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AUGUST 2022 Volume 41 Number 8

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2022 ACEP ELECTIONS PREVIEW

MEET THE PRESIDENT-ELECT AND BOARD CANDIDATES

The candidates discuss ACEP strategy and member needs

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

CONTINUED on page 12

PRACTICE CHANGERS

Killing the Pulse Check

Getting the fundamentals right and stop routinely checking pulses during CPR cycles

by LAUREN WESTAFER, DO, MPH

"Time to pause for a pulse check." Although this refrain is uttered during cardiac arrests across the United States each day, we are overdue to stop this practice. Interruptions in chest compressions are associated with decreased survival.¹⁻³ As a result, focus has increasingly shifted to finding ways to ensure minimal interruptions in chest compressions during cardiopulmonary resuscitation (CPR). This has resulted in the de-emphasis on advanced airways and the introduction of mechanical chest compression devices. Traditional point of care ultrasound during cardiac arrest has faced scrutiny as data has demonstrated pauses of more than 10 seconds are common, leading some institutions to introduce transesophageal echocardiography.^{4,5} Some have even suggested hands-on defibrillation to reduce interruptions.⁶ However, there is a far easier way to improve the quality of CPR—stop routinely performing pulse checks during CPR.

Pulse Checks Are Hard

Despite the ubiquity of pulse checks, few people can accurately determine whether a patient is pulseless in under 10 seconds. In a 1996 study of patients on cardiopulmonary bypass, study participants were blinded to whether the flow was pulsatile or non-pulsatile and asked to perform a carotid pulse check. Only 16.5 percent of the 206 first responder participants were able to determine that a patient was pulseless in under 10 seconds. Further, only two percent correctly recognized truly pulseless patients.⁷

A similar study by Tibballs et al., in 2010 evaluated pulse palpation by 154



World TravelERs: AUSTRALIA

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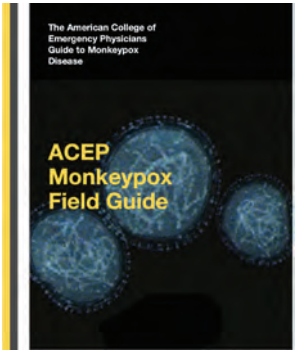
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UPDATES AND
ALERTS FROM ACEP

NEWS FROM THE COLLEGE

Monkeypox Field Guide Available

The CDC is tracking multiple cases of monkeypox that have been reported in several countries that don't normally report monkeypox, including the United States. For those who want to read up on Monkeypox management, ACEP's new Monkeypox Field Guide compiles the information into one place for you. View this resource at acep.org/monkeypox-field-guide.



Task Force Formed to Examine ED Reproductive Health

After the Supreme Court's decision to overturn *Roe v. Wade*, ACEP convened a task force to examine emergency department reproductive health and patient safety under a changing landscape. The task force, co-chaired by Diana Nordlund, DO, JD, and Antony Hsu, MD, FACEP, will work to identify gaps in existing regulation or statute that could create clinical and legal barriers to how emergency physicians practice emergency medicine, and develop resources and guidance to address them.

Board Approves New Clinical Policy

During its June Board meeting, the ACEP Board of Directors approved a new policy to replace the 2006 version of "Critical Issues in the Management of Adult Patients Presenting to the

Emergency Department with Acute Heart Failure Syndromes." It focuses on the diagnostic accuracy of point-of-care lung ultrasound, the safety and efficacy of diuretics, the safety and efficacy of vasodilator therapy with high-dose nitroglycerin, and which group of patients can be safely discharged home. View all clinical policies at acep.org/clinicalpolicies.

In addition to this clinical policy, the Board approved new and revised policy statements on gender diversity, the physician/patient relationship, liability, ED violence and more. Visit acep.org/June2022-Board-Recap to see more details about the new and updated policy statements.

ACEP Members Elected to Key AMA Roles

The American Medical Association just held its House of Delegates Annual meeting in Chicago in person for the first time since 2019, and emergency medicine was well represented in election proceedings at the meeting. Marilyn J. Heine, MD, FACEP, was newly elected to the AMA's Board of Trustees, and Stephen K. Epstein, MD, MPP, FACEP, was re-elected to the Council on Medical Service. With emergency physicians in these prominent roles, emergency medicine is well positioned to leverage this strong voice in the house of medicine to advocate for improvements for the profession.

Stay Updated During Regulatory Season

Every Thursday morning, ACEP publishes a new edition of "Regs and Eggs," a blog where ACEP's external affairs team reads very lengthy regulations and summarizes the main takeaways for you. It's been a very busy time full of regulatory news:

What is proposed in the 2023 Physician Fee Schedule and what does it mean for EM? How does the *Dobbs v. Jackson Women's Health Organization* decision affect EMTALA? What staffing models are proposed in Rural Emergency Hospitals Conditions of Participation? Find these answers and more by reading and subscribing to Regs & Eggs at acep.org/regsandeggs.

Honoring the 2022 ACEP Teaching Award Winners

ACEP is excited to recognize its 2022 Teaching Award winners during ACEP22 in San Francisco this fall! Congratulations to these deserving honorees:

Emergency Medicine Faculty Teaching Award

- Suzanne Bentley, MD, MPH, FACEP
- Laura Bontempo, MD, FACEP
- Petra Duran-Gehring, MD, FACEP
- Karen Jubanyik, MD
- Mimi Lu, MD, FACEP
- Andrew Stolbach, MD, FACEP
- Joseph Turner, MD, FACEP

Emergency Medicine Junior Faculty Teaching Award

- Amber Cibrario, DO
- Rosny Daniel, MD
- Michael Ehmann, MD, FACEP
- Christopher Hahn, MD
- Alexandra Mannix, MD
- John Purakal, MD
- Trent She, MD, FACEP
- Robyn Wing, MD

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FIRST DISCOVERED
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(As of July 22, 2022)¹

2,891

WASHINGTON, D.C.

3.6X 

per capita rate
of all other states²

NEW YORK

900 

cases, highest
number in country

SYMPTOMS PRESENT IN LAB-CONFIRMED CASES³

FEVER

100%

RASH

95%

LYMPHADENOPATHY

85%

SOURCES

1. CDC
2. Calculation from data from CDC and Census Bureau
3. Osadebe L, Hughes CM, Shongo Lushima R, et al. Enhancing case definitions for surveillance of human monkeypox in the Democratic Republic of Congo. *PLoS Negl Trop Dis*. 2017;11(9):e0005857.

FROM THE EDITOR

Curating Both the Clinical and Cultural

Emergency physicians have never shied away from discussing hot topics ... nor should they

by CEDRIC DARK, MD, MPH, FACEP



DR. DARK

(@RealCedricDark) is assistant professor of emergency medicine at Baylor College of Medicine and the medical editor in chief of *ACEP Now*.

Every month, our editorial team meets to discuss, plan, and choose content to be published on the pages of *ACEP Now*. Several of our Editorial Advisory Board members have joined these meetings for a chance to peek behind the curtain of ACEP's newsmagazine. As they can attest, much thought and deliberation goes into every single piece of content—solicited or unsolicited, accepted or denied, and all of those we eventually publish.

In the August 2022 issue, you will read a thoughtful clinical case study from Dr. Trent Stephenson on thoracic outlet syndrome as well as our usual menagerie of columns including Dr. James Augustine's reflections on emergency department operations and Dr. Lauren Westafer's review of the data on frequent pulse checks during CPR. Additionally, please peruse ACEP Senior Content Manager Jordan Grantham's highlight on ACEP's new Strategic Plan and hear directly from ACEP's 2022 Board candidates.

But you may also notice a theme emerging from some of the other pieces in this issue: they touch on controversial issues. This is both a symptom and side-effect of our current social, political, and professional climate. The topics discussed here are meant to highlight the work, and the worries, of our profession. Dr. Atsuko Koyama et al. and Lauren Paulk, Esq. discuss the clinical and legal impacts of the recent Supreme Court ruling and because we published one of these articles online already, we're also able to include rapid-fire commentary from our readers in this print issue. Editor Danielle Galian explores the wide-ranging opinions on personal firearms in the emergency department. And Dr. Vidya

Eswaran challenges emergency physicians to address gun violence in our own communities.

In our profession we are not immune to difficult discussions. We do not shy away from talking about code status with people who were strangers only moments before, nor should we shy away from talking about abortion or guns when it impacts our patients or the practices of medicine. No matter which side you take, each topic affects us all professionally and personally.

I believe that every emergency physician not only has a right to have an opinion, but also to substantively express it. As Medical Editor in Chief of *ACEP Now*, my goal has been to share what's happening in emergency medicine, curating both the clinical and cultural aspects of our lives. It requires a balance in perspective that is at the core of my editorial philosophy—representation and respect for all. Unlike psychiatry or general surgery, emergency physicians have been historically split down the middle of the aisle politically.¹ Because of this, no one should expect consensus from emergency physicians on the difficult questions outlined in this issue. Our diversity of experience *and* opinion is what makes emergency medicine, the American College of Emergency Physicians, and America itself enriching. I hope that you will enjoy reading this issue, and most of all, learn something new from what you find inside.

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TOXICOLOGY Q&A



JASON HACK (OLEANDER PHOTOGRAPHY)

Which Popular New England Garden Shrub Causes Seizure and Coma?

by JASON HACK, MD

ANSWER on page 19

RESIDENCY SPOTLIGHT

HCA HEALTHCARE RIVERSIDE EMERGENCY MEDICINE RESIDENCY

Twitter: @emriverside1 **Year Founded:** 2017
Instagram: @EMRiverside **Number of Residents:** 13 per year
Location: Riverside, California **Program Length:** 3 years



The HCA Healthcare Riverside Emergency Medicine Residency team.

What is one thing that sets your program apart?

Our program was designed from the ground up to foster a culture of flourishing as we prepare highly skilled clinicians to serve their communities. Our program is based out of a high-volume, high-acuity setting with ample opportunities for hands-on critical care and procedural experience. Residents can work alongside University of California, Riverside medical students and care for the local community by volunteering at clinics. We are involved in a number of research projects, including wellness research to support further understanding of resident well-being. The program combines excellent clinical exposure, teaching experience, service opportunities, and a supportive residency family in an amazing Southern California location.

Where do most residents end up practicing after residency?

Our residents have entered practice in a variety of settings including rural, community, and academic centers, as well as fellowship training. Many of our residents choose to stay in California to practice while others obtain positions throughout the country.

What do residents do for fun in Riverside?

Residents hike in the nearby mountains, tackle walls at the local climbing gym, and explore the Riverside food scene.

Recent publications to share:

- Dziadkowiec O, Durbin JS, Novak ML, Patt-Rappaport Z, Guldner GT. A two-year longitudinal, cross-sectional evaluation of resident physician burnout: An exploration of the effects of stress, satisfaction, exercise, and EMR. *HCA Healthcare Journal of Medicine*. 2021;2(2):123–132.
- Kim TY, Kim EC, Agudelo AZ, Friedman L. COVID-19 hospitalization rate in children across a private hospital network in the United States: COVID-19 hospitalization rate in children. *Arch Pediatr*. 2021;28(7):530–532.
- Louthan M, Ng D. Hemithorax Westermark sign secondary to complete pulmonary artery occlusion from pulmonary embolus. *Clin Pract Cases Emerg Med*. 2021;5(2):261–262.
 —Allison Woodall, MD, assistant program director

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FIREARMS AND EMERGENCY DEPARTMENT SAFETY

Continuing the conversation around emergency physicians carrying firearms

by DANIELLE GALIAN, MPS, EDITOR

Violence in the emergency department (ED) is nothing new. A 2005 study showed that between 35–80 percent of hospital staff have been physically assaulted at least once during their careers.¹

COVID-19 may have also exasperated an already existing truth. In November 2021, a survey conducted by the National Nurses United and the Surgeon General indicated eight out of 10 health care workers experienced at least one type of workplace violence during the pandemic, with two-thirds having been verbally threatened, and one-third of nurses reporting an increase in violence compared to the previous year.² Patients in emergency departments sometimes have violent outbursts; some of these patients have access to weapons—either prefabricated or improvised. In 2020, *ACEP Now* published statistics surrounding firearms in the ED, revealing that almost 60 percent of health care professionals working in American EDs encountered firearms in or near the ED at least once per year.³ Recent mass shootings, inside and outside the hospital, have directly impacted emergency physicians—either as caregivers or as victims—and reignited the debate over the wisdom of concealed carry in the emergency department.

But a recent slew of gun violence in the ED has prompted debate on the efficacy of workplace safety. In 2016, Parrish Medical Center in Florida experienced an active shooter who shot and killed a 92-year-old patient and her caregiver.⁴ In 2021, a hostage situation at the Children's Medical Group in Austin, Texas, left two physicians dead, including the gunman.⁵ In June, EMS workers in Conroe, Texas, were nearly injured after disarming a patient who fired shots in the emergency department.⁶

Also in June, the murders of Preston J. Phillips, MD, FAAOS, an orthopedic surgeon, and Stephanie J. Husen, DO, a sports medicine physician, along with two other people by a disgruntled patient at a hospital in Tulsa, Oklahoma, highlighted the dangers posed to health care workers—dangers which ED staff know all too well.⁷

Firsthand Encounters and Experiences

Catherine A. Marco, MD, FACEP, encountered an active shooter the same day as the Tulsa, Oklahoma, mass shooting.⁸ On June 1, her hospital in Ohio experienced an active shooter incident ending with both the patient and security guard dying. “I was just working a regular shift with the residents and we had a full emergency department. We were boarding a lot of patients. Someone came running from triage yelling, ‘There’s an active shooter out in triage.’ And this brought to mind the fact that all the training in the world might not help.”



Dr. Marco



The shooter was a prisoner in the custody of law enforcement and had been admitted, waiting for a hospital bed. “He had been in the ED for many hours without any incident,” Dr. Marco recalled. “Somehow [he] got the security officer’s weapon, shot the security officer, ran out to the ED parking lot, and shot himself. And they were both killed. We attempted resuscitation on both of them, but neither one could be resuscitated.”

