RESIDENT VOICE

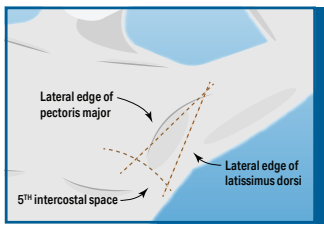
Resident Innovations in Medicine

SEE PAGE 18

FACEPS IN THE CROWD

Mohamed Hagahmed, MD, FACEP, FAAEM, EMT-P

SEE PAGE 4



SKEPTICS' GUIDE

Go Big or Go Small?

SEE PAGE 15

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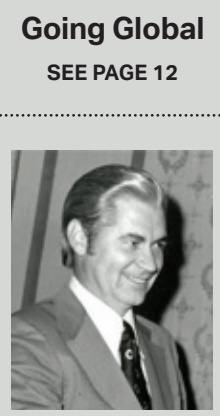
SEE PAGE 12



HISTORY

We Dissent

SEE PAGE 10

FIND IT ONLINE
For more clinical stories and practice trends, plus commentary and opinion pieces, go to:
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Tres Bernhard (left), deputy chief of staff for Troy Carter, former Louisiana state senator and now U.S. Representative in Congress, and Dr. Kuo (right).

JAMIE DO KUO

"If Not Me, Then Who?"

by JAMIE KUO, MD

Last year's scope of practice battle in Louisiana helped ignite my new passion for state-level advocacy work, and it can for you, too.

In spring 2021, HB 495, a bill submitted by Rep. Barry Ivey, was progressing quickly through the Louisiana legislative process. It was a bill that would grant full practice authority to advanced practice registered nurses, who would no longer need to collaborate with a supervising

CONTINUED *on page 8*

The Cures Act

Adjusting to new rules in emergency departments

by LINDA KOSSOFF

Five years after the U.S. Department of Health and Human Services' Office of the National Coordinator for Health Information Technology (ONC) developed the 21st Century Cures Act allowing patients expanded access to their electronic health records, the sweeping law is, for all practical purposes, in full effect. And although the increased transparency that the law represents is empowering to patients, it does require adjustments for physicians.

"There's always been this veil of mystery around physicians' notes," said Áine Yore, MD, an emergency physician affiliated with Providence Regional Medical Center in Everett, Washington. "Before [the Cures Act], if the patient wanted to see their whole chart, they would have to request it from a medical records department, pay a fee and maybe wait weeks for it to be released." Today, pa-

CONTINUED *on page 6*

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PAGE 17

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UPDATES AND ALERTS FROM ACEP

NEWS FROM THE COLLEGE

ACEP Now Welcomes New Associate Editor

Catherine Marco, MD, FACEP, is the newest member of the *ACEP Now* editorial team. In her role as Associate Editor, Dr. Marco will work in conjunction with Medical Editor in Chief Cedric Dark, MD, MPH, FACEP, to primarily oversee the evidence-based medicine content within the magazine. Dr. Marco is Professor of Emergency Medicine at Wright State University and Research Director at the Wright State University Department of Emergency Medicine.

Learn More About Consolidation and its Effects

A two-part series on ACEP's regulatory blog tackles both sides of the consolidation coin. The first blog, focused on recent federal efforts to address hospital and physician consolidation, discusses trends seen in the current health care system and summarizes the steps Congress and the Biden Administration have taken to address it. The second blog, focused on insurer consolidation and the bad insurer behavior that comes with it, dives deep into the Medicare and Medicaid data and how it affects emergency medicine (EM). Read the full series and subscribe to ACEP's weekly regulatory blog at acep.org/regsandeggs.

Dr. Lorna Breen Bill Passes

On Feb. 17, the Senate passed the ACEP-supported Dr. Lorna Breen Health Care Provider Protection Act (H.R. 1667) by voice vote, clearing the way for President Biden to sign it into law. H.R. 1667 takes significant steps to prevent physician suicide, reduce burnout, and address major concerns about the mental health of emergency physicians and care teams. ACEP was instrumental in the work to develop and pass this bill, and ACEP members rallied around this bill from its inception. "ACEP is grateful that Congress recognizes the weight of the challenges shouldered by medical professionals on the front lines throughout the pandemic," said Gillian Schmitz, MD, FACEP, president of ACEP. "This important legislation honors Dr. Breen's legacy and charts a path forward that helps limit the barriers currently preventing many emergency physicians from seeking the mental health care they need."

ACEP Sets Upcoming Advocacy Priorities

Every year, ACEP's Federal Government Affairs Committee and the ACEP advocacy team work together to establish broad goals for the upcoming legislative session.

1. **Mental Health:** ACEP priorities include strengthening the mental/behavioral health care workforce, increasing integration, coordination, and access to mental health care, ensuring parity, furthering the use of telehealth, and improving access especially for children and young adults. ACEP also continues urging Congress to include physician mental health and burnout as necessary considerations in any comprehensive mental health policy initiatives.
2. **Medicare Reimbursement:** At the end of 2021, Congress acted to avert *most* Medicare reimbursement cuts that were slated to affect many physicians, including EM. ACEP aims to work with them this year to develop a longer term solution that provides stability and appropriate payment for physician services without setting specialties against one another due to budget neutrality requirements.
3. **EM Workforce:** ACEP is developing legislation to help address the unique concerns of the EM workforce and to create incentives to help fill in gaps in emergency care in rural and underserved communities in the United States. This legislation coincides with ACEP's ongoing advocacy on Capitol Hill as legislators examine growing health care workforce shortages and other challenges facing the health care system.
4. **EM Due Process:** ACEP is concerned by reports of health care workers being threatened or silenced for speaking out about public health and safety concerns, especially during the pandemic. ACEP is working closely with legislators to reintroduce the "Emergency Room Hero and Patient Safety Act" that would ensure every EM physician has medical staff due process protections.
5. **Expanding Access to Services for OUD Patients:** ACEP disagrees with the requirement that physicians must apply for a special waiver in order to prescribe buprenorphine. ACEP supports the bipartisan, bicameral "Mainstreaming Addiction Treatment Act" and is urging Congress to reauthorize the successful "Alternatives to Opioids (ALTO) in the Emergency Department Act."

All ACEP members are invited to join the cause by participating in the upcoming Leadership & Advocacy Conference, May 1–3 (acep.org/LAC).

RESIDENCY SPOTLIGHT

STATEN ISLAND UNIVERSITY HOSPITAL EMERGENCY MEDICINE

Instagram: @siuhemresidency
Twitter: @statenislandem
Location: Staten Island, NY

Year founded: 2010
Number of residents: 30, 10 per class
Program length: 3 years

SIUH EMERGENCY MEDICINE

Residents taking part in "dress like the Program Director Dr. Caputo" at SIUH.

Why did you choose this program?

We get exposure and a diverse experience at two of only three hospitals on Staten Island: an academic level 1 trauma center (SIUH North) and community-based site (Prince's Bay Campus). Our residency is located one bridge away from Brooklyn/Manhattan and New Jersey, so we get the best of both worlds! The faculty provide unmatched medical education through our first-rate weekly resident conferences, simulation sessions, and ultrasound teaching. Their dedication and our hard work have paid off as we are the current NYC SimWars and NYC Battle of the Borough Lecture competition champions.

How do residents relax during their downtime?

Competing in weekly interdepartmental resident basketball league games (EM usually wins!), weekend strolls on the Midland Beach boardwalk, hiking at nearby mountains, brunch/karaoke in the city, hot pot/korean bbq after conference. We also bond over wellness events including Friendsgiving, Six Flags, TopGolf, escape rooms, free concert tickets and VIP suite at the Prudential Center, BBQ at our APD's house, and hiking upstate!

—Chief Residents (PGY3): Tazeen Abbas, MD; Wayne Fu, MD, MBA; Danielle Langan, DO

FACEPs IN THE CROWD

Get to know the Fellows of the American College of Emergency Physicians

MOHAMED HAGAHMED, MD, FACEP, FAAEM, EMT-P

Clinical Assistant Professor, Department of Emergency Medicine; UPP Director of Diversity, Recruitment and Relations
University of Pittsburgh Medical Center; Associate Medical Director for the Center of Emergency Medicine

New ACEP Fellow Dr. Mohamed Hagahmed's background informs his unique perspective. He fled Sudan in his early teens and lived in Germany before coming to America, so he knows what it's like to feel out of place. He works to increase inclusion inside and outside the ED because he believes feeling seen, heard and supported can make all the difference.

MOHAMED HAGAHMED

Q: What does inclusion mean to you?

Dr. Hagahmed: One thing we can do is simply acknowledge what's happening in that person's life. I'm originally from Sudan, and right now the country is going through a lot of turmoil. There is an uprising, dictatorship, reckless killing and rape. It's been going on for months and months. I feel stressed and uneasy about what's going to happen to [my family members in Sudan]. I go to work, and I feel lonely. I think to myself, 'Should I talk about it?' I need to hear a word of support.

One morning, my colleague texted me to ask how I'm doing and what the situation is like in Sudan. That simple text message kind of turned a switch in my mind. I felt like, 'Wow—somebody else cares?' And to me, that feeling and message gave me hope. A simple text message has the power of completely transforming how you feel. He asked me what he could do to help me or support me. I said, 'Brother, you have no idea. You helped me so much with just a simple text. You helped me so much because now I don't feel alone anymore.'

And that's what inclusion means to me. Inclusion means that I know how to pronounce your name, the way you want it to be pronounced. That you are part of us. Your needs are also our needs. Your emotional support is our emotional support.

5 Fun Things with Dr. Hagahmed

1. **Listening to:** Miles Davis if I'm relaxing. Hip hop, like DMX, when I'm working out.
2. **Reading:** *Atlas of the Heart* by Brené Brown. She's my new favorite author.
3. **Watching:** Scrubs—I've been watching and rewatching the show since medical school. It's so funny. It lifts my spirits.
4. **Caffeinating with:** Big Dog Coffee—It's a local place here in Pittsburgh. I grind my own coffee at home—it's a ritual that brings me joy … and smells amazing.
5. **Dreaming of:** Traveling to Europe—specifically Germany, where I lived after fleeing Sudan as a young teenager. And I'd like to tell some of the people who doubted I would ever make it in medicine: I'm here now. I made it.

