LEADING AN ORGANIZATION AS LARGE AND DIVERSE AS ACEP REQUIRES A FOCUS ON BOTH THE URGENT PROBLEMS OF THE MOMENT AND THE LONG-TERM HEALTH OF THE ORGANIZATION AND ITS MEMBERS. FOR ACEP PRESIDENT VIDOR E. FRIEDMAN, MD, FACEP, CENTERING HIS EFFORTS ON IMPROVING LIFE FOR EMERGENCY PHYSICIANS AND ADVOCATING FOR SHARED AREAS OF CONCERN HAVE ALLOWED HIM TO TACKLE BOTH CURRENT ISSUES AND LONG-TERM STRATEGY INITIATIVES.

FROM A LEADERSHIP PERSPECTIVE, DR. FRIEDMAN HAS ACCOMPLISHED MUCH IN A SHORT TIME. INSTEAD OF SPENDING THE USUAL YEAR AS ACEP PRESIDENT-ELECT, HE ONLY SPENT THREE MONTHS IN THE ROLE BEFORE ASSUMING THE PRESIDENCY IN SEPTEMBER 2018. HE WAS ELECTED BY THE ACEP BOARD OF DIRECTORS IN JUNE 2018 TO SERVE AS PRESIDENT-ELECT FOLLOWING THE RESIGNATION OF FORMER ACEP PRESIDENT-ELECT, JOHN ROGERS, MD, FACEP.

DR. FRIEDMAN RECENTLY SAT DOWN WITH ADVOCACY, STRATEGY, & SHARED PURPOSE MIDYEAR REPORT FROM ACEP PRESIDENT DR. VIDOR FRIEDMAN LEADING AN ORGANIZATION AS LARGE AND DIVERSE AS ACEP REQUIRES A FOCUS ON BOTH THE URGENT PROBLEMS OF THE MOMENT AND THE LONG-TERM HEALTH OF THE ORGANIZATION AND ITS MEMBERS. FOR ACEP PRESIDENT VIDOR E. FRIEDMAN, MD, FACEP, CENTERING HIS EFFORTS ON IMPROVING LIFE FOR EMERGENCY PHYSICIANS AND ADVOCATING FOR SHARED AREAS OF CONCERN HAVE ALLOWED HIM TO TACKLE BOTH CURRENT ISSUES AND LONG-TERM STRATEGY INITIATIVES. FROM A LEADERSHIP PERSPECTIVE, DR. FRIEDMAN HAS ACCOMPLISHED MUCH IN A SHORT TIME. INSTEAD OF SPENDING THE USUAL YEAR AS ACEP PRESIDENT-ELECT, HE ONLY SPENT THREE MONTHS IN THE ROLE BEFORE ASSUMING THE PRESIDENCY IN SEPTEMBER 2018. HE WAS ELECTED BY THE ACEP BOARD OF DIRECTORS IN JUNE 2018 TO SERVE AS PRESIDENT-ELECT FOLLOWING THE RESIGNATION OF FORMER ACEP PRESIDENT-ELECT, JOHN ROGERS, MD, FACEP. DR. FRIEDMAN RECENTLY SAT DOWN WITH
Congrats, ACEP’s Outstanding Medical Students

The winners of our 2019 Outstanding Medical Student Awards have been announced! This honor recognizes students who excel in compassionate care of patients, professional behavior, and service to the community and/or specialty. Winners receive a year of free ACEP membership and free registration to the Scientific Assembly. This year’s winners are:

• Arthur Broadstock, The Ohio State University College of Medicine
• Alexandra Gregory, Saint Louis University School of Medicine
• Jonathan Lee, University of California, Irvine
• Andrea Quijones-Rivera, University of California, San Francisco
• Stephanie Winslow, University of Florida College of Medicine

The following students received honorable mentions: Adrienne Caiado (Penn State College of Medicine), Reed Macy (University of Texas Southwestern), and Dylan Lukato (University of Wisconsin School of Medicine and Public Health).


ACEP recently added two new point-of-care (POC) tools to its growing library. RPUE is a quick and easy tool to assess patients for opioid withdrawal and the use of buprenorphine. It provides indications, side effects, and expected responses to buprenorphine. It provides indications, side effects, and expected responses to buprenorphine. Eric Ketcham, MD, FACEP, presented the new buprenorphine tool at the Rx Drug Abuse & Heroin Summit in Atlanta this April. The AFIB tool helps determine the best way to control rapid atrial fibrillation and assesses patients for opioid withdrawal and the use of buprenorphine. It provides indications, side effects, and expected responses to buprenorphine.

Advocacy Alert: Seeking CoSPonsors for Bill to Improve Mental Health Access from ED

Contact your legislators to cosponsor S. 1334/H.R. 2359, the Improving Mental Health Access from the Emergency Department Act. This ACEP-drafted legislation was introduced May 3, 2019, and would provide additional resources for patients with acute mental health needs receiving care in the ED. Stay updated on this issue at www.acep.org/EDsafety.

Geriatric ED Accreditation Grants for VA Facilities

With a grant from the John A. Hartford Foundation and West Health, ACEP is offering to accredit 20 VA facilities as geriatric emergency departments at no cost. ACEP’s Geriatric ED Accreditation Program was developed by leaders in emergency medicine to ensure our older patients receive well-coordinated quality care, specific to the needs of the geriatric population, during every ED encounter. Learn more about the program at www.acep.org/geda.

ACEP meets with OSHA to Address ED Violence

ACEP held a meeting with the Occupational Safety and Health Administration (OSHA) to discuss strengthening protections for health care workers, especially in the emergency department, from workplace violence. Currently, no such federal regulation exists, but OSHA has begun to explore its development. ACEP has long advocated for such protections; most recently, ACEP drew attention to the issue by releasing results of a survey that reported nearly half of emergency physicians polled had been physically assaulted, with more than 60 percent of assaults occurring in the past year. ACEP worked with congressional offices to refine H.R. 1309, the Workplace Violence Prevention for Health Care and Social Service Workers Act, and recently sent a letter of support asking Congress to consider how emergency department, in particular, are staffed to ensure the important provisions of this legislation are implemented appropriately. Stay updated on this issue at www.acep.org/EDsafety.

Correction:

Our May issue erroneously claimed that ACEP Now has the #1 readership position in emergency medicine. ACEP Now is #1 in advertising. We apologize for the error.
United States Constitution Versus FDA

OFF-LABEL DISCUSSIONS MAY NO LONGER BE FAUX PAS

by KENNETH ALAN TOTZ, DO, JD, FACEP

The First Amendment to the U.S. Constitution states in total, “Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances.” This freedom of speech, so often cited, is not absolute. For example, you cannot legally yell, “Fire!” in a crowded movie theater, intentionally publish untruthful facts about another person, or untruthfully advertise commercial products.

Recently, commercial speech has been the center of much debate in medical-legal circles.

HISTORICAL REVIEW

The Food and Drug Administration (FDA) received its congressional power to regulate medicines and medical devices through the Federal Food, Drug, and Cosmetic Act (FFDCA) of 1938. Through this act, the FDA controls the commercialization of new medical products through a rigorous multistage approval process. The process not only allows entry of products into the stream of commerce but also determines the labeling of those products. Product labeling articulates the specifically approved uses supported by previously performed medical research, along with side effects and other precautions to be considered. Unapproved indications or off-label uses communicated in the product labeling will identify the product as being mislabeled or misbranded and subject the manufacturer to FDA scrutiny and penalties. Although the approval process may yield additional product benefits, only FDA-approved indications are permitted on the label.

The FDA recognized that significant costs and lengthy approval times precluded many manufacturers from pursuing additional useful indications for their medical products. As such, the FDA introduced the FDA Modernization Act (FDAMA) of 1997, which allowed manufacturers to disseminate literature and have discussions regarding off-label uses of their medical devices. Unfortunately, any communications regarding off-label uses had to occur following the filing of an investigational new drug application (INDA).

