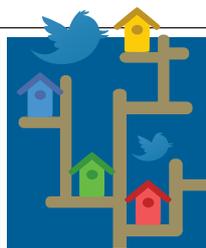


Follow-Up
Clinic

MEDICAID
UNINSURED

POLICY Rx
Insurance
≠ Access
SEE PAGE 20

WHAT I WISH I KNEW
Purchase a Residence
During Residency?
SEE PAGE 17



THE FEED
#Tipsfornewdocs
SEE PAGE 21

WILEY



American College of
Emergency Physicians®
ADVANCING EMERGENCY CARE

ACEP Now

The Official Voice of Emergency Medicine

AUGUST 2018

Volume 37 Number 8

FACEBOOK/ACEPFAN

TWITTER/ACEPNOW

ACEPNOW.COM

PLUS

INTIMATE
PARTNER VIOLENCE
DANGER
ASSESSMENT
SEE PAGE 16



FORENSIC FACTS
HOW TO HELP
VICTIMS OF
INTIMATE PARTNER
VIOLENCE
SEE PAGE 18



FIND IT ONLINE
For more clinical stories and
practice trends, plus commentary
and opinion pieces, go to:
www.acepnow.com

2018 ACEP ELECTIONS PREVIEW ✓

MEET THE ACEP BOARD OF DIRECTORS CANDIDATES

The candidates discuss major issues facing emergency medicine

Each year, ACEP's Council elects new leaders for the College at its meeting. The Council, which represents all 53 chapters, 39 sections of membership, the Association of Academic Chairs in Emergency Medicine, the Council of Emergency Medicine Residency Directors, the Emergency Medicine Residents' Association (EMRA), and the Society for Academic Emergency Medicine, will elect the College's President-Elect and four members to the ACEP Board of Directors. This month, we'll meet the Board candidates, and in September, we'll meet the President-Elect candidates.

CONTINUED on page 11

AIRWAY THEN & NOW

50-year evolution of
airway management

by RICHARD M. LEVITAN, MD,
FACEP

My first response on being asked to write an article on the progression of emergency airway management since ACEP was founded was that I am not that old. But actually, my career in emergency care started in 1980 as an EMT. For the thousands of



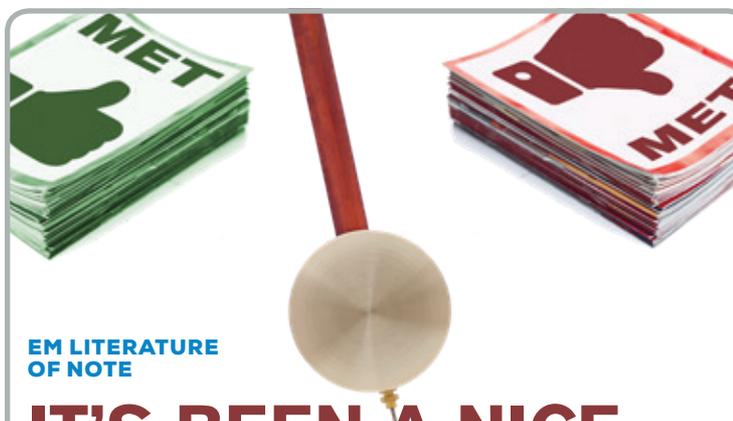
residents now training in our specialty, and anyone who started after the 1980s, it's hard to imagine how emergency

medicine was practiced in the '60s and '70s. The pioneers of our specialty created their practice out of necessity, a consequence of emergency care being neglected by the established specialties. It took guts, especially in academic environments with political turf wars, for self-taught emergency physicians to start staking out responsibility for critical, time-sensitive procedures, including airway management.

Improved Airway Devices

In hindsight, the late '70s and '80s were a major transitional time in airway management. The start of the decade saw the invention of the laryngeal mask airway (LMA) as well as the esophageal tracheal Combitube. These devices were a marked improvement over both mask ventilation and the EMS airway at the time, the esophageal obturator airway (EOA). The EOA was a co-esophageal blocker married to a face mask, but it still had all the deficiencies of mask ventilation. It was a good vomit directional device, but was not a significant improvement in ventilation or oxygenation over mask ventilation.

CONTINUED on page 10



EM LITERATURE
OF NOTE

IT'S BEEN A NICE RUN, TAMUSLOSIN

SEE PAGE 19

If you have changed your address or wish to contact us, please
visit our website www.wileycustomerhelp.com

JOHN WILEY & SONS, INC.
Journal Customer Services
111 River Street
Hoboken, NJ 07030-5790

ACEP Now

PERIODICAL



**DARE TO BE
DIFFERENT**

...in approach
...with purpose
...for patients

**Choose the
only NOAC
with...**

Extensive safety and efficacy data in the most patients studied with NVAF at a higher risk* of stroke¹⁻⁵

AND

A major bleeding rate as low as aspirin with superior efficacy in recurrent DVT/PE risk reduction^{†6}

[†]After 6 months initial treatment.

*CHADS₂ scores 3 to 6 in pivotal NOAC phase 3 trials: ROCKET AF (N=12,402), ARISTOTLE (N=5502), ENGAGE-AF (N=11,200), and RE-LY (N=5882).

INDICATIONS

XARELTO[®] is indicated to reduce the risk of stroke and systemic embolism in patients with nonvalvular atrial fibrillation (AF). There are limited data on the relative effectiveness of XARELTO[®] and warfarin in reducing the risk of stroke and systemic embolism when warfarin therapy is well controlled.

XARELTO[®] is indicated for the treatment of deep vein thrombosis (DVT). XARELTO[®] is indicated for the treatment of pulmonary embolism (PE). XARELTO[®] is indicated for the reduction in the risk of recurrence of DVT and/or PE in patients at continued risk for recurrent DVT and/or PE after completion of initial treatment lasting at least 6 months.

IMPORTANT SAFETY INFORMATION

WARNING: (A) PREMATURE DISCONTINUATION OF XARELTO[®] INCREASES THE RISK OF THROMBOTIC EVENTS, (B) SPINAL/EPIDURAL HEMATOMA

A. Premature discontinuation of XARELTO[®] increases the risk of thrombotic events

Premature discontinuation of any oral anticoagulant, including XARELTO[®], increases the risk of thrombotic events. If anticoagulation with XARELTO[®] is discontinued for a reason other than pathological bleeding or completion of a course of therapy, consider coverage with another anticoagulant.

B. Spinal/epidural hematoma

Epidural or spinal hematomas have occurred in patients treated with XARELTO[®] who are receiving neuraxial anesthesia or undergoing spinal puncture. These hematomas may result in long-term or permanent paralysis. Consider these risks when scheduling patients for spinal procedures. Factors

that can increase the risk of developing epidural or spinal hematomas in these patients include:

- ◆ Use of indwelling epidural catheters
 - ◆ Concomitant use of other drugs that affect hemostasis, such as non-steroidal anti-inflammatory drugs (NSAIDs), platelet inhibitors, other anticoagulants, see Drug Interactions
 - ◆ A history of traumatic or repeated epidural or spinal punctures
 - ◆ A history of spinal deformity or spinal surgery
 - ◆ Optimal timing between the administration of XARELTO[®] and neuraxial procedures is not known
- Monitor patients frequently for signs and symptoms of neurological impairment. If neurological compromise is noted, urgent treatment is necessary. Consider the benefits and risks before neuraxial intervention in patients anticoagulated or to be anticoagulated for thromboprophylaxis.

DVT = deep vein thrombosis; NOAC = non-vitamin K antagonist oral anticoagulant; NVAF = nonvalvular atrial fibrillation; PE = pulmonary embolism.

Please see accompanying Brief Summary of full Prescribing Information, including Boxed WARNINGS, or visit www.XareltoHCP.com/PI.

IMPORTANT SAFETY INFORMATION (cont'd)

CONTRAINDICATIONS

- ◆ Active pathological bleeding
- ◆ Severe hypersensitivity reaction to XARELTO® (eg, anaphylactic reactions)

WARNINGS AND PRECAUTIONS

◆ Increased Risk of Thrombotic Events After Premature Discontinuation:

Premature discontinuation of any oral anticoagulant, including XARELTO®, in the absence of adequate alternative anticoagulation increases the risk of thrombotic events. An increased rate of stroke was observed during the transition from XARELTO® to warfarin in clinical trials in atrial fibrillation patients. If XARELTO® is discontinued for a reason other than pathological bleeding or completion of a course of therapy, consider coverage with another anticoagulant.

◆ Risk of Bleeding: XARELTO® increases the risk of bleeding and can cause serious or fatal bleeding. Promptly evaluate any signs or symptoms of blood loss and consider the need for blood replacement. Discontinue XARELTO® in patients with active pathological hemorrhage.

- A specific antidote for rivaroxaban is not available. Because of high plasma protein binding, rivaroxaban is not expected to be dialyzable.
- Concomitant use of other drugs that impair hemostasis increases the risk of bleeding. These include aspirin, P2Y₁₂ platelet inhibitors, other antithrombotic agents, fibrinolytic therapy, NSAIDs, selective serotonin reuptake inhibitors (SSRIs), and serotonin norepinephrine reuptake inhibitors (SNRIs).

◆ Spinal/Epidural Anesthesia or Puncture: When neuraxial anesthesia (spinal/epidural anesthesia) or spinal puncture is employed, patients treated with anticoagulant agents for prevention of thromboembolic complications are at risk of developing an epidural or spinal hematoma, which can result in long-term or permanent paralysis. To reduce the potential risk of bleeding associated with the concurrent use of XARELTO® and epidural or spinal anesthesia/analgesia or spinal puncture, consider the pharmacokinetic profile of XARELTO®. Placement or removal of an epidural catheter or lumbar puncture is best performed when the anticoagulant effect of XARELTO® is low; however, the exact timing to reach a sufficiently low anticoagulant effect in each patient is not known. An indwelling epidural or intrathecal catheter should not be removed before at least 2 half-lives have elapsed (ie, 18 hours in young patients aged 20 to 45 years and 26 hours in elderly patients aged 60 to 76 years), after the last administration of XARELTO®. The next XARELTO® dose should not be administered earlier than 6 hours after the removal of the catheter. If traumatic puncture occurs, delay the administration of XARELTO® for 24 hours. Should the physician decide to administer anticoagulation in the context of epidural or spinal anesthesia/analgesia or lumbar puncture, monitor frequently to detect any signs or symptoms of neurological impairment, such as midline back pain, sensory and motor deficits (numbness, tingling, or weakness in lower limbs), or bowel and/or bladder dysfunction. Instruct patients to immediately report if they experience any of the above signs or symptoms. If signs or symptoms of spinal hematoma are suspected, initiate urgent diagnosis and treatment including consideration for spinal cord decompression even though such treatment may not prevent or reverse neurological sequelae.

◆ Use in Patients With Renal Impairment:

- **Nonvalvular Atrial Fibrillation:** Periodically assess renal function as clinically indicated (ie, more frequently in situations in which renal function may decline) and adjust therapy accordingly. Consider dose adjustment or discontinuation of XARELTO® in patients who develop acute renal failure while on XARELTO®.
- **Treatment of Deep Vein Thrombosis (DVT), Pulmonary Embolism (PE), and Reduction in the Risk of Recurrence of DVT and of PE:** Avoid the use of XARELTO® in patients with CrCl <30 mL/min due to an expected increase in rivaroxaban exposure and pharmacodynamic effects in this patient population.
- **Prophylaxis of Deep Vein Thrombosis Following Hip or Knee Replacement Surgery:** Avoid the use of XARELTO® in patients with CrCl <30 mL/min due to an expected increase in rivaroxaban exposure and pharmacodynamic effects in this patient population. Observe closely and promptly evaluate any signs or symptoms of blood loss in patients with CrCl 30 to 50 mL/min. Patients who develop acute renal failure while on XARELTO® should discontinue the treatment.

◆ Use in Patients With Hepatic Impairment: No clinical data are available for patients with severe hepatic impairment. Avoid use of XARELTO® in patients with moderate (Child-Pugh B) and severe (Child-Pugh C) hepatic impairment or with any hepatic disease associated with coagulopathy, since drug exposure and bleeding risk may be increased.

◆ Use With P-gp and Strong CYP3A4 Inhibitors or Inducers: Avoid concomitant use of XARELTO® with known combined P-gp and strong CYP3A4 inhibitors. Avoid concomitant use of XARELTO® with drugs that are known combined P-gp and strong CYP3A4 inducers.

◆ Risk of Pregnancy-Related Hemorrhage: In pregnant women, XARELTO® should be used only if the potential benefit justifies the potential risk to the mother and fetus. XARELTO® dosing in pregnancy has not been studied. The anticoagulant

effect of XARELTO® cannot be monitored with standard laboratory testing nor readily reversed. Promptly evaluate any signs or symptoms suggesting blood loss (eg, a drop in hemoglobin and/or hematocrit, hypotension, or fetal distress).

◆ Patients With Prosthetic Heart Valves: The safety and efficacy of XARELTO® have not been studied in patients with prosthetic heart valves. Therefore, use of XARELTO® is not recommended in these patients.

◆ Acute PE in Hemodynamically Unstable Patients/Patients Who Require Thrombolysis or Pulmonary Embolectomy: Initiation of XARELTO® is not recommended acutely as an alternative to unfractionated heparin in patients with pulmonary embolism who present with hemodynamic instability or who may receive thrombolysis or pulmonary embolectomy.

DRUG INTERACTIONS

- ◆ Combined P-gp and strong CYP3A4 inhibitors increase exposure to rivaroxaban and may increase the risk of bleeding.
- ◆ Combined P-gp and strong CYP3A4 inducers decrease exposure to rivaroxaban and may increase the risk of thromboembolic events.
- ◆ XARELTO® should not be used in patients with CrCl 15 to <80 mL/min who are receiving concomitant combined P-gp and moderate CYP3A4 inhibitors (eg, erythromycin) unless the potential benefit justifies the potential risk.
- ◆ Coadministration of enoxaparin, warfarin, aspirin, clopidogrel, and chronic NSAID use may increase the risk of bleeding.
- ◆ Avoid concurrent use of XARELTO® with other anticoagulants due to increased bleeding risk, unless benefit outweighs risk. Promptly evaluate any signs or symptoms of blood loss if patients are treated concomitantly with aspirin, other platelet aggregation inhibitors, or NSAIDs.