KNOW AN EMERGENCY PHYSICIAN WHO SHOULD BE FEATURED IN "**FACEPs in the Crowd**"? SEND YOUR SUGGESTIONS TO **ACEPNOW@ACEP.ORG.** LEARN HOW TO BECOME A FACEP AT **WWW.ACEP.ORG/FACEPSINTHECROWD.**

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- IV Ketamine for Depression and Suicidality in the ED?
- Is Thrombolysis Needed Prior to Clot Extraction in Stroke?
- COVID Therapies: What Works, What Doesn't - Part 1
- COVID Therapies: What Works, What Doesn't - Part 2
- Posterior Circulation Stroke – A Tough Diagnosis
- LP for Subarachnoid Hemorrhage: Who Gets It?
- 2021 AHA Chest Pain Guidelines: Game Changer - Part 1
- 2021 AHA Chest Pain Guidelines: Game Changer - Part 2
- Bronchiolitis: Less is More
- Post Cardiac Arrest Pearls
- Pearls from *Risk Management Monthly* - Part 1
- Pearls from *Risk Management Monthly* - Part 2
- Syncope – Who Is at Serious Risk?
- Tranexamic Acid – Lessons Learned
- Importance of Shared Decision Making
- The 2021 AAP Guidelines for Febrile Infants - Part 1
- The 2021 AAP Guidelines for Febrile Infants - Part 2
- PE – Overtesting / Disposition
- Critical Care Grab Bag
- Trauma Pearls from the Recent Medical Literature
- Emergency Medicine New Products - Part 1
- Emergency Medicine New Products - Part 2
- Sexually Transmitted Infections – 2021 Guidelines
- New Advances in Prehospital Care
- Visual Diagnosis Challenges - Part 1
- Visual Diagnosis Challenges - Part 2
- What's New in ED Airway Management?
- Reader Beware – Predatory Publishing / Preprints
- Important Recent EM Literature - Part 1*
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tients log in to their record to easily view appointment information, medication lists, lab results and, now, physicians' clinical notes.

Given this latest development, emergency physicians weigh in on the law's unique impact in the emergency department.

Sparking a Conversation

Any patient who can connect to an online patient portal can gain access to their information, and this becomes a jumping-off point for doctor-patient discussion about their health status. "Patients accessing their information in real-time fuels more questions about their results, leading to meaningful conversations with physicians," explained Indira Gowda, MD, an emergency physician at University of California Los Angeles Medical Center. "As a result, patients end up better informed."

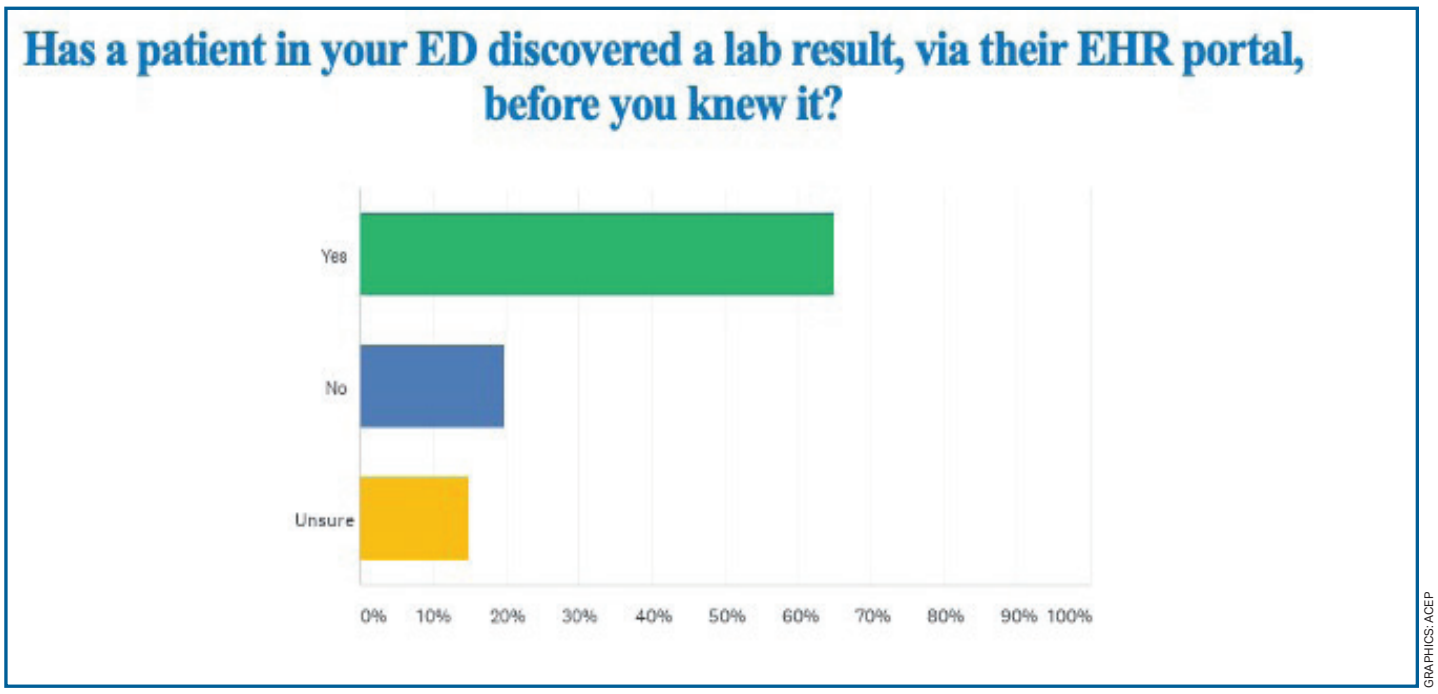

Dr. Indira Gowda

The easy availability of information also enables patients to share it with family members or friends who may help them better interpret their results. "Research has shown this is especially true for non-English-speaking patients," added Dr. Gowda.

To translate those real-time results into informative discussions, Dr. Yore is always prepared to give impromptu anatomy lessons in the patient room. "I'll walk in and say, 'You've got a kidney stone,' and they'll say, 'Yeah, doctor, we know—we saw that an hour ago.' And I'll say, 'Okay, well, very good, let's talk a little more about this,'" she explained. "And that gives me an opportunity to provide more education."

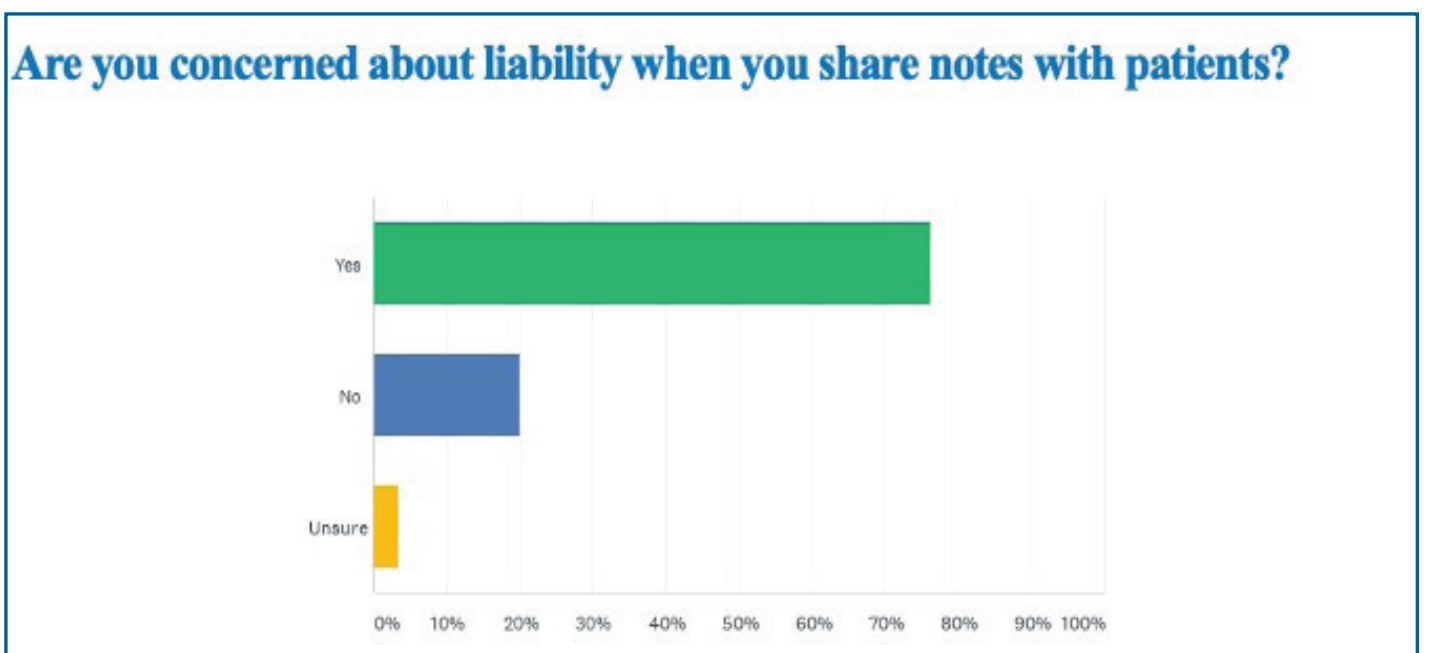
Another potential benefit can be seen in cases of incidental findings. "You do a chest X-ray to look for pneumonia, and it shows a spot on one of the lungs. Although this is a double-edged sword because now the patient sees this and the radiologist is saying, 'Well, you have to rule out cancer,' it also keeps us honest," Dr. Yore said. "Maybe in the past some of us haven't been too diligent about disclosing incidental findings and saying to patients, 'This is probably nothing, but you do need to follow it up and get that CT in six months,' or whatever the recommendation is. So the patient is now independently aware, and I think this increases our compliance to that communication with patients."

The degree to which some of the benefits of the Cures Act apply to the emergency department setting is not clear. "[The Cures Act] is supposed to help improve the patient-doctor relationship and improve trust and communication amongst patients and providers, but this has only really been studied in nonemergency, acute care settings, such as the outpatient clinic," said Dr. Gowda. One difference lies in the very nature of the emergency physician–patient relationship, which by nature is brief and limited, and any opportunity to educate patients plummets when that emergency department (ED) visit ends. Even patients who are inclined to reach out post-visit are likely to have a difficult time. "We come and we go. We work weird hours," Dr. Yore said. "An oncologist's relationship with their patient may be measured over months and years, whereas I have 180 minutes with each patient, by and large."