Dr. Marco served on the reference committee during the ACEP Council Meeting in Boston, Massachusetts, in October 2021 where a proposal to turn the ED into a firearm free zone was put forth. “Resolution 32: Firearm Ban in EDs Excluding Active Duty Law Enforcement” was also formally supported by the Vermont Chapter ACEP, the American Association of Women Emergency Physicians Section, and ACEP’s Diversity, Inclusion and Health Equity Section. Read the sidebar on page 7 to retrace the path of 2021 Council resolution 32 from proposal to policy.

Paul Kozak, MD, FACEP, an emergency physician in Arizona, served alongside Dr. Marco on the reference committee that analyzed Resolution 32. He, too, has had several encounters with ED violence. “I’m aware of about three episodes of people drawing guns in a hospital, and most of them were domestic disputes or in the offices of disgruntled patients,” explained Dr. Kozak. “Over my career, many times I have stood up and in between a patient and a nurse, when the patient got vio-



Dr. Kozak

lent toward a nurse. It’s a pretty common occurrence.”

Resolution 32 cosponsor Niki Thrane, MD, FACEP, who is also chapter President of Vermont ACEP and Democratic candidate for U.S. Senate, explained her position as, “I am against anyone carrying firearms in the ED with the exception of on-duty law enforcement, including federal agents and military police,” she said. “Hospital security too, if they are hired as such. I definitely do not think physicians and other staff should be carrying firearms in the ED.”



Dr. Thrane

Tony Hsu, MD, is an emergency physician in Ann Arbor, Michigan. As chair of ACEP’s Public Health & Injury Prevention Committee, he led the group assigned to translate aspects of Resolution 32 into ACEP policy. “I don’t think as on duty physicians we should have to deal with our own concerns of penetrating injury. I like to have specialists when I have a trauma patient coming in. I want to have a specialist when somebody else has a firearm and perhaps maybe threatening others,” explained Dr. Hsu. “When we think about violence in the ED, the ones who bring guns into the workplace should be safety personnel ... that made me want to update the policy.”



Dr. Hsu

James Phillips, MD, an emergency physician,

associate professor, and chief of disaster medicine at George Washington University, served as a tactical physician for a number of years, and is active in ACEP’s sections focused on disaster and tactical medicine. “We still don’t have protections in our emergency departments that we need and for anyone that doubts that, look at the debate we’re having right now that emergency physicians feel that they need to carry weapons to protect themselves,” Dr. Phillips said.



Dr. Phillips

Gun Ownership Among Emergency Physicians

Not all emergency physicians share Dr. Thrane’s viewpoint on restricting the carrying of firearms in the ED. A large minority of emergency physicians, 43 percent, own firearms, according to a study published in 2021.⁹ Among them is Steve Gasper, MD, who currently works in Dallas, Texas, and did an elective in tactical medicine during residency. Before that, Dr. Gasper served as a forward observer and a designated marksman in the U.S. Marine Corps. “I think there’s a tendency to have a boiler plate of, ‘No, [guns are] not allowed. Just call the police,’” Dr. Gasper said. “It’s kind of wishful thinking to say, ‘Well, we’ll just make it a gun-free zone and that’ll solve the problem.’ But that really



Dr. Gasper

doesn't. I mean, most of the mass shootings occur in gun-free areas."

Marco Coppola, DO, FACEP*, has been in the military for 37 years and is the chief of medical staff at The Colony ER Hospital in The Colony, Texas. "I think every emergency department should have active shooter drills. Just like we practice a disaster drill, every emergency department should do that," he explained. Dr. Coppola served as chair of the ACEP task force to rewrite the ACEP Firearms and Injury Prevention Policy in 2013. "We thought it was very important not to legislate and not to contradict existing laws. What was interesting is that [at the time] we tried to come up with the most comprehensive firearm policy possible."



Dr. Coppola

When asked about his personal belief on firearms in the emergency department, Dr. Coppola said, "I firmly believe that it is every person's right to defend themselves. If you're in a remote part of the ED where there is very little security or security is all on the other side and a patient becomes violent and you have no way to protect yourself, how do you do that? You could call for help, but you might be dead by the time they come."

Rural Considerations

Unlike many urban emergency departments, many rural emergency departments do not have armed security guards. "Do I carry when I'm not at work? Yes, I do," says Edwin Leap, MD, who works in small and medium-sized emergency departments in southern Appalachia. "I believe that concealed carry is a reasonable thing, but I don't do it in the hospital. Now, having said that, I've worked in lots of places that had little to no security. In fact, I worked once in a small town in Kentucky. There was a critical access hospital and after 5 p.m., the city police closed up, they weren't available, and the only person available was the highway patrolman who had responsibility for that area. And that person might have three or four counties. So, when emergency physicians feel like they'd like to carry at work, I'm sympathetic. I understand."

Dr. Marco, who personally does not feel that physicians should be armed while on duty, cites the violent confrontation in her own ED as one that demonstrates how complicated the issue can be. "[Ours was] a situation though, where any amount of gun control or weapon screening would not have helped because it was a security officer's weapon." Evidence shows that 23 percent of firearm attacks in the ED occur after the assailant takes a weapon from a law enforcement officer.¹⁰ "I think we all agree that security officers should be armed," Dr. Marco said.

Research indicates that carrying a firearm may increase a victim's risk of injury when a crime is committed, with one study indicating that people in possession of a gun may be more than four times more likely to be shot in an assault.¹⁰ An FBI analysis of 160 active shooter incidents from 2000–2013 found that active shooter incidents were rarely stopped by armed individuals who were not law enforcement returning fire.¹¹ In fact, four times as many shootings were stopped by unarmed civilians restraining the shooter. A 2015 Harvard University study analyzed data from 2007 to 2011 found that of more than 14,000 crimes in which a victim was present, just under one percent involved a gun used in self-defense. The Harvard

Injury Control Research Center also found that self-defense gun use is, "rare and not more effective at preventing injury than other protective actions."¹²

What About Resolution 32?

After lively discussion during the 2021 Council Meeting in Boston, Resolution 32 eventually passed and was adopted by ACEP's Board of Directors on Oct. 2021. The result of this vociferous debate is for now settled in an ACEP Policy Statement, "Protection from Violence in the Emergency Department," which was revised to address Resolution 32. The policy statement's list of hospital and administrative responsibilities to ensure the safety and security of the ED now includes these two items:

- Erect signage and provide for appropriate securing of firearms outside of the ED, designating the ED a 'Firearm-Free Zone.'
- Coordinate the health care institution's security system with local law enforcement agencies when developing policies for safekeeping of firearms; trained and on-duty law enforcement officers, hospital security, military police, and federal agents may be acceptable exceptions to the 'Firearm-Free Zone.'

ACEP's policy statements are available to view in full at acep.org/policystatements. 📄

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DANIELLE GALIAN (@Danielle_Galian) is editor of ACEP Now.

FROM RESOLUTION TO POLICY

At its 2021 meeting, the ACEP Council passed *Resolution 32: Firearm Ban in EDs Excluding Active Duty Law Enforcement*, after extensive discussion. The majority of the debate on the Council floor was surrounding the first Resolved clause: "That ACEP promote and endorse that Emergency Departments become "Firearm Free" Zones, with the exception of active duty law enforcement officers, hospital security, military police and federal agents."

HOW DID THIS RESOLUTION GO FROM PROPOSAL TO POLICY?



July 2021

Resolution submitted to Council

October 2021

Resolution debated during asynchronous testimony, with most strongly in favor.

October 23, 2021

Live testimony at the Council meeting was mixed. After much discussion, an amended version of the original resolution was adopted by the Council.

January 27, 2022

ACEP Board of Directors adopts the resolution.

February 2022

Resolution is assigned to the Public Health & Injury Prevention Committee to consider all types of security arrangements for emergency departments and develop a policy statement.

May 2022

PHIPC incorporates language from this resolution into its policy statement "Protection from Violence in the Emergency Department" and submits it for Board review.

June 2022

Revised policy statement approved by the Board.

Did you know you can check on the status of recent Council resolutions? Visit acep.org/actions-on-council-resolutions to do a deeper dive. The archive goes back to 1993.

The Emergency Department After the Fall of Roe

ORIGINALLY PUBLISHED ONLINE ON JUNE 24, 2022

by ATSUKO KOYAMA, MD, MPH; LAUREN PAULK, JD; KELLY QUINLEY, MD; AND LEILAH ZAHEDI-SPUNG, MD

Abortion is one of the safest and most common outpatient procedures performed in the United States. One in four women have an abortion in their reproductive lifetime.¹ Yet restrictive abortion laws have skyrocketed, making access limited for many despite abortion being legal. Between 2017 and 2020, 227 laws restricting abortion access were enacted compared to 29 laws expanding access.² The June 24 Supreme Court decision on the *Dobbs v. Jackson Women's Health Organization* case overturned the landmark decision in *Roe v. Wade*, removing constitutional protection of abortion.

The fall of Roe will create a state-by-state patchwork of those who have access to abortion services and those who do not. After this decision, it is expected that emergency departments (ED) will see an increase in patients who have a newly diagnosed pregnancy, are suffering from miscarriages or pregnancy-related complications, have accessed abortions locally or across state lines, or have self-managed their abortions. This article aims to review important aspects of the clinical management and counseling of these patients and outlines how the ED can collaborate effectively with their obstetrics and gynecology (OB/GYN) colleagues.

Your Patient is Diagnosed with an Intrauterine Pregnancy

Emergency physicians should be knowledgeable about clinical next steps for patients who are still making or have already made decisions about their early pregnancy. If providing patients with clinic referrals, emergency physicians should beware of crisis pregnancy centers (CPCs). These centers are usually staffed by non-medical personnel, are meant to dissuade patients from seeking abortions through misinformation and intimidation, and currently outnumber abortion clinics by three to one in some states and as high as nine to one in others.^{3,4} Plan in conjunction with your OB/GYN department to ensure the ED has a vetted list of both prenatal and family planning clinics to offer patients for follow-up.

Your Clinically Stable Patient is Considering Abortion

Emergency physicians should have basic knowledge regarding both up-to-date medication abortion and surgical abortion methods. In addition, they should be aware of restrictions on these options in the state in which they practice. Medication abortion, taken up to 10 weeks gestation, consists of the medication abortion pill—mifepristone 200mg—followed by misoprostol 800 µg 24–48 hours later. This method is 98 percent effective and is used by an estimated 60 percent of those who choose abortion early in pregnancy.⁵ Ninety-five percent of patients should expect bleed-

ing and cramping within 24 hours of taking misoprostol.

The alternative to medication abortion is a surgical option by either manual uterine aspiration (MUA) or electrical vacuum aspiration, also called dilation and curettage (D&C) or dilation and evacuation (D&E). These procedures can be performed in outpatient clinical settings and carry minimal risk. D&Cs are typically used up to 14 weeks gestation with D&E procedures being utilized beyond the second trimester.

The legal landscape for patients who wish to pursue abortion is both complicated and changing rapidly. Emergency physicians and patients alike need to understand the abortion laws in their states of practice, as obtaining an abortion can be time sensitive based on weeks of gestation. Abortions are safer, less expensive, and more likely to be available and legal earlier in pregnancy. Discharge papers should include the weeks of gestation as determined by ultrasound to facilitate the patient's ability to pursue abortion based on state specific constraints.

What are Self-Managed Abortions?

Patients may disclose that they have self-managed an abortion. Self-managed abortions (SMA) are defined as abortions obtained outside formal health care systems, which most commonly include self-sourced medications (mifepristone and/or misoprostol, often obtained online), but the term can also include the use of herbs, blunt abdominal trauma, or the introduction of

instruments into the intrauterine cavity. Research has shown that SMA with mifepristone and misoprostol can be safe and effective, and people who have SMAs are able to date their pregnancy and use these medications appropriately without the need to seek care at a medical facility.⁶ Approximately seven percent of U.S. women have attempted SMA at some point in their lifetime although SMA rates tend to be higher in states with greater abortion restrictions.⁷ SMA is considered a crime in three states: Oklahoma, South Carolina, and Nevada (after 22 weeks).⁸

Your Patient Had an Abortion or is Miscarrying

Following June's SCOTUS ruling, it is likely there will be an increase in patients seeking care in your ED following SMA, abortions obtained outside their usual physician (and possibly out of state), or a pregnancy-related issue such as miscarriage. SMAs are clinically indistinguishable from miscarriages; between 500,000–900,000 women seek care in the ED with miscarriage-related concerns each year.^{9,10} Out of fear of criminalization, patients may not disclose if they initiated the abortion themselves.

Apart from stabilizing patients with significant bleeding, the standard work-up for every patient should include an ultrasound to determine if there are retained products of conception, an ongoing intrauterine pregnancy (evidenced by a yolk sac or embryo), or an ec-

topic pregnancy (many patients with SMA will not have had an ultrasound to exclude ectopic pregnancy), a complete blood count if concern for severe hemorrhage, type and screen, and beta hCG level. Traditionally, type and screen for Rh status has been necessary, however, newer data suggest that Rhogam is unnecessary under 12 weeks gestation.¹¹ However, if there is any question regarding the gestational duration, giving Rhogam should always be the default. If an ultrasound reveals nonviable retained products of conception and the patient's bleeding is stable (i.e., less than two pads per hour for two hours in a row) an additional 800mcg vaginal or buccal dose of misoprostol can be given in the ED or prescribed to be taken at home. If the patient is clinically unstable or having significant vaginal bleeding, they may require uterine aspiration to stop the bleeding, so consult your OB/GYN team. For more complex miscarriages, such as those in the second trimester (e.g., pre-viable preterm rupture of membranes or significant bleeding with ongoing fetal cardiac activity), timely involvement of OB/GYN colleagues for escalation of care will be necessary.