USE IN SPECIFIC POPULATIONS

◆ Pregnancy: The limited available data on XARELTO® in pregnant women are insufficient to inform a drug-associated risk of adverse developmental outcomes. Use XARELTO® with caution in pregnant patients because of the potential for pregnancy-related hemorrhage and/or emergent delivery with an anticoagulant that is not readily reversible. The anticoagulant effect of XARELTO® cannot be reliably monitored with standard laboratory testing. Consider the benefits and risks of XARELTO® for the mother and possible risks to the fetus when prescribing XARELTO® to a pregnant woman.

- **Fetal/Neonatal adverse reactions:** Based on the pharmacologic activity of Factor Xa inhibitors and the potential to cross the placenta, bleeding may occur at any site in the fetus and/or neonate.
- **Labor or delivery:** The risk of bleeding should be balanced with the risk of thrombotic events when considering the use of XARELTO® in this setting.
- There are no adequate or well-controlled studies of XARELTO® in pregnant women, and dosing for pregnant women has not been established. Post-marketing experience is currently insufficient to determine a rivaroxaban-associated risk for major birth defects or miscarriage.
- ◆ **Lactation:** Rivaroxaban has been detected in human milk. There are insufficient data to determine the effects of rivaroxaban on the breastfed child or on milk production. The developmental and health benefits of breastfeeding should be considered along with the mother's clinical need for XARELTO® and any potential adverse effects on the breastfed infant from XARELTO® or from the underlying maternal condition.
- ◆ **Females and Males of Reproductive Potential:** Females of reproductive potential requiring anticoagulation should discuss pregnancy planning with their physician.
- ◆ **Pediatric Use:** Safety and effectiveness in pediatric patients have not been established.

OVERDOSAGE

- ◆ Discontinue XARELTO® and initiate appropriate therapy if bleeding complications associated with overdosage occur. A specific antidote for rivaroxaban is not available. The use of activated charcoal to reduce absorption in case of XARELTO® overdose may be considered. Due to the high plasma protein binding, rivaroxaban is not dialyzable.

ADVERSE REACTIONS IN CLINICAL STUDIES

- ◆ The most common adverse reactions with XARELTO® were bleeding complications.

Please see accompanying Brief Summary of full Prescribing Information, including Boxed WARNINGS, or visit www.XareltoHCP.com/PI.

References: 1. Patel MR, Mahaffey KW, Garg J, et al; and the ROCKET AF Steering Committee, for the ROCKET AF Investigators. Rivaroxaban versus warfarin in nonvalvular atrial fibrillation. *N Engl J Med.* 2011;365(10):883-891. 2. Granger CB, Alexander JH, McMurray JJV, et al; for the ARISTOTLE Committees and Investigators. Apixaban versus warfarin in patients with atrial fibrillation. *N Engl J Med.* 2011;365(11):981-992. 3. Connolly SJ, Ezekowitz MD, Yusuf S, et al; and the RE-LY Steering Committee and Investigators. Dabigatran versus warfarin in patients with atrial fibrillation. *N Engl J Med.* 2009;361(12):1139-1151. 4. Giugliano RP, Ruff CT, Braunwald E, et al; for the ENGAGE AF-TIMI 48 Investigators. Edoxaban versus warfarin in patients with atrial fibrillation. *N Engl J Med.* 2013;369(22):2093-2104. 5. Savaysa® [prescribing information]. Parsippany, NJ: Daiichi Sankyo, Inc. 2015. 6. Weitz JI, Lensing AWA, Prins MH, et al; for the EINSTEIN CHOICE Investigators. Rivaroxaban or aspirin for extended treatment of venous thromboembolism. *N Engl J Med.* 2017;376(13):1211-1222.

XARELTO® (rivaroxaban) tablets, for oral use
See package insert for full Prescribing Information

WARNING: (A) PREMATURE DISCONTINUATION OF XARELTO INCREASES THE RISK OF THROMBOTIC EVENTS, (B) SPINAL/EPIDURAL HEMATOMA

A. Premature discontinuation of XARELTO increases the risk of thrombotic events

Premature discontinuation of any oral anticoagulant, including XARELTO, increases the risk of thrombotic events. If anticoagulation with XARELTO is discontinued for a reason other than pathological bleeding or completion of a course of therapy, consider coverage with another anticoagulant [see *Dosage and Administration (2.3, 2.8)*, in full Prescribing Information, *Warnings and Precautions*, and *Clinical Studies (14.1)* in full Prescribing Information].

B. Spinal/epidural hematoma

Epidural or spinal hematomas have occurred in patients treated with XARELTO who are receiving neuraxial anesthesia or undergoing spinal puncture. These hematomas may result in long-term or permanent paralysis. Consider these risks when scheduling patients for spinal procedures. Factors that can increase the risk of developing epidural or spinal hematomas in these patients include:

- use of indwelling epidural catheters
- concomitant use of other drugs that affect hemostasis, such as non-steroidal anti-inflammatory drugs (NSAIDs), platelet inhibitors, other anticoagulants
- a history of traumatic or repeated epidural or spinal punctures
- a history of spinal deformity or spinal surgery
- optimal timing between the administration of XARELTO and neuraxial procedures is not known

[see *Warnings and Precautions and Adverse Reactions*].

Monitor patients frequently for signs and symptoms of neurological impairment. If neurological compromise is noted, urgent treatment is necessary [see *Warnings and Precautions*].

Consider the benefits and risks before neuraxial intervention in patients anticoagulated or to be anticoagulated for thromboprophylaxis [see *Warnings and Precautions*].

INDICATIONS AND USAGE

Reduction of Risk of Stroke and Systemic Embolism in Nonvalvular Atrial Fibrillation: XARELTO is indicated to reduce the risk of stroke and systemic embolism in patients with nonvalvular atrial fibrillation.

There are limited data on the relative effectiveness of XARELTO and warfarin in reducing the risk of stroke and systemic embolism when warfarin therapy is well-controlled [see *Clinical Studies (14.1)* in full Prescribing Information].

Treatment of Deep Vein Thrombosis: XARELTO is indicated for the treatment of deep vein thrombosis (DVT).

Treatment of Pulmonary Embolism: XARELTO is indicated for the treatment of pulmonary embolism (PE).

Reduction in the Risk of Recurrence of Deep Vein Thrombosis and/or Pulmonary Embolism: XARELTO is indicated for the reduction in the risk of recurrence of DVT and/or PE in patients at continued risk for recurrent DVT and/or PE after completion of initial treatment lasting at least 6 months.

Prophylaxis of Deep Vein Thrombosis Following Hip or Knee Replacement Surgery: XARELTO is indicated for the prophylaxis of DVT, which may lead to PE in patients undergoing knee or hip replacement surgery.

CONTRAINDICATIONS

XARELTO is contraindicated in patients with:

- active pathological bleeding [see *Warnings and Precautions*]
- severe hypersensitivity reaction to XARELTO (e.g., anaphylactic reactions) [see *Adverse Reactions*]

WARNINGS AND PRECAUTIONS

Increased Risk of Thrombotic Events after Premature Discontinuation: Premature discontinuation of any oral anticoagulant, including XARELTO, in the absence of adequate alternative anticoagulation increases the risk of thrombotic events. An increased rate of stroke was observed during the transition from XARELTO to warfarin in clinical trials in atrial fibrillation patients. If XARELTO is discontinued for a reason other than pathological bleeding or completion of a course of therapy, consider coverage with another anticoagulant [see *Dosage and Administration (2.3, 2.8)* and *Clinical Studies (14.1)* in full Prescribing Information].

Risk of Bleeding: XARELTO increases the risk of bleeding and can cause serious or fatal bleeding. In deciding whether to prescribe XARELTO to patients at increased risk of bleeding, the risk of thrombotic events should be weighed against the risk of bleeding.

Promptly evaluate any signs or symptoms of blood loss and consider the need for blood replacement. Discontinue XARELTO in patients with active pathological hemorrhage. The terminal elimination half-life of rivaroxaban is 5 to 9 hours in healthy subjects aged 20 to 45 years.

Concomitant use of other drugs that impair hemostasis increases the risk of bleeding. These include aspirin, P2Y₁₂ platelet inhibitors, other antithrombotic agents, fibrinolytic therapy, non-steroidal anti-inflammatory drugs (NSAIDs) [see *Drug Interactions*], selective serotonin reuptake inhibitors, and serotonin norepinephrine reuptake inhibitors.

Concomitant use of drugs that are known combined P-gp and strong CYP3A4 inhibitors increases rivaroxaban exposure and may increase bleeding risk [see *Drug Interactions*].

Reversal of Anticoagulant Effect: A specific antidote for rivaroxaban is not available. Because of high plasma protein binding, rivaroxaban is not expected to be dialyzable [see *Clinical Pharmacology (12.3)* in full Prescribing Information]. Protamine sulfate and vitamin K are not expected to affect the anticoagulant activity of rivaroxaban. Partial reversal of prothrombin time prolongation has been seen after administration of prothrombin complex concentrates (PCCs) in healthy volunteers. The use of other procoagulant reversal agents like activated prothrombin complex concentrate (APCC) or recombinant factor VIIa (rFVIIa) has not been evaluated.

Spinal/Epidural Anesthesia or Puncture: When neuraxial anesthesia (spinal/epidural anesthesia) or spinal puncture is employed, patients treated with anticoagulant agents for prevention of thromboembolic complications are at risk of developing an epidural or spinal hematoma which can result in long-term or permanent paralysis [see *Boxed Warning*].

To reduce the potential risk of bleeding associated with the concurrent use of XARELTO and epidural or spinal anesthesia/analgesia or spinal puncture, consider the pharmacokinetic profile of XARELTO [see *Clinical Pharmacology (12.3)* in full Prescribing Information]. Placement or removal of an epidural catheter or lumbar puncture is best performed when the anticoagulant effect of XARELTO is low; however, the exact timing to reach a sufficiently low anticoagulant effect in each patient is not known.

An indwelling epidural or intrathecal catheter should not be removed before at least 2 half-lives have elapsed (i.e., 18 hours in young patients aged 20 to 45 years and 26 hours in elderly patients aged 60 to 76 years), after the last administration of XARELTO [see *Clinical Pharmacology (12.3)* in full Prescribing Information]. The next XARELTO dose should not be administered earlier than 6 hours after the removal of the catheter. If traumatic puncture occurs, delay the administration of XARELTO for 24 hours.

XARELTO® (rivaroxaban) tablets

Should the physician decide to administer anticoagulation in the context of epidural or spinal anesthesia/analgesia or lumbar puncture, monitor frequently to detect any signs or symptoms of neurological impairment, such as midline back pain, sensory and motor deficits (numbness, tingling, or weakness in lower limbs), bowel and/or bladder dysfunction. Instruct patients to immediately report if they experience any of the above signs or symptoms. If signs or symptoms of spinal hematoma are suspected, initiate urgent diagnosis and treatment including consideration for spinal cord decompression even though such treatment may not prevent or reverse neurological sequelae.

Use in Patients with Renal Impairment: Nonvalvular Atrial Fibrillation: Periodically assess renal function as clinically indicated (i.e., more frequently in situations in which renal function may decline) and adjust therapy accordingly [see *Dosage and Administration (2.4)* in full Prescribing Information]. Consider dose adjustment or discontinuation of XARELTO in patients who develop acute renal failure while on XARELTO [see *Use in Specific Populations*].

Treatment of Deep Vein Thrombosis (DVT), Pulmonary Embolism (PE), and Reduction in the Risk of Recurrence of DVT and of PE: Avoid the use of XARELTO in patients with CrCl <30 mL/min due to an expected increase in rivaroxaban exposure and pharmacodynamic effects in this patient population [see *Use in Specific Populations*].

Prophylaxis of Deep Vein Thrombosis Following Hip or Knee Replacement Surgery: Avoid the use of XARELTO in patients with CrCl <30 mL/min due to an expected increase in rivaroxaban exposure and pharmacodynamic effects in this patient population. Observe closely and promptly evaluate any signs or symptoms of blood loss in patients with CrCl 30 to 50 mL/min. Patients who develop acute renal failure while on XARELTO should discontinue the treatment [see *Use in Specific Populations*].

Use in Patients with Hepatic Impairment: No clinical data are available for patients with severe hepatic impairment.

Avoid use of XARELTO in patients with moderate (Child-Pugh B) and severe (Child-Pugh C) hepatic impairment or with any hepatic disease associated with coagulopathy since drug exposure and bleeding risk may be increased [see *Use in Specific Populations*].

Use with P-gp and Strong CYP3A4 Inhibitors or Inducers: Avoid concomitant use of XARELTO with known combined P-gp and strong CYP3A4 inhibitors [see *Drug Interactions*].

Avoid concomitant use of XARELTO with drugs that are known combined P-gp and strong CYP3A4 inducers [see *Drug Interactions*].

Risk of Pregnancy-Related Hemorrhage: In pregnant women, XARELTO should be used only if the potential benefit justifies the potential risk to the mother and fetus. XARELTO dosing in pregnancy has not been studied. The anticoagulant effect of XARELTO cannot be monitored with standard laboratory testing nor readily reversed. Promptly evaluate any signs or symptoms suggesting blood loss (e.g., a drop in hemoglobin and/or hematocrit, hypotension, or fetal distress).

Patients with Prosthetic Heart Valves: The safety and efficacy of XARELTO have not been studied in patients with prosthetic heart valves. Therefore, use of XARELTO is not recommended in these patients.

Acute PE in Hemodynamically Unstable Patients or Patients Who Require Thrombolysis or Pulmonary Embolectomy: Initiation of XARELTO is not recommended acutely as an alternative to unfractionated heparin in patients with pulmonary embolism who present with hemodynamic instability or who may receive thrombolysis or pulmonary embolectomy.

ADVERSE REACTIONS

The following adverse reactions are also discussed in other sections of the labeling:

- Increased risk of stroke after discontinuation in nonvalvular atrial fibrillation [see *Boxed Warning and Warnings and Precautions*]
- Bleeding risk [see *Warnings and Precautions*]
- Spinal/epidural hematoma [see *Boxed Warning and Warnings and Precautions*]

Clinical Trials Experience: Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in the clinical trials of a drug cannot be directly compared to rates in the clinical trials of another drug and may not reflect the rates observed in clinical practice.