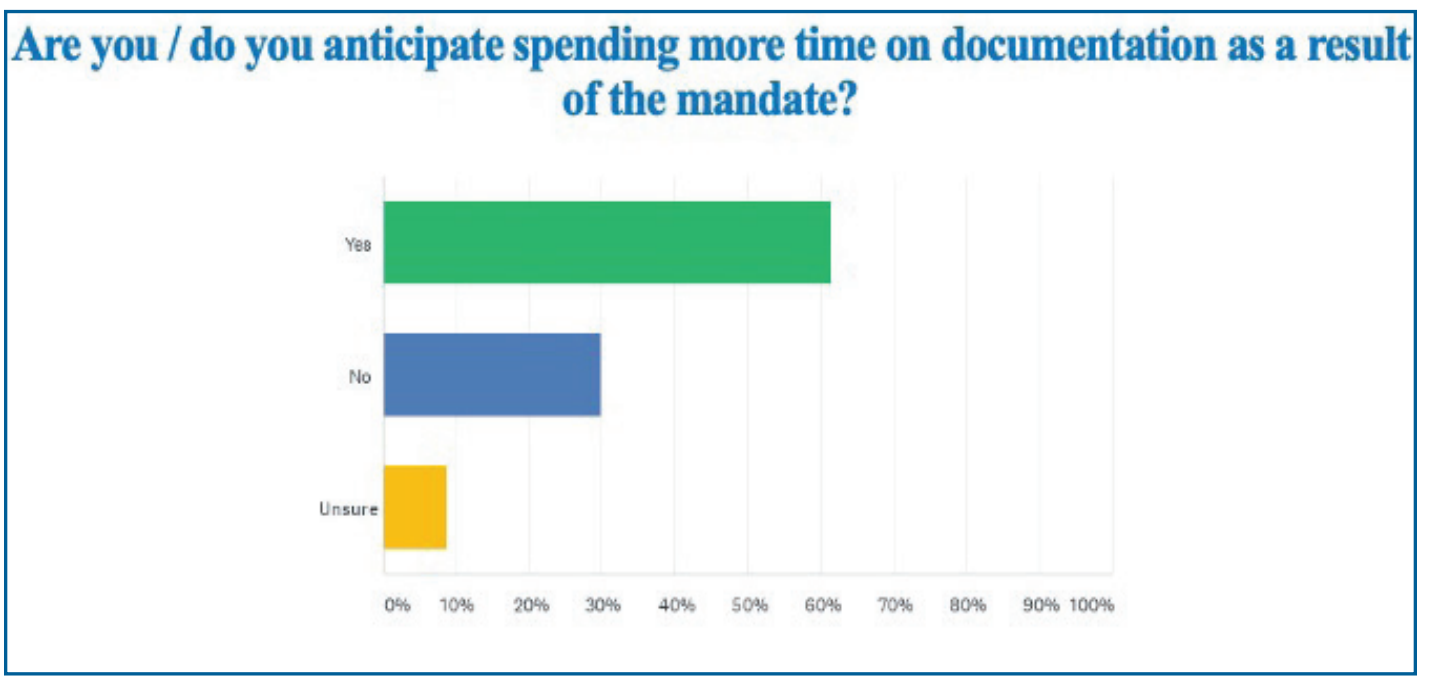


GRAPHICS: ACEP

Percentage of patients who indicated they saw their lab results before their physician.



Percentage of physicians who have liability concerns.



Percentage of physicians who may or may not spend more time on documentation.

Potential Pitfalls

In a recent survey of ACEP members on the 21st Century Cures Act, two-thirds of 134 respondents reported cases where patients knew their test outcome before their clinician could discuss it with them. This increased the likelihood of patients discovering a bad result on their own. Dr. Gowda cites an instance in which a woman discovered that she had had a miscarriage by reading the final impression of her radiology report. "I feel like providing patients this information without a human interaction can create more harm than good," she said.

A more common scenario is the patient who experiences undue anxiety over an abnormal but clinically irrelevant test result. "When an ED patient is scared and these results are trickling in electronically, a trivial abnormality or errant phrase may get magnified or misinterpreted," explained Nicholas Genes, MD, PhD, FACEP, an emergency physician at New York University (NYU) Langone Health, clinical associate professor in the department of emer-

gency medicine at NYU Grossman School of Medicine and chair of ACEP's Health IT Committee. "I remember a patient with a history of anxiety who brought up so many details from prior notes that what should have been a quick visit ended up feeling like a cross-examination where I had to discuss my own and other doctors' medical decision making. Being transparent is usually a great thing, but sometimes in a busy ER we don't need to revisit clinical notes written months ago."

Although Dr. Genes believes that note sharing is generally a good thing, he would like to see ED patients' notes digitally released toward the conclusion of their visit, after the physician has had an opportunity to review results and explain them. In efforts to enact a change, he has worked with Jeff Davis, ACEP's director of regulatory and external affairs, on outreach to the ONC. They formally requested that regulations be altered to allow for emergency departments to delay sharing lab results and clinical notes with patients for a 24-hour period or at the least until the patient is discharged from the emergency department. The recommendation was not accepted, however, and ACEP's effort to advocate for regulations that support the unique needs of the emergency department continues.


Dr. Nicholas Genes

Although there are provisions written into the Cures Act that allow doctors to censor information and prevent a patient from seeing it, many physicians are either not aware of this option or do not know how to use it. "There are often no clear guidelines on when censoring is appropriate," Dr. Gowda said. "For example, there are exceptions to patients having immediate access to their chart if it would result in harm to the patient, but *harm* is not clearly defined and doesn't always refer to emotional harm—as in learning that you had a miscarriage via a radiology report or ED note.

"I think increased awareness of what patients may access and knowing the appropriate steps physicians can take to censor information when needed will help improve communication," Dr. Gowda continued. "I think this responsibility often falls on the hospital administration to clearly distribute these guidelines."

Charting in a New Climate

Now that patients can view physicians' clinical notes, should doctors adjust their charting habits? Most say little change should be necessary, as clinical notes are still meant for multiple audiences, including other clinicians as well as billing, compliance and medicolegal departments. "I still chart from a medicolegal perspective and to help other providers understand my decision-making process," said Dr. Gowda.

In charting, accuracy has always been paramount. With the new law in place, patients are more inclined to scour their charts in search of errors to report. "There is literature out there, a primary care physicians study, regarding patients who do this," said Dr. Yore.[1] "We need to be aware of that those patients are going to contact us to say, 'This is wrong, please fix it.' And if it is wrong, we need to be open to amending our charts."

Some physicians have expressed concern that patient accessibility to their notes may open them up to harsh and unjustified criticism as every recorded remark and observation is scrutinized. Dr. Yore's advice: "If you're not comfortable with your chart being blown up into a 4 × 6 poster in front of a jury, you shouldn't be putting it in the medical record." She cautions colleagues to be mindful of the language used in charts and how people are going to perceive it. "This is particularly relevant in the emergency department, where we see a lot of people with substance abuse issues and mental health issues, marginalized people, homeless people, people of different racial, gender/sexual identities, etc.," she said. "It's easy to inadvertently—or even as a result of not caring—use language that isn't appropriate. For instance, you can describe someone as being 'drunk,' but that's not exactly neutral language. A suitable description of this patient might read, 'They had a wide, shuffling gait, and speech was slurred.' This way, you haven't exposed yourself as coming into that interaction with a set of implicit biases."

Some inappropriate word choices for charting are not quite so obvious. Dr. Yore cites the phrase "frequent flier," a common term her department uses to refer to patients who visit the emergency department regularly, often with the same complaint. "That phrase should never find its way into a chart, but it does," she said, suggesting that writing "this patient is well-known to this emergency department" would be a better choice. Along these same lines, Dr. Gowda now refrains from using certain descriptors: "For example, instead of stating that a patient is obese/overweight, I state the patient's BMI."

Some physicians express concerns about patients' inability to understand the medical jargon used in charts, but "this is the age of Google," reminded Dr. Yore. "People who are invested in their care and motivated to understand their condition can look up the terms and learn more than they would ever want. To the degree that the jargon is useful for precise and concise communication with other members of a health care team, I am okay with it."

Reference

1. Bell SK, Delbanco T, Elmore JG, et al. Frequency and types of patient-reported errors in electronic health record ambulatory care notes. *JAMA Netw Open.* 2020;3(6):e205867.

LINDA KOSSOFF is a freelance medical writer based in Woodland Hills, California.

JAMIE DO KUO

Dr. Kuo (front left) with ACEP members at the 2021 ACEP Leadership and Advocacy Conference in Washington, DC.

physician when treating patients. As usual, I was watching from the sidelines—I'd always been passive with legislative advocacy efforts. This time, the bill passed through committee, something that had never happened before. Then the bill quickly progressed through the House floor. My stress level spiked at the realization this bill could become law, and I knew I couldn't afford to wait this out and hope for the best—I had to get involved.

By the time I joined the cause, things were looking pretty bleak. The consensus among the public was that the bill was going to pass, but Louisiana physicians from all specialties joined forces to push back against it. LA-ACEP worked together with other specialties to hire a short-term lobbyist to make a last-minute push. On the first day, the lobbyist actually was worried we hired him too late in the process, but he stayed the course and was at the capitol from dawn to dusk, spreading our message: Advanced practice nurses should not perform

independent unsupervised care.[1]

Beginning a Grassroots Campaign

Using the power of social media, I started a physician-only Facebook group focusing specifically on this bill. While our lobbyist was at the capitol, we made a big grassroots push. We organized hundreds of physicians statewide to deluge our legislators by phone, via email, or in person. It was clear that a lot of physicians wanted to get involved and didn't know how to go about it. We kept it simple to make their voices heard; our collective voice declared to our legislators that Louisiana physicians did not support this bill.

The next month was wild! We communicated ideas and directions among physicians, our contacts, and lobbyists at the capitol. I posted daily updates with next steps (provided by our contacts) on our Facebook group page. Within a few days, the momentum started to change in our favor, and we knew we couldn't rest. We kept the messaging going for the next month. It was such an incredible feeling the day we found out the bill had officially been defeated.

Going through this experience on such an intimate level, I discovered my passion for state advocacy. At the end of the 2021 session, I decided I would start advocating in my spare time to support good health care legislation. After watching every single relevant House and Senate committee meeting, I realized our legislators are sometimes passing or not passing laws they don't fully understand. Many state representatives are former lawyers and business owners, so they can't possibly know every detail of every topic, including how their proposed policies affect patients. As a practicing emergency physician, I felt responsible to help educate them.

I enrolled in a master's program for health law and administration at Loyola University New Orleans so I can learn as much about health care law and legal research as possible. Currently, I'm working on ketamine legislation with a trauma surgeon at the local trauma center, and our LA-ACEP leaders are planning to make some good state-level changes in the coming years, so we're hoping to get as many Louisiana physicians involved as possible.

How You Can Get Involved, Too

If you're thinking about getting involved in advocacy work for the first time, the hardest part is getting started. My advice? Just throw yourself in! After my first experience in Louisiana, I spent my 2021 summer taking every advocacy course I could (thanks to virtual education, taking courses is easier than ever). I had a great experience at ACEP's Leadership & Advocacy Conference (acep.org/LAC), where we were trained on proper advocacy skills and met with various senators and representatives. Once I felt more confident, I reached out to my local legislators. I have already met with my state representative and met another one just by putting myself out there, and they were very welcoming. We met for coffee and talked about problems and solutions.

