating Committee. At the Council Meeting, each candidate presents their platform and ideas to the councillors. A Candidate Forum is also held where councillors can ask questions of the candidates. Councillors submit their votes at the end of the second day of the Council Meeting, and those elected are announced that day as soon as votes are tallied.

MS. GRANTHAM is ACEP communications manager.

LEARN MORE

Visit **www.acep.org/council** to learn more about the **ACEP Council.**

In early October, watch **www.acepnow.com** for an article **highlighting some key issues** under consideration during the upcoming **2021 Council Meeting**.

COVID-19 PROTOCOLS

ACEP's leadership continues to monitor all health and safety factors that impact ACEP21. View the event's COVID-19 safety measures at acep.org/acep21-covid-protocols.

New Sickle Cell Point-of-Care Tool Available

The Emergency Department Sickle Cell Care Coalition (EDSC^3) has released a new point-of-care tool for managing sickle cell disease in the emergency department (available at www.acep.org/sickle-cell). EDSC^3 is a collaboration between ACEP; the American Academy of Pediatrics; the American Society of Hematology; the American Society of Pediatric Hematology/Oncology; the Centers for Disease Control and Prevention; the Emergency Nurses Association; the Health Resources and Services Administration; The Joint Commission; the National Heart, Lung, and Blood Institute; the Sickle Cell Disease Association of America; and the Sickle Cell Foundation of Tennessee. Development of the tool was co-chaired by Caroline Freiermuth, MD, MS, FACEP; and Patricia Kavanagh, MD. Look for an *ACEP Frontline* podcast episode about this tool featuring Dr. Freiermuth. EDSC^3 is also planning to host a webinar in late September to discuss this resource and other considerations for sickle cell care in the emergency department.

Virtual Grand Rounds Continue

In April 2020, ACEP's Academic Affairs and Education Committees started conducting monthly Virtual Grand Rounds (VGR) as a way to provide socially distant education during the pandemic. Led by VGR Course Director Laura Oh, MD, FACEP, these free monthly sessions have featured well-known faculty covering timely topics including cardiology, wellness, airway, ultrasound, pediatrics, health policy, difficult conversations, neurology, and more. All past VGRs are available on-demand in the ACEP Online Learning Collaborative at http://ecme.acep.org. Look for upcoming events at www.acep.org/virtualgrandrounds.

TOXICOLOGY Q&A

JASON HACK (OLEANDER PHOTOGRAPHY)

Venom Dilemma

QUESTION: How worried do I need to be about a bite from this snake?

Scan the QR code to find out.

Big thanks to Dr. Sean Bush for providing the snake for my pictures.

DR. HACK is chief of the division of medical toxicology and vice chair for research at East Carolina University in Greenville, North Carolina.

EMF Grant Enabled Doctor to Delve into Pandemic Burnout

For its 2020–2021 grant cycle, the Emergency Medicine Foundation (EMF) awarded nearly $1 million in grants. One of its recipients was Janice Blanchard, MD, PhD, who received $38,777 for her project titled "An Evaluation of Stressors Related to COVID-19 in Emergency Medicine Physicians." We recently spoke with Dr. Blanchard, professor of emergency medicine and chief of the health policy section at the George Washington School of Medicine & Health Sciences in Washington, DC, about her research and how she hopes it'll change the field.

What are the goals of your research?

The purpose is to try to design interventions to address the stress in the future. Long term, we really want to understand what changes at the organizational level and individual level can alleviate workplace stress in the future. Even before the pandemic, emergency medicine clinicians and emergency medicine physicians in particular had really high levels of burnout. This isn't going away, we're still having those same issues that will increase our levels of burnout, and we may have more pandemics in the future. It's really important to understand how to decrease that burnout and anxiety and how to do that by alleviating some of the stress that emergency medicine clinicians face.

The stress can be multifold. It can be due to organizational factors, it can be due to lack of peer support, and we really need to understand how to address each of those issues better. When there are higher levels of anxiety, depression, and particularly burnout, clinician work productivity decreases. When your clinicians aren't happy and aren't effective, that translates to poor patient care.

What is unique about your data?

We had two parts. One part was interviews with emergency medicine physicians, emergency medicine nurses, and EMS workers at 10 locations across the country. These interviews were very meaningful. We got really personal, enriched stories from them to better understand how COVID-19 has impacted their stress and mental health outcomes.

The second part of our study involved a survey of nurses, physicians, and EMS workers at the same 10 locations across the country. From the survey data, we could understand the relationship between workplace factors, perceived stress, and mental health outcomes. The qualitative study gave us personal stories. The survey gave us a bigger data set to understand the relationship of these factors.

Scan the QR code to read the rest of the interview at ACEPNow.com.

As many as 1/3 of high-risk critical patients have non-convulsive seizures that can cause long term cognitive disability.[1-2]

Without brain monitoring, how would you know?

For your patients presenting with:

- Unexplained Altered Mental Status
- Post-cardiac Arrest
- Found Down / Unconscious
- Traumatic Brain Injury
- Post Intubation
- Seizure with Prolonged Post-ictal State
- Intracranial Hemorrhage / Stroke

Finally, the World's First Point-of-Care Brain Monitor

ceribell
Rapid Response EEG

Validated in a multicenter clinical trial (DECIDE)[3]

- Set-up by ANY healthcare provider for seizure triage within minutes
- Continuous brain monitoring using AI technology for bedside risk stratification
- Rapid and precise point of care clinical answers

Visit **www.ceribell.com** to learn more

1. Journal of Clinical Neurophysiology 2015;32: 87–95
2. Neurology 2016;86:253–260
3. Critical Care Medicine 2020; 48(9):1249-1257

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CONTINUED FROM PAGE 1

MEET THE PRESIDENT-ELECT AND BOARD CANDIDATES

President-Elect Candidates

Board of Directors Candidates

PRESIDENT-ELECT

The President-Elect candidates responded to this prompt:

What is your view of ACEP's strategy regarding workforce, scope of practice, and College sustainability?

Christopher S. Kang, MD, FACEP, FAWM

Current Professional Positions: attending physician and faculty, core emergency medicine residency, Madigan Army Medical Center, Joint Base Lewis-McChord, Washington; attending physician, Olympia Emergency Services, PLLC, Providence St. Peter Hospital, Olympia, Washington; clinical assistant professor, department of emergency medicine, University of Washington, Seattle; adjunct assistant professor, military and emergency medicine, Uniformed Services University of the Health Sciences, Bethesda, Maryland; associate professor, physician assistant program, Baylor University, Waco, Texas

Internships and Residency: emergency medicine residency, Northwestern University, Chicago

Medical Degree: MD, Northwestern University (1996)

Response

ACEP's current framework of workforce considerations established the necessary initial strategy to mitigate the projected surplus of emergency physicians by 2030 as well as the foundation for our specialty's evolution and sustained success. As the Board of Directors liaison to the Emergency Physician Assistant/Nurse Practitioner Utilization and Emergency Medicine Workforce Task Forces, I ensured that physicians remain the leaders of the care team and are not to be treated as replaceable by other degrees.

Emergency medicine became a leader in the house of medicine because our founders and the College fought together for their patients and specialty. However, as experienced by other specialties, the emergency medicine workforce could not grow unbridled indefinitely. The COVID-19 pandemic served as a stress test, accelerated this maturation process, and exposed needed changes. We have further lost ground as we have had to stand on the defensive from both outside of and within our ranks. Instead of assigning blame, ACEP stepped up and moved forward with organizations wishing to collaborate on solutions.