If there is concern for a septic abortion and the patient has a fever, lower abdominal tenderness, purulent vaginal discharge, or signs of sepsis with retained products of conception, prompt evaluation by the OB/GYN team should occur. If a patient has an acute peritoneal abdomen, consider possible uterine perforation or bleeding from a possible non-disclosed abortion procedure or mechanical



GETTY FOR WILEY

SMA attempt, obtain imaging, and involve consultants early.

It is important to provide a safe and judgment free space for patients. Physicians do not have any obligation to disclose whether a patient had a SMA. Remember that doing so may lead to criminalization of the patient in some states. Akin to caring for ED patients with opiate use disorder or alcohol intoxication, our primary role is to care for the patient at hand, to maintain patient confidentiality and compliance with HIPAA laws, and supporting the patient's confidence and trust in the medical system.

How Emergency Physicians Can Work with Their OB/GYN Departments to Prepare

Emergency departments are already busy places and while it is unclear currently how many patients will travel for abortion care, over 68,000 patients sought abortion care out-of-state in 2017. Increasingly restrictive state laws will likely put more pressure on patients to travel. Lack of access to their regular care providers leaves the ED as a main source of medical care, and patients who continue to have vaginal bleeding or complications from abortions may bounce back to the ED for repeat visits.

With few exceptions, post-abortion patients will have identical needs to those with first trimester miscarriage, so this is the time to invest in collaborative streamlined miscarriage care with your OB/GYN colleagues. Suggested steps:

1. Identify an OB/GYN and emergency physician champion to lead an interdepartmental grand rounds.
2. If manual uterine aspiration is not already offered in your ED, consider establishing a protocol to make it available at the bedside. This is becoming standard of care in the ED in the U.S. and is typically provided by OB/GYN consultant teams in ED for miscarriage patients with unstable bleeding or inadequate follow up. MUAs provide definitive management and are 97 percent effective at uterine evacuation after a single procedure which can help decrease ED bounce backs. The procedure compares favorably to misoprostol alone. MUAs are also very safe and have a much lower risk profile than many procedures commonly performed in the ED. MUAs decrease cost, length of stay, and operating room resource utilization.¹²
3. Invite your Legal or Risk Management teams to review the need for continued commitment to patient privacy, autonomy, and HIPAA compliance to assure physicians and emergency department staff avoid reporting patients who have had abortions.
4. Involve nursing leadership in planning decisions and meet with nursing and tech staff separately to hear any concerns.

In light of the June 24 SCOTUS ruling and as abortion restrictions progress in some states, it is increasingly important for emergency physicians to be well-versed in pregnancy, abortion, and miscarriage management and to collaborate with OB/GYN colleagues in order to provide compassionate, patient-centered care, minimize trauma, and prevent criminalization of patients. ➡

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Self-Managed Abortion: Legal Considerations for Emergency Physicians

A LEGAL REVIEW AS OF AUGUST 2022

by LAUREN PAULK, ESQ.

With *Roe v. Wade* overturned by the recent *Dobbs v. Jackson Women's Health Organization* Supreme Court decision, emergency physicians will see an increase in patients seeking care after a self-managed abortion.¹ The primary risk of most self-managed abortion is not medical but legal. Self-managed abortion is a crime in three states (Nevada, Oklahoma, and South Carolina), but the lack of an explicit crime in other state codes does not stop overzealous law enforcement actors from unlawfully arresting, charging, and imprisoning individuals for allegedly self-managing their own abortion care.² Criminalization of self-managed abortion falls most heavily on people who are already part of communities facing increased surveillance by law enforcement, namely, people with low incomes and people of color. Emergency physicians should be aware of first amendment protections for speech about self-managed abortion; legal protections for post-abortion care; the potential conflicts of state law with federal laws like HIPAA and EMTALA; the harm that can be caused by reporting self-managed abortion to law enforcement; as well as the risks of and protections against patient criminalization.

The First Amendment protects your right to give medical and legal information about self-managed abortion, but not necessarily medical and legal advice.

The First Amendment protects the right to freely share information with one another. However, those protections do not extend to aiding or facilitating a criminal action. Regardless of its legality, counseling a patient about safe methods of self-managed abortion is a harm reduction practice and something that emergency physicians can participate in without obvious legal risk. Similarly, sharing resources about self-managed abortion, such as abortionpillinfo.org, and about the legal risks of self-managed abortion, such as reprolegalhelpline.org, is a harm reduction practice that falls within the confines of First Amendment protected speech as of this writing. Though these activities are protected by current First Amendment law, this does not account for hospital administrators or other hospital policies that may conflict with the law and stifle your ability to speak to your patients about their reproductive health. That said, it is legally riskier for emergency physicians to share *sources* of abortion pills, or otherwise direct patients as to how they can access methods of self-management, as this may be seen as facilitating a criminal act de-

pending on state laws.

Post-abortion care after fetal demise is no legally riskier than miscarriage management.

Emergency physicians frequently provide care to people engaged in legally risky or prohibited activity such as sex work or use of illegal substances; self-managed abortion is no exception in states where abortion is criminalized or illegal. Providing care to someone experiencing a complication of self-managed abortion *after* fetal demise is no legally riskier for emergency physicians than treating someone experiencing a complication of miscarriage. In fact, providing treatment after a self-managed abortion with pills is identical to post-miscarriage treatment. Providing treatment *prior* to fetal demise is a more legally complicated question which will depend on the wording of the abortion laws in your state.

Generally, self-managed abortion is not something emergency physicians need to report to authorities and doing so is likely a HIPAA violation.

Emergency physicians are mandated by law to report certain incidents, such as some injuries and vital statistics information like fetal deaths. Currently, there is no law in any

state that requires an explicit report of self-managed abortion or of the intention to self-manage. In fact, recently released HIPAA guidance makes clear that in the absence of an explicit law requiring a report, reporting a self-managed abortion to law enforcement is an unpermitted breach of protected health information.³ In most states, emergency physicians are still obligated to report to public health authorities abortions that they themselves perform or abortion complications they treat. This may include self-managed abortion in some states. Emergency physicians may also be required to report injuries they treat arising from unsafe methods of self-managed abortion, such as injuries from sharp objects or assault. However, in the vast majority of these cases where a physician is not mandated to report, disclosing a self-managed abortion to law enforcement is unnecessary and could harm the patient by contributing to criminalization.² Mandatory reporting is fraught with racial and class bias.⁴ Emergency physicians should consider and take steps to mitigate potential harms associated with mandatory reporting, such as ensuring a patient is aware of what the emergency physician is required by law to report.

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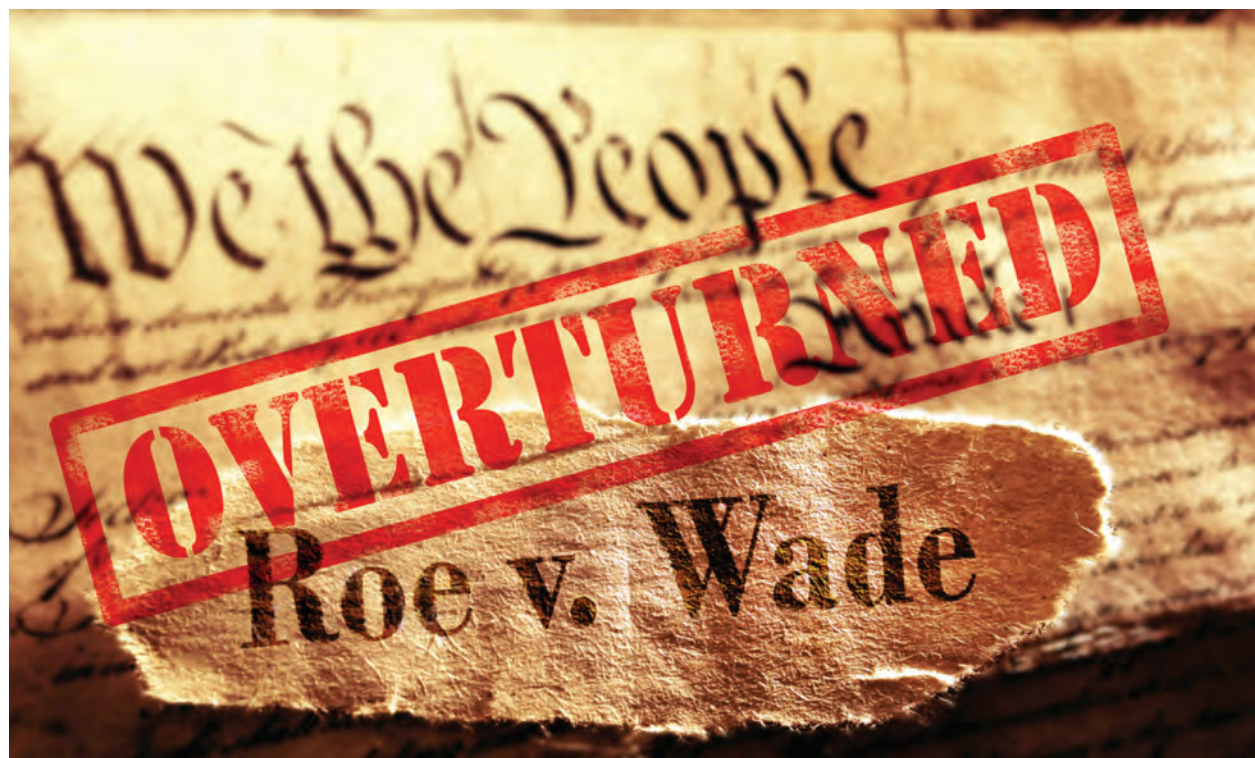
Some physicians have expressed concerns that state laws banning abortion have the potential to restrict a physician's ability to offer stabilizing care in a medical emergency. The federal government recently released guidance clarifying that "[e]mergency medical conditions involving pregnant patients may include, but are not limited to, ectopic pregnancy, complications of pregnancy loss, or emergent hypertensive disorders, such as preeclampsia with severe features."⁵ More guidance is needed to determine the extent of EMTALA protections for physician actions. However, it is clear that EMTALA preempts state laws restricting the ability of physicians to provide stabilizing care in an emergency situation, including abortion care.

Careful medical charting can help prevent patient criminalization.

Medical charts keep a record of patient care, but they are also frequently weaponized in criminal proceedings against a patient or an emergency physician. As such, emergency physicians should be wary of including information in a medical chart that is neither required by law, nor clinically significant for a future medical professional to have on hand.

Emergency physicians must prepare for an increase in patients with complications from abortion and be aware that those patients may be criminalized.

Criminalization is a health hazard—the risk or possibility of arrest deters patients from seeking health care, potentially subjecting them to inhumane, unsanitary, and dangerous conditions. Criminalization itself takes patients away from their families, and can cause the loss of employment, income, and dignity. The duty to do no harm can be an important reminder of your commitment as a medical professional as it relates to post-abortion care, regardless of how you personally feel about abortion itself. Emergency physicians should decide their own personal risk level and work with an attorney who



Roe v. Wade was overturned on June 24, 2022.

understands the specific laws in your state to navigate a post-Roe landscape. 📌

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READERS RESPOND TO "THE EMERGENCY DEPARTMENT AFTER THE FALL OF ROE"

First, abortion is not a constitutional right. No where in the U.S. Constitution does it say we can end the life of our citizens with abortion.

Second, why do you think we will see an increased number emergency department (ED) visits related to pregnancies? We always have women who come in just to verify their pregnancy or who have complications with their pregnancy. This decision to return abortion laws back to the individual states will make no change in ED visits for the reasons you stated in the first part of your article. I agree with some increase visits of complications from procedures outside your state if your state restricts them. However, in my county there are no abortion clinics within 100 miles and we have been dealing with a very small number of ED visits (Level I trauma center and main obstetrician-gynecologist hospital for the area) related to patients with abortion complications for over 25 years.

Statements such as crisis pregnancy centers are "meant to dissuade patients from seeking abortions through misinformation and intimidation," show an obvious bias of the writer of the article. While I have no doubt this may occur at times, one could make an equal argument that Planned Parenthood, the largest provider for abortions, does the same for persuading women to have an abortion.

[ACEP Now] should try to stick with medical facts and not biased opinions attempting to worry inexperienced emergency physicians. Mentioning there will be a small uptick in visits from abortion problems from procedures done out of your area is reasonable, but most of the rest is our standard operating procedure and nothing new for emergency physicians.

—David Wharton, MD, FACEP

In this emotionally charged debate, I think it is important to avoid insertion of ideological bias, which for the most part you accomplished. However, I really do not think we have any idea how this Supreme Court ruling will impact emergency physicians at this point. There is no doubt there will be many consequences to this ruling, but I am having a difficult time imagining any untoward consequences on emergency [physicians].

Are we expecting women to come to the emergency department demanding an abortion? Or perhaps prescriptions for mifepristone/misoprostol? Unlikely, but an easy "no" nonetheless.

—Todd B. Taylor, MD, FACEP

I agree with the thoughts of Dr. Wharton and Dr. Taylor. They articulate my thoughts better than I could have. I would like to add that now is the perfect opportunity for our medical community to advocate for improved employer-based benefits to support women in pregnancy. Improved maternity coverage, maternity and paternity leave, employer-based day care, comprehensive affordable family medical benefits, and maternity corporate executive level discrimination protections are perhaps a few examples.

At least taking those concerns off the table when making the difficult choices surrounding pregnancy.

One last thought: Is it not interesting that after the recent ruling that simply returns this debate to the states, there are some corporations that cover the cost of travel to have an abortion; yet, at the same time, provide mini-

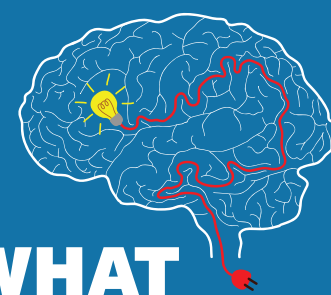
mal health care coverage for their employees and even less day care support, etc. Who is it exactly who doesn't want the child brought to term? The company or the mother?