I believe emergency physicians are uniquely qualified as advocates because it's what we do all day, every day. At the end of the day, we have not lost sight of the fact that we all went into medicine to *help* people. Getting involved with advocacy is another way we can help solve problems that affect our patients. As we learned in Louisiana, we can really move the needle when we work together to help make a difference.

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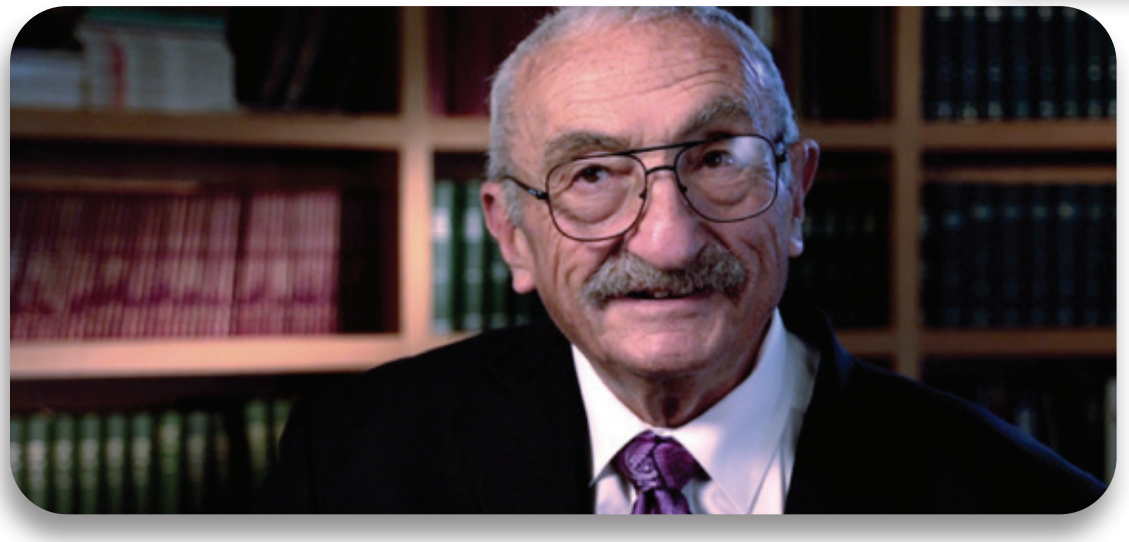
1. *Guidelines regarding the role of physician assistants and nurse practitioners in the emergency department.* 2020 June. https://www.acep.org/globalassets/new-pdfs/policy-statements/guidelines-reg-the-role-of-physician-assistants-and-nurse-practitioners-in-the-ed.pdf

DR. KUO is a staff physician at Ochsner Health System in New Orleans, Louisiana.



A FEW FOUNDERS OF EMERGENCY MEDICINE, CLOCKWISE FROM TOP LEFT: Dr. John G. Wiegenstein (1930–2004); Dr. George Podgorny (1934–2013); Dr. Peter Rosen (1935–2019); and an illustration of Dr. Ronald L. Krome (1936–2013).

PHOTOS: ACEP

WE DISSENT

HOW THE ACT OF DISSENT IS AN IMPORTANT AND PROUD TRADITION WITHIN OUR SPECIALTY

by GARY GADDIS, MD, PHD, FACEP, FIFEM

The Oxford English Dictionary defines *dissent* as, "the expression or holding of opinions at variance with those previously, commonly, or officially held."

Emergency medicine, perhaps more than any other medical specialty, is a specialty borne of dissent. I believe younger emergency physicians need to know this history. Reasoned dissent was a crucial tool in the formation of emergency medicine, and it continues to improve our practice environment today.

How Dissent Can Change the World

From a global perspective, those who dissent have improved nations. Consider Dr. Martin Luther King Jr., who is honored not for "putting up" silently with our society's flaws but for his leadership in the Civil Rights movement, which implemented thoughtful, nonviolent dissent against laws and barriers that precluded the full benefits of citizenship from being enjoyed by all Americans. Also, consider the legacy of the late Supreme Court Justice Ruth Bader Ginsburg. She regularly implemented dissent in her writings and decisions during her long and illustrious career on the bench.

In considering these legacies, it is also appropriate to review the influence dissent has emergency medicine as a specialty.

1. The Founding of ACEP

The founding of the American College of Emergency Physicians can be considered an act of dissent. ACEP was founded 11 years before the American Board of Medical Specialties (ABMS) granted emergency medicine official specialty status in 1979. Physicians, linked by a dissenting vision that "emergency room medicine" could indeed become a career choice, met in Arlington, Virginia, in November 1968. At the time, emergency medicine had no identifiable special body of knowledge and was widely considered a place for doctors who had challenges with other practices. ACEP's founders had an initial goal of sharing ideas to improve business practices and foster new educational programs.

At that meeting, Dr. R. R. Hannas took dissent a step further. He articulated a unique vision for emergency medicine to become a full-fledged medical and academic specialty, which our nation demonstrably needed. Did you know that in 1966, two years before ACEP was founded, the National Academy of Sciences disseminated a white paper titled Accidental Death and Disability: The Neglected Disease of Modern Society?[1] This work highlighted broad deficiencies in America's emergency care systems. Dr. Hannas' new vision provided a road map to illustrate a path for remediating many of those deficiencies.

2. Dr. Bruce Janiak, the World's First Emergency Medicine Resident

Nearly simultaneously, the world's first emergency medicine resident, Dr. Bruce Janiak, began training in 1969 at the University of Cincinnati. At that time, there was no such thing as an academic emergency department or an emergency medicine residency program. Dr. Janiak rotated on various relevant services as he developed his own personalized curriculum, such as it was, on the fly. He spent two years training for a specialty for which there would not be an official certifying board until 1979.

Dr. Janiak was so confident in his dissenting vision that while in his residency, he said if he were a betting man, he "wouldn't bet against me." This statement was noted within the exhibits commemorating ACEP's 50th anniversary, displayed at the 2018 ACEP Scientific Assembly in San Diego. Time has certainly proven Dr. Janiak to be right.

3. Laboring in Dissent

Organized dissent by many explains how emergency medicine became an official specialty within ABMS. ABMS voted in September 1977 (100 to five) to reject emergency medicine's application for specialty board status. Not content to accept failure, numerous visionary founders of our specialty, such as Drs. John Wiegenstein, George Podgorny, David Wagner and Ron Krome, led the efforts to labor effectively in dissent. Two years later in September 1979, through their considerable and persuasive efforts, emergency medicine became an approved specialty by ABMS in an almost unanimous vote. It is difficult to capture in a brief paragraph the extensive persuasive efforts required to effect this change. These leaders dissented from the overwhelming opinion of the ABMS, as expressed in 1977. They dissented so effectively that they changed minds and hearts and made emergency medicine an official ABMS-recognized specialty in 1979.

Further, we all have heard of Dr. Peter Rosen, a founder of our specialty. I will paraphrase an incident involving Dr. Rosen, as reported by Dr. Brian Zink in his book, *Anyone, Anything, Anytime: A History of Emergency Medicine*. Dr. Zink interviewed Dr. Rosen in Jackson, Wyoming, in 2003 as he collected the history of our specialty "from the horses' mouths," as it were.

In 1977, Dr. Rosen was leading the emergency department at the University of Chicago, and he had the occasion to meet with his new dean. The dean, Daniel C. Tosteson, was an anatomist and not a physician. The dean opined in meeting with Dr. Rosen that he did not understand why emergency medicine should exist because there is no "biology" of emergency medicine. (We don't claim an organ system in the manner of nephrologists with the renal system or cardiologists with the cardiovascular system.) The dean noted that if he were to have a heart attack, for example, he wanted to receive the care of a cardiologist. Dr. Rosen asked this dean how he might know he was having a heart attack. The dean replied that he'd expect to be having chest pain. Dr. Rosen replied by asking what the dean would expect to occur if the symptoms were mainly nausea. Dr. Rosen was quoted by Dr. Zink as saying, regarding the reaction of Dr. Tosteson, "It was the first time it had ever occurred to him that maybe you couldn't run an emergency department with 47 different specialties. ... I got so pissed at him that ... I went out and

ABMS Assembly unanimously approved the ABEM application for primary board status on September 22,1989. Top Row (L–R) Ronald L. Krome, M.D.; G. Richard Braen, M.D.; Gail V. Anderson, M.D.; Benson S. Munger, Ph.D.; Joseph E. Clinton, M.D.; George Podgorny, M.D.; David K. Wagner, M.D.; Harvey W. Meislin, M.D. Bottom Row (L-R) Judith E. Tintinalli, M.D.; Mary Ann Reinhart, Ph.D.; Michael V. Vance, M.D.; Susan K. Adsit.

wrote a paper." Now, *that's* effective dissent, when you look your dean in the eye and use his own words to explain why his opinion of our specialty is so wrong!

4. IV Opiate Analgesia Administration

Consider how we now employ opiate analgesia for patients with abdominal pain. When I finished residency in 1989, such a practice by emergency physicians was considered wildly inappropriate. Merciful IV opiate analgesia could be administered only after a surgeon (typically one who was often a surgical resident with less experience than the emergency department attending) had operated on or first seen and laid hands on the patient. The dogma of Dr. Zachary Cope, which had persisted since the early decades of the 20th century, was rejected once emergency medicine researchers dissented with data in peer-reviewed publications. If you wish to read more about how Dr. Cope and his dogma regarding analgesia became a historical footnote, peruse the online tool The NNT at www.thennt.com/nnt/opiate-analgesia-acute-abdominal-pain/. It summarizes the body of research that led to our modern view regarding use of analgesia for patients with acute abdominal pain.

5. Overturning "Pain as the Fifth Vital Sign"

More recently, emergency physicians have been among those speaking out against the Pain as the Fifth Vital Sign (PATFVS) initiative. The Joint Commission for Accreditation of Hospital Organizations, now known as The Joint Commission, initiated PATFVS in 2000. Of course, pain is a symptom and not a sign, so the entire initiative was flawed from the outset. Emergency physicians have been among many within the medical field to call out the folly. Joint Commission was only supported by a letter to the editor in the *New England Journal of Medicine* stating that opiates, such as oxycodone and hydrocodone, were not potentially addicting.[2] Emergency medicine researchers are among those who have demonstrated how the opiate crisis has followed increased prescribing of opiates, a practice that was arguably augmented by concomitant patient satisfaction initiatives. Fortunately, The Joint Commission finally heeded dissent from ACEP and others and overturned its advocacy for PATFVS. Efforts within The Joint Commission to change its standards began in 2016 and were finally officially revised by 2018.[3]

> "When we engage in dissent in the interest of more effective emergency department care, we not only foster team building and improved patient care environments, we add our names to the long, honorable and growing register of change agents who have utilized constructive dissent to advance our specialty."