Since chairing the 2018 workgroup that recommended the task forces and the inclusion of all emergency care organizations, I have increasingly gained essential awareness of the issues we face every day. Because of my service on both task forces, I now have critical knowledge of past, current, and potential future workforces and the opportunities for continued partnership with the other stakeholder organizations. It is with this unique insight that I helped define the core tenets of the current framework of workforce considerations, including:

- Uphold the incontrovertible expertise and role of emergency physicians as THE leaders of the emergency care team;
- Promote quality-controlled emergency medicine residency training programs—continue to recruit the best and provide them with the contemporary clinical, administrative, operational, advocacy, and leadership skills to succeed;
- Support emergency physicians in whatever setting they are employed—inside and outside the emergency de-

partment, rural to urban, emergency medicine to subspecialty, clinical to education to administration, and contractor to employee to partner;
- Transform emergency care to better meet the needs of our patients, communities, and professions—expand and enhance patient access to the full spectrum of specialized acute care provided, coordinated, and led by emergency physicians; and
- Ensure that business interests do not supersede patient care—the needs of patients and the workforce must be reprioritized.

But strategies must adapt over time as transformation is not often rapid or easy. As the emergency medicine workforce will be a principal issue for years to come, we must proactively advance our strategy to sustain the integrity, health, and success of our specialty. These subsequent steps will be challenging as we navigate dynamic market forces and engage stakeholders outside of our profession. As the team leader, we must fulfill several additional inherent responsibilities, including:
- Procure sufficient resources, opportunities to thrive, and healthier, supportive, and more secure environments for us, our team, and our patients;
- Advocate that emergency physicians are equitably employed by groups, hospitals, health care systems, and government agencies and valued by the health care community and the public to include fair reimbursement;
- Challenge the monopolization of health care services by hospital systems as well as insurers; and
- Include those non-physician providers committed to emergency care as members of our team, and engage in their training, hiring and credentialing, onboarding, clinical practice, and continuing education.

At this next turning point in our history, we have a prodigious opportunity to once again define emergency medicine and forge ahead. To do so, we must reaffirm our common belief in each other, commit to our leadership role and responsibilities, and fight together with our College for our patients and the advancement of our workforce and specialty.

Aisha T. Terry, MD, MPH, FACEP

Current Professional Positions: associate professor, emergency medicine and health policy, and senior advisor, emergency medicine health policy fellowship, George Washington University School of Medicine and Health Sciences, Washington, D.C.
Internships and Residency: emergency medicine residency, University of Maryland Medical System department of emergency medicine, Baltimore
Medical Degree: MD, University of North Carolina School of Medicine, Chapel Hill (2003); MPH, Columbia University Mailman School of Public Health (2011)

Response

These challenges offer welcomed disruption and tremendous opportunity to shape a bright future for our specialty and livelihoods. Now is the appointed time for ACEP to do what it was designed to do, unapologetically continue to lead! These issues share the common thread of being critical to the mission of ACEP and are inextricably tied to the value of the emergency physician (EP). Thus, as we together tackle these unprecedented issues, I will lead with visionary strength and make the reaffirmation of our value the fulcrum of the strategy.

Workforce: As Chair of ACEP's Membership Task Force in 2008–2009, I recall studying Carlos Camargo's 2005 study which predicted that board-certified EPs would not satisfy workforce needs until the year 2038. Today, it is predicted that there will be a major oversupply of EPs—for the first time ever—by the year 2030. This prediction, coupled with the recent relative paucity of EP employment opportunity due to the impact of the pandemic, threatens the stability of the emergency medicine (EM) workforce, the capacity to provide our patients with access to care, and the ability to successfully recruit future EPs.

As President-Elect, I will prioritize this existential challenge in a manner that optimizes ACEPs real-time relevance to all EPs. My efforts as a second-term Board member align with our strategy to 1) acknowledge the problem and rightful alarm; 2) inform by highlighting the complexities and differentiating fact from myth; 3) address head-on by sharing an action-based, multipronged strategy tied to an aggressive timeline; and 4) engage others to join these efforts in a unified way, which promotes swift progress. Consistent and transparent communication about our efforts and progress made is imperative. We must also highlight Chapter efforts, engage stakeholders in collaborations, and constantly seek feedback from our members.

Finally, we would be wise to acknowledge that a prediction is just that; several unknowns remain. For example, how will COVID-19 impact attrition? How might the role of workforce geographic distribution evolve? How will demand for EM services change? How will the proliferation of the nurse practitioner (NP) and physician assistant (PA) workforce be impacted? The answers to these and other salient questions will undoubtedly impact the future of our workforce and must be considered now.

Scope of Practice: ACEP believes that emergency care should be EP-led and opposes the independent practice of NPs and PAs. As President-Elect, I will lead efforts to attain and embrace data-driven solutions to combat scope-of-practice threats. We must be intentional about marketing our value and emphasizing why EP-led care offers distinct advantage as the gold standard. In doing so, ACEP's Clinical Emergency Data Registry (CEDR) data (>50 million ED visits from about 30,000 EPs, NPs, and PAs) would be an excellent tool to utilize in answering key questions and illustrating our comparative value. Further, as we pursue the implementation of ED accreditation standards, we must determine and enforce best practices for quality-promoting staffing models relative to scopes of practice among the ED care team.

We must also build upon past and current efforts. Outstanding strides have been made, for example, through the work of ACEPs Advanced Practice Provider Task Force, statements on the importance of title transparency in clinical settings, and our partnership with the American Medical Association (AMA) to dispel the myth that increased NP/PA scope of practice improves access to care.

College Sustainability: My candidate platform includes the creation and optimization of infrastructure that fosters longevity for EP livelihoods and the financial stability of the College. ACEP is well positioned to achieve this goal by building upon its investment in quality and data.

The delivery of high-quality care will continue to be required, measured, and tied to reimbursement. ACEP's CEDR is a member benefit that promotes quality while fostering EP compensation through federal quality reporting. The registry allows EPs to avoid financial penalties ($300 million in avoided penalties to date) and reap lucrative bonuses (up to $2,000 per EP for 2020).

CEDR is poised to evolve far beyond its current registry function, however. Imagine, for example, if ACEP had a digital platform by which to lead robust EM-focused research, real-time disease surveillance, and ethical data commercialization opportunities through unique EM use cases. Such would minimize the College's current reliance on member dues and meetings income (both total about 40 percent of revenue), while expanding our digital footprint in health care.

As President-Elect, I will build upon my experience as Treasurer of the College during the pandemic, one of the toughest financial periods in the history of ACEP. I led our finance team in making tough but necessary decisions, encouraged the implementation of zero-based budgeting, and helped spearhead strategy-focused practices. These efforts contributed to the passage of a 2021–2022 budget that mitigated damage from the 2020 pandemic, resulting in a significantly reduced deficit.

BOARD OF DIRECTORS

The Board candidates responded to this prompt:

How do you build confidence that the College prioritizes the interests of our members and our specialty?

L. Anthony Cirillo, MD, FACEP

Current Professional Positions: staff emergency department physician, AdventHealth Dade City and Palm Harbor emergency departments, Florida; director of government affairs, US Acute Care Solutions
Internships and Residency: emergency medicine residency, UMass Medical Center, Worcester, Massachusetts
Medical Degree: MD, University of Vermont College of Medicine, Burlington (1990)

Response

The building of confidence in any relationship is based upon how we listen to, respect, and act both toward each other and in support of each other. In my 30 years of ACEP membership, I have had the opportunity to work with and represent so many great emergency physicians. From my early days as an eager young resident serving on the EMRA Board of Directors to my service now on the ACEP Board of Directors, and in the course of each and every committee, task force, and Board meeting, I have never forgotten that I serve the interests of all ACEP members and the specialty of emergency medicine. ACEP is recognized within the house of medicine and with policy makers in the health care arena as *the* voice of emergency medicine. The College is respected in this role because we always focus on doing the right thing for our patients and our members. Focusing on the needs of our members and patients is the core of everything we do in ACEP, and we must never lose this foundation.