—Anthony Pohlgeers, MD

I think it's prudent for ACEP to inform and prepare [emergency] physicians for what they might see in their departments, but it's unfortunate when it's done in a clearly biased manner. The characterization that pregnancy resource centers are "usually staffed by non-medical personnel" and "meant to dissuade patients from seeking abortions through misinformation and intimidation" is misleading at best and slanderous at worst. I'm on the board of one such center and I can assure you this is not the case. Our staffing includes nurses trained to perform ultrasounds and limited STI testing, all of which are reviewed and addressed by one of our local OB/GYN physicians. All pamphlets and other information given by peer counselors have been reviewed by physician medical directors. Regarding misinformation, rather than open debate on controversial medical subjects about which physicians disagree (like we do within ACEP for TPA, for example) it seems some would prefer to demonize and silence the other side. Further, the blanket charge of "intimidation" is akin to saying all abortion clinics are like the one run by Kermit Gosnell. On the contrary, in our local center I have witnessed nothing but love and compassion for mothers (and fathers) in tough situations. In addition to the above, our center provides free diapers, clothes, car seats, parenting classes, and much more. It has served our community well for over 30

years. Sadly, since the overturn of *Roe v. Wade*, centers in multiple states have been the victims of vandalism and intimidation. I would hope reasonable people can see the irony in violence directed at centers whose goal is to help people facing unplanned pregnancies.

—Mike Dorrity, MD, MA



WHAT ARE YOU THINKING?

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2022 ACEP ELECTIONS PREVIEW

CONTINUED FROM PAGE 1

MEET THE PRESIDENT-ELECT AND BOARD CANDIDATES

President-Elect Candidates



Board of Directors Candidates



PRESIDENT-ELECT

The president-elect candidate—running unopposed—responded to this prompt:

What do you believe is the single most divisive issue in emergency medicine at this time and how would you address it?

Aisha T. Terry, MD, MPH, FACEP

Current Professional Positions: associate professor, emergency medicine and health policy, and senior advisor, emergency medicine health policy fellowship, George Washington University School of Medicine and Health Sciences, Washington, D.C.

Internships and Residency: emergency medicine residency, University of Maryland Medical System department of emergency medicine, Baltimore

Medical Degree: MD, University of North Carolina School of Medicine, Chapel Hill (2003); MPH, Columbia University Mailman School of Public Health (2011)

Response

✓ *"The world is getting too small for both an Us and a Them. Us and Them have become co-dependent, intertwined, fixed to one another. We have no separate fates, but are bound together in one."*—Sam Killermann

Divisive issues—those that tend to foster disagreement and even hostility—create the illusion of there being an "us" and a "them." This illusion creates a sense of competition wherein there must be a winner and a loser, allowing little to no space for listening and compromise. Time and time again, divisiveness has resulted in stress, anxiety, and damaged relationships. As we continue to weather the far-reaching impacts of the pandemic and find ourselves coping with unprecedented

amounts of burnout, it is especially important that divisiveness be stamped out as it only further depletes our energy and hope for a brighter future.

Most acknowledge that divisiveness is a problem and would appreciate a path forward. In fact, the Public Agenda/USA Today Hidden Common Ground survey from Feb. 2021 found powerful consensus across political affiliations that our country needs to move beyond the destructive nature of political divisiveness. It also found that most think that there is more common ground amongst the public than is typically acknowledged, but that disagreements tend to be handled destructively rather than constructively.

Whether the issue is firearm violence or the role of private equity in health care, we know that our specialty will continue to grapple with really tough topics. Divisive issues are typically related to ethics and personal choice, which foster strong opinions as well as proposed solutions that tend to be polarized and inflexible. Rather than focus on the issue, we must determine how to minimize the destructive potential of the divisiveness. An issue does not in and of itself create division; rather, our approach and accompanying emotions involved with resolving the issue determine the degree of vitriol felt. In the words of Eckhart Tolle, "rather than being [our] thoughts and emotions, [we must] be the awareness behind them."

As a two-term ACEP Board of Directors

member, I marvel at how well my fellow Board colleagues struggle with and come to important decisions on challenging issues. We are diverse, having representation from various geographic locations, political ideologies, and demographic backgrounds, yet we spend hours having cordial and honest discussions about a myriad of complex and controversial topics; we listen to each other and respect each other's perspectives. Perhaps most importantly, we are influenceable. We realize that there are several ways to reach an end goal, and that one must be open to exploring them all, while factoring in key elements like unintended consequences, justice, timing, and practicality.

Having led health policy efforts as an associate professor and advocate in our nation's capital for over a decade, I understand the necessity, yet challenge of achieving bipartisan wins. The divisive issues in Washington, D.C. are many, but the skilled policymaker and advocate focuses on discovering and exposing commonalities on both sides of the aisle. The best bills are those that are bipartisan and have a Senate and House version; this approach tends to be most efficient relative to energy and often successful.

As we seek to mitigate the effects of divisiveness, being mindful of our emotions, listening, being influenceable, and intently seeking to discover and expose commonality are examples of strategies to employ.

BOARD OF DIRECTORS

The candidates for ACEP's Board of Directors responded to this prompt:

Considering ACEP's strategic plan, what do you consider to be the top two issues and how should they be addressed?

William B. Felegi, DO, FACEP

Current Professional Positions: medical director, Van Buren County Hospital emergency department and Van Buren County Hospital ambulance, Keosauqua, Iowa; EMS medical director, Farmington Ambulance; medical director, Atlantic Health, Morristown Medical Center, Travel MD, Corporate Health

Internships and Residency: emergency medicine residency, Morristown Memorial Hospital, Morristown, New Jersey

Medical Degree: DO, University of New England College of Osteopathic Medicine, Biddeford, Maine (1989)

Response

✓ **Career Fulfillment:** *Tackling tough issues head-on and working with you to tackle frustrations that get in the way of career satisfaction.* Unless we have satisfied members, our membership will dwindle or other organizations may be more appealing to our membership, including possible unionization. It is imperative that the College continue to recognize that in order to fulfill our important responsibilities in caring for this nation's emergency needs, we must ensure that every

emergency physician has a safe and secure working environment, adequate resources to perform our vital role, and fair compensation. ACEP needs to maintain its integrity with membership. A long time ago, I learned at an ACEP leadership event that integrity was doing the right thing at the right time for the right reasons. We need to base our priorities, interest, and messaging on strengthening our integrity for members. Our college needs satisfied members, and physician satisfaction starts in the workplace regardless of location (urban, suburban, rural) and regardless of the physician model (independent contractor, locums, hospital—community or academic, contract management group owned by a democratic group, publically traded company, or private equity firm). No one else in America has been given the privilege of dealing and caring for the sickest and most critically injured. Yet, we work in a dangerous and complex environment. The college needs courage in addressing inequities and advocate for an emergency physician “Bill of Rights.”

Practice & Innovation: *Revolutionizing acute, unscheduled care, developing new career opportunities, and taking the lead in reshaping the emergency medicine workforce landscape.* The latter is a clear top issue. It is important to demonstrate that residency-trained physicians are the most preferred clinicians based on education, training, and procedural skills. We need to demonstrate that the quality of care and outcomes are the highest when patients are treated by an emergency physician.

Jeffrey M. Goodloe, MD, FACEP

Current Professional Positions: attending emergency physician, Hillcrest Medical Center Emergency Center, Tulsa, Oklahoma; professor of emergency medicine, EMS section chief, and director, Oklahoma Center for Prehospital & Disaster Medicine, University of Oklahoma School of Community Medicine, Tulsa; chief medical officer, medical control board, EMS System for Metropolitan Oklahoma City & Tulsa; medical director, Oklahoma Highway Patrol; medical director, Tulsa Community College EMS Education Programs

Internships and Residency: emergency medicine residency, Methodist Hospital of Indiana/Indiana University School of Medicine, Indianapolis; EMS fellowship, University of Texas Southwestern Medical Center, Dallas

Medical Degree: MD, Medical School at University of Texas Health Science Center at San Antonio (1995)

Response

✓ **Career Fulfillment and Member Engagement.** Even a cursory review at acep.org/strategicplan will show my bias about career fulfillment. You’ll find on reviewing the many leaders, members, and staff involved (over 100!) that I’m incredibly privileged to co-lead the Career Fulfillment team with David McKenzie, CAE, ACEP’s incredible reimbursement director. Now, you might jump to the conclusion that we believe all career fulfillment is found through money, money, and more money. No. Does money matter to emergency physicians? Well, sure, just as it matters to non-emergency physicians, too! Just ask our neighbors, friends, and patients. Money is only part of the equation. We all want to feel valued and respected in non-monetary ways, too. Due process, safe work environments, clinical and administra-

tive opportunities at hospital and health care systems, ACEP state chapter, and national ACEP levels can enhance our emergency medicine careers. I’m concerned about the dynamics of a U.S. health care system that can exploit our dedication and commitment to patients, which reach far beyond the regulatory demands of EMTALA.

How do we improve career fulfillment? Many ways, including success in workforce and scope of practice dynamics through a strong, vibrant ACEP. We listen to one another, seek areas of common ground over the challenges and limits to advancing our careers, then equally invest in “best practices” among our members, helping to share local successes so they disseminate throughout our members’ practices.

When we do this, genuinely promoting our members, creating opportunities to highlight their insights, experiences, and talents, we create increasingly accessible resources available through ACEP. These solutions can be internet-accessible—creating guides, educational forums, and point-of-care apps. We can create stronger peer networks, virtual and in-person events. As ACEP becomes more tangible in helping emergency physicians in the workplace, in personal development, and in wellness to name just few key areas of importance, this tangibility advances member engagement and loyalty—leading to a bigger, stronger, more creative ACEP. This isn’t a “zero sum” equation whereby one emergency physician’s advance must come at another emergency physician’s loss. Our unity on career enhancements in emergency medicine serves to strengthen us all.

Gabor D. Kelen, MD, FRCP(C), FACEP

Current Professional Positions: chair, department of emergency medicine, Johns Hopkins University, Baltimore; physician-in-chief, emergency medicine, Johns Hopkins Medicine; director, Johns Hopkins Office of Critical Event Preparedness and Response; principal staff, Applied Physics Laboratory, Johns Hopkins University; professor of emergency medicine, anesthesiology, and critical care medicine, Johns Hopkins University School of Medicine

Internships and Residency: internship, University of Toronto, St. Michael’s Hospital; residency, University of Toronto, St. Michael’s Hospital; emergency medicine residency, Johns Hopkins Hospital

Medical Degree: MD, University of Toronto (1979)

Response

✓ The newly developed ACEP strategic plan (acep.org/strategicplan) has five pillars and 23 imperatives. Each of these imperatives is of top-line importance. All of them need to be addressed.

Inherent in the essentials of the strategic plan is the underlying drive to proactively address and promote the dignity of the emergency physician in all deliberations, and the nobility inherent in emergency practice. Our many threats—feeling like cogs in a system, CMG and sense of autonomy loss, encroachment of scope of practice, fair remuneration, fair treatment, due process, and violence in the workplace, diminish our sense of self and our specialty. Upholding and advancing the dignity of the emergency physician and respect for our practice must be the unwavering compelling force in addressing the key priorities and all activities of the College.

Jeffrey F. Linzer Sr., MD, FACEP

Current Professional Positions: professor of pediatrics and emergency medicine, Emory University School of Medicine; medical director for business affairs and compliance and EMS/pre-hospital care coordinator, Division of Pediatric Emergency Medicine, Emory + Children’s Pediatric Institute, Children’s Healthcare of Atlanta

Internships and Residency: pediatric residency, University of California, Irvine; allergy-clinical immunology fellowship, Children’s Hospital Los Angeles; pediatric emergency and transport medicine fellowship, Children’s Hospital Los Angeles

Medical Degree: MD, Centro de Estudios Universitarios Xochicalco, School of Medicine, Ensenada, Baja California, Mexico

Response

✓ The College needs to help simplify and streamline our practice to eliminate nuance and pointless frustration in our practice to ensure practice sustainability and fair compensation. Specifically, addressing misuse of ICD diagnosis codes by payers to deny reimbursement. Payers need to be held accountable for their “proprietary” diagnosis lists that inappropriately downcode. EHR vendors must make their diagnosis calculators more physician friendly so that the proper terminology can be easily found.

The College needs to work with state and federal authorities and support state chapters in resolving these issues that can adversely affect patient care.

Are there too many resident programs? In 2020 there were 265 EM resident programs with 2665 available positions. In this last match there were 277 programs offering 2,921 positions. This represents an increase of 4.5 percent in the number of EM residencies but an almost 10 percent increase in the number of positions.

The report coming from the ED Accreditation Task Force will help provide direction for the College to meet its workplace strategic goal. We also need to work with our partner groups to help ensure that residencies are not just being developed as a source of inexpensive labor, but that they are providing high quality training preparing their trainees to provide care in a range of environments. We must take care that the expansion of programs does not risk dilution in the quality of training. While, through supply and demand, there is a potential that their influx could drive down reimbursement in competitive markets, this could be countered by ACEP supporting programs that could help reduce graduate medical school debt.

Kristin Bond McCabe-Kline, MD, FACEP

Current Professional Positions: vice president/chief medical information officer, AdventHealth Central Florida Division; EMS medical director, Flagler County/City of Palm Coast/City of Flagler Beach; chief medical officer, WaterSafe, medical director, Flagler Technical College EMT Training Program; medical director, AllCare Medical Transport

Internships and Residency: residency, Advocate Christ Medical Center (IL)

Medical Degree: MD, University of Texas Medical School, San Antonio

Response

✓ The ACEP strategic plan is key to serving our members and specialty. Rather

than selecting two issues, I prefer to distill the strategic plan into two top priorities to be addressed: 1) the future of emergency medicine and 2) the culture of emergency medicine.