Until recently, discussions of off-label use between pharmaceutical representatives and medical professionals outside the scope of the FDAMA were considered illegal offenses. Dissemination of off-label medical product usages were limited to discussions at non-pharmaceutical-sponsored continuing medical education events, independent drug compendia resources, peer-reviewed journal articles, and other non-pharmaceutical manufacturer internet resources.

RECENT DEVELOPMENTS

All this changed in 2017 when the Arizona legislature passed HB 2382, the Free Speech in Medicine Act. The law prohibits punishment by any Arizona state agency of a pharmaceutical manufacturer, its representatives, or medical health professional for the “truthful promotion of an off-label use of a drug, biological product, or device.” Proponents of the bill touted the free speech protections of the First Amendment that should allow such open conversations and the ability to freely pass along any beneficial alternate uses of the medical product as foundational support for its adoption.

Opponents of the law feared drug makers would use the off-label pathway as an easier route to widespread drug adoption without the rigorous oversight of the traditional multistage FDA approval process. Challengers to the law also opined that the pharmaceutical industry would be disincentivized to share adverse medical information regarding off-label uses, culminating in another Fen-Phen disaster.

In any event, the Arizona law received the attention of many other state legislatures that ultimately moved to pass their own versions of the Free Speech in Medicine Act. Missouri, Mississippi, Tennessee, and Colorado have recently proposed similar versions of the Arizona law, but only Tennessee’s version had become law at press time.

The federal courts have similarly ruled favorably for pharmaceutical manufacturers and their representatives under the FDCA for speech promoting the lawful, off-label use of an FDA-approved drug.2 The U.S. Court of Appeals for the Second Circuit further clarified that any false or misleading promotions would not be entitled to similar First Amendment protections.

In contrast to the defensive posture of the defendant in the Caronia case, Amarin Pharmaceuticals went on the offensive against the FDA in Amarin Pharma, Inc. v. United States FDA, after the FDA failed to approve one of its cholesterol medications for extended indications. The FDA insisted it would consider the drug misbranded if Amarin elect to share any of its favorable research data with physicians. In Amarin, the district court dealt another blow to the FDA by reaffirming its earlier findings in Caronia—that is, that First Amendment commercial speech protections apply to truthful and non-misleading speech.

So the next time your favorite drug rep comes calling, feel free to discuss off-label uses of their medical products. You may be quite surprised to learn some of your colleagues have found some novel and helpful information regarding off-label uses, culminating in another Fen-Phen disaster.

The next time your favorite drug rep comes calling, feel free to discuss off-label uses of their medical products. You may be quite surprised to learn some of your colleagues have found some novel and helpful information regarding off-label uses, culminating in another Fen-Phen disaster.

REFERENCES


DR. TOTZ is facility medical director at First Choice Emergency Room at Adelphi Health in Texas.
A boy age 3 years and 4 months was brought to the emergency department at 6:40 a.m. with complaints of cold symptoms, including congestion, runny nose, and a fever for two days. His past medical history included typical childhood illnesses, and his immunizations were up-to-date.

Vital signs were temperature 103.6°F, heart rate (HR) 156, and respiratory rate (RR) 40, and he weighed 14.6 kg. Other than nasal congestion, his exam was normal. It was documented that he was alert, making good eye contact, and cooperative. His heart, lung, abdomen, extremity, and neurological examinations were all normal. Notably absent were meningismus, Kernig’s, and Brudzinski’s signs.

He was given an antipyretic and observed, and referring physician are both ACEP members, a formal ethics complaint can be filed. This is done to reduce the chance that such testimony erroneously establishes the standard of care.

The testimony is then reviewed by the Ethics Committee in the context of ACEP’s policy Expert Witness Guidelines for the Specialty of Emergency Medicine. Its recommendation is then reviewed by the Board of Directors, and an adverse decision can lead to a private or public letter of censure or suspension of membership. The member may request an appeal hearing prior to an action taking effect.

If the witness is not an ACEP member, the testimony can be referred to the Standard of Care Review Panel, which will then review the testimony and report its findings in ACEP Now. This is done to reduce the chance that such testimony erroneously establishes the standard of care.
of care for future cases. A full description of this process can be found at www.acep.org/StandardOfCareReview.

In this case, the referring physician was an ACEP member (not involved in the care) and the plaintiff expert had resigned his membership, so the case was directed to the Standard of Care Review Panel.

The member was concerned about several of the plaintiff expert’s statements, such as “All children with an elevated heart rate and respiratory rate require a full septic workup.” The witness also repeatedly said systematic inflammatory response syndrome (SIRS) criteria should be applied to children and said nasal discharge did not constitute a source of infection. In addition, the panel identified the following issues in the 300 pages of transcribed testimony:

- An inappropriate, inflammatory tone and word choices amounting to hyperbole; outlandish statements (including unsupported claims); and apparent pandering to the plaintiffs were noted. Also, with regard to several key aspects of the presentation, the witness gave significantly more weight to the recollections of the parents than to the medical record.
- The expert witness also stated that a complete blood count (CBC) can differentiate between viral and bacterial infections, rhinorrhea is generally due to allergies and not a respiratory infection, and fever cannot cause an elevated respiratory rate. He also suggested a head CT is required prior to an LP.
- He also said he thought the ACEP Expert Witness Guidelines did not apply to him, even though he was an ACEP member at the time of the testimony.

Issues Considered by the Standard of Care Review Panel

- The witness’s manner of speaking and tone
- Reliance on the recollections of lay relatives over the medical record
- Application of SIRS and sepsis criteria to children
- The making of broad, unsupported statements and suggestions including:
  - A CBC can differentiate between viral and bacterial infection
  - Rhinorrhea is generally due to allergies and is not a symptom of an upper respiratory infection
  - Fever cannot cause an elevated respiratory rate
  - A CT is required prior to an LP, including in the context of this case
- The witness’s statement that the ACEP Expert Witness Guidelines did not apply to him

Conclusions of the Panel

Physicians may provide expert opinion to the court, and they have a right to be compensated fairly for their time and effort in doing so. Expert testimony is based on the expert’s opinion but must be supported by the medical evidence to a reasonable degree of certainty. Hyperbole, insults, name calling, inflammatory language, and attacks on the character of others have no place in medicine (including expert testimony).

While observations of patients and family members are very important and sometimes vital to the care of patients, it is inappropriate to use their recollections to discredit or supplant a medical record unless there is an independent reason to doubt the veracity of the record. Much is written about the approach to febrile children, particularly those without a source for the fever. There are no SIRS criteria to apply to children, and it was inaccurate and misleading to insist such a standard existed. It is false to say this child required a sepsis workup due to his vital signs.

The panel felt none of the four other statements above were supported by any literature, and all were incorrect:

- A CBC is one piece of information that can be helpful in determining whether a serious illness exists, particularly an infection. It is not automatically required in a child of this age with a fever, even with an elevated heart rate and respiratory rate.
- Rhinorrhea may be a symptom of upper respiratory infection, including viral infection.
- It is generally accepted that fever alone can cause an elevated respiratory rate as well as an elevated heart rate.
- The literature does not support CT prior to LP without suspicion of a space-occupying lesion, and the radiation exposure most likely outweighs any benefit in the pediatric population.

When applicable, ACEP policies apply to all members, and that includes the Expert Witness Guidelines, as the policy itself makes clear. Apparently, the witness either changed his mind about this or contradicted his testimony by subsequently resigning his ACEP membership, possibly to avoid sanction by the College. The consensus of the Standard of Care Review Panel was that the physicians treating the patient in this case met the standard of care.

DR. PATTAVINA is an emergency physician at St. Joseph Hospital in Bangor, Maine, and immediate past President of the Maine Medical Association.
voice of emergency medicine with members of Congress on the issues of surprise billing and our country’s mental health crisis.

The Prep
With nearly 150 EM residents and medical students included in the 500-plus attendees at the conference, the Emergency Medicine Residents’ Association (EMRA) and ACEP’s Young Physicians Section (YPS) once again started the action on Sunday with their Health Policy Primer program. This half-day session started with a keynote talk by Steven Stack, MD, MBA, FACEP, the only emergency physician to be president of the American Medical Association. Dr. Stack challenged attendees to be “doers” who turn their words into action. Attendees got an introduction to several key issues—the opioid epidemic, prudent layperson, surprise billing, and the road to universal health care—during the lighting rounds.