During clinical development for the approved indications, 18560 patients were exposed to XARELTO. These included 7111 patients who received XARELTO 15 mg or 20 mg orally once daily for a mean of 19 months (5558 for 12 months and 2512 for 24 months) to reduce the risk of stroke and systemic embolism in nonvalvular atrial fibrillation (ROCKET AF); 6962 patients who received XARELTO 15 mg orally twice daily for three weeks followed by 20 mg orally once daily to treat DVT or PE (EINSTEIN DVT, EINSTEIN PE), 10 mg or 20 mg orally once daily (EINSTEIN Extension, EINSTEIN CHOICE) to reduce the risk of recurrence of DVT and/or PE; and 4487 patients who received XARELTO 10 mg orally once daily for prophylaxis of DVT following hip or knee replacement surgery (RECORD 1-3).

Hemorrhage: The most common adverse reactions with XARELTO were bleeding complications [see *Warnings and Precautions*].

Nonvalvular Atrial Fibrillation: In the ROCKET AF trial, the most frequent adverse reactions associated with permanent drug discontinuation were bleeding events, with incidence rates of 4.3% for XARELTO vs. 3.1% for warfarin. The incidence of discontinuations for non-bleeding adverse events was similar in both treatment groups.

Table 1 shows the number of patients experiencing various types of bleeding events in the ROCKET AF trial.

Table 1: Bleeding Events in ROCKET AF* - On Treatment Plus 2 Days

Parameter	XARELTO N=7111 n (%/year)	Warfarin N=7125 n (%/year)	XARELTO vs. Warfarin HR (95% CI)
Major Bleeding [†]	395 (3.6)	386 (3.5)	1.04 (0.90, 1.20)
Intracranial Hemorrhage (ICH) [‡]	55 (0.5)	84 (0.7)	0.67 (0.47, 0.93)
Hemorrhagic Stroke [§]	36 (0.3)	58 (0.5)	0.63 (0.42, 0.96)
Other ICH	19 (0.2)	26 (0.2)	0.74 (0.41, 1.34)
Gastrointestinal (GI) [¶]	221 (2.0)	140 (1.2)	1.61 (1.30, 1.99)
Fatal Bleeding [#]	27 (0.2)	55 (0.5)	0.50 (0.31, 0.79)
ICH	24 (0.2)	42 (0.4)	0.58 (0.35, 0.96)
Non-intracranial	3 (0.0)	13 (0.1)	0.23 (0.07, 0.82)

Abbreviations: HR = Hazard Ratio, CI = Confidence interval, CRNM = Clinically Relevant Non-Major.

* Major bleeding events within each subcategory were counted once per patient, but patients may have contributed events to multiple subcategories. These events occurred during treatment or within 2 days of stopping treatment.

[†] Defined as clinically overt bleeding associated with a decrease in hemoglobin of ≥2 g/dL, a transfusion of ≥2 units of packed red blood cells or whole blood, bleeding at a critical site, or with a fatal outcome.

[‡] Intracranial bleeding events included intraparenchymal, intraventricular, subdural, subarachnoid and/or epidural hematoma.

XARELTO® (rivaroxaban) tablets

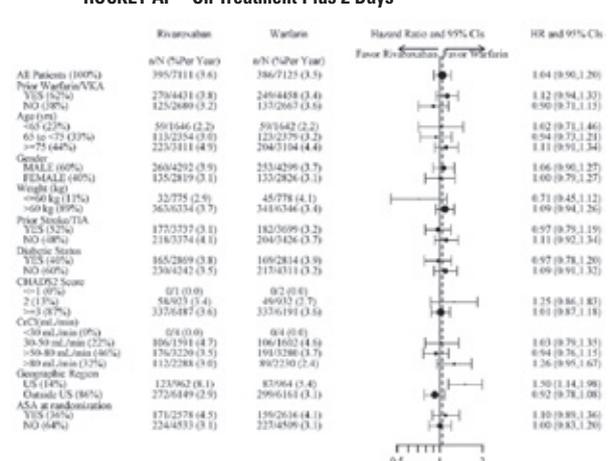
[§] Intracranial stroke in this table specifically refers to non-traumatic intraparenchymal and/or intraventricular hematoma in patients on treatment plus 2 days.

[¶] Gastrointestinal bleeding events included upper GI, lower GI, and rectal bleeding.

[#] Fatal bleeding is adjudicated death with the primary cause of death from bleeding.

Figure 1 shows the risk of major bleeding events across major subgroups.

Figure 1: Risk of Major Bleeding Events by Baseline Characteristics in ROCKET AF – On Treatment Plus 2 Days



Note: The figure above presents effects in various subgroups all of which are baseline characteristics and all of which were pre-specified (diabetic status was not pre-specified in the subgroup, but was a criterion for the CHADS2 score). The 95% confidence limits that are shown do not take into account how many comparisons were made, nor do they reflect the effect of a particular factor after adjustment for all other factors. Apparent homogeneity or heterogeneity among groups should not be over-interpreted.

Treatment of Deep Vein Thrombosis (DVT) and/or Pulmonary Embolism (PE): EINSTEIN DVT and EINSTEIN PE Studies: In the pooled analysis of the EINSTEIN DVT and EINSTEIN PE clinical studies, the most frequent adverse reactions leading to permanent drug discontinuation were bleeding events, with XARELTO vs. enoxaparin/Vitamin K antagonist (VKA) incidence rates of 1.7% vs. 1.5%, respectively. The mean duration of treatment was 208 days for XARELTO-treated patients and 204 days for enoxaparin/VKA-treated patients.

Table 2 shows the number of patients experiencing major bleeding events in the pooled analysis of the EINSTEIN DVT and EINSTEIN PE studies.

Table 2: Bleeding Events* in the Pooled Analysis of EINSTEIN DVT and EINSTEIN PE Studies

Parameter	XARELTO [†] N=4130 n (%)	Enoxaparin/ VKA [‡] N=4116 n (%)
Major bleeding event	40 (1.0)	72 (1.7)
Fatal bleeding	3 (<0.1)	8 (0.2)
Intracranial	2 (<0.1)	4 (<0.1)
Non-fatal critical organ bleeding	10 (0.2)	29 (0.7)
Intracranial [‡]	3 (<0.1)	10 (0.2)
Retroperitoneal [‡]	1 (<0.1)	8 (0.2)
Intraocular [‡]	3 (<0.1)	2 (<0.1)
Intra-articular [‡]	0	4 (<0.1)
Non-fatal non-critical organ bleeding [§]	27 (0.7)	37 (0.9)
Decrease in Hb ≥ 2 g/dL	28 (0.7)	42 (1.0)
Transfusion of ≥2 units of whole blood or packed red blood cells	18 (0.4)	25 (0.6)
Clinically relevant non-major bleeding	357 (8.6)	357 (8.7)
Any bleeding	1169 (28.3)	1153 (28.0)

* Bleeding event occurred after randomization and up to 2 days after the last dose of study drug. Although a patient may have had 2 or more events, the patient is counted only once in a category.

[†] Treatment schedule in EINSTEIN DVT and EINSTEIN PE studies: XARELTO 15 mg twice daily for 3 weeks followed by 20 mg once daily; enoxaparin/VKA [enoxaparin: 1 mg/kg twice daily, VKA: individually titrated doses to achieve a target INR of 2.5 (range: 2.0-3.0)]

[‡] Treatment-emergent major bleeding events with at least >2 subjects in any pooled treatment group

[§] Major bleeding which is not fatal or in a critical organ, but resulting in a decrease in Hb ≥ 2 g/dL and/or transfusion of ≥2 units of whole blood or packed red blood cells

Reduction in the Risk of Recurrence of DVT and/or PE: EINSTEIN CHOICE Study: In the EINSTEIN CHOICE clinical study, the most frequent adverse reactions associated with permanent drug discontinuation were bleeding events, with incidence rates of 1% for XARELTO 10 mg, 2% for XARELTO 20 mg, and 1% for acetylsalicylic acid (aspirin) 100 mg. The mean duration of treatment was 293 days for XARELTO 10 mg-treated patients and 286 days for aspirin 100 mg-treated patients.

Table 3 shows the number of patients experiencing bleeding events in the EINSTEIN CHOICE study.

Table 3: Bleeding Events* in EINSTEIN CHOICE

Parameter	XARELTO [†] 10 mg N=1127 n (%)	Acetylsalicylic Acid (aspirin) [‡] 100 mg N=1131 n (%)
Major bleeding event	5 (0.4)	3 (0.3)
Fatal bleeding	0	1 (<0.1)
Non-fatal critical organ bleeding	2 (0.2)	1 (<0.1)
Non-fatal non-critical organ bleeding [§]	3 (0.3)	1 (<0.1)
Clinically relevant non-major (CRNM) bleeding [¶]	22 (2.0)	20 (1.8)
Any bleeding	151 (13.4)	138 (12.2)

* Bleeding event occurred after the first dose and up to 2 days after the last dose of study drug. Although a patient may have had 2 or more events, the patient is counted only once in a category.

[†] Treatment schedule: XARELTO 10 mg once daily or aspirin 100 mg once daily.

⁵ Major bleeding which is not fatal or in a critical organ, but resulting in a decrease in Hb \geq 2 g/dL and/or transfusion of \geq 2 units of whole blood or packed red blood cells.

⁶ Bleeding which was clinically overt, did not meet the criteria for major bleeding, but was associated with medical intervention, unscheduled contact with a physician, temporary cessation of treatment, discomfort for the patient, or impairment of activities of daily life.

In the EINSTEIN CHOICE study, there was an increased incidence of bleeding, including major and CRNM bleeding in the XARELTO 20 mg group compared to the XARELTO 10 mg or aspirin 100 mg groups.

Prophylaxis of Deep Vein Thrombosis Following Hip or Knee Replacement Surgery: In the RECORD clinical trials, the overall incidence rate of adverse reactions leading to permanent treatment discontinuation was 3.7% with XARELTO.

The rates of major bleeding events and any bleeding events observed in patients in the RECORD clinical trials are shown in Table 4.

Table 4: Bleeding Events* in Patients Undergoing Hip or Knee Replacement Surgeries (RECORD 1-3)

	XARELTO 10 mg	Enoxaparin [†]
Total treated patients	N=4487 n (%)	N=4524 n (%)
Major bleeding event	14 (0.3)	9 (0.2)
Fatal bleeding	1 (<0.1)	0
Bleeding into a critical organ	2 (<0.1)	3 (0.1)
Bleeding that required re-operation	7 (0.2)	5 (0.1)
Extra-surgical site bleeding requiring transfusion of >2 units of whole blood or packed cells	4 (0.1)	1 (<0.1)
Any bleeding event [‡]	261 (5.8)	251 (5.6)
Hip Surgery Studies	N=3281 n (%)	N=3298 n (%)
Major bleeding event	7 (0.2)	3 (0.1)
Fatal bleeding	1 (<0.1)	0
Bleeding into a critical organ	1 (<0.1)	1 (<0.1)
Bleeding that required re-operation	2 (0.1)	1 (<0.1)
Extra-surgical site bleeding requiring transfusion of >2 units of whole blood or packed cells	3 (0.1)	1 (<0.1)
Any bleeding event [‡]	201 (6.1)	191 (5.8)
Knee Surgery Study	N=1206 n (%)	N=1226 n (%)
Major bleeding event	7 (0.6)	6 (0.5)
Fatal bleeding	0	0
Bleeding into a critical organ	1 (0.1)	2 (0.2)
Bleeding that required re-operation	5 (0.4)	4 (0.3)
Extra-surgical site bleeding requiring transfusion of >2 units of whole blood or packed cells	1 (0.1)	0
Any bleeding event [‡]	60 (5.0)	60 (4.9)

* Bleeding events occurring any time following the first dose of double-blind study medication (which may have been prior to administration of active drug) until two days after the last dose of double-blind study medication. Patients may have more than one event.

[†] Includes the placebo-controlled period for RECORD 2, enoxaparin dosing was 40 mg once daily (RECORD 1-3)

[‡] Includes major bleeding events

Following XARELTO treatment, the majority of major bleeding complications (\geq 60%) occurred during the first week after surgery.

Other Adverse Reactions: Non-hemorrhagic adverse reactions reported in \geq 1% of XARELTO-treated patients in the EINSTEIN DVT and EINSTEIN PE studies are shown in Table 5.

Table 5: Other Adverse Reactions* Reported by \geq 1% of XARELTO-Treated Patients in EINSTEIN DVT and EINSTEIN PE Studies

Body System Adverse Reaction	XARELTO 20 mg	Enoxaparin/VKA
EINSTEIN DVT Study	N=1718 n (%)	N=1711 n (%)
Gastrointestinal disorders		
Abdominal pain	46 (2.7)	25 (1.5)
General disorders and administration site conditions		
Fatigue	24 (1.4)	15 (0.9)
Musculoskeletal and connective tissue disorders		
Back pain	50 (2.9)	31 (1.8)
Muscle spasm	23 (1.3)	13 (0.8)
Nervous system disorders		
Dizziness	38 (2.2)	22 (1.3)
Psychiatric disorders		
Anxiety	24 (1.4)	11 (0.6)
Depression	20 (1.2)	10 (0.6)
Insomnia	28 (1.6)	18 (1.1)
EINSTEIN PE Study	XARELTO 20 mg	Enoxaparin/VKA
	N=2412 n (%)	N=2405 n (%)
Skin and subcutaneous tissue disorders		
Pruritus	53 (2.2)	27 (1.1)

* Adverse reaction with Relative Risk $>$ 1.5 for XARELTO versus comparator

Non-hemorrhagic adverse reactions reported in \geq 1% of XARELTO-treated patients in RECORD 1-3 studies are shown in Table 6.