Dissent Fosters Growth and Improvement

These examples demonstrate how reasoned dissent has led to positive changes. I hope they can inspire some of you to dissent thoughtfully and constructively from the status quo when it becomes necessary. As you do, realize that you are the latest in a long line of emergency physicians who are not content to put up and shut up when you know that changes are needed to improve the safety or efficacy of the systems that deliver lifesaving care to our patients.

When we engage in dissent in the interest of more effective emergency department care, we not only foster team building and improved patient care environments, we add our names to the long, honorable and growing register of change agents who have utilized constructive dissent to advance our specialty. Sometimes, those in leadership require time to become convinced of the merits of our suggestions, but persistent reasoned dissent is part of the fabric of an aware and caring emergency physician.

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DR. GADDIS is professor of emergency medicine at Washington University School of Medicine in St. Louis, MO.

By the Numbers

CURRENT SPECIALTY STATISTICS

IN 2020

48,835

clinically active emergency physicians

MEDIAN AGE

50

28%

WOMEN

EMERGENCY PHYSICIANS

14.9

per 100,000 population

EMERGENCY PHYSICIANS

92%

Work in urban areas

EMERGENCY PHYSICIANS BY RACE

WHITE	64.6%
ASIAN	18.6%
HISPANIC OR LATINO	9.2%
BLACK OR AFRICAN AMERICAN	4.9%
UNKNOWN	2.6%
AMERICAN INDIAN AND ALASKA NATIVE	0.1%

SOURCE: Annals of Emergency Medicine/Zippia

EIGHTYONE.CO.NZ

(R–L) Dr. Radecki hiking with his family, Alexander, Annie, and Lydia in Christchurch, New Zealand.

Going Global

World TravelERs: New Zealand

by CEDRIC DARK, MD, MPH, FACEP, MEIC

A series about health care systems and the practice of emergency medicine across the world

In this series, we're going to talk about various countries and how they compare to the United States as representative prototypes to structure and finance care; the first of these prototypes, as described in the book, *The Healing of America* by T.R. Reid, is the National Health System model.

In the United States, we have our own version of this prototype called the Veterans Affairs (VA), where essentially, if you work for the VA, whether you are employed directly by the federal government or your group is under contract with them, you're essentially acting as an *agent* of the federal government delivering care to veterans. The hospitals and clinics are all owned by the government. And the financing is typically through broad-based taxation. There are several countries that do this; England, Spain, and Italy are prime examples.

New Zealand is also a country that utilizes a National Health System structure. It is a publicly funded system, administered through 20 different regional authorities, which began in 1938 with the passage of their Social Security Act. The New Zealand system includes benefits like inpatient care, outpatient care, mental health, long-term care, prescription drugs, maternity, physical therapy, medical equipment, home health, and hospice. It doesn't include benefits like adult dental care, eye care, and orthodontics.

New Zealand's system is financed mostly by taxes with the national government setting an annual budget and a benefits package. Patients do have some copays, which seem to be small, maybe $10 to $34 USD, on average. And they do all of this for only 9 percent of GDP, which is about half of what we spend in the United States on our health care system in terms of our percentage of GDP.

I spoke with Ryan Radecki, MD, FACEP, the author of "Pearls from the Medical Literature" column, because after spending many years in the United States, he is currently living and practicing in New Zealand.

Does New Zealand have similar challenges regarding getting follow-up care for your patients or making sure they can get access to medications or access to specialists, like we do in the United States?

Dr. Ryan Radecki: Access to primary care has traditionally been something that's one of New Zealand's strengths. It's been very easy to get access to primary care for either routine checkups or urgent visits or hospital follow-up. It's a little more challenging as of late because the borders have been closed and it's been a little bit harder to access some of the specialists and medical resources that New Zealand depends upon from overseas. Interestingly, about 20 percent to 30 percent of their physician workforce is born overseas, so they really do depend on foreign trained doctors as the foundation of their healthcare system.

New Zealand has all the same medications that the United States has as far as the basic [ones]. There's absolutely no trouble getting access to a specialist—at least in the hospital/acute care setting—to perform emergency surgery, acute intervention, interventional radiology, or anything else the patient needs at this particular tertiary hospital that I work at. However, there is, I think, one dermatologist for the entire South Island. So, if a patient is trying to see a dermatology specialist in the publicly funded health care system, they can end up with some pretty long wait times.

Before moving to New Zealand, you worked at a public hospital system in Houston, Texas. If you're trying to consider how hard it is to see the dermatologist in New Zealand versus the public hospital system in the United States, is it harder, easier, or about the same?

Dr. Radecki: I'd probably say it's very similar. And the difference being that most people in the United States don't access the public health care system for their health care needs. Also, about a third of the people in New Zealand also buy a private healthcare insurance policy that allows them more rapid access to some of these specialists (like dermatology) or decreased wait times on some of their elective procedures.

Speaking of the wait times on elective procedures, how would you say they typically compare to what you would see in the United States?

Dr. Radecki: Again, I think it all depends. Hip replacements or knee replacements take time. Elective cholecystectomies, these things take time in New Zealand. Certainly, it's nothing like the private system in the United States, where if you had a little bit of a biliary colic and you go to the emergency department, you might have your gallbladder taken out that day.

Would you say medications are also cheap in New Zealand, too?

Dr. Radecki: When you write a patient a prescription, their co-pay is quite small. And then if you have a specific type of community services card or if you're in a lower socioeconomic income bracket, then obviously it's even closer to free. The New Zealand Formulary determines what the public system covers. So there are a limited list of medications I can prescribe. But then again, you don't need ac-

cess to every different iteration of ACE inhibitor, for example.

Some things make sense, like [limited availability of] boutique cancer drugs, but some of things are a little bit more controversial, like these SGLT2 inhibitors for diabetes, which are fairly common and pervasive in the United States. These are *just* getting approved in New Zealand right now through a cost/benefit discussion, because they do end up on the more expensive side of things, but they also have well demonstrated cardiac benefits.

For the most part, 99 percent of the things that emergency physicians would see on a regular basis are also seen here in New Zealand.

As an emergency physician, do you feel there's any medication you wish you had over there that you don't have access to?

Dr. Radecki: They don't have Ketorolac. They do rectal diclofenac as their alternative for intramuscular ketorolac for renal colic. They have a solution for everything. It's just not the solution that you're used to in the United States.

What has your experience been as a patient in the health care system?

Dr. Radecki: We've accessed the outpatient GP system, just for before school checks for our kids. There's a dental service that comes around to all the schools and does dental checks on all the kids and refers anybody for a specific dental follow-up if they need additional cleaning or treatments, and that's all free and publicly funded as well. And then my family members—who have tried to access the system—have had no trouble getting appointments and no trouble getting the procedures and tests that they needed, and we've had our results in a timely fashion. We haven't run up against any delays accessing our health care through the public system.

What is the greatest lesson you've learned that might inform people back home, listeners, or maybe even policy makers, on how we could restructure our health care system in the United States?

Dr. Radecki: I think the most obvious value or endorsement of universal health care is that it's publicly-funded, regionally administered, and [delivered by] 20 different regional authorities. People [here] are advocating to move the United States to one of these publicly funded models, but nobody is saying, *"Let's tear that up and leave some of our population uncovered and switch the United States model."*

In New Zealand, it blows their mind that the United States cannot somehow all get together and fix the system. The thought of medical bankruptcy, that you might run out of money, that you might lose your health insurance because you've lost your job, is just insane to them. And that people who are effectively in their greatest hour of need, whose families are suffering the most, have to have that suffering compounded by the issues with the health care system.

Is there anything else you want to tell our readers about New Zealand?

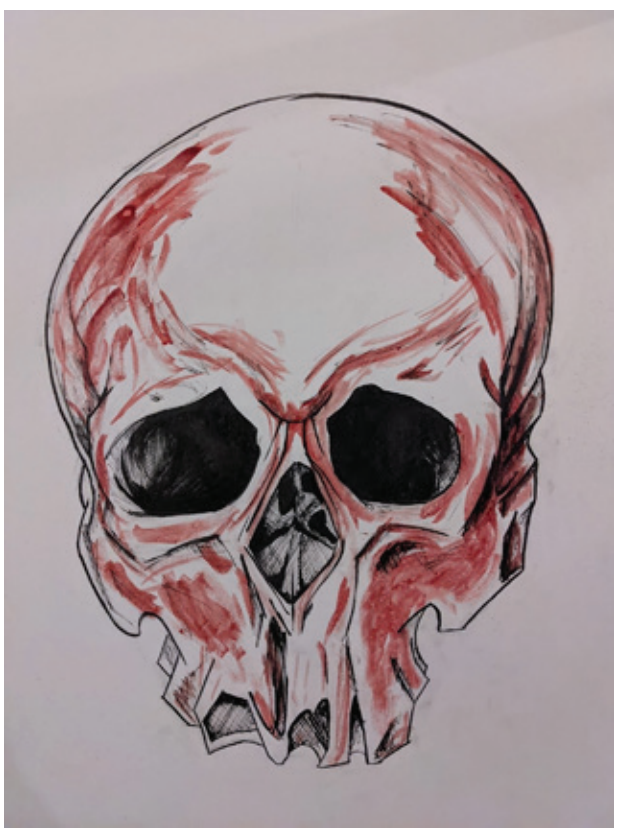
Dr. Radecki: It's a great place to work and it's probably the most fun I've had practicing medicine in a long time. And I think that, certainly, it's a lot more fun than practicing medicine in the United States over this past year. I encourage everyone to come visit once the borders are open. It's just lovely.

Listen to our full conversation at EM:RAP

THE ART IN MEDICINE

Cara Borelli, DO, *ACEP Now* Resident Fellow, recently interviewed Katrina Lettang, MD, for this month's Resident Voice video. Dr. Lettang shares her experience working with various art mediums as a way to share personal experiences as an emergency physician through art. One painting features human blood to try and capture the duality of something doctors see every day.

Watch the full interview to see Dr. Lettang's paintings.



"Blood & Ink" by Dr. Katrina Lettang and Dr. David Bell

ACEP4U: Multiply Your Impact

ACEP COMMITTEES ARE A WAY TO COMBINE FORCES WITH YOUR PEERS TO MAKE A BIGGER DIFFERENCE

by JORDAN GRANTHAM

ACEP members often wonder how they can get more involved with the work of the College, especially when it comes to their niche interests or passion projects—clinical topics, advocacy issues, career development, etc. One way to take your involvement to the next level is to get involved with ACEP committees and sections, but this article will focus on committee involvement. If you've ever thought about contributing to an ACEP committee, now is the time to do it. Applications are now being accepted through May 15 on our wesbite, acep.org/committee-involvement.

What's the Difference Between ACEP Committees and Sections?