Globally, emergency physicians transformed emergency departments into front doors of hospitals and key access points throughout the community via free standing sites. Granularly, emergency physicians leveraged ultrasound equipment utilized by others to provide patients with immediate results while under our constant bedside care. Innovation is essential to the future of emergency medicine. As emergency physicians, we are well positioned to identify gaps in care where the system has failed our patients, embrace opportunities to meet their needs, and reimagine the delivery of our unique skillset in service to patients.

The compensation of care and measurement of quality are critical to our specialty, making advocacy essential to the future of emergency medicine. ACEP must be at the table, leading discussions around reimbursement models, speaking to the value of the care we provide, and developing metrics that support evidence-based practices translating to the best outcomes for our patients. Advocacy on behalf of our members is key to preserving our reputation as fierce patient advocates.

As emergency physicians, we are subjected to the harshest of circumstances and held to the highest of standards, which can undermine even the most resilient emergency physicians. While providing individual resources for emergency physicians to foster wellness, ACEP must step up to provide solutions for system-level issues that undermine the positive mindset, physical health, and connectivity to others necessary for emergency physicians to thrive. Career fulfillment where emergency physicians feeling appreciated, free to explore a variety of career options, and fully supported when things are less than ideal, is essential to maintaining a healthy culture of emergency medicine. Providing opportunities for career fulfillment should highlight diversity as ACEP has members with a variety of interests, pursuits, backgrounds, and practice environments.

Engagement and trust highlights the value of every individual member of ACEP, milestones of our careers, and opportunities for growth and mentorship as part of a greater community of emergency physicians. When we engage with one another in meaningful College activities, there is a level of mutual support that positions ACEP as a vital force for wellness for emergency physicians.

Both the future of emergency medicine and the culture of emergency medicine cannot be optimized without appropriate infrastructure; thus, resources and accountability are an essential component of addressing all other areas of the strategic plan.

The future of emergency medicine is bright with innovation and advocacy efforts that highlight the importance of the value and contribution of emergency physicians in service to our patients. The culture of emergency medicine is being restored as we learn to address systems level issues that affect us collectively and individually, care for ourselves and one another, and discover opportunities for growth on our journeys as emergency medicine physicians.

CONTINUED on page 14

Henry Z. Pitzele, MD, FACEP

Current Professional Positions: attending physician, Jesse Brown VA Medical Center and Advocate Illinois Masonic Medical Center, Chicago; attending physician, Mesa View Regional Medical Center, Mesquite, Nevada

Internships and Residency: emergency medicine residency, University of Illinois at Chicago

Medical Degree: MD, University of Illinois at Chicago College of Medicine (2000)

Response

✓ For me, the most important of the College's missions has always been advocacy. Within the advocacy pillar of the strategic plan, several of the strategies resonate with me, specifically the plans to standardize advocacy strategies across the federal, state, and workplace levels. To that end, a few of us in the State Legislative/Regulatory Committee have begun a project which we think will help meet these goals—a dashboard of the most common legislative hurdles faced by all of us. Each ACEP member will (once we are up and running) be able to look at this dashboard and see how each state has handled the most common legislative issues (Medicaid, scope, unfunded mandates, etc.); if one of us has had a winning strategy, others won't have to reinvent the wheel—they'll be able to reach out to the stakeholders in the chapter that has done well and use some of those strategies themselves. We think that this will not only help us meet our legislative goals but will help unify the College when members see

all of the work that is being done on their behalf.

Secondly, I want to highlight the final strut in the Advocacy pillar—that of creating awareness around the business of EM. I feel very strongly that the interests of the major EM corporations do not align with the interests of the frontline EP, and I want ACEP to be very clear, to one and all, that the mission of the College is to better the working lives of those frontline docs. I am quite proud of what the College has done already this year, not just the act of adopting the strategic plan to reaffirm our mission to support individual EPs, but on this particular objective of creating awareness of the interests of business. In one of the most important months of ACEP's recent history, we filed an amicus brief supporting AAEM's lawsuit about the corporate practice of medicine, the Board came out with a statement about private equity in EM, and we wrote a letter to the FTC/DOJ perfectly and succinctly summarizing how corporate interests are eroding the specialty and negatively affecting both docs and patients. I can't really express what a Mjolnir-esque blow these three back-to-back events had—not just to EM as a specialty, but to me personally. They showed in the most public way, to our members, and to those watching outside that ACEP is here for us, not for an industry enriched by our blood and sweat. The College represents us. Now, do I feel like these three momentous events mean that our work on this issue is done? Absolutely not! It's merely a starting point—and a very encouraging one—and it

means that, if we continue in this vein, and keep making change, this College can and will be the unifying force through which together, emergency physicians can make the next phase of EM a place in which we truly look forward to working.

Ryan A. Stanton, MD, FACEP

Current Professional Positions: emergency physician, Central Emergency Physicians, Lexington, Kentucky; EMS medical director, Lexington-Fayette Urban County Government; medical director, AMR/NASCAR/SRX/RTI Safety Teams; medical director, Blue Grass Airport, Lexington;

Internships and Residency: surgery internship, James H. Quillen College of Medicine; emergency medicine residency, University of Kentucky

Medical Degree: MD, James H. Quillen College of Medicine (2003)

Response

✓ The strategic plan is all about focusing on the emergency physician and our practice of emergency medicine. The two biggest challenges are uniting a profession in a time of great divide and protecting the profession from those that work to undermine emergency medicine, whether intentional or as a byproduct.

We clearly have seen growing divides in this country and more positions that land in the “my way or the highway” realm. We are at a place and time that ACEP leadership has received death threats and frequent calls to take firm stances one way or the other, often

both. Our college is blessed with diversity in beliefs and passions. I still remember as a Kentucky councilor when the question was asked among ~500 emergency physicians in attendance their political leanings, and the vote was within a handful of 50/50. We need that diversity and those difference in viewpoints, but that also presents the challenge of being the leading voice in EM and how do we best represent our physicians and patients.

We must all double-down on listening more, being open to disagreement, and working towards a common ground that can help us move forward. We are all emergency physicians and that is the cornerstone of our work, advocacy, and opportunity. It is integral that we unite and fight as one voice with a diversity of opinions and viewpoints because we are under attack from many angles. Whether it is scope of practice, moral injury/burnout, entities putting profits over patients, insurance industry games, corporate influences, documentation bloat, or another unrealistic metric that provides no beneficial patient-oriented outcome.

The patient care part of EM is the easy part, but we are seeing ever increasing challenges and pressure from outside the treatment room. This is exactly why a strong unified voice through ACEP is integral. Individually, we are vulnerable; together, we are a force that can truly move the needle. The five pillars of the strategic plan are built on the foundation of the emergency physician and how we as the College best advocate, communicate, and provide the best return on investment regarding membership and a fulfilling career in EM. ➦

nurses and physicians on individuals on extracorporeal devices. They found pulse palpation was only 78 percent accurate. The mean time to a decision about the presence of a pulse was 20 seconds and was slightly longer in the physician cohort (24 seconds) compared with the nursing cohort (17 seconds). One of the most worrisome findings of this study was that participants reported the presence of a pulse in 14 percent of cases when it did not. Participants took an average of 30 seconds to diagnose cardiac arrest. By comparison, participants were able to diagnose the absence of cardiac arrest in an average of 13 seconds.⁸

The Guidelines Dropped Routine Pulse Checks Over a Decade Ago

In response to these studies demonstrating the complexity to pulse palpation, the American Heart Association (AHA) guidelines in 2010 began discouraging routine pulse checks during CPR: “Because of difficulties with pulse assessments, interruptions in chest compressions for a pulse check should be minimized during the resuscitation, even to determine if ROSC has occurred.”

In fact, pulse checks only arise four times in the body of the AHA 2020 guidelines—all in reference to initial identification of cardiac arrest.⁹

Rhythm Checks Are “In”

During CPR, advanced cardiac life support (ACLS) guidelines advocate for rhythm checks every two minutes. Rhythm checks allow rescuers to identify rhythms amenable to defibrillation. Unlike a pulse check, rhythm checks take a few seconds. The goal of the rhythm check is to ascertain whether the patient has an intervenable rhythm—one that is amenable to defibrillation (ventricular fibrillation or ventricular tachycardia) or a potentially perfusing rhythm. If a patient is in asystole, there is no need to check for a pulse—there will not be one. If a patient is in ventricular fibrillation or ventricular tachycardia, there is no need to feel for a pulse—the treatment is defibrillation. In both cases, prolonging the pause in chest compressions may have deleterious effects on organ perfusion.

Although the AHA guidelines have specified rhythm checks rather than pulse checks for over 10 years, clinicians have been slow to change practice. In fact, research continues to focus on “pulse checks.”¹⁰ A 1999 article in *Annals of Emergency Medicine* urged clinicians to pay close attention to pivotal shifts in evidence behind common CPR practices as AHA guidelines would certainly change. The authors highlighted pulse checks and summarized the 1996 data, “rescuers will hallucinate a pulse when one is absent about once every 10 arrests. They will hallucinate death (no pulse)

four times as frequently—about four out of 10 times.”¹¹ Despite the authors' urging, first responders and physicians continue with pulse checks.

Perhaps some may resist the pivot to rhythm checks, arguing this is only a semantic change. However, the pulse palpation literature is clear—assessing for a pulse is cognitively taxing. A shift in our language and personnel to tasks that are actionable, creates a simpler and more efficient resuscitation environment that has a better chance of reducing “hands off” time. It is more likely that we believe we have overconfidence in our ability to do simple things well and have difficulty unlearning our fundamental practices. Before we debate antiarrhythmics or double sequential defibrillation, let's get the fundamentals right and stop routinely checking pulses during CPR cycles. ➦

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ACEP4U: Stretching a Dollar Through Grant-Funded Projects

EARNING GRANTS ALLOWS ACEP TO DELIVER MORE RESOURCES

by JORDAN GRANTHAM

One of the five pillars of ACEP’s new strategic plan is focused on the thoughtful management of the College’s resources. This part of the plan encompasses many aspects of ACEP’s operations and systems—digital and communications infrastructure, staffing, systems and finances—that enable ACEP to move forward with its mission to support and advocate for emergency physicians.

A key strategy within the Resources & Accountability portion of the plan is to “develop alternative/nontraditional revenue sources” (beyond member dues) that allow ACEP to do more without placing that financial burden on its members. Alternative revenue sources let ACEP do more for its members by offsetting expenses, including staff salaries and benefits, educational and training resources, travel, and IT costs.

One of the ways ACEP earns non-dues revenue is by seeking, winning, and utilizing federal, foundation and corporate grant funding. Did you know ACEP has earned nearly \$40 million in grant funding since 2004? Those grants have funded some of ACEP’s most utilized resources, including the COVID-19 Field Guide and many point-of-care tools.

The Execution

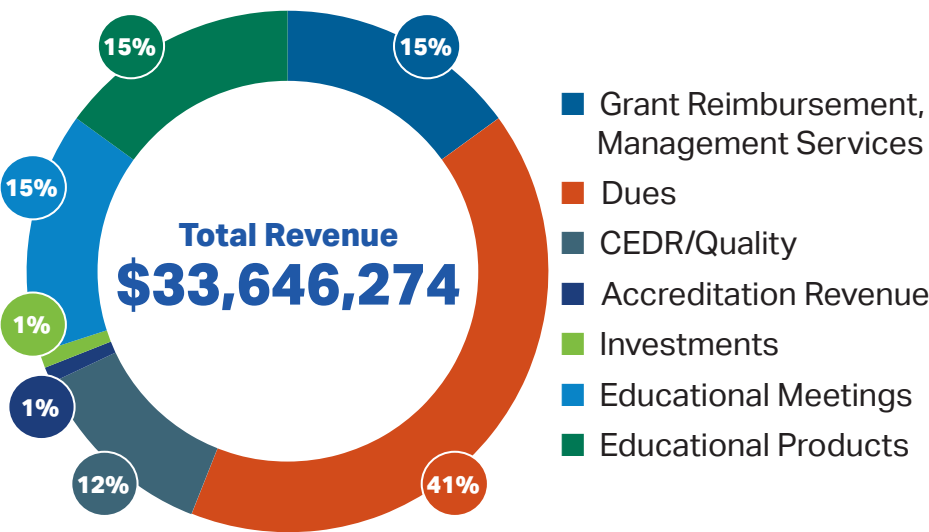
Successfully earning grants starts with seeking and developing relationships with grantor organizations who align with our mission and having strong proposals and procedures. ACEP’s meticulous record-keeping and clean audits has helped the College build a positive reputation as a reliable grantee.

Many grant projects utilize ACEP members as Principal Investigators (PI) and Subject Matter Experts (SME) to help design and lead the projects. ACEP staffers with expertise in a variety of subjects, including EMS, disaster preparedness, data analysis, registries, library science, and education, are also utilized to execute the grant projects.

The Results

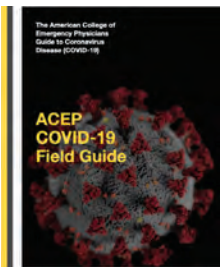
Over the years, grant funding has supported the development of many popular member resources and initiatives, from webinars to clinical tools and more. Here are a few highlights:

FIGURE 1: ACEP’s new strategic plan seeks to grow non-dues revenue. This chart, originally published in ACEP’s 2021 Annual Report, shows the fiscal impact of grant funding as an ACEP revenue source.



E·QUAL | EMERGENCY QUALITY NETWORK

- **Quality:** Emergency Quality Network (E·QUAL), a free program for ACEP members, started with a four-year grant from CMS. It is now funded through foundation support, including a recent \$2.9 million grant from the Gordon and Betty Moore Foundation to support quality improvement in acute vascular conditions and acute infections.



- **COVID-19:** Some key aspects of ACEP’s COVID-19 response, including the development of the COVID-19 Field Guide and the Physician Wellness Hub, are funded by a multi-year federal grant from the Centers for Disease Control and Prevention (CDC).
- **Opioids:** ACEP received multiple grants from the Substance Abuse and Mental

Health Services (SAMHSA) to provide Medication-Assisted Treatment (MAT) training and resident education.