Table 6: Other Adverse Drug Reactions* Reported by \geq 1% of XARELTO-Treated Patients in RECORD 1-3 Studies

Body System Adverse Reaction	XARELTO 10 mg	Enoxaparin [†]
Injury, poisoning and procedural complications		
Wound secretion	125 (2.8)	89 (2.0)
Musculoskeletal and connective tissue disorders		
Pain in extremity	74 (1.7)	55 (1.2)
Muscle spasm	52 (1.2)	32 (0.7)
Nervous system disorders		
Syncope	55 (1.2)	32 (0.7)
Skin and subcutaneous tissue disorders		
Pruritus	96 (2.1)	79 (1.8)
Blister	63 (1.4)	40 (0.9)

* Adverse reaction occurring any time following the first dose of double-blind medication, which may have been prior to administration of active drug, until two days after the last dose of double-blind study medication

[†] Includes the placebo-controlled period of RECORD 2, enoxaparin dosing was 40 mg once daily (RECORD 1-3)

Other clinical trial experience: In an investigational study of acute medically ill patients being treated with XARELTO 10 mg tablets, cases of pulmonary hemorrhage and pulmonary hemorrhage with bronchiectasis were observed.

Postmarketing Experience: The following adverse reactions have been identified during post-approval use of XARELTO. Because these reactions are reported voluntarily from a population of uncertain size, it is not always possible to reliably estimate their frequency or establish a causal relationship to drug exposure.

Blood and lymphatic system disorders: agranulocytosis, thrombocytopenia

Gastrointestinal disorders: retroperitoneal hemorrhage

Hepatobiliary disorders: jaundice, cholestasis, hepatitis (including hepatocellular injury)

Immune system disorders: hypersensitivity, anaphylactic reaction, anaphylactic shock, angioedema

Nervous system disorders: cerebral hemorrhage, subdural hematoma, epidural hematoma, hemiparesis

Skin and subcutaneous tissue disorders: Stevens-Johnson syndrome

DRUG INTERACTIONS

General Inhibition and Induction Properties: Rivaroxaban is a substrate of CYP3A4/5, CYP2J2, and the P-gp and ATP-binding cassette G2 (ABCG2) transporters. Combined P-gp and strong CYP3A4 inhibitors increase exposure to rivaroxaban and may increase the risk of bleeding. Combined P-gp and strong CYP3A4 inducers decrease exposure to rivaroxaban and may increase the risk of thromboembolic events.

Drugs that Inhibit Cytochrome P450 3A4 Enzymes and Drug Transport Systems: Interaction with Combined P-gp and Strong CYP3A4 Inhibitors: Avoid concomitant administration of XARELTO with known combined P-gp and strong CYP3A4 inhibitors (e.g., ketoconazole and ritonavir) [see Warnings and Precautions and Clinical Pharmacology (12.3) in full Prescribing Information].

Although clarithromycin is a combined P-gp and strong CYP3A4 inhibitor, pharmacokinetic data suggests that no precautions are necessary with concomitant administration with XARELTO as the change in exposure is unlikely to affect the bleeding risk [see Clinical Pharmacology (12.3) in full Prescribing Information].

Interaction with Combined P-gp and Moderate CYP3A4 Inhibitors in Patients with Renal Impairment: XARELTO should not be used in patients with CrCl 15 to $<$ 80 mL/min who are receiving concomitant combined P-gp and moderate CYP3A4 inhibitors (e.g., erythromycin) unless the potential benefit justifies the potential risk [see Warnings and Precautions and Clinical Pharmacology (12.3) in full Prescribing Information].

Drugs that Induce Cytochrome P450 3A4 Enzymes and Drug Transport Systems: Avoid concomitant use of XARELTO with drugs that are combined P-gp and strong CYP3A4 inducers (e.g., carbamazepine, phenytoin, rifampin, St. John's wort) [see Warnings and Precautions and Clinical Pharmacology (12.3) in full Prescribing Information].

Anticoagulants and NSAIDs/Aspirin: Coadministration of enoxaparin, warfarin, aspirin, clopidogrel and chronic NSAID use may increase the risk of bleeding [see Clinical Pharmacology (12.3) in full Prescribing Information].

Avoid concurrent use of XARELTO with other anticoagulants due to increased bleeding risk unless benefit outweighs risk. Promptly evaluate any signs or symptoms of blood loss if patients are treated concomitantly with aspirin, other platelet aggregation inhibitors, or NSAIDs [see Warnings and Precautions].

USE IN SPECIFIC POPULATIONS

Pregnancy: Risk Summary: The limited available data on XARELTO in pregnant women are insufficient to inform a drug-associated risk of adverse developmental outcomes. Use XARELTO with caution in pregnant patients because of the potential for pregnancy related hemorrhage and/or emergent delivery with an anticoagulant that is not readily reversible. The anticoagulant effect of XARELTO cannot be reliably monitored with standard laboratory testing. Consider the benefits and risks of XARELTO for the mother and possible risks to the fetus when prescribing XARELTO to a pregnant woman [see Warnings and Precautions].

Adverse outcomes in pregnancy occur regardless of the health of the mother or the use of medications. The estimated background risk of major birth defects and miscarriage for the indicated populations is unknown. In the U.S. general population, the estimated background risk of major birth defects and miscarriage in clinically recognized pregnancies is 2-4% and 15-20%, respectively.

Clinical Considerations: Disease-Associated Maternal and/or Embryo/Fetal Risk: Pregnancy is a risk factor for venous thromboembolism and that risk is increased in women with inherited or acquired thrombophilias. Pregnant women with thromboembolic disease have an increased risk of maternal complications including pre-eclampsia. Maternal thromboembolic disease increases the risk for intrauterine growth restriction, placental abruption and early and late pregnancy loss.

Fetal/Neonatal Adverse Reactions: Based on the pharmacologic activity of Factor Xa inhibitors and the potential to cross the placenta, bleeding may occur at any site in the fetus and/or neonate.

Labor or Delivery: All patients receiving anticoagulants, including pregnant women, are at risk for bleeding and this risk may be increased during labor or delivery [see Warnings and Precautions]. The risk of bleeding should be balanced with the risk of thrombotic events when considering the use of XARELTO in this setting.

Data: Human Data: There are no adequate or well-controlled studies of XARELTO in pregnant women, and dosing for pregnant women has not been established. Post-marketing experience is currently insufficient to determine a rivaroxaban-associated risk for major birth defects or miscarriage. In an *in vitro* placenta perfusion model, unbound rivaroxaban was rapidly transferred across the human placenta.

Animal Data: Rivaroxaban crosses the placenta in animals. Rivaroxaban increased fetal toxicity (increased resorptions, decreased number of live fetuses, and decreased fetal body weight) when pregnant rabbits were given oral doses of \geq 10 mg/kg rivaroxaban during the period of organogenesis. This dose corresponds to about 4 times the human exposure of unbound drug, based on AUC comparisons at the highest recommended human dose of 20 mg/day. Fetal body weights decreased when pregnant rats were given oral doses of 120 mg/kg during the period of organogenesis. This dose corresponds to about 14 times the human exposure of unbound drug. In rats, peripartur maternal bleeding and maternal and fetal death occurred at the rivaroxaban dose of 40 mg/kg (about 6 times maximum human exposure of the unbound drug at the human dose of 20 mg/day).

Lactation: Risk Summary: Rivaroxaban has been detected in human milk. There are insufficient data to determine the effects of rivaroxaban on the breastfed child or on milk production. Rivaroxaban and/or its metabolites were present in the milk of rats. The developmental and health benefits of breastfeeding should be considered along with the mother's clinical need for XARELTO and any potential adverse effects on the breastfed infant from XARELTO or from the underlying maternal condition [see Data].

Data: Animal data: Following a single oral administration of 3 mg/kg of radioactive [¹⁴C]-rivaroxaban to lactating rats between Day 8 to 10 postpartum, the concentration of total radioactivity was determined in milk samples collected up to 32 hours post-dose. The estimated amount of radioactivity excreted with milk within 32 hours after administration was 2.1% of the maternal dose.

Females and Males of Reproductive Potential: Females of reproductive potential requiring anticoagulation should discuss pregnancy planning with their physician.

Pediatric Use: Safety and effectiveness in pediatric patients have not been established.

Geriatric Use: Of the total number of patients in the RECORD 1-3 clinical studies evaluating XARELTO, about 54% were 65 years and over, while about 15% were $>$ 75 years. In ROCKET AF, approximately 77% were 65 years and over and about 38% were $>$ 75 years. In the EINSTEIN DVT, PE and Extension clinical studies approximately 37% were 65 years and over and about 16% were $>$ 75 years. In EINSTEIN CHOICE, approximately 39% were 65 years and over and about 12% were $>$ 75 years. In clinical trials the efficacy of XARELTO in the elderly (65 years or older) was similar to that seen in patients younger than 65 years. Both thrombotic and bleeding event rates were higher in these older patients, but the risk-benefit profile was favorable in all age groups [see Clinical Pharmacology (12.3) and Clinical Studies (14) in full Prescribing Information].

Renal Impairment: In pharmacokinetic studies, compared to healthy subjects with normal creatinine clearance, rivaroxaban exposure increased by approximately 44 to 64% in subjects with renal impairment. Increases in pharmacodynamic effects were also observed [see Clinical Pharmacology (12.3) in full Prescribing Information].

Nonvalvular Atrial Fibrillation: In the ROCKET AF trial, patients with CrCl 30 to 50 mL/min were administered XARELTO 15 mg once daily resulting in serum concentrations of rivaroxaban and clinical outcomes similar to those in patients with better renal function administered XARELTO 20 mg once daily. Patients with CrCl 15 to 30 mL/min were not studied, but administration of XARELTO 15 mg once daily is also expected to result in serum concentrations of rivaroxaban similar to those in patients with normal renal function [see Dosage and Administration (2.4) and Clinical Pharmacology (12.3) in full Prescribing Information].

Patients with End-Stage Renal Disease on Dialysis: Clinical efficacy and safety studies with XARELTO did not enroll patients with end-stage renal disease (ESRD) on dialysis. In patients with ESRD maintained on intermittent hemodialysis, administration of XARELTO 15 mg once daily will result in concentrations of rivaroxaban and pharmacodynamic activity similar to those observed in the ROCKET AF study [see Clinical Pharmacology (12.2, 12.3) in full Prescribing Information]. It is not known whether these concentrations will lead to similar stroke reduction and bleeding risk in patients with ESRD on dialysis as was seen in ROCKET AF.

Treatment of DVT and/or PE and Reduction in the Risk of Recurrence of DVT and/or PE: In the EINSTEIN trials, patients with CrCl values $<$ 30 mL/min at screening were excluded from the studies. Avoid the use of XARELTO in patients with CrCl $<$ 30 mL/min.

Prophylaxis of DVT Following Hip or Knee Replacement Surgery: The combined analysis of the RECORD 1-3 clinical efficacy studies did not show an increase in bleeding risk for patients with CrCl 30 to 50 mL/min and reported a possible increase in total venous thromboemboli in this population. Observe closely and promptly evaluate any signs or symptoms of blood loss in patients with CrCl 30 to 50 mL/min. Avoid the use of XARELTO in patients with CrCl $<$ 30 mL/min.

Hepatic Impairment: In a pharmacokinetic study, compared to healthy subjects with normal liver function, AUC increases of 127% were observed in subjects with moderate hepatic impairment (Child-Pugh B).

The safety or PK of XARELTO in patients with severe hepatic impairment (Child-Pugh C) has not been evaluated [see Clinical Pharmacology (12.3) in full Prescribing Information].

Avoid the use of XARELTO in patients with moderate (Child-Pugh B) and severe (Child-Pugh C) hepatic impairment or with any hepatic disease associated with coagulopathy.

OVERDOSAGE

Overdose of XARELTO may lead to hemorrhage. Discontinue XARELTO and initiate appropriate therapy if bleeding complications associated with overdosage occur. A specific antidote for rivaroxaban is not available. Rivaroxaban systemic exposure is not further increased at single doses $>$ 50 mg due to limited absorption. The use of activated charcoal to reduce absorption in case of XARELTO overdose may be considered. Due to the high plasma protein binding, rivaroxaban is not dialyzable [see Warnings and Precautions and Clinical Pharmacology (12.3) in full Prescribing Information]. Partial reversal of laboratory anticoagulation parameters may be achieved with use of plasma products.

Active Ingredient Made in Germany

Finished Product Manufactured by:

Janssen Ortho, LLC

Gurabo, PR 00778

or

Bayer AG

51368 Leverkusen, Germany

Manufactured for:

Janssen Pharmaceuticals, Inc.