As a new addition to the conference, ACEP developed a “Chapter Leadership Session” providing information and advice for current and future chapter leaders to more effectively engage members and strategically lead their chapters.

The Kickoff
The Leadership Summit challenged us to take the lead on creating positive change in the health care arena. Brian Williams, MD, a trauma surgeon from Texas, provided a very personal and descriptive description of advancing through the medical education system as an African American male. He described what it was like to play a central role caring for the Dallas police officers wounded by a gunman who was reportedly angry over police shootings of African American men. During that shooting, which occurred at the end of a protest against the police killings of Alton Sterling in Louisiana and Philando Castile in Minnesota, five police officers were killed and nine were injured. Dr. Williams’ touching comments at the press conference after the shooting resonated with people across the country, and his LAC session was riveting.

The Deep Dive
Monday’s afternoon session kicked off with a panel discussion about the public health crisis of firearm-related injuries and deaths and the emotionally-charged political and policy issues that influence attempts to better understand and reduce injuries from firearms. Demonstrating how emergency physicians can “walk the walk,” Roneet Lev, MD, FACEP, who was recently appointed chief medical officer of the White House Office of National Drug Control Policy, and Gerard R. Cox, MD, MHA, deputy undersecretary of health for the Veterans Health Administration, discussed the critical importance of emergency physicians being willing to serve in the public sector and how those who serve can become key policymakers in health care.

The final full group session of the day brought staff members from both congressional members and key House and Senate committee offices to talk about the increasing activity on out-of-network/surprise billing legislation at the federal level. These speakers are key thought leaders and senior policymakers in Congress. The opportunity to provide them the emergency medicine perspective was critically important to ensure that they understand the unique challenges facing our specialty as the 24/7/365 safety net for the country.

On the Hill
Tuesday’s meetings on Capitol Hill were perfectly timed. We asked members of Congress to co-sponsor ACEP-crafted legislation on out-of-network/surprise billing legislation at the federal level. These speakers are key thought leaders and senior policymakers in Congress. The opportunity to provide them the emergency medicine perspective was critically important to ensure that they understand the unique challenges facing our specialty as the 24/7/365 safety net for the country.

CONTINUED on page 8
THE NATIONAL EMERGENCY MEDICINE BOARD REVIEW COURSE

Over 1,700 Participants in 2018 (Over 30,000 Since Inception!)

2019 LIVE COURSE DATES

AUGUST 11-14, 2019
RENAISSANCE BALTIMORE HARBORPLACE HOTEL
BALTIMORE, MARYLAND

AUGUST 24-27, 2019
BALLY’S HOTEL & CASINO
LAS VEGAS, NEVADA

SELF-STUDY PROGRAM

Avoid missing family/work obligations and participate in the self-study course from the comfort of home.

Register Today at
www.EMBoards.com/course
or Call 1-800-458-4779 (9:00am-4:30pm ET, M-F)

If You Don’t Pass, You Don’t Pay!

Content Updated & Revised for 2019

The Center for Emergency Medical Education (CEME) is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians. The Center for Emergency Medical Education (CEME) designates this live activity for a maximum of 34.75 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.
The Surprise Billing Battle: What You Need to Know

Surprise billing (also known as out-of-network billing) is one of the most important issues facing emergency physicians today. The decisions being made in Washington, D.C., could have a far greater impact on how we care for our patients than even EMTALA did in 1986.

For more than a year, surprise billing has been a central focus of ACEP’s federal advocacy efforts, building on years of state-level advocacy already done on this issue. Much of this conflict over surprise billing is playing out in the media, and insurers have been trying to paint emergency physicians in a bad light. Our public relations team is working diligently to make sure the physician side of the story is fairly portrayed both in the press and in Congress.

We’ve seen a flurry of legislative activity after LAC19. In response to the May 9, 2019, release of the White House’s principles regarding surprise billing, ACEP President Vidor Friedman, MD, FACEP, said “ACEP shares the administration’s view that improving transparency is critical to stopping surprise bills ... Still, the principles the White House laid out do not go far enough to protect patients.”

On May 17, 2019, we responded to the STOP Surprise Medical Bills Act of 2019 introduced by several senators, saying it would hit a proposed arbitration process in the insurer’s favor.

The surprise billing debate is changing daily, and ACEP’s advocacy efforts are ongoing. To stay current on what’s happening in D.C., visit www.acep.org/surprise-billing.
THE HEART COURSE

Emergent Cardiovascular and Neurovascular Care for the Frontline Clinician

October 21–24, 2019
Planet Hollywood, Las Vegas, NV

TOPICS INCLUDE:
Advanced EKG interpretation, Acute Coronary Syndrome, Dysrhythmias, Acute Heart Failure, Cardiac Arrest, Device Emergencies, Stroke, and much more!

NEW / 2+ hours of Stroke CME
2 EKG Pre-Course Workshops
2 Echo Post-Course Workshops

REGISTER NOW at ceme.org/heart

COURSE DIRECTOR:
Peter Pang MD, FACEP
Vice Chair for Strategic Innovation
Department of Emergency Medicine
Indiana University School of Medicine

COURSE DIRECTOR:
Amer Aldeen MD, FACEP
Chief Medical Officer
US Acute Care Solutions

SPEAKER:
Amal Mattu MD, FAAEM
Vice Chair of Academic Affairs
Department of Emergency Medicine
University of Maryland School of Medicine

The Center for Emergency Medical Education (CEME) is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians. The Center for Emergency Medical Education (CEME) designates this live activity for a maximum of 28.75 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

The Center for Emergency Medical Education (CEME) designates this activity for a maximum of 28.75 hours of participation for continuing education for allied health professionals.
MISSION KURDISTAN

A recent medical mission trip opened my eyes and expanded my worldview

by BRYAN BALENTINE, MD, FACEP

Of our top 10 international travel destinations, where does Kurdistan rank? It wasn’t initially on my list at all. After all, who would want to spend their own money to travel to a war-torn country with Islamic extremists just waiting to harm someone from the United States? At least that is what I surmised after following years of international news. Trying to understand the complexity of the Islamic State of Iraq and Syria (ISIS), Syria, Syrian rebels, Turkey, Russia, and the United States, all with their own agendas fighting in a very concentrated area of the world, is a challenge when only familiar with the U.S. perspective.

In the middle of all this enter John Miller and One Vision International. Even while the war was active against ISIS in northern Iraq, he would travel, usually alone, and coordinate humanitarian-aid shipments of water filters, coats for the cold winters, shoes, children’s clothes, wheelchairs, and crutches to help everyone displaced from the war. Through these experiences, he witnessed the need for a medical mission trip.

I traveled with John and One Vision International multiple times to Haiti and the Dominican Republic. On some of these trips, one of my best friends from residency, Greg Jacobs, DO, came along. When John approached me about a trip to Kurdistan in northern Iraq, I said no multiple times for the reasons listed above. After each of his trips, he would provide me with an update, and I learned more and more about the kind and welcoming people there who were in need. After multiple invitations and a retreating ISIS, I finally said yes in mid-2018, and we started planning. One conversation later, Greg was on board.

The Trip

Day 1: We visited a military base and treated 100 soldiers for various medical problems. Several of these individuals had fought against ISIS in the recent past. They were extremely kind and appreciative of our time and efforts. We joined them in the “mess hall” and ate good-quality food, better than expected, on the typical metal tray often seen on television.

Day 2: John mentioned beforehand that his local hospital had requested Greg and I provide a lecture for their physicians. We would be speaking to their EM residents and attendings, with the goal of decreasing complications of central line placement by teaching them how to perform the procedure with ultrasound. The lecture also included peripheral IV placement with ultrasound to allow them to more successfully place peripheral IVs on patients with difficult anatomy.