- **Disaster Response:** ACEP has received numerous grants from the CDC, Department of Homeland Security (DHS), and Assistant Secretary for Preparedness and Response (ASPR) to train our nation’s first responders for man-made and natural disasters.



- **Data:** ACEP is leveraging the Clinical Emergency Data Registry (CEDR) comprehensive data to supplement national hospital data through funding from the CDC. CEDR data is also being used to create emergency medicine quality measures through foundation funding.
- **Bedside Tools:** ACEP members have access to 16 point-of-care tools (acep.org/pointofcaretools) covering a variety of clinical pathways, from sepsis to hyperkalemia and more. The majority of these bedside tools were developed by ACEP members and supported by grants. ➕

JORDAN GRANTHAM is senior content manager at ACEP.

ENSURING TRANSPARENT, DILIGENT MANAGEMENT OF RESOURCES

Each month, ACEP4U will highlight and expand on a specific pillar of ACEP’s new strategic plan. This month, we focus on the third strategic pillar—Resources and Accountability.

More than 100 ACEP members were involved in developing ACEP’s new strategic plan (acep.org/strategicplan) to guide the College for the next three to five years.

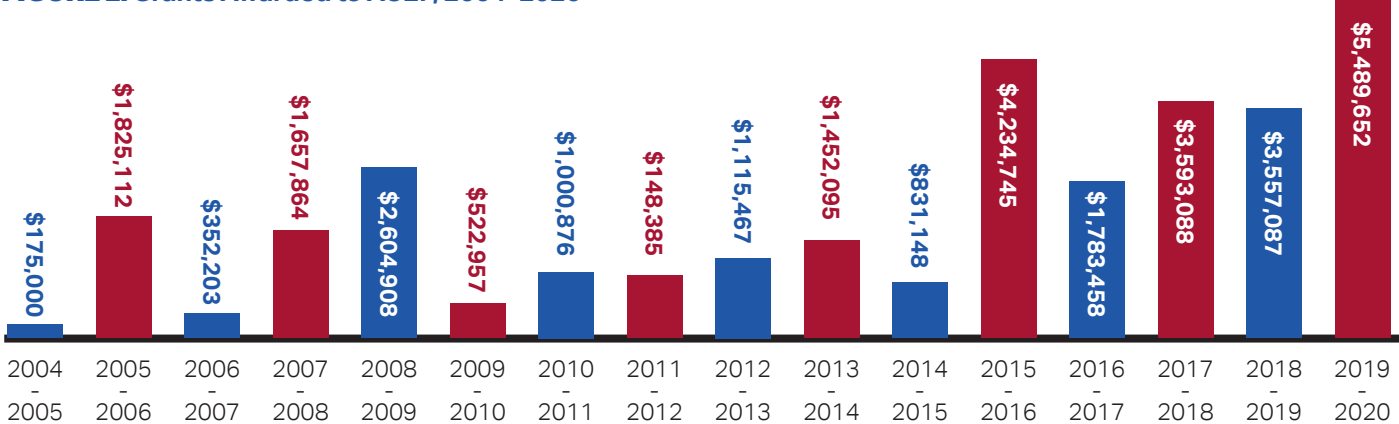
Alexander Rosenau, DO, FACEP, was part of the planning group that developed the Resources & Accountability pillar of the plan.

“Strategic planning says, I can’t predict the future because there’ll be new inventions, new problems. There’ll be the next pandemic. But it does say that if I understand my foundation and my resources, and if I understand my values and the mission and the winning proposition of the emergency physician as first priority... then we are going to make great strides and be even stronger tomorrow than we are today,” Dr. Rosenau said.

The Resources & Accountability portion of the strategic plan features six key strategies to ensure the thoughtful acquisition and management of resources:

1. Invest in overhauling ACEP’s digital infrastructure to modernize systems, deliver a more personalized, proactive and responsive experience for members, and support exceptional customer service.
2. Implement a systematic program evaluation process that considers new and on-going needs, return on investment (including member value) and the College strategic plan.
3. Adopt effective project management techniques and data-driven decision-making processes.
4. Re-examine membership/non-member pricing models and explore other models that would be of interest to more eligible members and still allow us to fulfill our role.
5. Develop alternative/non-traditional revenue sources and opportunities to achieve our strategic priorities.
6. Ensure all ACEP communications are strategic, transparent, bidirectional, proactive, and effective. ➕

FIGURE 2: Grants Awarded to ACEP, 2004–2020



Thoracic Outlet Syndrome

The case of the swollen left arm

by TRENT STEPHENSON, DO, FACEP

Case

A 19-year-old, left hand dominant female presented to the emergency department (ED) with a chief complaint of a swollen left arm that started just before arrival. Her symptoms were first noticed when she put her left arm down after spraying hair spray in a circular motion. She had no known medical problems, was normally very physically active, and never had anything similar happen in the past. Exam showed a swollen left arm with erythema. Her compartments were soft and her radial pulse was 2+. Her Adson's test was negative.

Differential

DVT, arterial clot, thoracic outlet syndrome, rhabdomyolysis, contact dermatitis, Raynaud disease and vasculitis.

Work Up

Venous and arterial dopplers of the left upper extremity were ordered, which showed no evidence of clot. Due to continued high suspicion for clot, vascular was consulted and they were also concerned for a clot from thoracic outlet syndrome (TOS). They recommend starting apixaban (Eliquis) and they would evaluate her the next morning in the clinic.

Follow Up

The patient was seen the next day in the vascular clinic where she had a repeat venous doppler that showed an acute deep vein thrombosis in the axillary vein. She then underwent a catheter directed thrombectomy that same afternoon. She was then scheduled to have her first rib removed in two weeks.

As directed, she followed up in two weeks for the removal of her first rib.

One month after rib removal and physician therapy, she did not have pain or any lingering symptoms. Her only issue was her chest being numb in the area of the incision from surgery.

Thoracic Outlet Syndrome

TOS results from compression or irritation of the brachial plexus or subclavian vasculature as those structures pass through the space between the clavicle and first rib (i.e., the thoracic outlet). Symptoms can be either neurogenic (painless muscular atrophy, paresthesias, or weakness most common) or vascular (color change, claudication, or limb ischemia).¹ Causes of TOS include trauma, repetitive motion injuries (e.g., in swimmers and baseball pitchers), pregnancy, or anatomical defects like having an extra rib. Reported figures for TOS range from 3–80 per 1,000 people and affects three times more women than men. The age of onset of symptoms usually occurs between 20 and 50 years of age. A physician exam test for TOS is the Adson's test. It is performed by the physician being behind the patient while their arms are in full extension. The pulse on the potential affected side is palpated as the patient's arm is abducted and externally rotated. The patient also holds their breath as they extend their neck and rotated their head towards the side being tested. The test is positive if there is a significant decrease

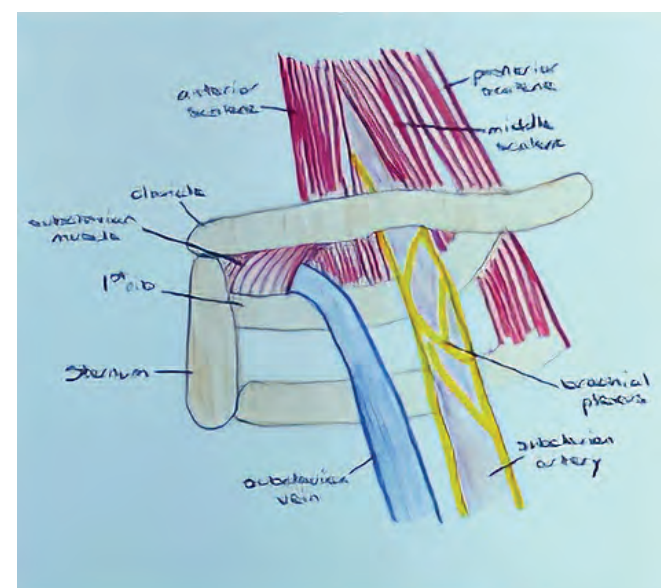


FIGURE 1 (LEFT): Patient's left arm demonstrates cyanosis.

FIGURE 2 (ABOVE): Anatomic illustration of the thoracic outlet.

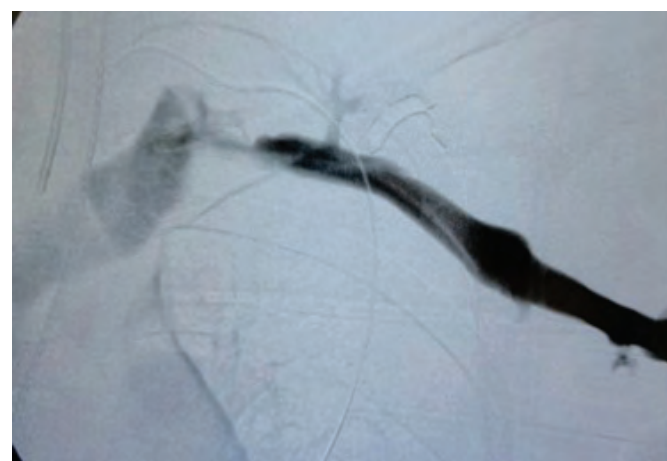


FIGURE 3: Angiography reveals thrombosis of the axillary vein.

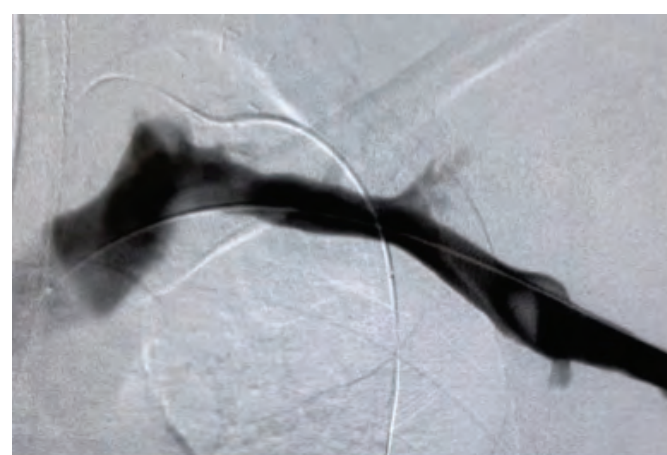


FIGURE 4: After thrombectomy.



FIGURE 5: As directed, patient followed up in two weeks for the removal of her first rib.

in strength or complete disappearance of the radial pulse. Treatments range from physical therapy to anticoagulation to surgical options to relieve the compression of structures through the thoracic outlet. Neurogenic TOS is generally neither progressive nor likely to resolve spontaneously. Vascular forms of TOS generally have good outcomes with treatment of underlying cause. In 2015, Orlando et al, published "A decade of excellent outcomes after surgical intervention in 538 patients with thoracic outlet syndrome."² In

this retrospective study they evaluated outcomes of patients that underwent first rib resections for all three forms of thoracic outlet syndrome during a 10-year period. They concluded that surgery resulted in excellent outcomes.³ +

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DR. STEPHENSON is an emergency physician at Wylie ER in Texas. He is a graduate of UTSW EM residency.

World TravelERs: AUSTRALIA

How a Texas emergency physician enjoys living and working Down Under

by CEDRIC DARK, MD, MPH, FACEP

In what should be familiar to readers from what you've heard about Canada or the United States' Medicare program, Australia has a form of universal health care based on a single-payer system.

Australia created their program—called Medicare—in 1984 to provide free public hospital care, substantial coverage for physician services, and pharmaceuticals. Australian citizens, residents with permanent visas, and interestingly, even some New Zealanders are covered under the scheme. Their federal government finances the Medicare system, but it has a very limited role in the actual delivery of health care.

Each of the six states in Australia own and manage service delivery for public hospitals, ambulances, public dental care, and community health, which can include anything from primary or preventative care to mental health care. Local governments play a role in the delivery of community health and preventive health programs, such as immunizations, which is obviously important during COVID.

Like in the United States, a substantial portion of the gross domestic product goes towards health care, but it's only about 10 percent in Australia; in America it's about 17 percent. I know we've been talking a lot about workforce oversupply in the U.S., but in Australia, there are workforce shortages, so physicians like Justin Hensley, MD, who moved from Texas to Australia last summer, benefit from the transition.

I recently spoke with Dr. Hensley about his experiences working as an emergency physician in Australia and what other differences he sees in health care in Australia.

You were an owner in the freestanding ED in Texas. One big difference between the U.S. and Australia is how fast reimbursement goes from public to private payers. Is it nearly as instantly as it seems?

Dr. Hensley: Ninety days was a good day to get reimbursed by any of the private insurers in the United States. It's a reason why a significant number of freestanding clinics closed because they can't keep the lights on if they're not getting paid. The claims being pushed back by insurers was horrendous. It is significantly better here, yes.

Supposedly there's an interoperable national eHealth program that's based on personally controlled unique patient identifiers. I'm wondering how that works in comparison to the U.S. where we have so many different proprietary electronic medical record systems (EMRs), none of which seem to want to talk to one another, even if one hospital is across the street from another one?

Dr. Hensley: Every Australian patient has their own Medicare number and they can all get access to the system. The clerks also have 100 percent access the Medicare information they need. I can see what the patient has had to a degree on a kind of an HTML-based sys-



Dr. Hensley's family on the steepest passenger railway in the world, Blue Mountains.

tem. The hospital does not feed data to that. That just has their Medicare claims results. So if they've had imaging tests, I can see that, but it doesn't indicate the results. It just has tests they've had and other conditions.