Titusville, NJ 08560

Licensed from:

Bayer HealthCare AG

51368 Leverkusen, Germany





ACEP Now

The Official Voice of Emergency Medicine

EDITORIAL STAFF

MEDICAL EDITOR-IN-CHIEF
Kevin Klauer, DO, EJD, FACEP
kklauer@acep.org

EDITOR
Dawn Antoline-Wang
dantolin@wiley.com

ART DIRECTOR
Chris Whissen
chris@quillandcode.com

ACEP STAFF

EXECUTIVE DIRECTOR
Dean Wilkerson, JD, MBA, CAE
dwilkerson@acep.org

DIRECTOR, MEMBER COMMUNICATIONS AND MARKETING
Nancy Calaway, CAE
ncalaway@acep.org

ASSOCIATE EXECUTIVE DIRECTOR, MEMBERSHIP AND EDUCATION DIVISION
Robert Heard, MBA, CAE
rheard@acep.org

COMMUNICATIONS MANAGER
Noa Gavin
ngavin@acep.org

PUBLISHING STAFF

EXECUTIVE EDITOR/PUBLISHER
Lisa Dionne Lento
ldionne@wiley.com

ASSOCIATE DIRECTOR, ADVERTISING SALES
Steve Jezzard
sjezzard@wiley.com

ADVERTISING STAFF

DISPLAY ADVERTISING
Dean Mather or Kelly Miller
mjmrvcia@mrvcia.com
(856) 768-9360

CLASSIFIED ADVERTISING
Kevin Dunn Cynthia Kucera
kdunn@cunnasso.com ckucera@cunnasso.com
Cunningham and Associates (201) 767-4170

EDITORIAL ADVISORY BOARD

James G. Adams, MD, FACEP
James J. Augustine, MD, FACEP
Richard M. Cantor, MD, FACEP
L. Anthony Cirillo, MD, FACEP
Marco Coppola, DO, FACEP
Jordan Celeste, MD
Jeremy Samuel Faust, MD, MS, MA
Jonathan M. Glauser, MD, MBA, FACEP
Michael A. Granovsky, MD, FACEP
Sarah Hoper, MD, JD
Linda L. Lawrence, MD, FACEP
Frank LoVecchio, DO, FACEP

Catherine A. Marco, MD, FACEP
Ricardo Martinez, MD, FACEP
Mark S. Rosenberg, DO, MBA, FACEP
Sandra M. Schneider, MD, FACEP
Jeremiah Schuur, MD, MHS, FACEP
David M. Siegel, MD, JD, FACEP
Michael D. Smith, MD, MBA, FACEP
Robert C. Solomon, MD, FACEP
Annalise Sorrentino, MD, FACEP
Jennifer L'Hommedieu Stankus, MD, JD
Peter Viccellio, MD, FACEP
Rade B. Vukmir, MD, JD, FACEP

INFORMATION FOR SUBSCRIBERS

Subscriptions are free for members of ACEP and SEMPA. Free access is also available online at www.acepnow.com. Paid subscriptions are available to all others for \$278/year individual. To initiate a paid subscription, email cs-journals@wiley.com or call (800) 835-6770. ACEP Now (ISSN: 2333-259X print; 2333-2603 digital) is published monthly on behalf of the American College of Emergency Physicians by Wiley Subscription Services, Inc., a Wiley Company, 111 River Street, Hoboken, NJ 07030-5774. Periodical postage paid at Hoboken, NJ, and additional offices. Postmaster: Send address changes to ACEP Now, American College of Emergency Physicians, P.O. Box 619911, Dallas, Texas 75261-9911. Readers can email address changes and correspondence to acepnow@acep.org. Printed in the United States by Hess Print Solutions (HPS), Brimfield, OH. Copyright © 2018 American College of Emergency Physicians. All rights reserved. No part of this publication may be reproduced, stored, or transmitted in any form or by any means and without the prior permission in writing from the copyright holder. ACEP Now, an official publication of the American College of Emergency Physicians, provides indispensable content that can be used in daily practice. Written primarily by the physician for the physician, ACEP Now is the most effective means to communicate our messages, including practice-changing tips, regulatory updates, and the most up-to-date information on healthcare reform. Each issue also provides material exclusive to the members of the American College of Emergency Physicians. The ideas and opinions expressed in ACEP Now do not necessarily reflect those of the American College of Emergency Physicians or the Publisher. The American College of Emergency Physicians and Wiley will not assume responsibility for damages, loss, or claims of any kind arising from or related to the information contained in this publication, including any claims related to the products, drugs, or services mentioned herein. The views and opinions expressed do not necessarily reflect those of the Publisher, the American College of the Emergency Physicians, or the Editors, neither does the publication of advertisements constitute any endorsement by the Publisher, the American College of the Emergency Physicians, or the Editors of the products advertised.



WILEY



NEWS FROM THE COLLEGE

UPDATES AND ALERTS FROM ACEP

ACEP18

EM:RAP GO and ACEP have teamed up to give ACEP18 registration scholarships to 20 international emergency physicians. This year, a contingent from Haiti, Guyana, and Chile will attend as part of the EM:RAP GO and ACEP partnership.

We'll see you in San Diego!

June 2018 Board of Directors Meeting Summary

This is an abbreviated summary of the June 2018 ACEP Board of Directors meeting. For a full list of all actions taken by the Board, visit acep.org/leadershipreport.

The Board approved:

- Clinical policy "Critical Issues in the Evaluation and Management of ED Patients with Suspected Non-ST-Elevation Acute Coronary Syndromes"
- New award: Innovative Change in Practice Management. (Nominees will be accepted in 2019.)
- New policy statements:
 - » Prescription Drug Pricing
 - » Interpretation of EMTALA in Medical Malpractice Litigation
 - » Use of Social Media by Emergency Physicians

- Developing a business plan for layperson training to stop bleeding and render CPR

Teaching Award Winners

National Junior Faculty Teaching Award

- Anne Messman, MD, FACEP
Michigan Chapter
- Joan Noelker, MD
Missouri Chapter
- Adriana Olson, MD
Texas Chapter
- Ryan Pedigo, MD
California Chapter

National Faculty Teaching Award

- Michelle Daniel, MD, FACEP
Michigan Chapter
- Maria Moreira, MD, FACEP
Colorado Chapter
- Christopher Sampson, MD, FACEP
Missouri Chapter
- Robert Tubbs, MD, FACEP
Rhode Island Chapter

National Outstanding Medical Student Award

- Kyle Barbour
California Chapter
- Katie O'Connor
Maryland Chapter
- Sheri-Ann Peckham
Georgia Chapter
- Zachary Wettstein
California Chapter

National EM Excellence in Bedside Teaching

- Timothy Larsen, MD
Nebraska Chapter



ACS COT meeting participants.

ACEP Representing EM

ACEP senior leadership recently attended the American College of Surgeons Committee on Trauma (ACS COT) meeting. The group discussed achieving greater involvement in the Trauma Center Verification Program. Also discussed was a revision of the REBOA statement.

ACEP participated in a small meeting of several medical specialty associations with America's Health Insurance Plans (AHIP) and several private payers to discuss how to expand access to non-opioid treatments and other pain management strategies to address chronic low back pain.

ACEP was invited to participate in a meeting at the Food and Drug Administration (FDA) on drug compounding. The FDA was seeking input from physician groups, and ACEP member Craig Manifold, DO, FACEP, and ACEP staff Jeff Davis attended to provide the emergency medicine perspective.

ACEP led an effort to convene and draft a group response to the Centers for Medicare and Medicaid Services (CMS) request for information on price transparency included in the annual Inpatient Prospective Payment Sys-

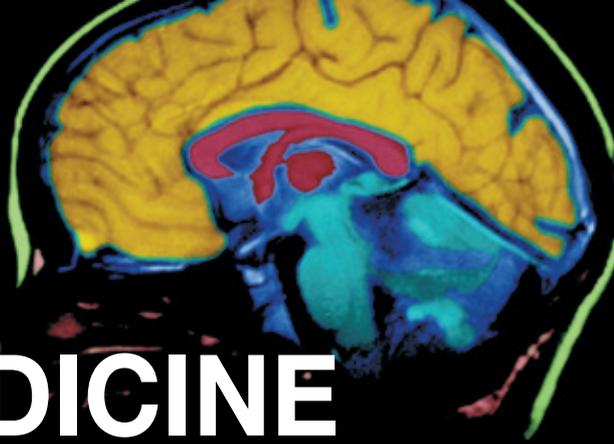
tem proposed rule, which specifically asked for input on out-of-network and surprise bills, including those from emergency care. Eleven medical associations and organization, in addition to ACEP, participated and signed onto the letter.

The congressional drug shortage letter to FDA Commissioner Scott Gottlieb, which ACEP developed, and ACEP Leadership & Advocacy Conference attendees asked their members of Congress to sign onto, closed with 107 House representatives and 31 Senators signed on—over a quarter of the entire Congress. ACEP also worked with *The New York Times* on a story it ran on the drug shortage issue, which referenced ACEP's drug shortage survey as well as the congressional letter.

ACEP and the Medical Association of Georgia filed suit against Anthem's Blue Cross and Blue Shield of Georgia in federal court in an effort to compel the insurance giant to rescind its controversial and dangerous emergency care policy that retroactively denies coverage for emergency patients. To read the lawsuit, visit newsroom.acep.org. ☘

22nd Annual

THE NATIONAL EMERGENCY MEDICINE BOARD REVIEW COURSE



Over 1,700 Participants in 2017 (Over 30,000 Since Inception)

2018 COURSE DATES



JULY 27-29, 2018

Course Has Passed

RESORT PLACE
LAS VEGAS, NV



AUGUST 14-16, 2018

Course Has Passed

RESORT PLACE HOTEL
BALTIMORE, MD



AUGUST 27-30, 2018

PLANET HOLLYWOOD
LAS VEGAS, NV

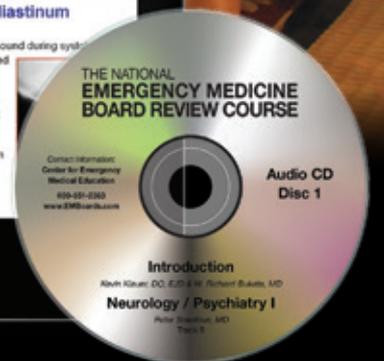
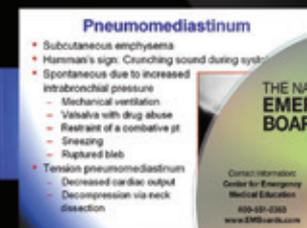


Take Your ConCert™ Exam up to 5 Years Early and Be Recertified for up to 15 Years!

See the ABEM Website for Details

Avoid the Unknowns Associated with Future Recertification Procedures

SELF-STUDY COURSE



Register Today at

www.EMBoards.com/course

or Call **1-800-458-4779** (9:00am-4:30pm ET, M-F)

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

If You Don't Pass, You Don't Pay!

Content Updated for 2018

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

THE BREAK ROOM



SEND YOUR THOUGHTS AND COMMENTS TO ACEPNOW@ACEP.ORG

Sometimes Opioids Are Necessary

Editor's Note: This letter is in response to May's *Skeptics' Guide to Emergency Medicine* column, "Lidocaine for Renal Colic," by Ken Milne, MD, MSC, CCFP-EM, FCFP, FRRMS.

This is only an important question to ask if you believe that giving opioids to a low-risk opioid-naive patient with objective symptoms somehow increases the odds of chronic opioid use or misuse.

The post-op surgical literature on opioid-naive patients that does *not* screen out high-risk patients (mental illness, smoking, alcohol, etc.) finds that chronic use from opioid administration is 0.2 percent (close to zero).

So if you have a low-risk patient with a kidney stone, give the poor soul whatever it takes to quickly, effectively, and safely make them better (this will likely include opioids in many real-deal stones).

If you have a patient at high risk for opioid misuse (chronic pain, addiction including nicotine, psychiatric disease including depression and anxiety, or electronic pharmacy records indicating excessive scripts), then we should be comparing non-opioid medications (toradol versus lidocaine).

Not sure why the opioid crisis has put all of our patients into a one-size-fits-all category of always starting with a non-opioid approach.

Mark Mosley, MD
Wichita, Kansas

HIGHLIGHTS FROM ANNALS OF EMERGENCY MEDICINE

The Role of Restrictive Covenants in Emergency Medicine Employment Contracts

by JAN GREENE

This month, we offer the second installment of our new feature in ACEP Now that highlights key research studies published in this month's issue of Annals of Emergency Medicine. The following is a summary of "Naloxone 'Moral Hazard' Debate Pits Economists Against Physicians" from the August issue of Annals of Emergency Medicine. Visit www.annemergmed.com to read the complete article.

An economics research paper arguing that naloxone distribution has had unintended consequences, such as increased crime because opioid users didn't die from their overdoses, prompted an emotional response from advocates for people with opioid use disorder and criticism about research methods from physicians. Critics cited both the apparent underlying message of the paper and its analytical methods.

The debate, which took place largely via Twitter, illuminated a cultural gulf between the disciplines of economics, working at a more theoretical level, and emergency and addiction medicine, whose practitioners are working with real people struggling with addiction.

What set off many critics was the use of the term "moral hazard" and the paper's emphasis on criminality. Some readers thought the analysis was making a moral judgment about people with opioid-use disorder. However, one author explained that moral hazard is an economics term that refers to a particular kind of unintended consequence. To their many supporters, the economists were simply follow-

ing a common practice in their field of looking for moral hazard from public health policies to evaluate their overall impact on society. The researchers wanted to measure what happened after multiple states approved legislation to expand the use of naloxone to reverse opioid overdoses. They studied opioid-related crime and opioid-related emergency department visits, comparing states that implemented naloxone laws with those that didn't. They found a 14% increase in opioid-related mortality in the Midwest and "suggestive evidence" that broadening naloxone access increased the use of fentanyl. They concluded there was also an increase in opioid-related arrests correlated to naloxone laws.

Critics said the state laws studied were highly variable and the time period too short to understand the laws' effects and whether they resulted in actual distribution and use of the reversal drug. They also said that increased ED visits were to be expected, as naloxone use is meant to result in an ED visit, and that ED use rose during the same time period with Medicaid expansion. The economist authors reanalyzed parts of their work in response to criticism and said their conclusions remained valid. ➔

Reference

1. Doleac JL, Mukherjee A. The moral hazard of lifesaving innovations: naloxone access, opioid abuse, and crime. SSRN website. Available at <http://dx.doi.org/10.2139/ssrn.3135264>. Accessed July 22, 2018.

JAN GREENE is a health care writer based in northern California.

Time is Running Out to
SAVE \$100

Register with Promo Code
WAVES by August 31



The world's largest and most prestigious Emergency Medicine conference



Scientific Assembly
SAN DIEGO, CA 18
October 1-4, 2018

REGISTER TODAY!