For this question, I believe one can substitute the word "trust" for "confidence." I believe that trust in a relationship is built on two things: communication and action. As the College has matured, we have become a multigenerational organization. This maturation has led to some amazing moments, such as a mom or dad emergency physician literally passing the baton of care during shift sign out to a daughter or son. ACEP's maturation also creates challenges for effective communication with our members. Creating a sense of connection and family is a critical role of ACEP that emphasizes our uniqueness as a specialty. As some in emergency medicine and the health care arena are trying to tear us apart, the College, and by that I mean each member, has been a source of pride and strength for me. But effective communication with a multigenerational group of emergency physicians requires that the College enhance our communication strategies. ACEP's connection to each and every member, regardless of generation, is vital to our future.

William B. Felegi, DO, FACEP

Current Professional Positions: medial director, Van Buren County Hospital emergency department and Van Buren County Hospital ambulance, Keosauqua, Iowa; EMS medical director, Farmington Ambulance
Internships and Residency: emergency medicine residency, Morristown Memorial Hospital, Morristown, New Jersey
Medical Degree: DO, University of

CONTINUED *on page 14*

New England College of Osteopathic Medicine, Biddeford, Maine (1989)

Response

ACEP does not have unlimited resources. Action plans cost money, resources, and time.

- Establish priorities based on the needs of our patients, members, and residents. These are proactive priorities. This is the essential basis of why we are emergency physicians and makes our specialty unique—fair balanced billing, prudent layperson, fair reimbursement, protecting EMTALA, etc. Reactive priorities are issues that arise as a part of another's agenda, whether it's the government, politicians, national mega-CMGs or private equity, hospitals, other physician groups, or providers. Examples include COVID and the lack of personal protective equipment, PAs wanting to change their name to physician associates, etc.—not always anticipated. Reactive priorities often are compounded by special interest groups that have more than adequate financial resources and political influence. ACEP needs to have a better understanding of issues that outside interests (and members) may have so that we can plan in a more proactive way. We can do better.
- Accurate messaging is key for our membership to understand the College's priorities. ACEP announced an anticipated surplus of residency-trained emergency physicians. One way of reducing residents was to extend EM residencies by one year. The messaging was off track, and some interpreted as, "Let's punish residents by increasing training length, placing them in deeper debt without a guaranteed job." Where I know that this was not the intent, it was the message that residents heard and disseminated on social media to create further panic. Unintended consequences of messaging are often overlooked.
- We must clarify some of what I refer to as bipolar behavior in our messaging and priorities. We aspire to have board-certified EPs working in every ED in this country. On the other hand, some want to ensure that all freestanding EDs are staffed similarly. Yet, critical access hospitals are not mandated to have the same requirements. In fact, there is no requirement to have a physician physically present on site 24-7. Some critical access and rural hospitals have tried to increase the quality of care delivered to patients by hiring PAs that have additional training in EM, but some training programs have been ostracized for calling them "residency programs." If our goal is to have an EM physician–lead team in every ED, then we need to work on ways to make this happen. Do we really know why residents do not want to practice in critical and rural hospitals? Do we need to readjust training for residents to practice in rural areas? Are our assumptions correct? Estimates are 42 percent of the population get its care in rural EDs, yet these EDs only make up 17 percent of all ED visits. Do we abandon our efforts? We need to figure this out or our goal will never be realized, and we will need to readjust priorities.
- ACEP needs to maintain its integrity. Integrity is doing the right thing at the right time for the right reason. We need to base our priorities, interests, and messaging on strengthening our integrity.

John T. Finnell II, MD, MSc, FACEP

Current Professional Positions: professor of clinical emergency medicine and associate professor of informatics, Indiana University, Indianapolis; investigator and faculty member, division of biomedical informatics, Regenstrief Institute; attending physician, Eskenazi Health, Indianapolis
Internships and Residency: emergency medicine residency, University of California, San Francisco–Fresno
Medical Degree: MD, University of Vermont, Burlington (1991)

Response

I've recently learned of an expected death of a dear colleague, which reminds me of a poem called "The Dash" by Linda Ellis. The Dash represents the time we have and what we can accomplish and reflect upon how we spend our Dash. The actions we take, the progress we make, is all about The Dash.

Confidence in our College is built upon our actions and achievements—The Dash. It begins with the ACEP Council, our councillors, and the Board of Directors. What we accomplish at Council sets the stage for what we need to accomplish today, tomorrow, and the rest of the year. While our progress may feel incremental, significant changes can and do happen.

The College can and should do more to promote our achievements. Our members may not fully realize everything that ACEP is doing for our members and our specialty. As a brief summary:

Advocacy in 2018:

- Four emergency medicine–focused bills signed into law
- 30 Congressional letters of support or comment submitted
- 10 regulatory comment letters submitted
- 555 legislative visits conducted by ACEP members and staff
- More than 4,000 members in the ACEP 911 Legislative Grassroots Network respond to advocacy alerts when needed by ACEP by emailing their members of Congress on a particular issue of concern to emergency medicine. This network covers 95 percent of Congressional districts.
- 5,215 donors to NEMPAC, the 4th largest physician specialty PAC
- NEMPAC contributed $2.2 million to House and Senate candidates and party committees in 2018.

Notable Board items in 2021:

- Legislative and Regulatory Priorities for the First Session of the 117th Congress
- National Pandemic Readiness—Ethical Issues
- Definition of Democracy in EM Practice
- Safer Working Conditions for Emergency Care Workers
- Prudent Layperson Model State Legislation
- Artificial Intelligence in Emergency Medicine

As I reflect over the past two and half years, your Board has considered over 400 items of business. The Council resolutions that you create and approve are the work products and achievements for the College. Think about it—over 400 items of business in close to three years. Our memories are short; the COVID-19 pandemic challenged all of us but allowed us to become stronger. We became stronger by working together to produce the ACEP COVID-19 Field Guide. This resource launched April 8, 2020, and one month later had over 100,000 page views, over 150 agencies/websites/links to our site, and has been translated into Japanese, Chinese, Spanish, Hindi, and Urdu with over 230 pages of content—outstanding, and a great example of how the College prioritizes the interest of members and specialty.

So, in the end, what matters most is not the beginning or the end but our Dash. Our achievements. How will we continue to lead and advance the specialty for all emergency physicians?

I'm proud to be an ACEP member and to serve you and the College.

Rami R. Khoury, MD, FACEP

Current Professional Positions: vice president of operations-west, Independent Emergency Physicians-PC; board member, Henry Ford Allegiance Health Specialty Hospital, Jackson, Michigan; staff physician, Henry Ford Allegiance Health and Ascension Providence Southfield/Novi; assistant clinical professor, department of osteopathic medical specialties, Michigan State University College of Osteopathic Medicine, East Lansing; assistant clinical professor, department of emergency medicine, Michigan State University College of Human Medicine
Internships and Residency: emergency medicine residency, St. John Hospital and Medical Center, Detroit
Medical Degree: MD, Wayne State University School of Medicine, Detroit (2001)

Response

As a practicing physician in an equal-partnership democratic group, I know firsthand the challenges that face today's front-line physicians. And as a leader in my group, I've been privileged to help address those challenges, most recently developing solutions to the operational, financial, and wellness challenges that we faced related to the COVID pandemic. Our group is stronger than it has ever been due to our concerted efforts to achieve our unwavering commitment to openness and transparency with our physician partners. We consistently invite and invest in the development of the next generation of leaders within our group. In our group, all partners are invited and encouraged to share their viewpoints. Our group's vision and focus are representative of the shared vision of the collective.