In my limited experience, most international hospitals have ultrasound in the facility, but ED-provider utilization varies. Dr. Ben Smith from the University of Tennessee at Chattanooga graciously loaned me an excellent vascular access lecture, Greg and I tag-teamed the delivery and it was well-received.

We met the emergency department director, Dr. Dilshad Al-Sheikh, who gave us a hospital tour, including the emergency department seeing 700 patients a day. We were pleasantly greeted by several staff physicians and learned of their EM residency training program. I was amazed at how they functioned with limited resources. CT scanner? Broken. A new GE machine had been donated but was still in several boxes upstairs. (I recently learned that a GE representative was scheduled to visit soon to install the scanner.)

Day 3: We returned to the same facility and conducted a hands-on ultrasound workshop. They had two donated high-quality portable machines that were almost right out of the box. Greg taught them the focused assessment with ultrasound in trauma (FAST) exam, and I focused on vascular access. It was so rewarding watching the faces of the residents and attendings light up as they quickly learned their new skills.

Later that evening, we were invited into the home of a lady John affectionately called “Mom” who fed us an amazing meal that had taken 10 hours to prepare. During our conversation, we discussed the recent war and learned of the many atrocities committed by ISIS in her country. As one resident recounted: “ISIS came in quickly to Sinjar region where a high concentration of Yazidis are located. They killed the men and took the women and children for use as sex slaves. Over 3,000 women are still missing. Some of the women who have escaped or have been “bought” back tell stories of multiple rapes and of being sold to many different men. They took them to Syria and other places as trophies. Those that could fled to Sinjar mountain, where many died of heat, thirst, and lack of food. Many women who could not escape committed suicide.” Our host relayed that Christians and Muslims had lived together in peace for centuries...
A Driving Force for EM Education in the Americas

DR. HAYWOOD HALL HAS DEVOTED HIS CAREER TO IMPROVING EMERGENCY CARE FOR SPANISH-SPEAKING AND MARGINALIZED POPULATIONS

Not every career path in medicine follows a straight line, but the twists and turns can make one a better, more compassionate physician. Haywood Hall, MD, FACEP, FIFEM, FAAEM, didn’t finish high school, dropping out to work a variety of jobs in New York City. One day, while working outside of a Brooklyn emergency department, he decided he could be an emergency physician. He got his GED, completed his medical training, and joined the ranks of emergency medicine. However, he never lost the appreciation of diversity and community that he developed from his childhood in Mexico and early work in New York, and the desire to help and support communities infuses his work to this day.

Dr. Hall recently sat down with Andrea Green, MD, FACEP, an emergency physician and chair of ACFP’s Diversity, Inclusion, and Health Equity Section, to discuss his career. Here are some highlights from that discussion.

AG: From the beginning of your career to being acknowledged as a hero of the specialty was quite an interesting journey. How did you get started in EM?

HH: I was raised in Mexico and come from a multicultural family. I went to 12 different schools by the time I was in 10th grade and actually dropped out and became a musician, a piano tuner, a mechanic, and I was even a New York cab driver. All of these things were me trying to find where I fit in the world. As I got older, I realized that being able to work in a multicultural environment, like New York, is a very important skill.

One day, I was reading electric meters outside of a hospital ED in Brooklyn and I realized, “Wow, I could be doing this,” because I always had an interest in science. I always had an interest in different cultures and being able to find a way to help. That was just part of my DNA. Suddenly, it struck me like a bolt of lightning, and I got a GED with the idea of becoming an emergency physician.

AG: Tell us about how you see the social impact of emergency medicine.

HH: The ED is such a central part of the community wherever you are. We really get to see everything that’s wrong and everything that’s not working; it’s not just a particular illness or particular medical condition. It could be that there are no pediatricians in the community and you have all the kids in the ED, or it could be a new wave of drugs that comes in. I really see the emergency department and emergency care as a barometer of what is happening in the community on a public health level.

AG: You’re a fellow of the International Federation for Emergency Medicine (IFEM). What inspired your interest in international emergency medicine?

HH: I, like many people, was very idealistic about health care, but I felt limited in trying to find new solutions that would require developing health care and health care systems in various places. I respect the kind of metro-centric big city and big medical center part because that’s clearly the base, but I felt the challenge to go out to where those things are not and to figure out how to make an impact there.

Having been raised in Mexico, I always felt there was something missing in my life in the U.S. I was on vacation and came across a big car accident in an isolated place in Mexico. Very few people seemed to know what to do. An ambulance came, and I wound up decompressing somebody’s chest who had a pneumothorax. I was struck with the idea that my skills and knowledge might be able to go very far if I started a training center.

AG: You founded the Pan American Collaborative Emergency Medicine Development (PACE MD) program in 2002 in the goal of improving emergency care. What started the emergency care patients receive in underserved areas of Latin America. Can you briefly describe the program?

HH: We started off just by making ourselves available to the health ministry in Guatemala, Mexico. They were working on a prehospital system. Before long, we had some students who came on to help with the project who wanted to learn Spanish, so we created this medical Spanish program. When they came down, we started working on different projects, and then over time, we became a training center. We started buying mannequins, and we became a training center for the American Heart Association.

We started an advanced life support for obstetrics program, and we’ve trained 17,000 people in that program. Altogether, we’ve trained 35,000 people in the various modular programs we’ve developed. We established the first public-access defibrillator program in Latin America, and we also set up a technical conference on forensic emergency care, especially as it relates to sexual assault. We’ve helped set up a series of conferences and actually did the vast majority of the work for the successful bid for the International Conference on Emergency Medicine held in Mexico City last year.

A big role that I took within the IFEM was going country by country, finding where residency programs existed and where they were recognized by the government, and encouraging them to become voting members of the IFEM. We did that for Panama, the Dominican Republic, Cuba, Ecuador, and Venezuela. On the ground, it was really training people in emergency care, which could make a big difference in the outcomes.

AG: Congratulations on receiving the IFEM Humanitarian Award through your work with PACE MD. Can you summarize your relationship with the federation?

HH: Emergency medicine is a relatively new specialty, and we take it for granted that this exists everywhere, but that’s not the case. Until recently, there were four countries, the United States, Canada, England, and Australi- a, that really had any development of our specialty. The work that we’ve done at PACE MD for Latin America has been happening all over the world, and now there are some 60 countries that recognize the specialty of emergency medicine and have training programs. IFEM is sort of the World Health Organization of EM.

AG: What opportunities exist for residents and physicians from the United States to participate in PACE MD?

HH: People could come as medical student electives or residents. We started providing CME, and we even have a pre-professional program to encourage people to go into health care and to understand the cultural aspects of care. We’re not just a language school; we’re actually a medical operation, and so we’re able to, through the medical Spanish program (www.medspanish.com), have people learn what is now an essential medical skill. There are 50 million Spanish speakers in the United States.

AG: So residents who participate in the PACE MD program get credits for their residency as a rotation?

HH: They have to clear it with their dean of students if they’re medical students, or their residency program director, but yes.

AG: How do practicing emergency physicians get involved with PACE MD?

HH: They can contact us through www.pacemd.org or contact me at Haywood.Hall@pacemd.org. We can get the CME credit provided through the University of New Mexico. We can provide up to 50 CME credits, and physicians are primarily here to learn how to communicate with Spanish-speaking patients. I do have to point out that we’re not licensed physicians in Mexico. Our role is really putting emergency physicians in contact with the physicians who actually have responsibilities for these patients.

AG: Can you say a little bit about what you’re seeing on the border?

HH: I’ve always said that I’m sort of a migrant worker, tongue-in-cheek, but it’s actually quite real. I’ve spent a lot of my career flying up to the border on the Mexican side and crossing the bridge twice a month. The emergency departments on the border have a very special burden. Migrants—and some are undocumented—have been through hell, and they’re scared to death. They wouldn’t have shown up in the emergency department if they didn’t feel there was a serious problem. I’ve seen some unusual things, like people showing up need- ing dialysis, and the ED had to somehow find a way to dialyze them. They’re not U.S. citizens, and they’re not in the system. Some emergency departments actually have dialysis units. I don’t think people understand the magnitude of this problem. All politics aside, there’s somewhere around 40,000 or so unaccompa- nied minors who show up across the border every year, and they’re almost all from Central America. The unaccompanied minors are not coming from Mexico, and that’s creating a whole other burden. A few children have died in custody, and now ICE is sending them to emergency departments to get medical clearance. This is a very large number of people. We occasionally see tetanus, rabies, and tropical illnesses like dengue.