And Join us for our 50th Anniversary Celebration

More than 350 educational courses, labs and workshops

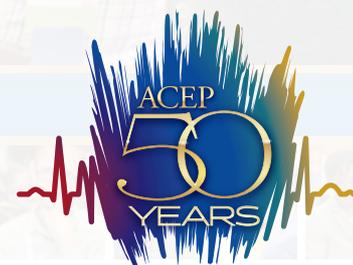
Networking events and parties at extraordinary venues

World's largest EM exhibit hall featuring the latest products and services

Family-friendly parties and child care available

And so much more!

acep.org/acep18



Making Every Moment Count

Approved for AMA PRA Category 1 Credit™

ACN_0618_1189_0718



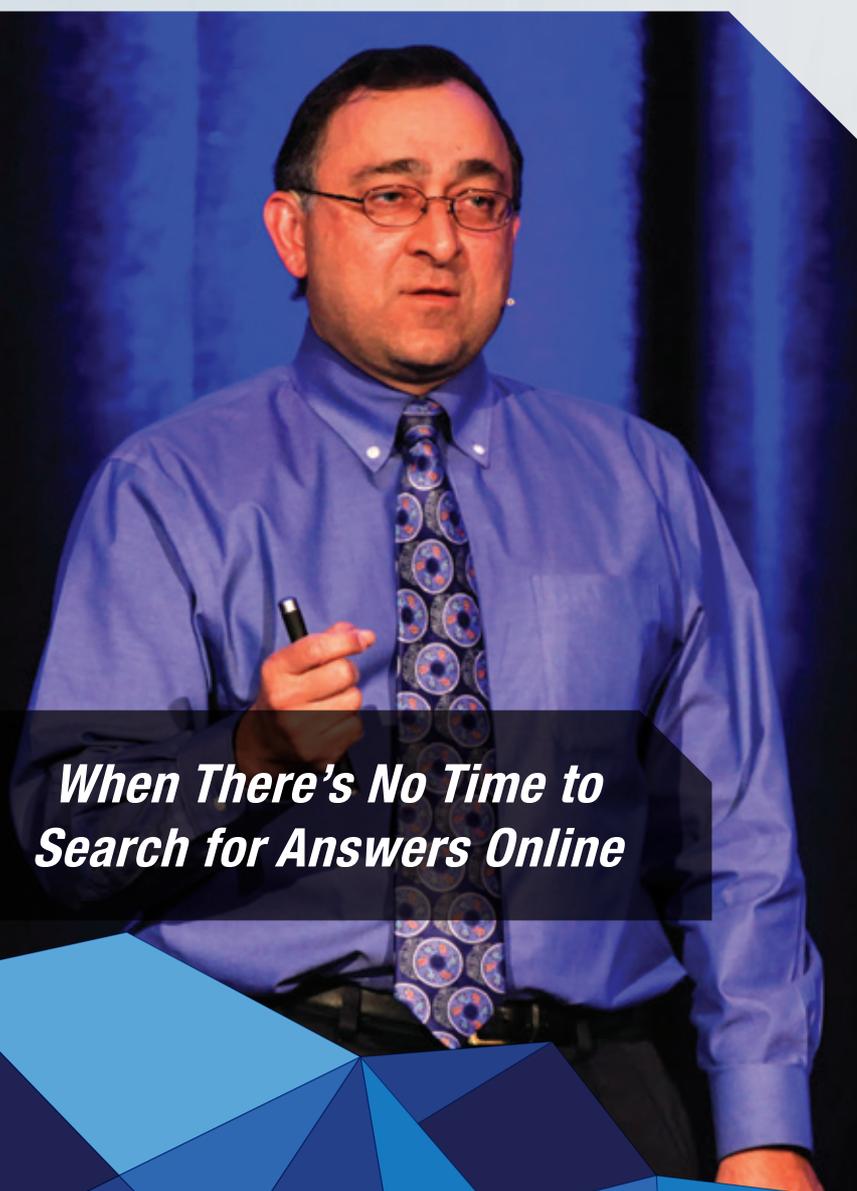
THE HEART COURSE

November 5-8, 2018
Caesars Palace, Las Vegas, NV



State-of-the-Art Cardiovascular and Neurovascular Education for the Acute Care Clinician

Now in its 13th year, The Heart Course provides an opportunity to learn, discuss, and apply emerging data, new guidelines, and optimal treatment strategies for the management of cardiac and vascular emergencies.



*When There's No Time to
Search for Answers Online*

COURSE HIGHLIGHTS:

- ✓ Safely and Rapidly Assessing Chest Pain
- ✓ Urgent Diagnosis of Routine & Complex MIs
- ✓ The Initial Management of the MI Patient
- ✓ Managing the Crashing CHF Patient
- ✓ Diagnosis and Managing Lethal Dysrhythmias
- ✓ Dealing with Uncontrolled Atrial Fibrillation
- ✓ Initiation of Anticoagulants in the ED
- ✓ The Latest Biomarkers of Cardiac Dysfunction
- ✓ Implanted Device Cardiac Emergencies
- ✓ Initial Diagnosis and Treatment of TIA / Stroke
- ✓ And Much More ...

FOUR OPTIONAL HALF-DAY WORKSHOPS

1. Amal Mattu's Cardiac Ischemia ECG Workshop
2. Amal Mattu's Tough Dysrhythmia Workshop
3. The Cardiopulmonary Echo Workshop
4. Ultrasound for Hypotension / Vascular Access

REGISTER NOW
www.ceme.org/heart

AIRWAY | CONTINUED FROM PAGE 1

The Combitube, invented by Michael Frass, was a step forward in that it combined a pharyngeal balloon with an esophageal balloon. The seal of the airway was now within the hypopharynx. The Combitube became the default airway solution for EMS agencies, as it was easy to insert and very stable once the pharyngeal balloon was inflated. It isolated the larynx and trachea from the esophagus (and stomach contents). The Combitube has been since largely replaced by a better designed two-balloon blocking device, the King laryngeal tube (King LT).

Anesthesiology embraced an alternative means of ventilation just as the Combitube was coming into vogue with EMS. Archie Brain, MD, an anesthesiologist from Britain, created an intra-oral sealing device he called the LMA. This small triangular mask slid along the hard palate, down and behind the tongue, with the tip of the triangular mask wedged into the upper esophagus. Although not a complete blocker of the esophagus, the mask created an effective ventilatory seal in the hypopharynx, over the larynx. Dr. Brain's original device and many LMA-type devices still to this day use inflatable cuffs, but it turns out that the sealing of the airway is due to the collapse of soft tissue (created by gravity and sedation, usually propofol) down onto the mask. It would take almost 20 years for this to be widely recognized; newer LMA-type devices have either very-low-volume cuffs (the i-gel, Cook air-Q, Ambu Aura, LMA Supreme) or no cuff at all. The latest generation of these devices adds gastric decompression ports, further improving safety.

The Combitube and King LT along with the LMA and its successors have revolutionized prehospital airway management and completely changed anesthetic delivery for nonemergent cases. The LMA is now used in the vast majority of elective surgical cases worldwide. These devices have also provided options for rescue ventilation in emergency departments. Prior to these devices, if intubation failed, the only option was mask ventilation or cricothyrotomy. Unfortunately, difficult direct laryngoscopy and difficult mask ventilation can often occur in the same patients. After the invention of effective rescue ventilation devices, failure to place a tube didn't necessitate an immediate surgical airway. It is reassuring to know that obesity in and of itself is not a problem for effective supraglottic airway use (assuming the patient is placed in head-elevated positioning). The LMA and Combitube were centrally featured in the first Difficult Airway Algorithm, created by the American Society of Anesthesiology in 2004. Along with video laryngoscopes, airway management options have expanded dramatically in the last two decades.

End-Tidal CO₂ Detection and Use of Neuromuscular Blockers

Another seminal change in airway management, also from the 1980s, was the widespread adoption of end-tidal CO₂ detection for the confirmation of tracheal tube placement and effective ventilation. Prior to this, unrecognized esophageal intubation was a major risk in elective surgical cases and very common in emergency airways. Capnography or colorimetric devices now confirm all intubations in all settings, in or out of the hospital. Academic emergency physicians identified the dangers of unrecognized esophageal intubation and changed the standard of care.

Emergency physicians (led by Ron Walls, MD, and Michael Murphy, MD, in the 1980s) were largely responsible for the widespread adoption of muscle relaxants being used in emergency airways. That coupled with end-tidal CO₂ detection and rescue ventilation devices led to a sharp decrease in the number of cricothyrotomies performed in emergency departments. According to Chang et al, at New York's Bellevue Hospital, cricothyrotomies declined from 1.8 percent in trauma patients to less than 0.2 percent after the initiation of the emergency medicine residency program.¹

Prior to the universal establishment of emergency medicine residency programs at academic centers, it was a great challenge for emergency medicine practitioners to acquire formal training in airway management. It's noteworthy that The Difficult Airway Course (created by Dr. Walls, Dr. Murphy, Robert Luten, MD, and Robert Schneider, MD) has had an incredible impact on disseminating airway education to tens of thousands of emergency physicians. The transition from anesthesia to emergency physicians being the primary airway providers (in trauma and all ED patients) coincided with the growing respect and power of emergency medicine that developed within academic centers. Having been a resident during emergency medicine's "adolescence," it is inspirational for me to see emergency physicians as senior administrators of major academic centers and medical schools.

Rapid sequence intubation in emergency airways, end-tidal CO₂ detection for verification of tube placement, "O's up the nose," apneic oxygenation, and video laryngoscopy—all the major components of current airway practices—have been pioneered, researched, and validated by emergency physicians.

It is not coincidental, but rather something the pioneers of our specialty intended, that the academic advancement of emergency medicine would improve patient care. This can certainly be seen in myocardial infarction, stroke, and sepsis. Although I'm biased, I am especially proud of emergency medicine's role in improving emergency airway management.

When I chose emergency medicine as a specialty, I was told by my medical school dean that we were "just triage doctors." I now see growing validation of emergency medicine's approach to airway management as well as visible evidence that our contributions have been leading the way.

Check out the following five articles—among my favorites by emergency physicians—and give a pat on the back to the authors whose work has improved your practice and boosted patient safety:

- Driver BE, Prekker ME, Klein LK, et al. Effect of use of a bougie vs endotracheal tube and stylet on first-attempt intubation success among patients with difficult airways undergoing emergency intubation: a randomized clinical trial. *JAMA*. 2018;319(21):2179-2189. (recommended by Dr. Levitan)
- Kovacs G, Sowers N. Airway management in trauma. *Emerg Med Clin North Am*. 2018;36(1):61-84. (recommended by Dr. Kovacs)
- Sakles JC, Chiu S, Mosier J, et al. The importance of first pass success when performing orotracheal intubation in the emergency department. *Acad Emerg Med*. 2013;20(1):71-78. (recommended by Dr. Sakles)
- Walls RM, Brown CA 3rd, Bair AE, et al. NEAR II Investigators. emergency airway management: a multi-center report of 8937 emergency department intubations. *J Emerg Med*. 2011;41(4):347-354. (recommended by Dr. Walls)
- Weingart SD, Levitan RM. Preoxygenation and prevention of desaturation during emergency airway management. *Ann Emerg Med*. 2012;59(3):165-175. (recommended by Dr. Levitan) ⊕

Reference

1. Chang RS, Hamilton RJ, Carter WA. Declining rate of cricothyrotomy in trauma patients with an emergency medicine residency: implications for skills training. *Acad Emerg Med*. 1998;5(3):247-251.

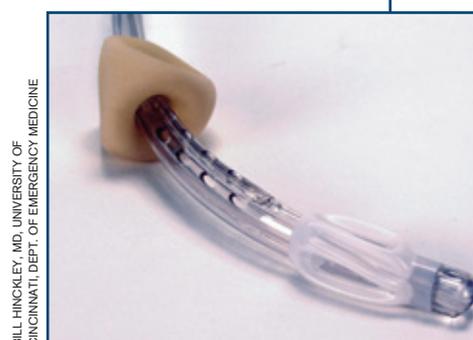
DR. LEVITAN is an adjunct professor of emergency medicine at Dartmouth's Geisel School of Medicine in Hanover, New Hampshire, and a visiting professor of emergency medicine at the University of Maryland in Baltimore. He works clinically at a critical care access hospital in rural New Hampshire and teaches cadaveric and fiber-optic airway courses.

TIMELINE OF AIRWAY DEVICES



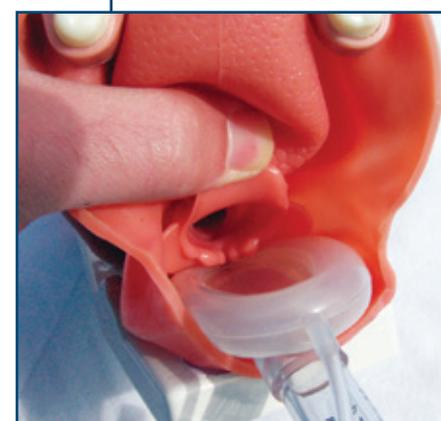
RICHARD LEVITAN

▲ **1973**
Esophageal obturator airway introduced.



BILL HINCKLEY, MD, UNIVERSITY OF CINCINNATI, DEPT. OF EMERGENCY MEDICINE

◀ **1985**
Patent for Combitube filed with US Patent and Trademark Office.



RICHARD LEVITAN

1987 ▶
First laryngeal mask airway made commercially (this is a picture of LMA Unique, the single-use version, made in 1997).



RICHARD LEVITAN

◀ **2000**
GlideScope introduced.



RICHARD LEVITAN

▲ **2011**
NO DESAT (Nasal Oxygen During Efforts to Secure A Tube) article published in *Annals of Emergency Medicine*.

2018 ACEP ELECTIONS PREVIEW

CONTINUED FROM PAGE 1

MEET THE ACEP BOARD OF DIRECTORS CANDIDATES



L. ANTHONY CIRILLO, MD, FACEP



KATHLEEN J. CLEM, MD, FACEP



FRANCIS COUNSELMAN, MD, FACEP



JOHN T. FINNELL, MD, FACEP



JEFFREY M. GOODLOE, MD, FACEP



CHRISTOPHER S. KANG, MD, FACEP, FAWM



MICHAEL J. MCCREA, MD, FACEP



MARK ROSENBERG, DO, FACEP



THOMAS J. SUGARMAN, MD, FACEP

PLATFORM STATEMENTS

The following members are candidates for the Board of Directors. They responded to this question:

Describe how your election to the Board would enhance ACEP's ability to speak for all emergency physicians.

L. Anthony Cirillo, MD, FACEP (Rhode Island)

Current Professional Positions: director of health policy and legislative advocacy and site quality director, US Acute Care Solutions; medical director, Pequot Emergency Department, Groton, Connecticut; physician-in-chief, department of emergency medicine, Memorial Hospital of Rhode Island; chief, Center for Emergency Preparedness and Response, Department of Health, State of Rhode Island

Internships and Residency: emergency medicine residency, UMASS Medical Center, Worcester, Massachusetts

Medical Degree: MD, University of Vermont College of Medicine, Burlington (1990)

Response

✓ As we approach ACEP's 50th Anniversary, there is much to celebrate. The founders of the College were true visionaries who recognized the uniqueness and importance of our specialty. The practice of emergency medicine has evolved over the past 50 years to meet the needs of our patients and the healthcare system. We are the 24-7-365 healthcare safety net for the nation, filling the gap for the U.S. healthcare system's inadequacies. And although some would characterize us as being "the expensive emergency department," patients and other healthcare providers choose us because they know that we are the experts in quickly and accurately evaluating acute illness and injury.