Today, ACEP members are clear about the issues that are most pivotal to the future of emergency medicine: fair reimbursement for our skill and expertise, a rational approach to EM workforce and scope of practice for non-physician providers of emergency department care, and employment models that are equitable and transparent. Since its founding in 1968, ACEP has been an organization dedicated to serving its members—emergency physicians and physicians-in-training—who for over 50 years worked tirelessly to advance the specialty of emergency medicine. Each fall during ACEP's Scientific Assembly, councillors representing each of ACEP's 53 chapters, 40 sections, EMRA, ACOEP, AACEM, CORD, and SAEM gather to elect ACEP's leaders and to vote on resolutions that frame the agenda for the College. The passed resolutions are then reviewed by the ACEP Board, which subsequently assigns these objectives to one or more of ACEP's 30 committees or to new ACEP task forces.

Building confidence that the College prioritizes our members' interests begins with engaging our members in the process—through committee or task force membership, Council involvement, and active participation in ACEP state chapter affairs. Additionally, confidence in ACEP's dedication is further enhanced through robust communication with members regarding the amazing work that is being done on behalf of emergency physicians and the patients they care for.

Our specialty certainly has its share of challenges. I believe that challenges create opportunities, and when I look at how much our specialty has grown over the past 50 years, I am optimistic that emergency physicians will continue to innovate, adapt, evolve, and lead in delivering the best care possible for our patients—within the emergency department and beyond. As your next ACEP Board member, I commit to ensuring that the interests of our members, our patients, and our specialty will be prioritized above all else.

Heidi C. Knowles, MD, FACEP

Current Professional Positions: associate medical director and emergency medicine residency core faculty at John Peter Smith Hospital, Fort Worth, Texas; assistant professor, department of emergency medicine, TCU and UNTHSC School of Medicine, Fort Worth; ED staff physician, Texas Health Southlake; EMS program medical director, Trinity Valley Community College, Athens, Texas
Internships and Residency: emergency medicine residency, University of Texas Health Science Center at Houston
Medical Degree: MD, University of Texas at Houston Medical School (2003)

Response

Confidence—"the feeling or belief that one can rely on someone or something; firm trust"—is critical to an organization's members' interest, involvement, and commitment. Currently, there is a divide amongst emergency medicine physicians, one side committed to ACEP and the other questioning the priorities and loyalties of ACEP. At this time, it is essential that ACEP commit to building confidence in all emergency medicine physicians, not only to retain members but also to gain new ones, so that ACEP can continue to be the voice of EM.

Communicating a clear strategic picture, one that allows members to gain awareness of the historical precedence set by the College, will help members to better understand future goals and strategies implemented by the Board. Strategic planning that occurs at the national level must be clearly communicated to every member. This transparency will go a long way in building confidence that ACEP is prioritizing the interests of its members and our specialty. The challenge lies in determining which method of communication is best to accomplish this goal. Since ACEP's membership is diverse, this communi-

cation must continue to be multimodal—via traditional and electronic methods, with emphasis being placed on identifying the most efficacious means of getting the message across. Video conferencing is another method that can be taken advantage of to allow members the opportunity to hear this information live as well as have interactive discussions/Q&A sessions. Video conferencing allows members to voice their opinions, feel validated, and, importantly, be heard. The COVID pandemic made this modality commonplace, and most of our members are now familiar with its use. ACEP should embrace this opportunity to set up regional meetings with EM physicians for virtual "town hall" discussions across the country. Communicating the hard work that the ACEP staff and Board members are doing on a daily basis will give members an understanding and insight into how these activities affect them and their practice. This will ultimately lead to a confident and loyal member.

Michael Lozano Jr., MD, MSHI, FACEP

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Internships and Residency: emergency medicine residency, Albert Einstein College of Medicine of Yeshiva University, Bronx Municipal Hospital Center, Bronx, New York
Medical Degree: MD, Mount Sinai School of Medicine, New York, New York (1987)

Response

The objective reality is that ACEP does indeed prioritize both our members' interests and specialty. College publications, policy statements, and advocacy efforts all provide support for that statement in both words and deeds. The challenge is in properly and effectively communicating this reality to our rank-and-file membership. Without that connection to membership, confidence wanes and the weeds of misinformation will flourish. To combat this, we need to be purposeful in framing our communications to always be viewed through the lens of member interest. Additionally, we can educate the membership on our governance structure and provide additional degrees of transparency in our governance processes.

A casual review of the June issue of *ACEP Now* is representative of how the breadth of our practice is supported by ACEP. There are articles on clinical issues such as the management of pulmonary embolism, marine envenomation, and urticaria. COVID-19 vaccination challenges are discussed alongside the global health aspects of vaccine sharing. Professional development is promoted through conferences (ED Directors Academy, Scientific Assembly, and Leadership & Advocacy) and didactic materials (Critical Decision in EM, and PEERcert+). All are relevant and relatable to physicians practicing emergency medicine. Similarly, when visiting the newly updated ACEP website, one sees categories of content that resonate on a professional or personal level. Additionally, the myriad committees and sections available for participation reflect the priorities of our membership.

The content and services are indicative of the big umbrella that is emergency medicine and which is represented by ACEP. Although some of our efforts, like advocacy, raise all boats, we should make it a point to indicate the personal benefits of membership and not just when we want people to renew. We should include terms such as "member benefit" and prominently illustrate the savings due to membership at the point of purchase for all our products.

Messaging is but one aspect of restoring confidence. Actions speak louder than words, and to that end, we should actively reach out to the membership to determine their preferred mode of communication. We are a multigenerational organization, and our members have individual preferences for connection with us. In tandem we should embark on an educational journey to better inform on the governing structure of ACEP. I would hazard to guess that many members are not clear on the role of Council and how it connects with the Board. There is probably a larger number of members that are unaware of the staff at the ACEP offices (both) and the great and varied work that they do on our behalf. Finally, I would advocate for greater transparency. Let us take advantage of the pandemic and continue to open Board meetings and Council electronically to the general membership. Transparency goes a long way in restoring confidence.

ACEP is an organization that represents the interests of emergency physicians and their patients. In doing so, there are multiple touch points across the career range of membership. Promoting confidence, and in turn commitment, can be achieved through effective communication, education, and transparency.

Henry Z. Pitzele, MD, FACEP

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Internships and Residency: emergency medicine residency, University of Illinois at Chicago
Medical Degree: MD, University of Illinois at Chicago College of Medicine (2000)

Response

So much of what we do as organizational leaders is based in symbolism; what we say in public matters, and what we do in public matters even more. Every day, hundreds of people within ACEP spend countless person-hours working for the betterment of our specialty—unfortunately, this fact does not always permeate down to the members who are busy scanning heads and admitting chest pain. We need to do significantly better with messaging so that the tremendous and significant value which ACEP generates for the specialty (and for front-line docs) is conveyed to the people whose hard-earned money and time make up the foundation of our organization.

The other thing we can do is to elect leaders within ACEP who have no other interests than the betterment of the specialty and the improvement in the lives of front-line doctors and ED patients. The physicians who hold leadership-level positions within national staffing companies necessarily have to balance the interests of ACEP with the interests of their company—when those two are at odds (for instance, with the business model of oversupplying EM residents to drive down

CONTINUED *on page 16*

EP compensation in the long-term, or with the tactic of using non-physician practitioners to drive down demand), it is not realistic to think that these leaders would act as strongly to set guardrails for their own companies as leaders who do not have this other set of corporate goals. The best we can hope for is abstention on these issues—and why should we settle for that from our leaders? I am not maligning these individuals—they clearly work hard for EM and bring significant talent to the organization. But it would be unexpected and weird if these highly efficient executives ignored or worked against their company—if they didn't represent their companies' interests well, they wouldn't have risen so highly. It's not evil; it's just that their goals aren't the same as our goals. And although it has seemed for years that electing these leaders to the ACEP Board (and indirectly, to the Presidency) has been a benign and victimless endeavor, the findings of the Workforce Task Force have shown us that unchecked corporate action in this arena has left us hobbled; we must course-correct, and we must do so now.