AG: Thank you so much for all the work that you’ve done.

UPCOMING CONFERENCE

The Official Voice of Emergency Medicine

JUNE 2019

ACEP NOW 11

ACEP NOW.COM
Diagnostic advances and awareness of autoantibody-mediated encephalitis answer long-standing conundrum

by RYAN PATRICK RADECKI, MD, MS

A few years ago, a best-selling autobiographical work, Brain on Fire, chron- cled one of the first instances of diagnosis for N-methyl-D-aspartate (NMDA) encephalitis. The story depicted by the author is one of a young woman’s descent into madness caused by encephalitis before its relatively novel cause is determined by a New York neurologist. The book details her recovery, and the story has even been developed into a feature film on Netflix.

In historical times, such cases may have been responsible for reported incidents of “demonic possession.” In 2009, when the events of Brain on Fire transpired, this diagnosis remained obscure. Now, in 2019, this diagnosis, under the umbrella classification of autoantibody-mediated encephalitis, is prominently featured in the educational series of one of the largest critical care conferences in the world. The past decade has seen both a heightened recognition of these syndromes and also the necessary laboratory advancements required for diagnosis. This related collection of syndromes is almost certainly more common than any of us were aware during our medical education, and it is important to recognize them because early immunotherapy can profoundly improve recovery.

Unfortunately, recognizing the conditions or performing diagnostic testing for these syndromes isn’t terribly straightforward. The overlap between autoantibody-mediated encephalitis and more common clinical syndromes such as delirium, dementia, and substance abuse–related psychosis is substantial. The most prudent consideration for these diagnoses would be in a specific subset of patients with altered mental status for whom another clinical diagnosis is not fully supported by all manifested symptoms and testing hasn’t identified a cause. Some of the clinical features most commonly seen in combination for autoantibody-mediated encephalitis include:

- Acute or subacute onset of cognitive impairment and/or memory loss
- New-onset seizures or status epilepticus
- Acute psychiatric illness, including psychosis, with rapid progression
- Unusual movement disorders
- Autonomic dysfunction, hypersalivation, or insomnia

The type of autoantibody-mediated encephalitis featured in Brain on Fire was limbic encephalitis, of which antibodies against the NMDA receptor are but one culprit. The phenotype expressed by limbic involvement skewed toward the cognitive and psychiatric spectrum, followed by seizures. Antibodies against the NMDA receptor are the most common, followed by antibodies against leucine-rich glioma-inactivated 1 and contactin-associated protein 2, components of voltage-gated potassium channel complexes. Interestingly, many of these autoantibody-mediated syndromes have paraneoplastic associations. Almost 40 percent of antibodies against the NMDA receptor are associated with ovarian teratomas, making this association a potential red flag for limbic encephalitis in the appropriate clinical context.

The brainstorm encephalitides are likewise included in the spectrum of autoantibody-mediated disease. These syndromes typically display features associated with abnormal eye movements and inflammation of the cranial nerves. The most prominent and common of these syndromes includes the neuromyelitis optica spectrum disorders, characterized by anti-aquaporin-4 or anti-ganglioside GQ1b antibodies. The latter antibody has been found to be the causative etiology for Bickerstaff brainstem encephalitis, which was described more than half a century ago and typically includes ataxia and ophthalmoplegia in the context of altered consciousness.

Once alternative diagnoses have been fully and appropriately evaluated, most proposed diagnostic strategies for the autoantibody-mediated encephalitides include neuromaging and cerebrospinal fluid (CSF) evaluation as critical to identifying the diagnosis. Several subtypes of encephalitis include specific abnormal findings on magnetic resonance imaging, while CSF pleocytosis or the presence of oligoclonal bands raises suspicion for central nervous system inflammation. Commercial assays for CSF antibody detection are available, and specialist consultation can help determine the most appropriate tests to order for a specific phenotype. Finally, electroencephalo- gram may be a useful diagnostic modality but...
ACEP Now Medical Editor in Chief Kevin Klauer, DO, ED, FACEP, to discuss his goals as ACEP President. Here are some highlights from their conversation.

**KK:** Let’s talk about your initial goals as ACEP President. What did you really want to try to accomplish in this year?

**VF:** Well, these were interesting times. The reality is that most president-elects have a year to prepare. I only had three months to prepare, following John Rogers’ transition out of the role. I didn’t have as much time to think about what my personal goals were for the presidency. I wanted to do what I could in this year to improve life for emergency physicians and particularly for future emergency physicians. I think most presidents go into it thinking of the things that they would like to accomplish. However, the crises of the moment that we have to deal with have a tendency to hijack the agenda to a certain extent.

There were internal things that I wanted to try to accomplish this year. My goal was to help the Board be more strategic in its operations. What I mean by that is over the last 10 years, the Board has become very operational. I’m glad that our annual Board retreat went well and that we were able to focus on how to help the Board become more strategic in its functioning.

In terms of what’s happened since I’ve assumed office, I knew going into it that the issues around network-of-work billing were going to be important this year. There’s a tremendous bipartisan desire to do something in that arena. In fact, it’s including the White House and the Secretary of Health and Human Services. They’ve decided that [surprise] billing is something they’re going to focus on.

I’ve been advocating for our profession and our College in Washington, D.C., at least once or twice a month since the annual meeting. That doesn’t include multiple phone calls trying to bring all the parties to the table internally around this issue, which we have struggled with as a profession. I think we’ve made some progress. Having said that, I think we have to be realistic that the forces against us are pretty significant. But we’ll continue to fight for our right to take care of patients in the way we want to care for them, for our profession, and for our right to be fairly compensated. That’s really been the central focus so far in my presidency.

**KK:** I’m certain you had imagined “the day in the life” of your presidency. How has that changed for you?

**VF:** I think the biggest difference is that I didn’t anticipate the amount of time that would be required during this presidency for our lobbying efforts in D.C. Our D.C. office is doing a tremendous job, and I don’t intend to take anything away from their efforts. However, as president, I’m the spokesperson for our College, and I need to be there articulating things from the physician’s perspective that are best delivered by the president. I knew this would be a piece of what I did this year, but didn’t realize it was going to be such a big piece. Like you said, the issues of the day really help define the presidency.

I’ll try to highlight some of the things that I would like to see the College do. One area that I would encourage the College to be engaged in is firearm injury prevention and fire-arm safety. I recently met with the American College of Surgeons (ACS) at their annual meeting and put together a meeting of 49 medical specialties and societies to discuss this issue. I really have to give the ACS kudos that they internally did a deep dive and were able to come to some consensus on the things they did agree on around firearm safety. That helped their leadership be more focused and more proactive. I want our College to do that as well. Are we going to agree 100 percent on everything? No. But instead of focusing on the issues that split us apart, I’d like us to be clear about the things that we do agree on so that we can address.

**CONTINUED on page 15**
Small-cell lung cancers are most frequently implicated, along with thyromas, breast cancer, and Hodgkin’s lymphoma. Patients presenting to facilities without access to such specialty care may benefit from transfer to a tertiary center.

Of course, the first step in diagnosing any syndrome is to rule out more obvious differential diagnoses. There are differing opinions regarding the incidence of these diagnoses, with proponents reporting that, particularly in the young, the frequency may exceed that of the infectious encephalitides. However, even considering such elevated frequency, the approximate incidence is still only one per 100,000 person-years. A mid-sized city might see no cases of autoimmune encephalitis per year, meaning the frequency of an individual emergency physician encountering this diagnosis might be once per decade. Therefore, while awareness of this condition among neurologists should be exercised to avoid overtesting as a result of availability bias (believing something is more common than it actually is simply because we are more aware of it).