My involvement and leadership within ACEP began more

than 25 years ago with my election to the EMRA Board, serving as the representative to ACEP and the ACEP Board of Directors. I am incredibly fortunate to have had the opportunity to work with many amazing people within ACEP. Through my work on various committees and task forces, I have both listened to and learned from emergency physicians who truly represent the breadth and depth of our specialty. In my time serving on, and chairing, the Membership, State Legislative/Regulatory, and Federal Government Affairs Committees I learned of the unique challenges faced by the various emergency medicine practices as they provide care to our patients. As a member of the Alternative Payment Model and Single Payer Task Forces, I have worked to encourage ACEP to think outside the box as we envision the future of emergency medicine delivered in new healthcare system paradigms.

Personally, I have practiced clinically and administratively in a variety of emergency medicine settings and groups. During my career, I have worked as an academic faculty member at a residency training site, in a single-coverage tiny community hospital ED, and pretty much every size ED in between. This variety of experiences helps me to be able to better understand and appreciate the unique perspectives of the emergency physicians who care for patients on a daily basis. During my time in service of ACEP I have strived to become a better listener in order to be able to better represent our specialty in discussions within the house of medicine and with healthcare policymakers.

As part of the evolution of the practice of emergency medicine, we will need to ensure that the laws, regulations, and policies that govern the care we provide adapt to the needs of our patients, and the practice of emergency medicine. Working in the advocacy arena over the past 25 years, I have had the opportunity to work at the federal, state, and local level to ensure that emergency physicians are recognized for the quality care we provide, and compensated appropriately for that care. As models of healthcare delivery evolve, ACEP will need to be vigilant and defend the specialty and practice of emergency medicine, regardless of where our patients are. I believe that I can bring my advocacy experience to the ACEP Board to help in this mission.

Kathleen J. Clem, MD, FACEP (Florida)

Current Professional Positions: professor of emergency medicine, University of Central Florida College of Medicine, Orlando; executive vice president and chief clinical officer, Adventist Health System, Altamonte Springs, Florida; emergency physician, Florida Hospital and Adventist Health System

Internships and Residency: emergency medicine residency, Loma Linda University, Loma Linda, California

Medical Degree: MD, Loma Linda University School of Medicine (1989)

CONTINUED on page 12

Response

✓ My skill set includes clinical emergency medicine, academic leadership, and healthcare system leadership. All are crucial as we lead our specialty into the future. ACEP needs experienced leaders to lead through this critical time in healthcare. I have been an involved ACEP member since 1993 and have over 20 years of experience in community, academic, and now health system leadership. I will use my skills to keep emergency medicine's excellence as we shape the future of our specialty.

I am a leader in the efforts to empower emergency physicians to get our patients the appropriate and timely access to the next level of care they need. I am involved in innovations to harness technology to smooth transitions between community and hospital care, and between emergency departments and inpatient care. I have experience in advocating for emergency medicine to our state and national government leaders. I will work to continue to ensure the safety of our communities by advancing the science of prehospital and large-scale emergency and disaster care. I will continue to lead in emergency medicine's unique position as the hub of healthcare and speak to the importance emergency medicine serves in coordinating, facilitating, and guiding the direction of care that touches all Americans.

I work clinically in a high-volume community emergency department and teach emergency medicine residents. I have served as a medical director, tackled reimbursement issues and tort reform at the state level. I understand that unnecessary, bureaucratic demands on our time and energy matter. I have worked to decrease documentation requirements that do not add to patient care. I am also actively involved in improving electronic medical record use to increase efficiency and navigability.

As a past academic chair, I bring additional experience as we work through challenges to our specialty, educating the next generations of emergency physicians, and the complexities associated with residency and faculty financial support.

As a current health system Executive Vice President and Chief Clinical Officer, overseeing 47 hospitals and more than 1.6 million ED visits per year, I have led efforts for hospitals to be incentivized to rapidly admit patients, supported resources for timely consults, and worked to build bridges with other specialties.

My experience as an ACEP Steering Committee member, Committee Chair for Public Relations, Chair of National Chapter Relations, American Association of Women Emergency Physicians Chair, and Membership Committee Chair have provided key leadership opportunities and understanding of ACEP administration and the process of creating positive change as an organization.

I value, seek out, and treasure opportunities to listen to physicians. The importance of listening-to-understand cannot be overstated. My highest priority as a member of the Board of Directors would be to seek opportunities to hear from as many ACEP members as possible. I will collaborate with the Board to incorporate the concerns and solutions offered by our members into the work we do in our state chapters and nationally to advance emergency medicine.

Francis Counselman, MD, FACEP (Virginia)

Current Professional Positions: founding chairman, department of emergency medicine, Eastern Virginia Medical School, Norfolk; attending physician, Emergency Physicians of Tidewater, Virginia Beach; Editor-in-Chief, *Emergency Medicine*

Internships and Residency: emergency medicine residency, Eastern Virginia Medical School; internal medicine internship, Eastern Virginia Medical School

Medical Degree: MD, Eastern Virginia Medical School (1983)

Response

✓ Professionally, I'm a hybrid—equal mix community and academic EM physician. After emergency medicine residency graduation, I joined Emergency Physicians of Tidewater (EPT)—a private practice, democratic group of board-certified emergency physicians. In addition, I began serving as an Assistant Program Director of the EM residency program from

which I graduated.

In 1990, I was appointed the Program Director of the EM residency. I served in this role for the next 20 years, and oversaw its growth and maturation. In many ways, it's the best job in all of EM. This job only deepened my commitment to quality EM education; it is part of my DNA.

When I started, EM was a division of the Department of Family Medicine at Eastern Virginia Medical School. It was clear to me we should be an academic department. I spent one year meeting with every department chair, explaining why we deserved such status. In 1992, we were granted academic departmental status, becoming the first in Virginia and only the 26th in the nation; I was appointed the inaugural chair and continue to serve today. This taught me how to effectively deal and negotiate with other departments, advocate for EM clinically and academically, and run a multimillion-dollar enterprise.

For the past 20 years, I have served on the Board of Directors of EPT, helping lead our democratic practice group through the changing healthcare environment, demands from hospital administration, reimbursement issues, and all manner of other threats.

In 2008, I was asked to serve as the President of the medical staff of our 1,100-plus physician, two-hospital system; the first emergency physician to do so. I gained invaluable experience and education in dealing closely with hospital administration, interacting with other clinical services, and overseeing the hospital transition to an electronic medical record. I now see EM through many different lenses, but always guided by the desire and passion to promote a healthy working environment for all emergency physicians.

Finally, I have served as President of two national EM organizations—the Association of Academic Chairs of Emergency Medicine and the American Board of Emergency Medicine. I have firsthand experience in serving large groups of emergency physicians—academic and community—by listening, advocating, and working hard on their behalf.

From all of my experiences, I am acutely aware of the challenges and opportunities offered by private practice and academic EM. While some make a hard distinction between the two, there is much more in common than unique. Issues of fair reimbursement, coding and billing, appropriate staffing, leaving without being seen, patient satisfaction, boarders, throughput metrics, and on-call availability are all important, regardless of your practice type. You have to be knowledgeable of all of these issues, and advocate for a working environment that is healthy, professionally rewarding, and satisfying for patients and emergency physicians. I have the passion and the experience to work hard on these issues on behalf of all of the ACEP membership. I hope you will support my nomination.

John T. Finnell, MD, FACEP, FACMI (Indiana)

Current Professional Positions: fellowship program director, clinical informatics, Indiana University, Indianapolis; president, American Medical Informatics Association (AMIA) Academic Forum; member, AMIA Board of Directors; member, AMIA Education Committee; American Board of Emergency Medicine (ABEM) senior case examiner reviewer; ABEM item writer; ABEM oral examiner; ABEM case development panel

Internships and Residency: emergency medicine residency, University of California, San Francisco–Fresno

Medical Degree: MD, University of Vermont, Burlington (1991)

Response

✓ How many of us recall growing up with “Emergency!” which debuted on NBC on Jan. 15, 1972? What an awesome team. Firefighters Johnny Gage and Roy DeSoto working together with nurses (Dixie McCall) and emergency physicians Kelly Brackett and Joe Early, MD, FACS, ACEP. Yes, ACEP was listed in their credentials, founded only four years earlier, found its way into our hearts and living rooms.

ACEP continues to represent a family of physicians who share a commitment to improving the quality of emergency care. I've been a member of ACEP for over 30 years and have practiced in multiple settings. I've worked for both private and small groups, and currently serve as the program director of Clinical Informatics and as teaching faculty in the Indiana

University residency program. While we all wear many hats, I consider ACEP to be my home, and my informatics training to add unique value, which will truly complement the existing ACEP Board.

Healthcare is entering a period of rapid change. Advancement of new technologies will fundamentally change how we practice medicine. Hospitals will become smaller as more healthcare will be done at home. Precision medicine where treatments will be based on genetic, environmental, and lifestyle factors. Aging will become a treatable disease.

I'm well aware that the “promise of technology” with the advent of electronic records has presented new challenges. The burden of the electronic record has resulted in increased rates of physician burnout and spawned a new class of scribes. However, my particular set of skills helps to transform the realities of all emergency physicians. True transformation requires trusted data and sound analytics. We all work with problematic electronic records, order sets, and decision support that drive us crazy. However, I've built systems that truly reflect emergency medicine's best practices and our particular realities of care. I've led collaborative and creative teams to streamline our existing processes in order to enhance the efficiency of our department. I understand the nuances of data collection and measurement and can help our Board to ensure the success of all of our practices.

As part of my extensive career, I've been able to bridge the crucial gap between generations of physicians through the use of technology. We are all part of connected teams. Using tools like Slack, Trello, and Basecamp to bridge that divide. I want us to work smarter, not harder. We are currently working on tools to help mine “Big Data.” When a patient presents to the ED with chest pain, why should we have to search for an old ECG, cardiology notes, or stress reports? These all should be readily available and instantly viewable.

Nomination to ACEP's Board is an honor and a privilege. I would like the opportunity to bring the advances in emergency medicine that we have in Indiana to ACEP. I have the full support of my family, practice group, and state to serve you. I'm asking for your support and will bring your voice to lead our College into the future.

Jeffrey M. Goodloe, MD, FACEP (Oklahoma)

Current Professional Positions: attending emergency physician, Hillcrest Medical Center Emergency Center, Tulsa, Oklahoma; professor of emergency medicine, EMS section chief, and director, OK Center for Prehospital and Disaster Medicine, University of Oklahoma School of Community Medicine, Tulsa; medical director, 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 at Dallas

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

Response

✓ Speaking for emergency physicians translates specifically to advocating for emergency physicians. Effective advocacy for emergency physicians is built upon understanding and respecting us. All of us.

I'm celebrating 20 years since emergency medicine residency graduation. In my journey as an emergency physician, I've been taught by generalists, other specialists, non-EM residency trained/EM boarded faculty and EM residency trained/EM boarded faculty. These mentors, teachers, and colleagues are female and male, spiritual and not spiritual, and as diverse in interests as I could have ever imagined. I've found valuable medical and life lessons from them all.

I've worked at a rural/small suburban community hospital, with its 16-bed ED and with phone handsets duly worn, proving the frequency of transfers to “the big city” that most often involved more than one conversation (aka persuading, pleading, and/or praying). I've worked at an inner-city tertiary referral hospital with an annual ED census soaring past 100,000

patients. I've also worked at larger suburban and even urban hospitals that many assumed were "nice little places to practice emergency medicine" while my partners and I routinely saw four to five patients an hour throughout 10-plus hour shifts, many with acuities requiring invasive airway management, central lines pre-routine ultrasound guidance, and trauma/STEMI/stroke/sepsis teams that were all comprised of one emergency physician, two nurses (if we were lucky), and one respiratory therapist (maybe).

For the past several years, I've been fortunate to share the benefits of those experiences, while still learning emergency medicine advances daily, as I teach fellows, residents, and medical students in the base hospital for an EM residency and conduct research in a historically medically underserved state.

Also, as an emergency physician, I've built upon my love for prehospital care that I discovered as a paramedic in college and medical school years. I've served in EMS for 30 years, 22 of those as a medical oversight physician, currently the clinical leader for over 4,000 credentialed professionals in the metropolitan Oklahoma City and Tulsa areas. I also find professional fulfillment in serving in special events medical planning and on-site coverage, including many NASCAR and IndyCar events as well as law enforcement tactical missions.

Each of these roles—bedside clinician, teacher, researcher, EMS medical oversight leader, special mission clinician—has an axis of being an emergency physician. Add in years of advocacy and service in state and national ACEP and I can't hardly believe what started as a hopeful vision has come to this fulfilling reality.

If you recognize yourself in any of the above, I can effectively help to speak for you. If you don't, I'm sincerely willing to listen so I can better understand and factor your perspectives.

Do we all have continual challenges? Yes. Can we find the answers *together*? Yes. Between our dates of birth and death, we all have a dash. Emergency physicians make positive differences with those dashes. Part of my positive difference is a sincere desire to serve you as a member of the ACEP Board of Directors, speaking for you.

Christopher S. Kang, MD, FACEP, FAWM (incumbent, Washington)

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

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

Medical Degree: MD, Northwestern University (1996)

Response

✓ My continued service on the Board of Directors would advance the College's ability to speak for all emergency physicians because of my affinity and ability to see from and appreciate diverse perspectives that stem from my personal background and profes-

sional career and which are evidenced by my College service.

I spent my childhood in Asia, North America, and Europe, where I was sometimes a member of the majority, sometimes the minority. Since medical school, I have observed and practiced a wide range of medicine in various settings across the country and around the world, including Asia, Central America, and the Middle East. I welcome and respect different values, cultures, and clinical practices.

Professionally, my career reflects the diversity of the practice models of emergency medicine. I work at a federally operated medical center and for an independent group in a community hospital. I also serve on the faculty of an accredited emergency medicine residency and emergency medicine physician assistant fellowship program. My responsibilities have included advisor, curriculum development, didactic and simulation instruction, research director, faculty development, and liaison to other departments and hospitals. Both jobs provide me firsthand experience with different patient populations, levels and generations of emergency medicine providers, healthcare systems, and employment and reimbursement models.