The membership knows this—they are waiting for us (the Council and the collective ACEP leadership) to show them that nothing is more important to ACEP than the long-term well-being of EPs. I believe in Dr. Schmitz, and I think she's the right leader for this heavy task; the multifactorial framework approach to Workforce is absolutely the right way to go—I just want to make certain that we give her the utmost support in the "limit corporate interests" plank of that framework, and that starts with an unconflicted Board. The specialty can and will continue to grow and flourish, and this is the most immediate way to show the membership that ACEP is the best way forward.

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Internships and Residency: emergency medicine residency, Spectrum Health–Butterworth Hospital, Grand Rapids, Michigan

Medical Degree: MD, Rutgers–Robert Wood Johnson Medical School, New Brunswick, New Jersey (1983)

Response

One of the biggest issues that we currently face is our workforce.

We witnessed an unpreceded drop in ED volumes at the onset of COVID-19. As a result, many members experienced a reduction in hours—and compensation. Twenty percent of new EM residency grads were unable to find jobs. ACEP's recent study, "Emergency Medicine Physician Workforce: Projections for 2030," projects a surplus of emergency physicians by 2030. Woven into this challenge is the rising use of non-physician providers (NPPs).

NPPs make up roughly 25 percent of the total EM workforce. The increasing use of NPPs has reduced the need for emergency physicians. In addition, there is an increased push at the state level for the independent practice of NPPs. Recently, the American Academy of PAs voted to change the name of the clinicians they represent from physician assistants to physician associates. The motivation for this is not surprising. In many EDs where I have worked, PAs effectively work independently. However, they can be geographically separated from physicians, making communication challenging. In addition, physicians can be maxed out taking care of their own patients and have little bandwidth to see and evaluate the NPP's patients. No wonder that some in the NPP world are seeking independent practitioner status.

However, to blame NPPs for this problem misses the root cause. NPPs cost about a third of a physician's salary. Entities that employ physicians and NPPs—hospitals, health systems, contract groups—are financially incentivized to reduce their labor costs and replace physician hours with NPP hours whenever possible. This is true for both for-profit and not-for-profit organizations. However, the use of NPPs isn't all the result of unbridled greed; many physician-owned contracts would not be financially viable without the use of NPPs. Hospitals would have increased labor costs, leaving less money available for other health initiatives that serve the community. Yet, the potential for abuse clearly exists. Indiscriminate substitution of physician coverage with NPPs serves only the bottom line.

The solution to this problem will be complex and nuanced. NPPs are now woven into the fabric of the EM workforce, and there is no going back. There are many competing interests, and it will be difficult, if not impossible, for ACEP to take a position that will make everyone happy. However, I believe that our North Star on this issue should be what's in the best interest of our patients. That is where we can all find common ground. Many years ago, ACEP promoted the standard that emergency departments should be staffed by EM-trained physicians, not moonlighting internists or surgeons. Similarly, we need to redefine what a clinically effective, safe, physician-led care team should be. We need to make that definition the standard for emergency departments across the country. We need to develop a model for an ED care team that we'd trust to care for our loved ones, and a model for where we want to work. By placing patients first, we will be true to ourselves, our members, and our specialty.

PUTTING RESEARCH TO WORK FOR YOU

PRACTICE CHANGERS

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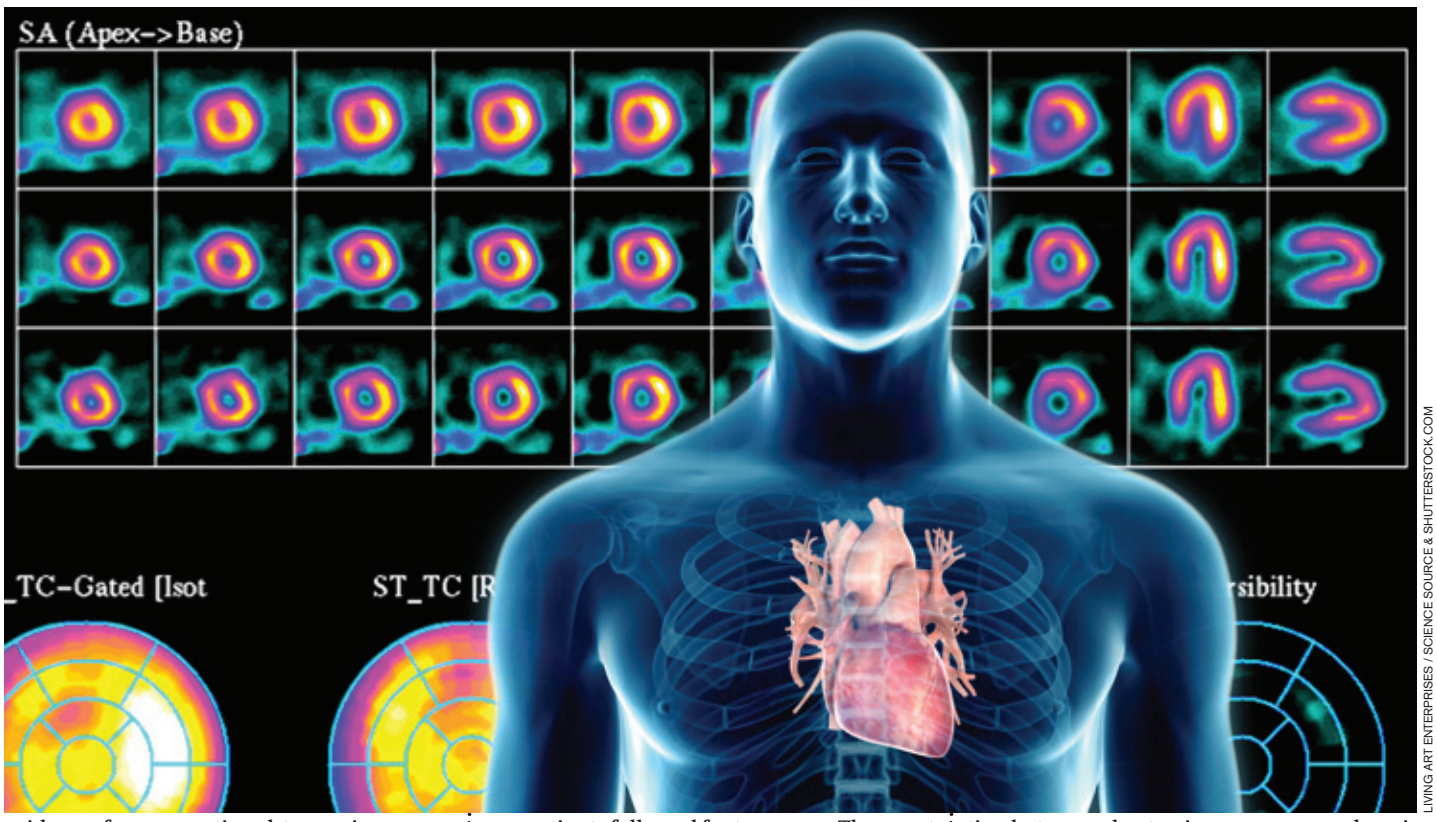
GRACE in Evaluating Chest Pain

New guidelines empower physicians to consider when less is more

by LAUREN WESTAFER, DO, MPH



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Emergency department evaluations for chest pain are common, accounting for approximately 5 percent of all ED visits. Up to 40 percent of these patients return to the emergency department with recurrent chest pain within one year.[1] The intensity of evaluation for acute coronary syndrome (ACS) may vary—some patients may have received prior stress testing, coronary CT angiography, or even cardiac catheterization. Although risk stratification tools such as the History, ECG, Age, Risk factors, and Troponin (HEART) score are widely used to help determine disposition of patients with chest pain, there is little guidance regarding patients with recurrent chest pain who have had a prior evaluation. How much should a prior negative stress test or cardiac catheterization guide the medical decision making?