ACEP committees are work groups appointed by ACEP's President-Elect. Committees are assigned objectives through the Board related to the work of the College, including the implementation of Council resolutions. There are 31 committees tackling a broad variety of issues. *(See sidebar for the full list.)*

ACEP sections have a different structure. ACEP members can elect to join any of ACEP's 40 sections, so many sections are much bigger than committees. Section membership is a way to network and share information with like-minded peers under the umbrella of specific topics within emergency medicine (EM). Section members who want to go beyond the networking aspect to help set the agenda and goals of the section can get further involved by running for section officer positions. Learn more at acep.org/sections.

What Type of Projects Do ACEP Committees Work On?

ACEP committees tackle big topics every year, developing policy statement and other resources to fill gaps and help ACEP members. Here are a few highlights from recent committee efforts:

- The **Research Committee** oversees ACEP's annual Research Forum (RF), including the special edition COVID-19 specific forum hosted in 2021. Many of the 2021 RF abstracts are now available on-demand in the ACEP Online Learning Collaborative, and abstracts are now being accepted for the 2022 Research Forum (acep.org/RF).
- The **Clinical Policies Committee** completed new clinical policies related to community-acquired pneumonia and opioids and is working on policies related to appendicitis, acute heart failure syndromes, and mild traumatic brain injury (acep.org/clinicalpolicies). Revisions to the stroke, sedation, airway management, blunt trauma, pediatric fever, and seizures clinical policies are underway.
- The **Federal Government Affairs Committee** recently helped ACEP's advocacy team finalize its legislative and regulatory priorities for the 117th Congress, 2nd session. *(See page 3 for more details.)*
- The **Reimbursement** and **Coding & Nomenclature Advisory** maintain detailed reimbursement FAQs on the ACEP website, and they have just updated them to reflect 2022 changes at acep.org/reimbursement-FAQs. The last physician fee schedule included some complicated but very important policies, and the new FAQs help ACEP members navigate the changes.
- The **Academic Affairs Committee** organizes ACEP's popular Virtual Grand Rounds educational events (acep.org/virtualgrandrounds). ACEP members have free access to the live webinars, and the past 17 VGRs are available for on-demand viewing. This committee also recently updated the policy statement "Overcoming Barriers to Promotion of Women and Underrepresented in Medicine (URiM) Faculty in Academic Emergency Medicine," now available at acep.org/policystatements, along with a Policy Resource and Education Paper (PREP) by the same title.
- The **Health Information Technology Committee** developed resources to help emergency physicians navigate the "Open Notes" provision in the 21st Century Cares Act, which made ED notes visible to patients via the electronic health record portal (acep.org/healthinfotech). *(See page 1 for more details.)*
- The **EM Practice Committee** revised ACEP's policy statements to strengthen EM scope of practice. Those statements are part of ACEP's expanded Career Center (acep.org.careercenter).
- The **Quality & Patient Safety Committee** and the **CEDR Committee** are heavily involved in the field-testing process for the first EM-specific episode-based cost measure. The committees are reviewing field-testing reports and providing feedback to Acumen, a contractor of the Centers for Medicare & Medicaid Services (CMS), regarding the potential use of this cost measure in the Merit-based Incentive Payment System (MIPS).
- The **Communications Committee** works with ACEP's public relations team to fulfill media requests on various topics as part of its efforts to educate the public about the value of emergency physicians. It assisted with a recent bilingual media tour focused on combatting vaccine hesitancy.
- The **Medical-Legal Committee** produced a six-part webinar series about EMTALA to help ACEP members better understand the law, how it is enforced and how it affects daily practice (acep.org/emtala-webinars).

This is only a small sampling of the way ACEP committees are working year-round to support emergency physicians.

Learn more about how you can get involved and make an even bigger difference at acep.org/committees.

PHOTOS: ACEP

Laura Oh, MD, FACEP, chair of ACEP's Academic Affairs Committee, leads the group's meeting during ACEP21 in Boston.

Matthew Gangidine, MD, presents his research as part of the Brooks F. Bock Lecture and Abstract Session during the ACEP21 Research Forum in Boston. The annual Research Forum is organized by ACEP's Research Committee, and abstracts for the 2022 event are being accepted through May 18 at acep.org/RF.

ACEP Committees

Please consider getting involved as a member of an ACEP committee! Apply at acep.org/committee-involvement by May 15 for consideration for the upcoming cycle.

- Academic Affairs
- Audit
- Awards
- Bylaws
- Bylaws Interpretation
- Clinical Emergency Data Registry
- Clinical Policies
- Clinical Resources Review
- Coding & Nomenclature Advisory
- Communications
- Compensation
- Disaster Preparedness & Response
- Education
- EMS
- EM Practice
- Ethics
- Federal Government Affairs
- Finance
- Health Information Technology
- International Emergency Medicine
- Medical-Legal
- Membership
- National Chapter Relations
- Pediatric EM
- Public Health & Injury Prevention
- Quality & Patient Safety
- Reimbursement
- Research
- State Legislative/Regulatory
- Well-Being

DOGMA FEELS RIGHT UNTIL YOU STEP IN IT

SKEPTICS' GUIDE TO EMERGENCY MEDICINE

DR. MILNE is chief of emergency medicine and chief of staff at South Huron Hospital, Ontario, Canada. He is on the Best Evidence in Emergency Medicine faculty and is creator of the knowledge translation project the Skeptics' Guide to Emergency Medicine (www.TheSGEM.com).

Go Big or Go Small?

Is there a difference between the types of catheter used in hemodynamically stable patients?

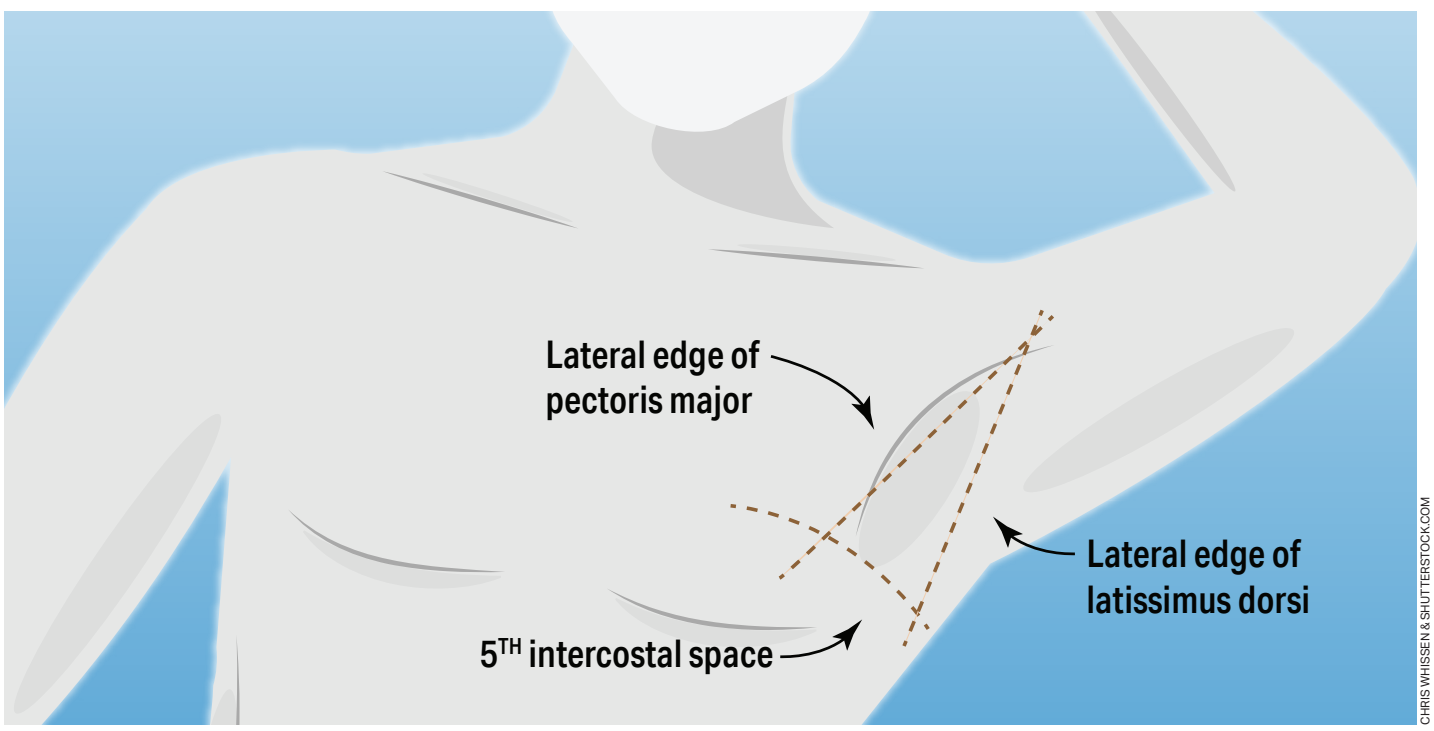
by KEN MILNE, MD

Case: A 54-year-old male presents to your emergency department the day after being involved in a snowmobile accident on the weekend. He reports he was riding his sled along an embankment when it rolled. He thought it would get better, but the chest pain and shortness of breath have gotten worse over the past 48 hours. His vital signs are normal, and the physical exam indicates he has bruising and tenderness over the left chest wall, with diminished left-sided lung sounds. A CT scan reveals three rib fractures and a hemothorax estimated to measure 600 cc, with no additional injuries.

Clinical Question: Are small pigtail catheters (PCs) as effective as large-bore chest tubes (LBCTs) for the treatment of hemodynamically stable patients with traumatic hemothorax?

Background: Traumatic hemothoraces have been traditionally treated with LBCTs. It

CONTINUED *on page 16*



Remember to respect the triangle of safety.

is important to place these in the pleural space and in the zone of safety. Whether the tube is directed up or down does not seem to be associated with outcomes.[1]

A small observational study looked at 36 patients with traumatic hemothorax or hemopneumothorax receiving a PC and compared them to 191 patients receiving a LBCT. The small catheter seemed to work just as well as the LBCT.[2]

Reference: Kulvatunyou N, Bauman ZM, Edine SBZ, et al. The small (14 Fr) percutaneous catheter (P-CAT) versus large (28–32 Fr) open chest tube for traumatic hemothorax: a multicenter randomized clinical trial. *J Trauma and Acute Care Surg*. 2021;91(5):809-813.