At the very least, no need to call an exorcist.

References
2. Car D. Turning a zebra into a horse. Presented at: Social Media and Critical Care Conference, March 2018; Sydney, Australia.
NUZYRA® (omadacycline) injection for intravenous use NUZYRA® (omadacycline) tablets, for oral use

due to adverse events occurred in 12 (17%) NUZYRA treated patients, and 10 (15%) comparator treated patients. There was 1 death (0.1%) reported in NUZYRA treated patients and 3 deaths (5%) reported in comparator treated patients. In NAISST trials, most frequent adverse effects occurred in ≥5% of patients receiving NUZYRA in Trials 2 and 3.

Table 5: Adverse Reactions Occurring in ≥2% of Patients Receiving NUZYRA in Pooled Trials 2 and 3

<table>
<thead>
<tr>
<th>Adverse Reaction</th>
<th>NUZYRA</th>
<th>Lead (or &gt;5%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nausea*</td>
<td>21.9</td>
<td>8.7</td>
</tr>
<tr>
<td>Vomiting</td>
<td>11.6</td>
<td>3.9</td>
</tr>
<tr>
<td>Infusion site reac</td>
<td>5.2</td>
<td>3.6</td>
</tr>
<tr>
<td>Abnormal Bleeding</td>
<td>4.3</td>
<td>3.6</td>
</tr>
<tr>
<td>Arterial or venous infus</td>
<td>3.4</td>
<td>2.9</td>
</tr>
<tr>
<td>Headache</td>
<td>3.3</td>
<td>3.0</td>
</tr>
<tr>
<td>Diarrhea</td>
<td>3.2</td>
<td>2.9</td>
</tr>
</tbody>
</table>

In Trial 2, which included IV to oral dosing of NUZYRA, 10 (12%) patients experienced nausea and 7 (9%) patients experienced vomiting in NUZYRA treatment group as compared to 13 (19%) patients experienced nausea and 15 (21%) patients experienced vomiting in the comparator group. One patient (0.1%) in the NUZYRA group discontinued treatment due to nausea and vomiting.

In Trial 3, which included the oral loading dose of NUZYRA, 11 (35%) patients experienced nausea and 12 (37%) patients experienced vomiting in NUZYRA treatment group as compared to 28 (84%) patients experienced nausea and 11 (33%) patients experienced vomiting in the LAISST group. One patient (0.6%) in the NUZYRA group discontinued treatment due to nausea and vomiting.

Infusion site reactions occurred in 5.2% of patients receiving NUZYRA and 3.6% of patients receiving LAISST. These reactions were reported in NUZYRA-treated patients at a rate of less than 1% in Trials 1, 2 and 3. Cardiovascular System Disorders: 90% (13%) in the NUZYRA group discontinuing treatment due to nausea and vomiting

Female and Males of Reproductive Potential

In rat studies, omadacycline affected fertility parameters in male rats, resulting in reduced coagulation and inhibition of bone growth, causes patients that breastfeeding is not recommended during treatment with NUZYRA and for 5 days (based on half-life) after the last dose.

KL: You’re so right. You can provide the greatest benefit, perhaps, by tackling some of the most challenging topics, so I’m glad you’ve taken on. Moving to another topic, are there any successes that you’d like to share with the membership?

VF: Well, I can’t really take credit for it, but it happened on my watch. The conversations that we had with The Joint Commission about the ability to eat in the emergency department

KL: That’s fair enough.

VF: I think we have continued to improve and deepen our collaborative efforts with other specialties and with the American Medical Association (AMA). I think that we have worked very diligently to position ourselves well within the AMA over the last decade. Our AMA delegation continues to grow and be very strong.

Another area I feel strongly about is emergency physician well-being. Physician suicide is the endpoint of a predictable continuum. Depressed physicians have a difficult time accessing appropriate resources to deal with depression. One of the things that I’m pushing us to do is to help our chapters advocate to state medical boards to refine their questionnaires for licensure. Similar efforts should be taken with the hospital credentialing departments.

Many, if not processes, ask, “Have you ever been treated for mental illness?” An affirmative response is often interpreted as a red flag for patient safety. Being treated for medical or mental illness is no one’s business unless it will prevent you from doing your job safely.

I’d like to work with the AMA to expand the offerings that physicians have, improving access to resources when they’re in trouble. Burnout is a huge success in emergency medicine, with depression being a key component.

KL: What do you hope to accomplish with the remaining time you have, Vidor?

VF: I’ve been working with our staff to develop end-of-life care initiatives. There’s a tremendous need to decrease health care costs in this country, and we, as emergency physicians, have a better understanding of where some of that excess cost exists. Most people don’t have end-of-life care orders. This is partly because up until two years ago, physicians in the United States were not reimbursed for conducting advanced care planning discussions. That’s changing, but slowly. I think it would behoove us, and our membership, to accelerate the adoption of those important conversations while patients are still in a position to do so. This is an area that I’d like to work on.

I also want to continue to work on physician wellness, not just around resiliency, but to work on the environmental causes that lead to burnout. I think our BalanceEd conference was a really good start, and I hope we’ll be able to continue that effort in the coming years.

KL: Those are all wonderful goals. If anyone can accomplish that much in the second half of a presidential term, it’s Vidor Friedman. Thanks for the time, Vidor, and thank you for your service and excellent leadership.
**Financial Advantages for Emergency Physicians**

Considering the time value of money, EM comes out ahead

by JAMES M. DAHLE, MD, FACEP

Q. How are finances different for emergency physicians compared to other specialties?

A. I am looking forward to seeing many of you this October at ACEP19, where I will be speaking about personal finance for the early-career emergency physician. As I reflected on this opportunity to engage with so many emergency physicians, I began to think about all of the financial advantages we enjoy compared to our colleagues in other specialties.

Like most of you, when I chose to pursue residency training in emergency medicine 17 years ago, I was motivated primarily by my interest in diagnosing and treating acute medical issues. I wanted to be there to help on the worst day of people’s lives and be one of the white knights of medicine who would take care of anyone, anywhere, anytime. It was a place where my “unique set of skills” (often derided as ADHD or a thirst for adrenaline) was an attribute, not a liability. The last thing I ever wanted was a job where I knew what I would be doing all day long before I ever pulled out of the driveway. Like most medical students, I didn’t pay nearly enough attention to the future income prospects and lifestyle associated with my specialty choice. Today, I would like to review six financial advantages emergency physicians enjoy.

**Emergency physicians have one of the highest hourly rates in medicine.** While emergency medicine generally shows up somewhere in the middle on salary surveys of the various medical specialties, what is not taken into account is the number of hours worked. While many specialists make more money than we do, they also work two or even three times as many hours to earn that money. On an hourly basis, our compensation is at or near the top of the list. This can be easily demonstrated by comparing surveys of hours worked among the various specialties to salary surveys. In the 2018 Medscape Physician Compensation Report, emergency medicine was ranked 19th of 29 specialties, with an average income of $350,000. However, if you look at hours worked for the 12 highest-earning specialties, all of them are paid less than emergency physicians, both on an hourly and an annual basis. In fact, a typical community emergency physician makes more than many specialists who trained for four to six years! This opportunity to begin earning an income earlier in our careers decreases the total size of our student loan burdens and allows our savings to begin compounding earlier. Our hourly rate per year of training is so much higher than all of the other specialties that it might even make up for all of those shifts when you don’t have time to eat, drink, or use the restroom.

**Our pathway to our peak level of earnings is very rapid.** In most careers, even within medicine, it can take decades to reach your peak earning potential. Not so in emergency medicine, where we usually reach peak earnings within two years of graduation from residency, even in a group with a sweat equity buy-in. In fact, due to a willingness to work more shifts and more undesirable shifts, young emergency physicians often make more than their older colleagues. Early peak earnings, especially when combined with financial literacy and discipline, help us to “take care of business” early on in our careers, paying off our student loans and mortgages and rapidly building a retirement nest egg.