Enter the Society for Academic Emergency Medicine Guidelines for Reasonable and Appropriate Care in the Emergency Department (GRACE) on recurrent chest pain. This is the first of a clinical practice guideline series aimed at de-implementing low-value practices within emergency medicine. These guidelines attempt to make recommendations for patients who present with low-risk chest pain, defined as those deemed low risk by a validated scoring system (eg, HEART score <4) who present to an emergency department with an evaluation for ACS at least twice in a 12-month period. The primary outcomes assessed were major adverse cardiac events (MACE), including acute myocardial infarction (AMI), need for percutaneous coronary intervention (PCI) or bypass, and death. Nearly all the recommendations in this document are based on low-quality evidence, mostly from studies indirectly answering the questions, as few addressed recurrent evaluations specifically.

Serial Versus Single Troponin

Recommendation: "In adult patients with recurrent, low-risk chest pain, for greater than 3 h duration we suggest a single, high-sensitivity troponin below a validated threshold to reasonably exclude ACS within 30 days."

This recommendation is congruent with other clinical policies, including the 2018 ACEP clinical policy on suspected ACS, as MACE within 30 days was 0.5 percent, falling below the acceptable miss rate of 1 to 2 percent.[2] There are two key components to this recommendation. First, a single troponin only applies to high-sensitivity troponin, as there is insufficient evidence for conventional troponin assays. Second, the chest pain must be more than three hours in duration, as very few patients in the included studies presented to the emergency department earlier.

Repeat Stress Testing

Recommendation: "In adult patients with recurrent, low-risk chest pain, and a normal stress test within the previous 12 months, we do not recommend repeat routine stress testing as a means to decrease rates of MACE at 30 days."

Ideally, stress testing would identify patients with intervenable coronary artery disease and reduce MACE; however, studies assessing stress testing of ED patients with chest pain have not found a reduction in MACE at 30 days. Yet, stress testing carries potential harms from downstream testing and procedures as false positive tests are not uncommon.

Outpatient Versus Inpatient Management

Recommendation: In adult patients with recurrent, low-risk chest pain and either no occlusive coronary artery disease (CAD) (0 percent stenosis) or non-obstructive (<50 percent stenosis) CAD on prior angiography within five years, the authors recommend referral for expedited outpatient testing as warranted rather than admission for inpatient evaluation.

These recommendations are possibly the most "practice changing" in the document. Patients with nonobstructive CAD have very low incidence of AMI or death in the two years following the catherization—fewer than one event in 100 patients followed for two years. The event rate is even lower for those with no occlusive CAD. As a result, hospital admission for ACS evaluation is likely to generate more harms (allergic reactions, procedural risks, stress, and cost) than benefit.

Recommendation: "In adult patients with recurrent, low-risk chest pain and prior [coronary computed tomographic angiography] CCTA within the past 2 years with no coronary stenosis, we suggest no further diagnostic testing other than a single, high-sensitivity troponin below a validated threshold to exclude ACS within that 2-year time frame."

This recommendation echoes the one above—the recognition of the unlikely benefit and potential harms of hospitalization in a very low-risk group. A large registry found that the risk of AMI, mortality, and MACE were all well under 1 percent in patients with a CCTA without coronary stenosis who were followed for two years. Although identification of this ultra-low-risk population might be seen as a benefit of CCTA, the test is associated with increased downstream testing and interventions of uncertain long-term patient-oriented benefit.

Screening and Referral for Depression and Anxiety

Recommendation: In adult patients with recurrent, low-risk chest pain, the authors recommended using depression and anxiety screening tools and referral for anxiety or depression management.

The evidence basis for these recommendations is minimal and rooted in observational data finding variable results for an association between chest pain recurrence and anxiety and depression. At this time, the evidence doesn't provide sufficient information on what to do if a patient "screens in" for depression or anxiety. As emergency physicians, we must be cautious in attributing medical issues to mental health and recognize that a concurrent diagnosis of anxiety may cause us to anchor and potentially miss a serious diagnosis.

Conclusion

The recommendations in this guideline are rooted in low-quality evidence and therefore are a weak set of treatment options for emergency physicians. Yet, they represent a critical step in ED evaluations—guidance for clinicians to stop performing low-value or wasteful care. In medicine, we often strive for a "zero miss" culture, despite the impossibility of this aim and recommendations to embrace a 1 to 2 percent missed diagnosis rate in ACS. We often fail to consider the iatrogenic harms and patient and societal costs associated with overtesting and more intensive care. The GRACE guidelines may empower some clinicians to more thoughtfully and rationally evaluate patients with low-risk recurrent chest pain by providing reassurance that "more" may not necessarily be beneficial to the patient.

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Physician Interrupted

Interruptions abound in the ED, but does putting limits on physician chart access eliminate medication errors?

by CEDRIC DARK, MD, MPH, FACEP

Emergency physicians have a difficult job. In no other profession can a person be interrupted more than once every 10 minutes while being asked to make critical lifesaving and life-altering decisions.[1] Even when interruptions are minimal, working long and odd hours can induce erroneous judgment if we are not careful with our decision making.

I remember the combination of fatigue and inexperience during my internship year when I was writing orders on a newly admitted patient before leaving the hospital after a 24-hour shift. Walking around the ICU on rounds, I suddenly remembered that I had written for the wrong medication. Before an error could happen, I was able to go back and change the order. Back then, orders were written on paper, they weren't executed rapidly or in real time, and you could only write in one chart at a time because you had to have the thick binder of the patient's medical record physically open in front of you. Following the advent of electronic medical records, it has become even easier to mix charts and extraordinarily simple to place the wrong order on the wrong person.

Whenever I try to order a dose of ketorolac on a patient who neglected to tell me that they are allergic to ibuprofen, the computer alerts me to this potential adverse event. But the computer can't tell me if I am ordering a medicine for the wrong patient or a test for the wrong person or an X-ray on the incorrect side of the body. To reduce errors such as these, The Joint Commission and the Office of the National Coordinator for Health Information Technology have suggested that physicians should only open one chart at a time on their computer screens. Based on expert opinion alone, this restriction promises improved patient safety. It also threatens efficiency, which, in the emergency department, is one of a physician's greatest commodities. This month's journal club article at right explores this assumption. It shows that when a medical system reduced the number of open charts that physicians were allowed to access simultaneously from four to two, mistaken entry errors—orders that were "placed, retracted, and reentered on a different patient"—decreased.[2]

Once quantified, the rate at which errors declined meant that for every 5,000 orders, only one would be changed. Extrapolating this to my high-volume urban emergency department, could that mean that only 20 patients out of every 100,000 would have an order entry error? Is that level of restriction worth it? A report by Kaiser Health News entitled "Death by 1,000 Clicks" detailed the new types of errors that have become prominent as we have expanded our medical records into the digital age.[3] While we have certainly reduced problems with illegible handwriting and standardized protocols, we've also made it more difficult to do seemingly simple tasks. Reducing the emergency physician's ability to multitask does not benefit our patients—it just promises to be another impediment to the practice of medicine. A second study, a randomized trial testing The Joint Commission's "expert opinion" to limit physicians to one open chart at a time, similarly showed that emergency physicians do not need to sacrifice efficiency for safety.[4]

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EMRA+POLICYRx HEALTH POLICY JOURNAL CLUB

Limiting EMR Chart Access May Not Reduce Error Rates

by FLORIAN SCHMITZBERGER, MD, MS

Perhaps no other specialty in medicine deals with constant task switching as much as emergency medicine. It happens frequently during a shift when you are in the middle of one task and get interrupted to place an order for a different patient. There is a certain cognitive load to keeping your current task in mind while switching charts in your electronic medical record (EMR) system. You see a message that you are not able to open another chart, you must close an open chart first; this inevitably causes frustration. A major reason for the limitation in the number of open charts is to minimize orders being accidentally placed for the wrong patient, an argument that superficially makes sense. However, limiting the number of open charts does not limit the number of patients being cared for at the same time.