- **Population:** Hemodynamically stable adult patients 18 years or older suffering traumatic hemothorax or hemopneumothorax requiring drainage at the discretion of the treating physician
  - » **Exclusions:** Emergent indication, hemodynamic instability, patient refuses to participate, prisoner or pregnancy
- **Intervention:** Small (14 Fr) pigtail catheter
- **Comparison:** Large (28–32 Fr) large-bore chest tube
- **Outcome:**
  - » **Primary Outcome:** Failure rate defined as radiographically apparent hemothorax after tube placement requiring an additional intervention, such as second tube placement, thrombolysis or video-assisted thoracoscopic surgery
  - » **Secondary Outcomes:** Insertion complication rate; drainage output (30 minutes, 24-hour, 48-hour and 72-hour); hospital course outcome up to 30 days (total tube days, ICU length of stay, hospital length of stay and ventilator days); and insertion perception experience (IPE) score (1–5 subjective score, with 1 meaning "it was okay" to 5 meaning "it was the worst experience of my life")
- **Trial Design:** Multicenter, noninferior, unblinded, randomized, parallel assignment comparison trial

Authors' Conclusions: "Small caliber 14-Fr PCs are equally as effective as 28- to 32-Fr chest tubes in their ability to drain traumatic HTX with no difference in complications. Patients reported better IPE scores with PCs over chest tubes, suggesting that PCs are better tolerated."

Results: They identified 222 eligible patients over five years, with 119 (56 PC and 63 LBCT) included in the final cohort. The mean age was 55 years, 82 percent were male, 81 percent had blunt trauma and median time to tube placement was one to two days after injury.

Key Result: Pigtail catheters were noninferior to large-bore chest tubes for treating traumatic hemothorax and hemopneumothorax.

- **Primary Outcome:** Failure rate was 11 percent for PC versus 13 percent for LBCT (P=0.74).
- **Secondary Outcomes:** There were two insertion-related complications, one from each group (bleeding from PC necessitated a thoracotomy, and extra pleural position from chest tube placement required another tube placement). There were two deaths, one from each group (PC group had a PE on postinjury day 10 and the tube had already been removed, and LBCT group had a nontrauma-related death at an outside institution). There was no statistical difference between PC and LBCT in terms of drainage tube output except at 30 minutes, with more in the PC group. There was no statistical difference in hospital course. Patients reported better IPE scores in the PC group compared to the LBCT group.

EBM Commentary:

1. **Selection Bias:** There were 102 patients excluded from the 222 eligible. Twenty-seven of the exclusions were for "MD preference." This could have introduced some selection bias into the trial.
2. **Unstable Patients:** Hemodynamically unstable trauma patients were also excluded from this trial. Open thoracostomy and the placement of a LBCT is still considered by many to be the primary treatment for the evacuation of hemothorax in the hemodynamically unstable trauma patient. The exclusion of hemodynamically unstable patients could also explain the lower-than-anticipated failure rate, which is discussed below. Further research will be needed to determine if PC catheters are noninferior to LBCTs in hemodynamically unstable trauma patients.
3. **Patient-Oriented Outcome:** Tube failure rate seems like a disease-oriented outcome (DOO). The IPE score seems like a more patient-oriented outcome (POO). Patients did prefer the PC compared to the LBCT. However, the IPE scale developed by the investigators has not been externally validated.
4. **Low Overall Failure Rates:** The failure rates in this study were 11 percent and 13 percent for PCs and LBCTs, respectively.

These figures are significantly lower than the rate of 28.7 percent reported in a recent multi-institutional study from the Eastern Association for the Surgery of Trauma (EAST). This may be because the study excluded patients in extremis, as the authors point out in the discussion. However, the study population in this trial had a mean hemothorax volume of 612 mL versus 191 mL is the EAST study. This indicates that volume of blood did not appear to influence rate of failure compared to what has been published elsewhere.[3]

5. **Stopped Early:** This trial was stopped before reaching its goal of 190 patients, despite enrolling at four sites for five years. The authors reported slow enrollment and disruption to research caused by the COVID-19 pandemic. They did conduct an interim analysis prior to stopping enrollment, and their primary endpoint still met the prespecified noninferior margin.

SGEM Bottom Line: Offering a pigtail catheter instead of a large-bore chest tube for the evacuation of a traumatic hemothorax in a hemodynamically stable patient is reasonable.

Case Resolution: The patient is offered the traditional LBCT or the pigtail. He decides to go with the small catheter, which is placed without any complications. He is admitted to the trauma service for pain management and monitoring. The PC is removed on day three of hospitalization, and he is discharged on day five.

Thank you to Dr. Chris Root, a second-year resident physician in the Department of Emergency Medicine at the University of New Mexico Health Sciences Center in Albuquerque, New Mexico, 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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TOXICOLOGY Q&A

JASON HACK (OLEANDER PHOTOGRAPHY)

Purity & Poison

by JASON HACK, MD

Question: Often associated with royal families, which delicate flower symbolizing purity and humility can cause cardiac arrest if handled incorrectly?

ANSWER *on page 19*

DR. BORELLI is an emergency medicine resident at the University of Texas Health San Antonio and *ACEP Now* resident fellow.

Resident Innovations in Medicine

Inspiration can take many different forms

by CARA BORELLI, DO

For this month's "Resident Voice" column, I explore how emergency medicine residents are innovating the field of medicine in creative and diverse ways. I requested residents to submit descriptions of their innovations, and was enthused at the breadth of initiatives being undertaken by emergency medicine residents across the country. I hope these three different initiatives which encompass research, community outreach, and technologic innovations will inspire you to pursue your own innovations.

Starting a Nonprofit Organization

SANDRA COKER, MD, PGY2, University of Chicago

My journey into medicine and to the founding of Black Girl White Coat surprisingly share a few things in common. I was the first in my family to pursue a career as an emergency physician, and I was also the first person I knew who had the audacity to start a nonprofit in the middle of it all. To be honest, I had no idea what to do, how to do it, or where to start with either endeavor. If we are being even more honest, I doubt I would have made it through undergraduate, medical school, and the nonprofit startup process if not for Google.

Dr. Coker

Despite my lack of experience and outside guidance, I always understood the incredible lack of people who looked like me doing the same jobs of which I dreamt.

My sole intention in founding Black Girl White Coat prior to beginning medical school in 2016 was to help provide resources and tools to Black students who either did not have the privilege of physician parents, resources to make their dreams come true, or the knowledge base to even get started. Studying human patterns shows us that we are most likely to become what we see and are surrounded by.[1,2] Likewise, we have an easier time believing we can achieve something when we see other people who look like us achieve similar goals. This is a challenge for African American/Black and Latinx youth who grow up in communities where access to higher education comes at a much higher cost, mentorship is scarce, and exposure is limited.

In just five years, Black Girl White Coat has grown into a 501(c)3 organization that has helped over 600 Black and Latinx students through our mentorship program, awarded over $10,000 worth of scholarship to future health care professionals, and supplied numerous textbooks and other academic resources to those in need. Black and Latinx men and women are desperately needed to provide culturally competent quality care for a medical population that continues to grow in number and diversity. Support and representation have not previously been there; Black Girl White Coat exists to bridge that gap.

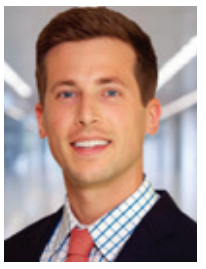
Black Girl White Coat is also exactly what I needed when I was younger. I hope everyone who encounters our organization soars to heights higher than I will ever reach. The potential has always been there; now we are tearing down barriers. However, we have more gaps to fill, especially when we look further down the line. More pipeline programs are needed in traditionally marginalized communities. Better support and retention strategies for faculty of color are needed in academic programs and throughout institutions. There is still so much work to be done ... Black Girl White Coat is just getting started.

Revolutionizing Information Access

JASKIRAT DHANOA, MD, PGY3; NICHOLAS STARK, MD, MBA, PGY4; CHRISTOPHER PEABODY, MD, MPH, University of California San Francisco, Department of Emergency Medicine, Acute Care Innovation Center

Challenges presented by the COVID-19 pandemic pushed many emergency departments' stagnant information distribution systems to a breaking point, requiring rapid adaptation to support a constantly changing clinical care environment. San Francisco General Hospital (SFGH), a University of California San Francisco-affiliated site, was no exception. As our emergency department became overloaded with rapidly-changing clinical information, the Acute Care Innovation Center (ACIC) set out to improve access to critical clinical information. The ACIC uniquely brought together a group of residents, hospital leadership, and medical students to account for different perspectives and tackle problems in an innovative manner. Our team learned that clinicians felt overwhelmed by the volume and speed of changing clinical information that was communicated from emails to cloud folder uploads. Clinicians did not know where to find the most up-to-date information. And text-heavy documents were difficult to apply in real-time on shift.

Dr. Dhanoa



Dr. Stark

Dr. Peabody

The design process led our team to an idea that was profound in its simplicity: democratizing information through an open-access, mobile-friendly, centralized digital information hub. Today, that idea has become an evolving clinical information platform called E*Drive (https://edrive.ucsf.edu).

E*Drive currently hosts a broad array of clinical information, ranging from COVID-19 guidelines to announcements to discharge resources, and it displays this information in a simple, standardized flow-chart style to enable in-the-moment utilization on shift. The platform has been profoundly successful, increasing access to clinical information in our emergency department by over 230 percent (from 0.13 views/day with the legacy system to nearly 30 views/day in September 2021), with 77 percent of clinicians reporting improved access to clinical information and 70 percent endorsing improved efficiency on shift as a result of E*Drive.

Our team was able to build, launch, and sustain E*Drive for nearly free, all without in-depth tech experience. To do this, we built E*Drive on Drupal—our institution-supported web content management system—and utilized GoogleSlides to create the flow-chart style guidelines. E*Drive is easily accessible via a direct link in our medical record system or a short URL on any device with an internet connection. The platform layout is optimized for rapid information access with an average of three clicks from the homepage or via a robust search tool. The dynamic, modular nature of the E*Drive platform allows continued growth and evolution in response to user feedback. For example, we recently developed a first-of-its-kind Discharge Navigator tool (https://edrive.ucsf.edu/dcnav) that helps clinicians refer vulnerable patients to tailored community resources based on their demographics and needs. We also recently digitized frequently utilized forms, such as procedure consents, that previously needed to be accessed in cluttered filing cabinets.

E*Drive has revolutionized how our emergency department distributes and stores critical clinical information. By creating a system that is affordable, portable, and adaptable, our team hopes to inspire other emergency physicians including residents to develop similar innovations to accelerate guideline accessibility in the future.

Histories of our Present Illness

LUKE MESSAC, MD, PHD, PGY4, Brown Emergency Medicine Residency

As a physician historian, I use techniques from history, anthropology, and epidemiology to study determinants of health outcomes. I completed my MD/PhD with a focus in the history of science, and have written about international opiate regulations, population control campaigns, economic indices, AIDS treatment activism, and hepatitis C diagnostic technologies. The aim of my research is to show how our way of delivering and paying for medical care developed, and how we might do better.