Our system here in Bunbury, Western Australia, is different than the system in Perth, is different than the system in Sydney and I can't see their notes, but all the systems in Sydney can see each other. A lot of the systems in Perth can see each other. In Bunbury, we were attached to a private hospital, which is a unique amalgamation of what happens when you have publicly insured people and privately insured people in the same town. If we sent patients over there, all of our cardiac patients went over there, we couldn't see any of their notes. If they got discharged and came back to our emergency department the next day, we couldn't see anything. So it's great on the billing side, it makes everything real efficient, smooth, and fast. Does not mean I can see their actual health care record.

In the United States, we're heavily focused on the Emergency Medical Treatment and Labor Act (EMTALA). In Australia, are people ever referred away to another facility without being seen? Does that scenario happen?

Dr. Hensley: We don't have to do any examinations or other types of things that you would normally feel you would need to do in the U.S. to kind of cover yourself from a malpractice lawsuit standpoint. You can tell the patient, "I'm not the proper person for it. You need to go see your general physician (GP) tomorrow," and you can just sign them out and they leave.

They can still have trouble getting in to see their GP and it may take a couple more days than usual, but every Medicare patient here has a GP. There aren't people here that don't have primary care physicians. It's glorious. The issue at play sometimes is geography and other things, like in the U.S., if you need somebody that has a specialized problem—hand surgery, ophthalmologic surgery, or something kind of specific—a specialist will see

them in the U.S. because there's EMTALA. In Australia, they'll say either the patient needs private insurance or they'll need to pay our fee schedule.

Let's talk about pharmaceuticals, how does that work in Australia?

Dr. Hensley: The pharmacy benefit scheme (PBS) is essentially the preferred drugs list for any private insurer. However, because there's really only one preferred insurer in Australia, you don't have to look up all the ones for private insurance company X, Y, or Z. You go to the PBS scheme website, type in the drug you're thinking of, and it brings up the first option that is available on the PBS website. You can look up and see how much you can give them, how much it's going to cost them, and if there are any other options.

You learn pretty quickly what certain drugs cost. Most of them are \$5 to \$10 Australian dollars. It's not a horrendous amount, but if you're trying to give them some kind of novel prescription, you'll quickly learn that it's pretty expensive.

It does narrow my pharmacologic options a little bit, but it also makes it cost significantly cheaper because it only takes a couple of those outliers that cost \$500 or \$1,000 a dose to really push drug costs up.

Have you had the experience of being a patient there?

Dr. Hensley: I haven't, but one of my friends was when we were here in 2019. It's pretty different. The initial part of going in, being seen, evaluated, getting a bedside ultrasound by the physician—as opposed to getting a formal department ultrasound, because it was two o'clock in the morning and that wasn't going to happen even in the city of Sydney. Getting all that done and getting the blood work back was about two to three hours in the emergency department. At the end they're like, "okay, so you're not Medicare, so you need to pay for this." It was \$500 as opposed to \$3,000 or whatever it would cost in the U.S. for a 2

a.m. emergency department visit with multiple blood works, IV pain medications, and an ultrasound.

What have you learned from being in Australia that you think could inform how we do things in the United States?

Dr. Hensley: The biggest thing, and one of the reasons why I wanted to come to a place that had a system such as this, is Australia doesn't allow non-physicians to dictate the way care is provided. When non-physicians are dictating how care is provided, like in the U.S., it makes things cost more. It just adds bureaucracy to medicine. It makes what we do not really practicing medicine anymore. It makes us practicing bureaucracy of medicine.

Is there anything that you miss about the U.S. that you wish was available in Australia?

Dr. Hensley: From Texas, I miss breakfast tacos. They make other really fantastic food in Australia and you aren't living until you've had saltwater crocodile. I do not miss the weather. So, I haven't experienced a single cyclone in the areas I've lived in since I've been here, which has been glorious. There are words and colloquialisms that take time to understand. Every single time you pronounce the name of a city in Australia they'll make fun of you for it because you're pronouncing it incorrectly. Driving on the other side of the road is not as big of a deal as people like to make of it. It only takes hitting a couple curbs to figure out where the other side of the car is. I really enjoy it and the plan is to go through permanent residency and then become a citizen because it's got enough benefits for my kids and family. ☺



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The Big Recovery: ED Operations in 2021

by JAMES AUGUSTINE, MD, FACEP

The role of the emergency department (ED) and emergency physicians has been made dramatically more important due to the pandemic.

Performance of EDs in 2020 and into 2021 changed abruptly due to the pandemic, with subsequent changes in health care delivery and incidence of certain diseases. The members of the ED Benchmarking Alliance (EDBA) are surveyed annually and those surveys provide insight into important trends in ED operations. Definitions have been previously published.¹

From the results of the 2021 EDBA performance measures survey, EDs are seeing higher acuity, more adults, more EMS patients, making more use of diagnostic tests, transferring more ED patients, and boarding the early time of patients who are in need of inpatient ser-

Table 1

YEAR	DOOR TO DECISION (MINUTES)	BOARDING TIME (MINUTES)	LEFT BEFORE TREATMENT COMPLETE (%AGE)
2021	198	169	4.1%
2020	183	121	3.2%
2019	186	116	2.7%
2018	188	116	2.2%
2017	195	117	2.7%

vices.

Large losses in patient volume, which began in 2020, started to reverse in 2021. After volume drops of about 15–20 percent in over-

all ED volumes in 2020 compared to 2019, volumes recovered in 2021 to about a five to 10 percent decrease from 2019 volumes.

Patient acuity increased, as measured by

physician level of service and by the percentage of patients that were admitted to the hospital from the ED. There are ongoing indications that patient acuity is increasing across all sizes

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and types of full-service EDs. The cohort system used in the EDBA survey process has data comparators for adult and pediatric EDs, and for EDs that see patients in 20,000 volume bands. Higher volume EDs reported disproportionately higher acuity, higher use of diagnostic testing, and longer patient processing times.

There is a significantly lower percentage of children presenting to EDs that are not designated as children's hospitals, as I described in my previous article. For general community EDs, the decrease in visits by patients under age 18 has moved from about 16 percent in 2020 to about 13 percent in the data for 2021.

Patient arrival by EMS increased, and more of those patients were admitted. About 19 percent of ED arrivals in 2021 came by ambulance and 37 percent of those patients were subsequently admitted.

ED patient intake processing remained intact, which is an incredible accomplishment in a very difficult year. "Door to Bed" time remained stable with a median time of about seven minutes, and "Door to Doctor" time at about 12 minutes. The long-term trends for these metrics remained intact, as they have decreased in most years since 2008 when the intake time was about 41 minutes.

Despite the work of many emergency physicians to preserve flow for all patients, the boarding times in 2021 jumped to 169 minutes, from 121 minutes in 2020. This time interval is very cohort-dependent, ranging from 130 minutes in the smallest volume EDs, to 268 minutes in EDs that see over 80,000 patients. The time from "Door to Decision" actually decreased from 194 minutes in 2020 to 183 minutes in 2021, despite increased use of diagnostic testing due to COVID. Boarding time is more and more a problem of the hospital, not the emergency department.

However, patients who require inpatient boarding are a significant challenge to ED operations. About 68 percent of hospital admissions are processed through the ED, so this "front door" function is very important to the hospital. Continuing to trend higher, about 19 percent of ED visits result in hospital admission.

All ED patient processing times increased significantly in EDs, related to the lengthy ED boarding times. This likely increased ED walkaway rates. The overall length of stay for all ED patients increased to 195 minutes in 2021, up from 182 minutes in 2018, 184 minutes in 2019, and 186 minutes in 2020. The percentage of patients who leave the ED prior to the completion of treatment increased to 4.1 percent, from 2.8 percent in 2020, and 2.7 percent in 2019. The cohort ranges are from about 1.9 percent to 5.1 percent.

Diagnostic testing in the ED evolved with the pandemic changes. There was a 33 percent increased use of CT scans across all groups of EDs. CT scans in 2021 increased to a rate of about 32 procedures per 100 patients versus 24 procedures per 100 patients in 2019.

The Challenges to Emergency Physicians are Significant

Emergency physicians are seeing higher acuity patients, with more complex medical needs, and an even more important role as the "front door" to the hospital. Most communities are aware of the ED as the portal for critical patients and unexpected events, and with pandemic operations the value of the ED in public health and managing community surges has become even more visible.

Emergency physician leaders must work in earnest with hospital leaders to improve the flow of inpatients in 2023 and beyond. With the lessons and data of 2021 in mind, the need to move admitted patients up to the inpatient units is an obvious management priority. 📌

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JASON HACK (OLEANDER PHOTOGRAPHY)

Toxicology Q&A Answer

QUESTION ON PAGE 4

Answer: Bigleaf Hydrangea

This ornamental deciduous shrub can grow to six feet tall and are often seen in gardens—prized for their hardiness, colorful blooms, and dark green leaves. They have deeply colored "pom-poms" of grouped flowers consisting of both sterile and fertile florets. The flower bunches stand above or within darkly colored serrated green leaves.

Although lacking scientific evidence, *Hydrangea aborescens* has been used in small doses in some communities as a diuretic for a variety of ailments ranging from urinary tract infections to prostatic enlargement. However, it is not safe during pregnancy.

Names

Hydrangea macrophylla, bigleaf hydrangea, or Mop heads

Source of Toxins

Leaves, buds, flowers, and bark. The most poisonous component is the cyanogenic glycoside amygdalin. There are other biologically active compounds found in the hydrangea species including, dihydroisocoumarins and their glycosides, iridoid glycosides, secoiridoid glycosides, and flavonoid glycoside.¹

Epidemiology

Poisoning is primarily seen in dogs and cats, but can also be seen in children and with intentional ingestions by adults.

Symptoms

The most common symptoms in animals (or children) that eat a few leaves are gastrointestinal, such as stomach pain, nausea, vomiting, and diarrhea. Complications with the central nervous system are typically only seen in large ingestions and symptoms consist of lethargy, labored breathing, seizures, and coma. Individuals with high skin sensitivity may develop contact dermatitis

from handling the plants and especially its sap.

Antidotes and Management

There is no antidote. Treatment is supportive as directed by clinical illness.

Interesting Facts

- The dermal sensitization occurs more frequently in garden nursery workers and florists who frequently handle this plant.
- Thunberginol C, an active ingredient found in *hydrangea macrophylla*, was found in a recent mouse study to prevent corticosterone-induced neuronal cell death and stress-induced anxiety.
- The flower color of *Hydrangea macrophylla* is determined by the pH of the soil it grows in. When grown in neutral or basic soils, hydrangea becomes red (anthocyanin, delphinidin-3-glucoside). When grown in acidic soil, the flowers become blue. This is related to the Al³⁺ ion—in acidic soil it is complexed with anthocyanidin and turns blue, in alkaline conditions the Al³⁺ ion is insoluble and the flowers are red. 📌

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DR. HACK (@oleanderphotography) is chief of the division of medical toxicology and vice chair for research at East Carolina University in Greenville, North Carolina. He enjoys taking photographs of beautiful toxic, medicinal, and benign flowers that he stumbles upon or grows in his garden.

Firearm Relinquishment Laws Help Decrease Death

Emergency physicians are no strangers to the impact of firearms and intimate partner violence

by VIDYA ESWARAN, MD

I will never forget the day I heard about the heinous murder of Dr. Tamara O'Neal—an emergency physician in Chicago—and her colleagues by her former



partner on hospital grounds.¹ Her death was a shocking reminder of the reality women face in this country, especially minoritized and transgender wom-

en.^{2,3} Intimate partner violence (IPV) affects nearly one in four women in this country, and three to nine percent experience IPV during their pregnancy.^{4,5}

Any conversation about IPV must include

a discussion about firearms. An average of 70 women every month are shot and killed by an intimate partner, and the majority of mass shootings in this country involve the perpetrator shooting a current or former intimate partner or family member.⁶ An abuser's access to and prior use of firearms to threaten partners are strongly predictive of future homicide.⁷ Given that firearm ownership appears to be increasing, as have firearm-related homicides during the pandemic, we can expect that rates of IPV-related homicides will similarly increase.^{8,9}

As emergency physicians, we are no strangers to the impact of firearms and IPV. The patients whose memories have stayed with me the longest are those who were slain by guns. They are often women and children, for

whom no number of thoracotomies, transfusions, or chest tubes will save.¹⁰ It can never ease the heartache of the family to whom I must say, "Despite our best efforts, your loved one has died." Each reset of the trauma room after the death of a patient is an acknowledgement that another victim is to be expected, that another life will hang in the balance thanks to firearm-related violence. This endlessly repeating cycle of second-hand violence takes its toll on us as physicians, adding to the burnout that we face from so many different directions.

The solution to these intersecting epidemics—gun violence, intimate partner violence, and burnout—is systemic. We must advocate for legislation to decrease access to firearms. Data have already shown that restricting ac-

cess to firearms decreases deaths, and, on the other hand, increasing access leads to increased mortality.^{11,12} Decreasing firearm ownership among people who have been convicted of domestic violence charges or are under IPV-related restraint orders can similarly protect those at high risk of death—including pregnant women.¹³

While we cannot bring back the lives of Dr. O'Neal or the countless others who have been murdered, common sense policies could save others just like them. Rome wasn't built in a day and neither will comprehensive gun control reform. In the meantime, by preventing access to deadly weapons by people who are known to be at high risk of harming others, we

CONTINUED on page 23



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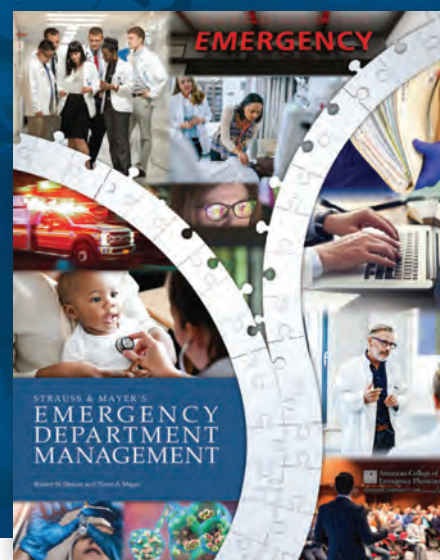
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Penn State Health is a multi-hospital health system serving patients and communities across 29 counties in central Pennsylvania. The system includes Penn State Health Milton S. Hershey Medical Center, Penn State Children's Hospital, and Penn State 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.

can at least begin by protecting those in this highly vulnerable group.