A new study sought to establish whether a lower limit of open charts in the EMR led to a reduction in accidental orders being placed for the wrong patient.[1] The researchers performed a retrospective chart review at 13 emergency departments where they counted retract-and-reorder events, which were defined as a procedure or medication order that was placed, retracted, and reentered on a different patient within 10 minutes. While limited, this simple approach can be expected to catch a number of mistaken entry errors. The researchers studied two periods of evaluation with limits of either two or four open charts.

Their findings showed retraction rates of 2.4 per thousand when four charts could be opened versus 2.2 per thousand when only up to two charts could be simultaneously opened. Ultimately, there was no statistically significant difference in the rates of retract-and-reorder events, the chosen proxy for these near-miss medical errors.

While this study is not sufficiently rigorous to conclude with certainty that limiting concurrently open charts does not reduce error rates, it provides some evidence that runs opposite to recommendations offered by The Joint Commission to limit open charts to only one. In my opinion, the loss of efficiency with fewer open charts without a verifiable increase in patient safety does neither the doctor nor the patient any good.

This Health Policy Journal Club review is a collaboration between Policy Prescriptions and the Emergency Medicine Residents' Association.

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ADVANCING EMERGENCY CARE

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by LANDON JONES, MD, AND RICHARD M. CANTOR, MD, FAAP, FACEP

The best questions often stem from the inquisitive learner. As educators, we love, and are always humbled by, those moments when we get to say, "I don't know." For some of these questions, you may already know the answers. For others, you may never have thought to ask the question. For all, questions, comments, concerns, and critiques are encouraged. Welcome to the Kids Korner.

Bacterial Blowout

Question 1: In children, is there a particular duration of diarrhea that would suggest a bacterial etiology?

A 2006 prospective study by Klein et al evaluated 1,626 stool samples of children with diarrhea presenting to a pediatric emergency department over a three-year period.[1] The authors evaluated clinical characteristics such as the number of stools, duration of diarrhea (in days), recent travel, fever, age, and presence of blood. They then evaluated whether these characteristics were associated with an increased likelihood of a positive bacterial diarrhea culture.

This study was performed in the United States. The median age of children enrolled was 1.3 years, and the median duration of diarrhea prior to presentation was three days. Bacterial pathogens were culture positive in 118 of 1,626 stool samples (7.3 percent), and factors significantly associated with a positive bacterial stool culture were travel outside the United States within 30 days (relative risk [RR] 2.8), blood in the stool (RR 7.4), or passing of more than 10 stools in the previous 24 hours (RR 1.1).

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Interestingly, duration of diarrhea more than 10 days significantly decreased the likelihood of yielding a positive bacterial stool culture (odds ratio [OR] 0.3; 95 percent, confidence interval [CI] 0.1–0.9). Also, this study found that clinical physician judgment for the need for a stool culture demonstrated sensitivity and specificity of 76 percent and 65 percent, respectively. Physician gestalt was almost as predictive as the model developed by multivariate analysis.

A second prospective case-control study of 3,366 children in Africa and southeast Asia found a negative association between viral etiology and bloody diarrhea as well (OR 0.129; 95 percent CI, 0.096–0.173), suggesting that bloody stool is not typically associated with viral etiologies of diarrhea.[2] Conversely, bloody stools were associated with a bacterial cause (P<0.0001). This study did not find a significant association between diarrhea duration and the likelihood of a bacterial etiology.

Conclusion

We were unable to find a particular duration of diarrhea that would suggest a bacterial etiology. Bloody stool and recent travel outside the United States seem to be the strongest predictors of a bacterial etiology of diarrhea.

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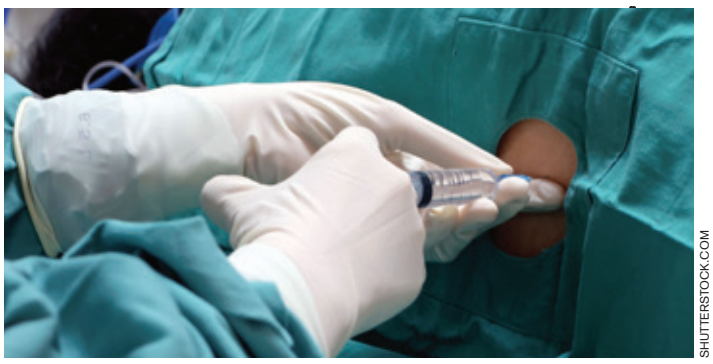
Lumbar Punctures

Question 2: In children with a complex febrile seizure, on which patients might you safely forego a lumbar puncture (LP)?

A retrospective study by Seltz et al evaluated 390 cases of complex febrile seizures in 366 children ages 6 months to 6 years in the post-Hib and post-pneumococcal vaccine era.[1] The authors evaluated the incidence of either bacterial meningitis or herpes encephalitis. A lumbar puncture (LP) was performed on 146 of 390 cases (37 percent). Of 390 total complex febrile seizures, there were six cases of meningitis (1.5 percent; 95 percent confidence Interval [CI] 0.6–3.3 percent) and one case of HSV encephalitis (0.3 percent; 95 percent CI, 0–1.4%). All children with meningitis or HSV encephalitis demonstrated persistent altered mental status after the complex febrile seizure. There were no cases of meningitis or encephalitis in children with normal mentation following their complex febrile seizure or in any children who did not receive an LP, suggesting that the incidence of meningitis and encephalitis is low in children with complex febrile seizures—particularly those who have returned to their baseline mentation.

Kimia et al retrospectively studied 526 children ages 6 months to 60 months with a first-time complex febrile seizure, evaluating this population for bacterial meningitis specifically.[2] Of note, they did not evaluate for herpes encephalitis. In this population, 340 of 526 children (64 percent) received an LP, and bacterial meningitis was identified in three of 526 cases (0.9 percent; 95 percent CI, 0.2–2.7). Of these three positive bacterial meningitis cases, two children presented before conjugated pneumococcal vaccines were commonly in use and had altered mental status. The third child was treated for suspected acute bacterial meningitis. She looked well on exam but had a cerebrospinal fluid (CSF) sample "contaminated with blood" that grew no bacterial pathogens on CSF culture. No CSF cell count was ordered, but she had a positive blood culture for *S. pneumoniae* and was treated as suspected bacterial meningitis. This child also had significant hypocalcemia consistent with rickets. Like the prior study, the incidence of meningitis was very low, especially in a well-appearing child.



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A separate retrospective study by Hardasmalani and Saber found similar results in 71 children with complex febrile seizures.[3] One patient (1.4 percent) had meningitis, and that patient presented in status epilepticus. Another retrospective study by Rivas-García et al found no cases of meningitis or encephalitis in 654 cases of febrile seizures consisting of 537 simple febrile seizures (82 percent) and 117 complex febrile seizures (18 percent).[4] In the complex seizure group, 46 had prolonged seizure more than 15 minutes, six had focal seizures, and 76 had multiple seizures within 24 hours. Another retrospective study by Fletcher and Sharieff identified 193 children with first-time complex febrile seizures; 136 received an LP.[5] There was a single case of acute bacterial meningitis, and that patient had four seizures, of which one lasted more than 30 minutes.