**More so than most specialties in the house of medicine, we are an interchangeable cog in the machine.** While this has its downsides, such as the risk of small physician-owned groups being replaced by larger groups, the rare skill set of the competent board-certified, residency-trained emergency physician ensures the doc will only be without work for as long as it takes to get emergency credentialing (and perhaps a new state license). We have the ability to adjust very rapidly to a new department, even in the age of the electronic medical record. While no one job is all that secure, our ability to find a high-paying job somewhere is fairly certain.

**One of the biggest downsides of emergency medicine is that it really isn’t a “lifestyle” specialty.** Only about a quarter of our shifts are worked during banker’s hours. The rest are worked in the evening, at night, on weekends, and on holidays. However, this setup allows for a very unique opportunity; we have a lot of time off during regular business hours. While many emergency physicians use this time to recover for their next shift, take care of family responsibilities, engage in academic activities, and pursue hobbies (ski slopes, mountain bike trails, and lakes always seem deserted on weekday mornings), we also have the opportunity to engage in entrepreneurial pursuits. It is tough to start and run a business entirely on weekends and in the evenings, but it is relatively easy to do so during the day and then practice medicine in the evenings when most ED shifts are worked. Time off during the day also allows us to be able to competently care for our own investment portfolios and rental properties, saving thousands in advisory and management fees. By late career, many physicians are paying a month’s salary each year just for investment management simply because they do not have the time that we have.

**The flexibility of shift work provides for numerous burnout-reducing measures to be taken.** While emergency medicine is traditionally ranked high on the percentage of doctors with burnout symptoms, when the severity of an individual’s burnout is measured, we actually rank fairly low. In few other specialties is it as easy to cut back to three-quarter-time or half-time to go to the “parenting track,” do medical missionary work, or take a sabbatical.

Some groups have found innovative ways to reduce the effect of burnout-inducing night shifts on the group. Hiring a couple of nocturnists (and paying them well) can dramatically reduce shift-work sleep disorder. Innovative groups come up with solutions to ensure nobody is working shifts they do not wish to work. In my group, we have a large shift differential between day, evening, and night shifts. We simply let “the market” decide which shift is worth. For us, it turns out a night shift is worth about 50 percent more than a day shift. The younger docs with high student loan burdens and new mortgages often volunteer to work all or mostly nights, and the older docs with fewer financial worries tend to work the day and evening shifts. If more docs start wanting to work day (or night) shifts, we simply adjust the differential until everybody is working exactly the shifts they want and being paid accordingly. This common-sense solution boosts career satisfaction, increases longevity, and builds a collegial sense of teamwork in the group. Emergency medicine has significant financial advantages over other specialties. Take advantage in order to improve your career and financial situation.

---

**THE END OF THE RAINBOW**

JAMES M. DAHLE, MD, FACEP

JAMES M. DAHLE is the author of two investing books including The White Coat Investor’s Financial Boot Camp: A 12-Step, High-Yield Guide to Bring Your Finances Up to Speed and blogs at www.whitecoatinvestor.com. He is not a licensed financial adviser, accountant, or attorney and recommends you consult with your own advisers prior to acting on any information you read here.
Prepare for the Unexpected

Emergency medicine requires us to be ready for anything at any time

by BENJAMIN THOMAS, MD

One of the reasons I chose emergency medicine is because I love the spontaneity our specialty offers. No shift is exactly the same. Anything can happen at any given time. Unfortunately, that spontaneity can put you in situations that you might never expect.

I was working a shift in our rapid care area for low-acuity patients when I met a young man in his 20s who presented with the chief complaint of rash. His rash had started three days prior, and he had completed a course of amoxicillin for pharyngitis a week earlier. He denied fever, chills, recent travel, and exposure to known sick contacts. The rash started on his neck, spreading to his torso and extremities. He had no significant past medical or surgical history. He reported using amphetamines and cocaine recreationally. On exam, the patient was well-appearing. He had a diffuse erythematous palpable morbilliform rash involving his face, torso, and extremities, sparing his palms and soles.

His history and exam prompted me to think that he had a simple drug reaction secondary to the amoxicillin. Drug reaction with eosinophilia and systemic symptoms (DRESS) syndrome were also on my differential, but the patient was well appearing with no history concerning for systemic involvement. My initial gut reaction was to discharge him home with expectant management. Yet something about his story did not sit well with me.

I decided to consult dermatology to get recommendations on workup and management. After my consultation, their initial thought was that his presentation was likely due to a drug eruption. They recommended that I obtain a complete blood count, basic metabolic panel, liver function tests, HIV test, and urinalysis. Results were coming in, and my concern began to diminish. I was on the verge of printing his discharge paperwork when I got a call that changed everything.

“Doctor, your patient’s HIV test is positive,” said the lab tech over the phone. I was stunned; I assumed the test would be negative. An attending once told me to never order a study unless you have a plan for what to do with the result. That day, I did not have a plan for this HIV result. More specifically, I did not have an idea for how I was going to share the unexpected news with him.

I took the patient out of our crowded rapid care area to a private room. I sat him down in a chair and looked into his eyes and told him his HIV test was positive. The look on his face was something I will never forget. The moment after sharing the news felt like an eternity. I watched the stages of grief unfold before my eyes as the patient tried to wrap his mind around this diagnosis. I tried to console the patient and inform him that he could live a long life with proper HIV treatment. Yet I felt my words fell on deaf ears. The hardest part about medicine is being able to bear witness to suffering.

After spending some time trying to coordinate this patient’s follow-up, I walked back into the room to find it completely empty. He eloped. I can only imagine what was racing through his mind as he secretly walked out of the emergency department. I made frantic attempts to reach him by phone to no avail. He left the emergency department with a result he was not expecting. I left the emergency department that day remembering to always expect the unexpected.
Fluoroquinolones in the FDA Spotlight Again

How unsafe are they when it comes to aortic aneurysms or dissections?

by JEREMY SAMUEL FAUST, MD, MS, AND LAUREN WESTAFER, DO

During FOAMcast, we like to cover guidelines that affect emergency physicians. But we don’t just cover the conclusions made by the authors. We like to do a deep dive into the data and see if we agree with their take. Often, we don’t agree with the conclusions made by the authors, even in prestigious journals.

Earlier this year, we reviewed a “safety communication” released by the U.S. Food and Drug Administration (FDA) about an apparent increased risk of ruptures and tears in the aorta for certain patients who have taken fluoroquinolones.

The FDA has long had a beef with fluoroquinolones. In the past, it has released warnings related to the risks of tendon rupture, glycemic control, and central nervous system effects with fluoroquinolone use. In the past, the FDA advised against prescribing fluoroquinolones for conditions that most emergency physicians already do not treat with these agents (eg, sinus infections, bronchitis, and uncomplicated urinary tract infections). However, in a recent warning, which we covered on our show, the FDA’s concern about risks to the aorta led it to suggest that for older patients with certain conditions (ie, peripheral atherosclerotic vascular disease, hypertension, Marfan syndrome, and vasculartype Ehlers-Danlos syndrome), this class of medication should be avoided altogether. The FDA made this recommendation based on several retrospective studies that seem to suggest a doubling of risk of either aortic aneurysms or aortic dissections.

The first problem we see with this FDA warning is that it puts aortic aneurysms and aortic dissections into the same bag. These are related conditions but are very different in terms of our level of concern in certain patients. New aneurysms can indeed be dangerous, but dissections of the aorta are so deadly that they are in a category of their own. When we looked deeper, it looked like the statistical signal does not hold up when you take away the far less dangerous aneurysms, considering only dissections. We don’t know how many of these aneurysms were actually new as opposed to chronic conditions. The other question we have is just how serious is the risk in real life (ie, not just in terms of population-level epidemiology). Even if we accept a twofold risk of an aortic event associated with taking a fluoroquinolone, does that have any meaning at the level of the individual patient? The answer depends on just how common the conditions really are, and there is no consensus on this in the literature. If the actual rate of aortic syndromes is on the low end of the published estimates (nine events per 100,000 patients), a doubling in the rate of aneurysm or dissection is not even statistically significant. However, if these conditions truly are as common as the higher-end estimates (300 events per 100,000 patients), that same twofold risk begins to have meaning for more patients because the “number needed to harm” (ie, the number of patients who would have to take fluoroquinolones in order for one patient to develop an otherwise avoidable aortic syndrome) would be around 334.