Dr. Messac

Today, I am studying the history of medical debt collection and the impact these debts are having on Americans' lives. Since the 1980s, unpaid medical debts have moved from obligations negotiated by doctors and patients to financial instruments traded on impersonal financial exchanges. Spurred in part by cuts in public funding and insurance companies' turn toward cost-sharing, hospitals have faced more bad debts. In response, health care institutions sent overdue bills to collection agencies and debt buyers. Divorced from the physicians' bond to patients, debt collectors exercise draconian techniques, using wage garnishments, liens on homes, and lawsuits to extract profits from patients. Aggressive debt collection and third-party debt purchasing have continued to spread.

Another area of my research examines how health professionals respond to scarcity. My book, *No More to Spend: Neglect and the Construction of Scarcity in Malawi's History of Medicine*, is a history of medical neglect in Malawi. Using the stories of doctors, patients, and political leaders, the book shows how colonial and postcolonial administrations used claims of scarcity to justify the dismal state of health care. Scarcity was not inevitable but was instead the product of choices by powerful actors to siphon financial resources away from medical care.

The COVID-19 pandemic highlighted the urgent need to study scarcity. New shortages have emerged, particularly in nursing staffing. This experience revealed the many tolls—psychological, economic, and clinical—exacted by not having enough resources to care for patients safely. In settings plagued by chronic scarcity, health care professionals face these inadequacies every day. Economists and psychologists have demonstrated how scarcity impairs the ability to make rational decisions. This has relevance to the practice of emergency medicine, particularly in low-income settings, where the constant pressure of not being able to practice the standard of care and the knowledge that one works in a system of tiered access can contribute to burnout, rushed diagnoses, and improper management. By understanding the pathophysiology of scarcity, we will improve outcomes and be better equipped to address health inequity.

References

1. Childhood surroundings matter more than genes for would-be inventors. The Economist. 2017(12). https://www.economist.com/united-states/2017/12/04/childhood-surroundings-matter-more-than-genes-for-would-be-inventors.
2. Smith N. Nurture Counts as Much as Nature in Success. Bloomberg Opinion. 2017(12). https://www.bloomberg.com/opinion/articles/2017-12-12/nurture-counts-as-much-as-nature-in-success.

Toxicology Q&A Answer

QUESTION ON PAGE 17

Answer: Lily of the valley

Description

Although part of the asparagus family and potentially deadly, the flower has a scent that makes it one of the most beloved plants in the world. The flowers grow from underground rhizomes, so they will spread and take over an area of the garden if not planted with boundaries.

In the spring, each stem produces two long pointed leaves and a central raceme (a flower cluster with individual blossoms along a central stem) with five to 15 bonnet-shaped white flowers. Later in the growing season, the flowers are replaced by berries that range in color from red to orange.

Toxin and Dose

The plant contains a long list of toxins, mainly cardiac glycosides (some authors report 20–40)—primarily convallarin and convallamarin—that affect the heart and saponins that affect the gastrointestinal (GI) tract. The entire plant contains toxins; its leaves, berries, stems and roots are all poisonous.

It is reported that severe poisoning might occur after ingestion of a seemingly small amount or "two stems with leaves." The water that cut stems are placed in may also contain enough toxins to poison someone trying to "taste the perfume."

Symptoms of toxicity include nausea, vomiting, general malaise, chest pain, weakness, altered mental status, very slow heart rate, irregular heartbeat, ectopy and cardiac arrest.

Treatment is primarily supportive. GI decontamination with activated charcoal can be considered. Although there is no clear antidotal therapy, the use of digoxin-specific Fab fragments has been suggested.

Similar Poisons

Other naturally occurring compounds with structures similar to these cardioactive steroids include bufadienolides (Bufo spp of toads), fireflies (Photinus spp), oleandrin (Nerium spp), cerebins (from *Cerbera odollam*, pong-pong or "suicide" tree) and ouabain (Acokanthera schimperi tree). This last one deserves some attention as it is where the African crested rat sources the poison it wicks into its fur—it's the only known mammal that intentionally coats itself in poison! It's totally worth a look if you are unfamiliar with this awesome animal.*

Cultural Background

Did you know the lily of the valley is the national flower of Finland?

It is often used in bouquets, in tabletop floral arrangements and as scent in soaps and perfumes. Bridal bouquets, including those of royal families, use it for its sweet perfume, and it was in the bouquets of Catherine, Duchess of Cambridge, and Princess Grace Kelly of Monaco. Plus, it is said to be Queen Elizabeth II's favorite flower. In the language of flowers, lily of the valley symbolizes purity, humility and a return to happiness.

The flower is traditionally associated with May Day, especially in France where the *muguet* is handed out at special events. The lily of the valley image is a frequently used motif in artwork, including those by Marc Chagall, Marx Reichlich, Carl Fabergé and others.

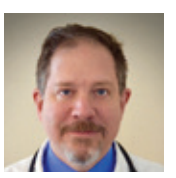
**Listen to this three-minute NPR podcast on the African crested rat.*

JASON HACK (OLEANDER PHOTOGRAPHY)

LILY OF THE VALLEY

Convallaria majalis

COMMON NAMES: May lily, May bells, Our Lady's tears —*convallis* (valley), *leiron* (lily) and *majalis* (May)



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

Baylor College of Medicine
HENRY J.N. TAUB DEPARTMENT OF EMERGENCY MEDICINE

Academic & Clinical Faculty Opening

The Department of Emergency Medicine at Baylor College of Medicine (BCM) is looking for **Faculty** who are interested in a career in Academic Emergency Medicine. We are currently hiring faculty of all ranks commensurate with prior experience and seeking applicants who have demonstrated a strong interest and background in a variety of areas (eg. research, simulation, ultrasound, disaster medicine, ems, toxicology, etc…). Clinical opportunities are also available at our affiliated hospitals.

Baylor College of Medicine is located in the world's largest medical center in Houston, Texas. The Baylor Emergency Medicine Residency was established in 2010, and received department status in Jan 2017. Our residency program has grown to 16 residents per year in a 3-year format. We offer a highly competitive academic salary and benefits commiserate to academic level and experience.

Our academic program is based out of Ben Taub General Hospital, Baylor St. Luke's Medical Center, DeBakey VA Medical Center, and Texas Children's Hospital. Ben Taub General Hospital is the largest Level 1 trauma center in southeast Texas with certified stroke and STEMI programs that sees nearly 80,000 emergency visits per year. Baylor St. Luke's Medical Center is home to the Texas Heart Institute and is a tertiary referral center with multiple transplant programs and many high acuity patients. Texas Children's Hospital is consistently ranked as one of the nation's best, largest and most comprehensive specialty care pediatric hospitals. These affiliations, along with the medical school's preeminence in education and research, help to create one of the strongest emergency medicine experiences in the country.

MINIMUM REQUIREMENTS
Education: M.D. degree or equivalent
Experience: Previous experience in Research, Simulation and Toxicology strongly preferred but not required
Licensure: Must be currently boarded or board eligible in Emergency Medicine and eligible for licensure in state of Texas.

Those interested in a position or further information may contact Dr. Dick Kuo via email dckuo@bcm.edu or by phone at 713-873-2626. Please send a CV and cover letter with your past experience and interests.

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Baylor College of Medicine (www.bcm.edu) is recognized as one of the nation's premier academic health science centers and is known for excellence in education, research, healthcare and community service. Located in the heart of the world's largest medical center (Texas Medical Center), Baylor is affiliated with multiple educational, healthcare and research affiliates (Baylor Affiliates).

The Henry JN Taub Department of Emergency Medicine at Baylor College of Medicine seeks a Vice Chair of Research to oversee research operations for the department.

Salary, rank, and tenure status are contingent upon candidate qualifications. The rank and tenure status awarded will be based upon qualifications in alignment with Baylor College of Medicine's promotion and tenure policy.

Qualified applicants are expected to have a research record with significant extramural funding and leadership skills to develop a strong multidisciplinary collaborative Emergency Medicine research program and continue to grow current departmental research efforts. In addition to the above responsibilities, other duties may be assigned by the Chair.

Please include a cover letter and current curriculum vitae to your application.

This position is open until filled. For more information about the position, please contact Dick Kuo, MD via email [dckuo@bcm.edu].

MINIMUM REQUIREMENTS

Education: M.D. degree or equivalent
Experience: Research Fellowship not required for application
Licensure: Must be currently boarded in Emergency Medicine and eligible for licensure in state of Texas.

Penn State Health Emergency Medicine

About Us:

Penn State Health is a multi-hospital health system serving patients and communities across 29 counties in central Pennsylvania. The system includes Penn State Health Milton S. Hershey Medical Center, Penn State Children's Hospital, and Penn State Cancer Institute based in Hershey, PA; Penn State Health Holy Spirit Medical Center in Camp Hill, PA; Penn State Health St. Joseph Medical Center in Reading, PA; and more than 2,300 physicians and direct care providers at more than 125 medical office locations. Additionally, the system jointly operates various health care providers, including Penn State Health Rehabilitation Hospital, Hershey Outpatient Surgery Center, Hershey Endoscopy Center, Horizon Home Healthcare and Pennsylvania Psychiatric Institute.

In December 2017, Penn State Health partnered with Highmark Health to facilitate creation of a value-based, community care network in the region. Penn State Health shares an integrated strategic plan and operations with Penn State College of Medicine, the university's medical school.

We foster a collaborative environment rich with diversity, share a passion for patient care, and have a space for those who share our spark of innovative research interests. Our health system is expanding and we have opportunities in both an academic hospital as well community hospital settings.

Benefit highlights include:

- Competitive salary with sign-on bonus
- Comprehensive benefits and retirement package
- Relocation assistance & CME allowance
- Attractive neighborhoods in scenic Central Pennsylvania

PennState Health

FOR MORE INFORMATION PLEASE CONTACT:

Heather Peffley, PHR CPRP - Penn State Health Physician Recruiter
hpeffley@pennstatehealth.psu.edu

Penn State Health is fundamentally committed to the diversity of our faculty and staff. We believe diversity is unapologetically expressing itself through every person's perspectives and lived experiences. We are an equal opportunity and affirmative action employer. All qualified applicants will receive consideration for employment without regard to age, color, disability, gender identity or expression, marital status, national or ethnic origin, political affiliation, race, religion, sex (including pregnancy), sexual orientation, veteran status, and family medical or genetic information.

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OR YOU CAN *MAKE* IT MATTER.

US Acute Care Solutions bought back our group from private equity in 2021. Now in 2022, we have bought out Alteon's private equity partners too, granting more than 450 Alteon physicians ownership in their group. In doing so, we have further strengthened our patient-centered practice, which is owned and led by physicians. At USACS, we believe what you believe: Our patients matter, our colleagues matter, our specialties matter and our careers matter. **At USACS, ownership matters.**

To our new colleagues from Alteon we say: **Welcome aboard!** We're proud to unite with you to care for our shared patients and to preserve the future of our specialties. **Together, we own the future!**

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US Acute Care Solutions