Diana Halloran, MD, Analyzes New Study

Pregnant people and those within one year postpartum are at an elevated risk of homicide—in fact, homicide is one of the leading causes of death among this group.¹⁴ Some states have enacted policy changes by passing laws banning the possession of firearms by people convicted of domestic violence misdemeanors or who are under domestic violence restraining orders.¹⁵ Occasionally this law is paired with a second law requiring people banned from possessing firearms, such as the groups above, to turn in their firearms to law enforcement or gun dealers.¹⁵

What The Research Shows

A recent study, published in October of 2021 in Health Affairs, assessed data from 2011–2019 from the National Center for Health Statistics on pregnancy-associated homicides throughout the United States to determine if the implementation of domestic violence related firearm possession bans and relinquishment laws had an effect on the rates of pregnancy-associated homicide.¹³

During 2010–2018, 16 states did not have the possession ban nor a relinquishment law in effect, while 23 states had at least one of these laws. Eleven states implemented either the possession ban (with or without a relinquishment law) or a relinquishment law to support an already present possession ban during the study period. States that both prohibited firearm possession and required firearm relinquishment by people convicted of a domestic violence misdemeanor experienced 3.74 fewer deaths per 100,000 live births than would have been expected in the absence of either law. Additionally, the authors found that the presence of a relinquishment law in addition to a prohibition ban was associated with 1.17 fewer deaths per 100,000 live births compared to a prohibition ban alone.

Public Health, Health Care Provision, and Policy Making

This analysis and the state laws discussed suggest that the policy regarding prohibition and relinquishment laws are effective interventions in the reduction and prevention of pregnancy-associated homicide. However, the effectiveness of these laws are most apparent when these laws are coupled together. Some states passed prohibition laws without an associated enforcement or relinquishment strategy and these states showed no significant reduction in pregnancy-associated homicide. This is in line with previous research, which revealed that prohibiting firearms without a relinquishment strategy may be ineffective in reducing the risk of intimate partner homicide.^{15, 16} This study emphasizes the strong intersection between public health, health care provision, and policy making, and the importance of firearm-related research to inform safe and effective public policy. ➔

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KCENTRA® (Prothrombin Complex Concentrate [Human]) For Intravenous Use, Lyophilized Powder for Reconstitution
Initial U.S. Approval: 2013

BRIEF SUMMARY OF PRESCRIBING INFORMATION

These highlights do not include all the information needed to use KCENTRA safely and effectively. See full prescribing information for KCENTRA.

WARNING: ARTERIAL AND VENOUS THROMBOEMBOLIC COMPLICATIONS

Patients being treated with Vitamin K antagonists (VKA) therapy have underlying disease states that predispose them to thromboembolic events. Potential benefits of reversing VKA should be weighed against the potential risks of thromboembolic events, especially in patients with the history of a thromboembolic event. Resumption of anticoagulation should be carefully considered as soon as the risk of thromboembolic events outweighs the risk of acute bleeding.

- Both fatal and non-fatal arterial and venous thromboembolic complications have been reported with KCENTRA in clinical trials and post marketing surveillance. Monitor patients receiving KCENTRA for signs and symptoms of thromboembolic events.
- KCENTRA was not studied in subjects who had a thromboembolic event, myocardial infarction, disseminated intravascular coagulation, cerebral vascular accident, transient ischemic attack, unstable angina pectoris, or severe peripheral vascular disease within the prior 3 months. KCENTRA may not be suitable in patients with thromboembolic events in the prior 3 months. (5.2)

INDICATIONS AND USAGE

KCENTRA, Prothrombin Complex Concentrate (Human), is a blood coagulation factor replacement product indicated for the urgent reversal of acquired coagulation factor deficiency induced by Vitamin K antagonist (VKA, e.g., warfarin) therapy in adult patients with:

- acute major bleeding or
- need for an urgent surgery/invasive procedure. (1)

DOSAGE AND ADMINISTRATION

For intravenous use after reconstitution only.

- KCENTRA dosing should be individualized based on the patient’s baseline International Normalized Ratio (INR) value, and body weight. (2.1)
- Administer Vitamin K concurrently to patients receiving KCENTRA to maintain factor levels once the effects of KCENTRA have diminished.
- The safety and effectiveness of repeat dosing have not been established and it is not recommended. (2.1)
- Administer reconstituted KCENTRA at a rate of 0.12 mL/kg/min (~3 units/kg/min) up to a maximum rate of 8.4 mL/min (~210 units/min). (2.3)

Pre-treatment INR	2–< 4	4–6	> 6
Dose* of KCENTRA (units† of Factor IX) / kg body weight	25	35	50
Maximum dose‡ (units of Factor IX)	Not to exceed 2500	Not to exceed 3500	Not to exceed 5000

* Dosing is based on body weight. Dose based on actual potency is stated on the vial, which will vary from 20-31 Factor IX units/mL after reconstitution. The actual potency for 500 unit vial ranges from 400-620 units/vial. The actual potency for 1000 unit vial ranges from 800-1240 units/vial.
† Units refer to International Units.
‡ Dose is based on body weight up to but not exceeding 100 kg. For patients weighing more than 100 kg, maximum dose should not be exceeded.

DOSAGE FORMS AND STRENGTHS

KCENTRA is available as a white or slightly colored lyophilized concentrate in a single-dose vial containing coagulation Factors II, VII, IX and X, and antithrombotic Proteins C and S. (3)

CONTRAINDICATIONS

- KCENTRA is contraindicated in patients with:
- Known anaphylactic or severe systemic reactions to KCENTRA or any components in KCENTRA including heparin, Factors II, VII, IX, X, Proteins C and S, Antithrombin III and human albumin. (4)
 - Disseminated intravascular coagulation. (4)
 - Known heparin-induced thrombocytopenia. KCENTRA contains heparin. (4)

WARNINGS AND PRECAUTIONS

- Hypersensitivity reactions may occur. If necessary, discontinue administration and institute appropriate treatment. (5.1)
- Arterial and venous thromboembolic complications have been reported in patients receiving KCENTRA. Monitor patients receiving KCENTRA for signs and symptoms of thromboembolic events. KCENTRA was not studied in subjects who had a thrombotic or thromboembolic (TE) event within the prior 3 months. KCENTRA may not be suitable in patients with thromboembolic events in the prior 3 months. (5.2)
- KCENTRA is made from human blood and may carry a risk of transmitting infectious agents, e.g., viruses, the variant Creutzfeldt-Jakob disease (vCJD) agent, and theoretically, the Creutzfeldt-Jakob disease (CJD) agent. (5.3)

ADVERSE REACTIONS

- The most common adverse reactions (ARs) (frequency ≥ 2.8%) observed in subjects receiving KCENTRA were headache, nausea/vomiting, hypotension, and anemia. (6)
- The most serious ARs were thromboembolic events including stroke, pulmonary embolism, and deep vein thrombosis. (6)

To report SUSPECTED ADVERSE REACTIONS, contact CSL Behring at 1-866-915-6958 or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch.

Revised: July 2020

For hemodynamically unstable patients on warfarin
**SEVERE GI BLEEDS CALL FOR
IMMEDIATE INTERVENTION**

Act fast in the face of these unstable vitals*



PT-INR >2

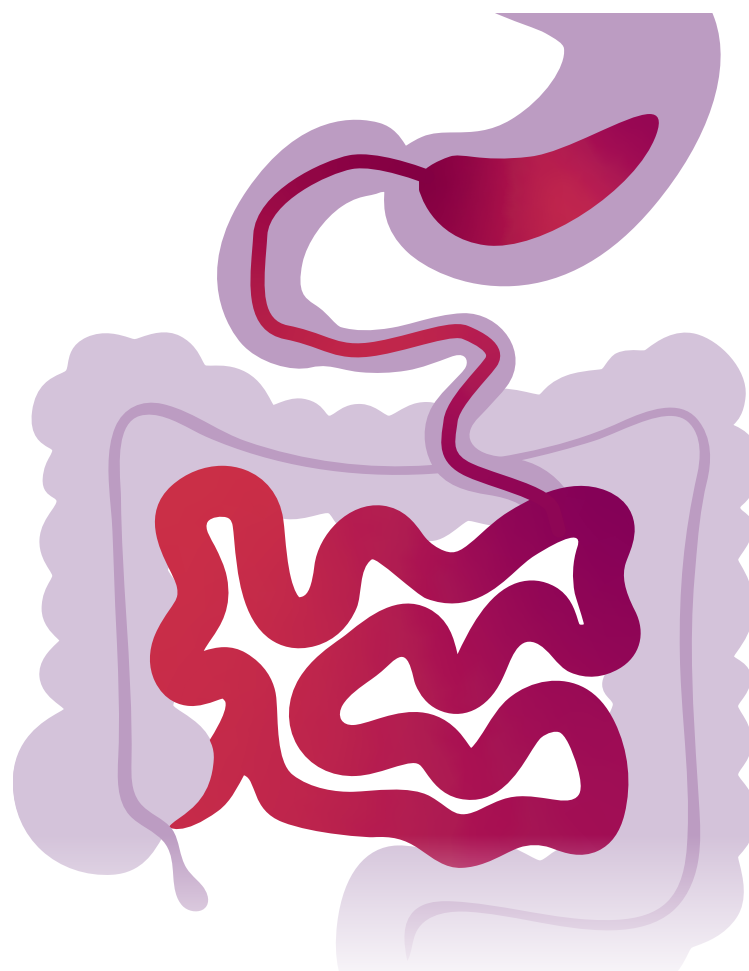
Moderate-to-severe bleeding



Heart rate >100 bpm



Blood pressure $<90/60$ mmHg



KCENTRA®
Prothrombin Complex
Concentrate (Human)

**Choose KCENTRA for
urgent warfarin reversal**

Learn more about KCENTRA and GI bleeds at [KCENTRA.com/case-studies](https://www.kcentra.com/case-studies)



FASTER ACTING†

Superior INR reduction at
30 minutes after end
of infusion vs plasma



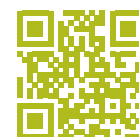
**FASTER
ADMINISTRATION,
LOWER VOLUME**

Mean infusion time is under
25 minutes ~85% less
volume vs plasma



**SUSTAINED
INR REDUCTION†**

Statistically significant
INR reduction sustained
 ≤ 1.3 for up to 8 hours
vs plasma



SCAN TO LEARN MORE

*Not inclusive of all symptoms of hemodynamic instability.

†In 2 head-to-head trials, KCENTRA demonstrated superiority to plasma in 3 of 4 efficacy endpoints. Superior hemostatic efficacy in the Urgent Surgery/Invasive Procedures trial and equally effective hemostasis efficacy in the Acute Major Bleeding trial. Faster INR reduction (to ≤ 1.3 at 30 minutes after end of infusion) in both head-to-head trials.

‡8 hours for Urgent Surgery/Invasive Procedures trial and 12 hours for Acute Major Bleeding trial. Administer vitamin K concurrently to patients receiving KCENTRA. Vitamin K is administered to maintain vitamin K-dependent clotting factor levels once the effects of KCENTRA have diminished.

Important Safety Information

**WARNING: ARTERIAL AND VENOUS THROMBOEMBOLIC
COMPLICATIONS**

Patients being treated with Vitamin K antagonist therapy have underlying disease states that predispose them to thromboembolic events. Potential benefits of reversing VKA should be weighed against the risk of thromboembolic events, especially in patients with history of such events. Resumption of anticoagulation therapy should be carefully considered once the risk of thromboembolic events outweighs the risk of acute bleeding. Both fatal and nonfatal arterial and venous thromboembolic complications have been reported in clinical trials and postmarketing surveillance. Monitor patients receiving KCENTRA, and inform them of signs and symptoms of thromboembolic events. KCENTRA was not studied in subjects who had a thromboembolic event, myocardial infarction, disseminated intravascular coagulation, cerebral vascular accident, transient ischemic attack, unstable angina pectoris, or severe peripheral vascular disease within the prior 3 months. KCENTRA might not be suitable for patients with thromboembolic events in the prior 3 months.

Indications

KCENTRA is a blood coagulation factor replacement indicated for the urgent reversal of acquired coagulation factor deficiency induced by Vitamin K antagonist (VKA—eg, warfarin) therapy in adult patients with acute major bleeding or the need for urgent surgery or other invasive procedure. KCENTRA is for intravenous use only.

Important Safety Information

KCENTRA is contraindicated in patients with known anaphylactic or severe systemic reactions to KCENTRA or any of its components (including heparin, Factors II, VII, IX, X, Proteins C and S, Antithrombin III and human albumin). KCENTRA is also contraindicated in patients with disseminated intravascular coagulation. Because KCENTRA contains heparin, it is contraindicated in patients with heparin-induced thrombocytopenia (HIT).

Hypersensitivity reactions to KCENTRA may occur. If patient experiences severe allergic or anaphylactic type reactions, discontinue administration and institute appropriate treatment.

In clinical trials, the most frequent ($\geq 2.8\%$) adverse reactions observed in subjects receiving KCENTRA were headache, nausea/vomiting, hypotension, and anemia. The most serious adverse reactions were thromboembolic events, including stroke, pulmonary embolism and deep vein thrombosis.

KCENTRA is derived from human plasma. The risk of transmission of infectious agents, including viruses and, theoretically, the Creutzfeldt-Jakob disease (CJD) agent and its variant (vCJD), cannot be completely eliminated.

Please see full Important Safety Information on the following page. Please see enclosed full prescribing information, including boxed warning.

To report SUSPECTED ADVERSE REACTIONS, contact the CSL Behring Pharmacovigilance Department at 1-866-915-6958 or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch.

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