A five-year multicenter retrospective study from seven pediatric emergency departments by Guedj et al evaluated 839 children with complex febrile seizures.[6] Particularly, the authors were interested in the incidence of meningitis or encephalitis in children with a "clinical exam not suggestive of meningitis or encephalitis," defined as a normal baseline neurological exam without altered mentation or meningeal signs. LPs were performed in 260 of 839 of patients (31 percent) overall and only 147 of 630 well-appearing children (23 percent). There were no cases of meningitis or encephalitis in the well-appearing group.

While these studies suggest that the incidence of meningitis and encephalitis is very low after a first complex febrile seizure—especially in children who are well-appearing—it is important to note that these studies are retrospective in nature.

DEFINITION OF COMPLEX FEBRILE SEIZURES

- Duration 15 minutes or more
- Focal neurological signs
- More than one febrile seizure in 24 hours

Source: Smith DK, Sadler KP, Benedum M. Febrile seizures: risks, evaluation, and prognosis. *Am Fam Physician.* 2019;99(7):445-450.

Conclusion

After a complex febrile seizure, well-appearing children who have returned to their baseline and have a normal neurological exam can probably forego the lumbar puncture. Because these studies are retrospective in nature, caution should be employed when exercising this treatment strategy.

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in CAP patients who are well enough to be managed as outpatients.
- They do *not* support preschool children routinely being prescribed antibiotics. This is because most of these CAPs in this age group are caused by viral pathogens.
- They *do* recommend antibiotics for school-age children diagnosed with CAP.
- How long school-age children should be treated for CAP is an open question. The guidelines provide a strong recommendation based on moderate quality of evidence that a 10-day course has been best studied, but a shorter course may be just as effective.

There is a relatively small (n=115) randomized controlled trial reporting five days of amoxicillin (80 mg/kg divided three times a day [TID]) was noninferior to 10 days for CAP in children 6 months to 59 months of age.[4] A five-day course has also been recommended by the American Thoracic Society and the IDSA for adults with CAP under certain conditions.[5]

Reference: Pernica JM, Harman S, Kam AJ, et al. Short-course antimicrobial therapy for pediatric community-acquired pneumonia: the SAFER randomized clinical trial. *JAMA Pediatr.* 2021;175(5):475-482.

- **Population:** Children age 6 months to 10 years diagnosed with CAP who are well enough to be treated as outpatients
  - » **Exclusions:** See paper for list of exclusions
- **Intervention:** Five days of high-dose amoxicillin (90 mg/kg/d divided TID) followed by five days of placebo
- **Comparison:** 10 days of high-dose amoxicillin (90 mg/kg/d divided TID)
- **Outcome:**
  - » **Primary Outcome:** Clinical cure at 14–21 days defined as meeting all three criteria: significant improvement in dyspnea and increased work of breathing, and no recorded tachypnea, at the day 14–21 follow-up visit; no more than one fever spike as a result of bacterial respiratory illness from day four up to and including the day 14–21 follow-up visit; and lack of a requirement for additional antibacterials or admission to hospital because of persistent/progressive lower respiratory illness during the two weeks after enrollment
  - » **Secondary Outcomes:** Days off school or child care, missed work days for caregivers, adverse reactions, and adherence

Authors' Conclusions

"Short-course antibiotic therapy appeared to be comparable to standard care for the treatment of previously healthy children with CAP not requiring hospitalization. Clinical practice guidelines should consider recommending 5 days of amoxicillin for pediatric pneumonia management in accordance with antimicrobial stewardship principles."

Results

A total of 281 children enrolled in the trial, with a median age of 2.6 years. Forty-three percent were female.

Key Result: A five-day course of antibiotics was inferior to a 10-day course of antibiotics in children with CAP.

- **Primary Outcome:** Clinical cure at 14–21 days after enrollment
  - » **Per-protocol (PP) analysis:** 88.6 percent in the intervention group, 90.8 percent in the control group; risk difference was −0.016 (97.5 percent confidence limit −0.087) and cannot claim noninferiority
  - » **Intention-to-treat (ITT) analysis:** 85.7 percent in the intervention group, 84.1 percent in the control group; risk difference was 0.023 (97.5 percent confidence limit −0.061)
- **Secondary Outcomes:** Caregivers were off work two days instead of three in the intervention group. All other secondary outcomes were the same.

Evidence-Based Medicine Commentary

1. Representative Cohort: There is a question of whether this cohort represents children with CAP presenting to the emergency department. Only 281 (5 percent) of the 5,406 children diagnosed with CAP were randomized. The study flow diagram shows researchers missed 3,215 possible children to include, suggesting they were not recruited consecutively. This also could have introduced some selection bias.

2. Chest X-Ray: This is not needed to make the diagnosis of CAP in children, and it is actively discouraged by the IDSA guidelines.[3]

3. Clinical Cure: Their definition of clinical cure included some subjective criteria. Different physicians could have different interpretations on what a "significant improvement" looked like clinically and if the child required additional antibiotics or hospital admission. This could have introduced uncertainty into the data.

4. **Statistical Versus Clinical Outcome:** This was a noninferiority trial, and they correctly performed a per-protocol analysis. The noninferiority margin was based on several assumptions. Because the one-sided 97.5 percent confidence limit of the point estimate of 7.5 percent was exceeded, a formal conclusion of noninferiority could not be made.

However, this is a statistical outcome and may not be a clinically important difference. Physicians will need to interpret the finding for themselves and think about how to apply the data. Both groups had about a 90 percent clinical cure rate, with only a 1.6 percent absolute risk difference between the five- and 10-day course of antibiotics. Will crossing a one-sided, and seemingly arbitrary, statistical barrier by 1.2 percentage points (7.5 versus 8.7 percent) make a difference in clinically applying this data?

5. External Validity: This trial was conducted at two pediatric emergency departments in Canada. It is unclear if these represent similar patients presenting to community emergency departments, rural emergency departments, or facilities in other countries.

Bottom Line

A five-day course of antibiotics was statistically inferior to the traditional 10-day course for children with CAP treated as outpatients, but it is unclear if this is clinically important.

Case Resolution

You engage in shared decision making with the parents and ask them if they would like a short course of antibiotics (five days) or the traditional course (10 days). Both have about a 90 percent chance of success, but a few more children were not clinically cured after five days of treatment.

Thank you to Dr. Andrew Tagg, who is an emergency physician and co-founder and website lead for Don't Forget the Bubbles (https://dontforgetthebubbles.com), for his help with this review.

Remember to be skeptical of anything you learn, even if you heard it on the Skeptics' Guide to Emergency Medicine.

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ONE MORE REASON NOT TO ORDER AN X-RAY

SOUND ADVICE

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How to Perform an Erector Spinae Plane Block

by DANIEL MANTUANI, MD, MPH; ELAINE YANG, MD; CODY SCHULTZ, MD; AND ARUN NAGDEV, MD

The erector spinae plane block (ESPB) is a relatively new block, first described in 2016 as an analgesic technique for neuropathic thoracic pain.[1] Since that time, this simple and safe technique has been adopted with enthusiasm and used with great efficacy to treat pain resulting from a wide array of pathological processes. Often referred to as the "poor man's epidural," the beauty of this single-injection high-volume block lies in its capacity to anesthetize the majority of the hemithorax. Additionally, the sonoanatomy of the ESPB is relatively simple and safe. Under the erector spinae muscles lie the transverse processes, which act as a bony "backstop" to prevent inadvertent puncture of any critical structures.

Scan the QR code for a step-by-step guide to performing an ESPB and a video of the procedure.

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