Finally, we are concerned about the notion of “contraindication creep.” Many people talk about the idea of “indication creep” in the medical literature. Indication creep is when a therapy that has been shown to be effective on patients with a specific condition is given to patients with related but different conditions or in similar but different circumstances. For example, some data suggest that magnesium can help patients suffering from a migraine with aura, but many physicians give magnesium to all patients with migraines whether or not an aura is present. Contraindication creep is the opposite. While the FDA specifically said that its warning about fluoroquinolones and aortic syndromes or dissections should only be applied to patients with certain risks, we have already seen headlines that omit those qualifiers. While we, in general, support limiting the use of fluoroquinolones to conditions in which they are truly necessary, we worry that this warning will be over-applied and cause unnecessary hassles for physicians and patients.

What’s your opinion on this FDA warning? Let us know by following us on @FOAMcast and be sure to check out our show on iTunes and our blog at FOAMcast.org.
HOW TO DOCUMENT IV FLUIDS REQUIREMENT
by TYLER W. BARRETT, MD, MSCI, FACEP

Question: What do I need to document to ensure appropriate reimbursement when a patient receives intravenous fluids?

Answer: Incredibly, some payers are down-coding or, worse, denying facility charge payment for ED evaluations that do not clearly document the medical necessity for intravenous fluid administration. Documentation of nausea, vomiting, or diarrhea alone may be insufficient to justify intravenous hydration.

To ensure appropriate reimbursement, emergency clinicians should include medical documentation supporting the need for intravenous hydration. The ED note should include the standard history, physical examination, and medical decision-making elements that support the need for intravenous hydration. Common examples include physical examination findings compatible with dehydration, need for rapid intravascular volume expansion (e.g., hypotension, sepsis, or shock), or abnormal laboratory testing such as an elevated white blood cell count, blood urea nitrogen and/or creatinine, glucose, creatine phosphokinase, sodium, calcium, or lactate.

Additional supporting documentation may include the patient’s inability to tolerate oral fluid administration,1 documentation suggesting the need for intravenous hydration. Common examples include physical examination findings compatible with dehydration, need for rapid intravascular volume expansion (e.g., hypotension, sepsis, or shock), or treatment of other causes of abnormal fluid losses (e.g., heat-related illness, thermal burns, or medication-related diuresis).

Reference

DR. BARRETT is associate professor of emergency medicine at Vanderbilt University Medical Center in Nashville, Tennessee.
At Geisinger, we’re not afraid to do things differently when it comes to delivering excellent care. That spirit of innovation and excellence drives everything we do—from our state-of-the-art emergency medical services program to developing new and expanding graduate medical education programs to our progressive care models focus on preventive care—these are just some of the ways we go above and beyond to help the communities we serve.

When you join Geisinger, you’ll be part of an organization that’s leading healthcare change. Opportunities include Emergency Medicine and Pediatric Emergency Medicine full-time positions for experienced and new graduate physicians.

To learn about our competitive compensation and benefits packages which provide professional development and support for a healthy work/life balance, visit geisingerjobs.org/emegegency/medicine.

Interested candidates, please reach out to Miranda Grace at 717-242-7109 or mlgrace@geisinger.edu.
Emergency Medicine & Toxicology Faculty

Rutgers Robert Wood Johnson Medical School

The Department of Emergency Medicine at Rutgers Robert Wood Johnson Medical School, one of the nation’s leading comprehensive medical schools, is currently recruiting Emergency Physicians and Medical Toxicologists to join our growing academic faculty.

Robert Wood Johnson Medical School and its principal teaching affiliate, Robert Wood Johnson University Hospital, comprise New Jersey’s premier academic medical center. A 580-bed, Level 1 Trauma Center and New Jersey’s only Level 2 Pediatric Trauma Center, Robert Wood Johnson University Hospital has an annual ED census of greater than 90,000 visits.

The department has a well-established, three-year residency program and an Emergency Ultrasound fellowship. The department is seeking physicians who can contribute to our clinical, education and research missions.

Qualified candidates must be ABEM/ABOEM certified/eligible. Salary and benefits are competitive and commensurate with experience. Subspecialty training is desired but not necessary.

For consideration, please send a letter of intent and a curriculum vitae to:

Robert Eisenstein, MD, Chair, Department of Emergency Medicine
Rutgers Robert Wood Johnson Medical School
1 Robert Wood Johnson Place, MEB 104, New Brunswick, NJ 08901
Email: Robert.Eisenstein@rutgers.edu
Phone: 732-235-8717 • Fax: 732-235-7379

THought Leaders Wanted

Do you want to lead a team in achieving goals and delivering quality patient care? You are a contributor, collaborator, innovator—we have leadership opportunities to further your career.

- Enrich your leadership skills with continuing education, mentorship and development programs
- Engage with a nationwide network of world-class clinical leaders
- Focus on leading your team to success—leave the administrative burden to us

Nationwide opportunities available
Join our team at teamhealth.com/join or call 866.750.6256
What We’re Offering:
- We’ll foster your passion for patient care and cultivate a collaborative environment rich with diversity
- Salaries commensurate with qualifications
- Sign-on bonus
- Relocation assistance
- Retirement options
- Penn State University Tuition Discount
- On-campus fitness center, daycare, credit union, and so much more!

What We’re Seeking:
- Experienced leaders with a passion to inspire a team
- Ability to work collaboratively within diverse academic and clinical environments
- Demonstrate a spark for innovation and research opportunities for Department
- Completion of an accredited Emergency Medicine Residency Program
- BE/BC by ABEM or ABOEM
- Observation experience is a plus

What the Area Offers:
We welcome you to a community that emulates the values Milton Hershey instilled in a town that holds his name. Located in a safe family-friendly setting, Hershey, PA, our local neighborhoods boast a reasonable cost of living whether you prefer a more suburban setting or thriving city rich in theater, arts, and culture. Known as the home of the Hershey chocolate bar, Hershey’s community is rich in history and offers an abundant range of outdoor activities, arts, and diverse experiences. We’re conveniently located within a short distance to major cities such as Philadelphia, Pittsburgh, NYC, Baltimore, and Washington DC.

FOR ADDITIONAL INFORMATION PLEASE CONTACT:
Susan B. Promes, Professor and Chair, Department of Emergency Medicine c/o Heather Peffley, Physician Recruiter, Penn State Health Milton S. Hershey Medical Center
500 University Drive, MC A595, P O Box 855, Hershey PA 17033
Email: hpeffley@pennstatehealth.psu.edu
or apply online at: hmc.pennstatehealth.org/careers/physicians

Penn State Health is committed to affirmative action, equal opportunity and the diversity of its workforce. Equal Opportunity Employer – Minorities/Women/Protected Veterans/Disabled.
WE PUT THE RIGHT PEOPLE IN THE RIGHT PLACES

Looking for a clinical opportunity that helps reach your career goals while empowering you to deliver outstanding patient care?

Explore new clinical careers through SCP Health at scp-health.com/people
As a physician-owned group, we protect each other.

At US Acute Care Solutions, we understand that the possibility of medical malpractice lawsuits can weigh heavily on your mind. With every full-time physician becoming an owner in our group, we have the power to reduce risk and protect our own. In fact, our continuing education and risk management programs cut lawsuits to less than half the national average. If a case is ever brought against you, we’ll have your back with our legendary Litigation Stress Support Team and the best medical malpractice insurance. It’s one more reason to weigh the importance of physician ownership. It matters.

Discover the benefits of physician ownership and check out career opportunities at USACS.com.

Own your future now. Visit USACS.com or call Darrin Grella at 800-828-0898. dgrella@usacs.com