Within the College, I have solicited the counsel of past leaders and advised resident physicians, junior members, and committee and chapter leaders. I have assisted the composition, presentation, and adoption of numerous Council resolutions, some of which involved emerging and contentious issues. Over the past three years, I have visited multiple chapters and sought out and served as a liaison to numerous College sections to learn more about and foster your interests. I have also represented the College at state and national meetings with other professional, industry, and government organizations. Trust and respect have been earned, individual and specialty relationships forged, and the foundations for future collaboration cultivated. Continued appreciation for and inclusion of you will enhance patient care and rapport, fortify membership identity and contentment, and promote the growth and maturation of our specialty.

As a result of my unique background and career, I can and will continue to represent and advocate for emergency physicians and their clinical practices, interests, and priorities to advance quality emergency care and the evolution of our profession.

Michael J. McCrea, MD, FACEP (Ohio)

Current Professional Positions: attending physician and core faculty, Mercy Emergency Care Services, Team Health, and Lucas County Emergency Physicians, Inc., Premier Physician Services, Toledo, Ohio; staff physician, Emergency Professionals of Ohio, Inc., Team Health, Middleburg Heights

Internships and Residency: emergency medicine residency, The Ohio State University Medical Center, Columbus

Medical Degree: MD, Medical College of Ohio at Toledo, 2004

Response

✓ My voice is your voice. I have worked in an eight-bed critical access ED. I have worked in a 60-bed urban tertiary care center. I have been a community medical director of a single coverage rural ED. I am an assistant program director supervising 42 EM residents. I have been a democratic partner, an independ-

ent contractor, and an employee of a contract medical group. Although I am core faculty for our residency, I still work in the community without residents at a single-coverage ED within our health system. Currently I am a teacher and mentor to residents and medical students, but I have never forgotten my roots in the community, fresh out of residency, just trying to get through the rack. I bring this varied and shared experience to my leadership.

This diverse background of practice experiences allowed me to speak and advocate for EM physicians in Ohio during my two terms as Ohio ACEP President. Having worked in nearly all practice environments provided me with firsthand insight into the issues that face emergency physicians. When I met with legislators or government officials, my personal experience gave real credibility to our message as I spoke for emergency physicians in Washington, D.C., or in our state capitol. I have testified before the Ohio House of Representatives on multiple occasions and I have developed personal relationships with the state and national officials from my district. Those relationships began at ACEP's Leadership and Advocacy Conference and Ohio ACEP's Advocacy Day. I have learned and seen firsthand the value of our advocacy. Although Ohio ACEP is widely known for our education courses, it is advocacy that ranks number one in importance to our chapter members every year on the chapter member survey.

Yet we must not forget that ACEP speaks for EM residents in training and medical students as well as the practicing physician. During my tenure on the Ohio Chapter Board, we sepa-

rated our resident assembly from our annual member meeting into a standalone event to emphasize the importance of resident members in our Chapter. This year I authored a bylaws amendment for our Chapter to designate one Ohio councillor seat for a resident. It passed unanimously at our annual meeting. For the past four years I have chaired a new event, the Midwest Medical Student Symposium, for medical students interested in EM. Our medical student membership has grown as a result. Working daily with residents and medical students allows me to respond to these members' needs as well.

Our members want voices that listen to their needs, speak for them, and advocate for our profession and our patients. My experiences have refined my voice and demonstrated that I can speak confidently for all current and future emergency physicians as a member of the ACEP Board of Directors.

Mark Rosenberg, DO, FACEP (incumbent, New Jersey)

Current Professional Positions: chairman of emergency medicine, chief innovation officer, and associate professor of emergency medicine, St Joseph's Health, Paterson, New Jersey; Board of Directors, Emergency Medicine Foundation; Pain Management Task Force, U.S Department of Health & Human Services; Pain Task Force, Institute of Healthcare Improvement

Internships and Residency: emergency

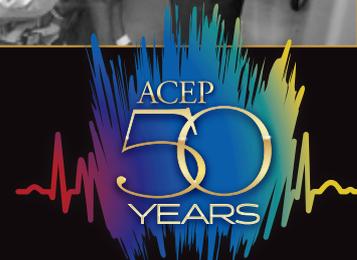
CONTINUED on page 15



Celebrate

the depth and diversity of emergency medicine

Bring 'em All: Chaos. Care. Stories from Medicine's Front Line.
Commemorating ACEP's 50th Anniversary



American College of
Emergency Physicians®
ADVANCING EMERGENCY CARE



50 photo essays by renowned photojournalist Eugene Richards, author of *The Knife and Gun Club*

ACEP Member presale price \$68 | Resident, PA, EMS price \$55 | List price \$95

Preorder today at acep.org/bring-em-all

BRING 'EM ALL

Highlights from the 50th Anniversary Photo Book

Bring 'Em All, the 50th anniversary photo book, embodies the spirit and the lifeblood of emergency medicine: anyone, anything, anytime.

See the breathtaking moments that comprise the lives and careers of American emergency physicians like you. Famed photographer Eugene Richards, author of *The Knife and Gun Club*, has

created a collection of 50 stirring photo essays focusing on clinicians from across the country. These clinicians share their perspectives and insights on life and death amid an ever-changing medical landscape.

Here's a never-before-seen preview of *Bring 'Em All*. Order your copy now at BringEmAll.com. Member price: \$68



"My father called me his 'tiger.' My parents let us know that, as girls, my sisters and I could do anything; the sky was the limit. That freedom was unique, especially for a traditional Nigerian household.

"We see and hear a lot of terrible things. They may make me sad, but they don't break me. They don't break me. I try not to take any of the emotional baggage home. There, I can just be a wife, a mom. Within those four walls, I have permission to cry. I can be scared. I'm allowed to feel confused, overwhelmed. But at work, there's no room for that; a different persona is required.

"But at home, I pray. I pray for my patients. I pray for myself."

Edidiong Ikpe, MD
Emergency physician | Atlanta

"I have a passion for civil disobedience. I get joy from arguing my position. I'm somebody who likes to question everything—and gets frustrated when there is no answer. I like to go back to the microcosm, the minor parts ... but I'm also interested in the bigger issues—like why did we use to paint every emergency department ceiling black? The answer usually is that somebody over here heard somebody over there, and somebody over there heard a rumor I don't want to comply for the sake of compliance.

"I guess you have to have a fair amount of self-confidence to push back, but the older I get, the easier it becomes. I've had pretty good luck with personal resistance. I've seen change ... I know it can happen."

Bruce Janiak, MD
EM pioneer & first EM resident | Augusta, Georgia



"It's one thing to be good with children—but it's equally important to understand how to interact with the families. You spend a lot of time reassuring them that everything is going to be okay—or trying to convince them to let you stick a needle in their child. And every situation is different ... you have to learn how to read between the lines.

"You can do a lot of good in a 9- or 10-hour shift ... for me, that's the best part. Of course, you never forget the terrible cases ... the boy hit by a car ... the teenager with cancer ... children who, despite your very best efforts, are lost. But you take solace in the balance ... in the resilience of the kids ... and in the fact that good things are happening."

William Lewander, MD
Pediatric emergency physician | Providence, Rhode Island

SPACE IS LIMITED REGISTER TODAY!



Begin Your Journey with Phase I

November 12-16 • Omni Park West • Dallas, Texas





Are You Currently a Director or Aspiring To Be One?

Join us for ACEP's ED Director's Academy, to hear from veteran practitioners and management experts offering you tried-and-true solutions to dealing with difficult staffing issues, creating patient satisfaction, and preventing errors and malpractice. Learn why so many see this as the must attend conference for ED directors and those aspiring to become director.

Approved for AMA PRA Category 1 Credit™



Visit www.acep.org/edda or call **844.381.0911**

Closest to the boards

The only thing you need to master your exams

815+ questions and detailed answer explanations

- ▶ Expert item-writers
- ▶ Continual updates
- ▶ New content and features
- ▶ Claim-as-you-go CME credit

Take the **FREE** Pretest, then watch your scores improve...

acep.org/PEER



*not affiliated with ABEM

Subscribe today at acep.org/PEER



MEET THE ACEP BOARD OF DIRECTORS CANDIDATES | CONTINUED FROM PAGE 13

medicine residency and internship, Metropolitan Hospital, Philadelphia

Medical Degree: DO, Philadelphia College of Osteopathic Medicine (1978)

Response

✓ In the very beginning, my mentor told me to join ACEP for life and that is exactly what I did. I have been a member ever since 1979. I have served on the Council, committees, and task forces and was elected to the ACEP Board in 2015.

During my career I have had the opportunity to work in small community hospitals as well as large medical centers. I have experience working with large national companies as well as small groups. I have had the privilege of owning my emergency medicine practice management company as well. Currently, I am employed as Chairman of Emergency Medicine and Chief Innovations Officer in a teaching hospital with an emergency medicine residency program. Emergency medicine residents are mirrors of our profession. They question the status quo, verbalize obstacles and barriers, and communicate opportunities to improve our practice. We have the opportunity to listen, discuss, collaborate, and innovate throughout our department, hospital, and community. We learn from each other.

Through my work with ACEP as well as my work within my hospital community, I have found myself collaborating with senators and congressmen on issues of importance to emergency physicians such as out-of-network billing, access to care, and population health issues. I have found that I am not shy and have a love affair with the microphone. I have learned not to talk for the sake of talking but to have a goal and know what needs to be said. I have been successful most recently with legislation for an alternative to opioid (ALTO) program in my home state of New Jersey and it is now on its way to becoming national legislation. The ALTO program is an example of our discipline adapting to the needs of our communities. We remain that safety net across the country.

I remember where I started. I remember staying up all night wondering what I could have done differently when I have lost a patient. At this point in my career, I am up all night wondering what I can do for our College and how best can I serve. I believe I enhance ACEP's ability to speak for all emergency physicians because of my diverse practice experiences, my activities with ACEP, and my genuine love and respect for our profession. Thank you.

Thomas J. Sugarman, MD, FACEP (California)

Current Professional Positions: emergency physician and chair of emergency services, Sutter Delta Medical Center, Antioch, California; senior director of government affairs, Vituity, Emeryville, California; urgent care physician, East Bay Physicians Medical Group, Lafayette, California

Internships and Residency: emergency medicine residency and internship, Harbor UCLA

Medical Degree: MD, University of Illinois at Chicago (1989)

Response

✓ ACEP is the preeminent organization advocating on behalf of emergency physicians and our patients. Since completing my EM residency in 1992, I have averaged at least 10 shifts a month as a pit doctor, practicing in three states and in multiple practice settings. I primarily practice at a small, but busy, suburban hospital (60,000 visits a year). My group, Vituity (formerly CEP America), is a democratic partnership and 100 percent physician owned with no investor ownership. We share best practices and solutions across our multiple sites, spanning the breadth of EM. Vituity exists to offer doctors the opportunity for a fulfilling medical practice, delivering care the way we want our families to receive care. My personal practice experiences include rural hospitals, urban hospitals, teaching hospitals, for-profit, nonprofit, and government-owned hospitals. As an actively practicing pit doc, I understand the challenges facing EPs and our patients.

During my years in California ACEP and ACEP leadership, I learned that listening and understanding various perspectives is key to influencing positive change. ACEP Board of Directors members must not only understand the needs and goals of all EPs, but also the views of patients, other specialties, government officials, payers, hospitals, and other stakeholders in the medical system. We must educate and innovate for our patients and communities to enjoy high-quality emergency care that is both available and affordable. Patients deserve to feel secure when seeking care for perceived emergencies without fear of dire economic consequences. They also deserve better tools to access the right care at the right time, with the right follow-up for poststabilization care. Without stabilizing reimbursement, improving practice enjoyment, and increasing resources for EM training, there will not be enough high-qualified EPs to deliver emergency care. ACEP, on behalf of EPs, must thread the needle by improving the value of the care EPs provide and ensuring that EM practices are sustainable. As an example, working with the EMS Committee, California ACEP, and the mobile integrated healthcare/community paramedicine task force, we were able to modernize ACEP's policy on community paramedicine. The new policy allows for care to be delivered in appropriate settings without undermining access to emergency care and EMTALA.

I will represent you and make decisions on the Board from a paradigm of improving patient care and ensuring access to quality care. ACEP must mitigate EP practice hurdles such as administrative hassles, excessive time documenting in electronic health records, and unreasonable Maintenance of Certification requirements so EPs can focus on clinical care. I remain convinced that the best paradigm to advocate for improvements to our EM practices is to view the situation from the patients' perspectives. What is good for our patients and the community will be good for emergency medicine and emergency physicians.

I humbly ask for your vote so that I may represent you on the Board of Directors. Thank you. Ⓡ

Too often I see us blaming each other instead of recognizing we're all good people, doing our best in a broken system.

I believe we have a moral obligation to create a system where making the right choice is the only choice. And I believe the first step is uniting to share information.

- Anne Zink, MD, FACEP

Join tens of thousands of providers across the country working together to catch patients before they fall.

Let's go all in.

Visit www.collectivemedicaltech.com/all-in to learn how.



DANGER ASSESSMENT

A tool to assess patient risk of experiencing abuse

by CAROLYN SACHS, MD, MPH, FACEP; REBECCA BARRON, MD, MPH; WENDY MACIAS-KONSTANTOPOULOS, MD, MPH; RALPH RIVIELLO, MD, FACEP; SONBOL SHAHID-SALLES, DO, MPH, FACEP; TOMI ST. MARS, MS, RN, CEN, FAEN (ENA); AND ISABEL A. BARATA, MD, FACEP, FAAP

The Case

Anna comes to your emergency department after her boyfriend hit her several times in the face before strangling her, resulting in her losing consciousness. She has marked facial ecchymosis and swelling especially to her right orbit and cheek. There are no facial petechiae noted, but there are small bilateral subconjunctival hemorrhages present. Her neck reveals linear bruising on the right side; the remainder of her physical exam is normal. The emergency department team evaluates and treats her injuries.

Initially, Anna declines police notification, and her state's laws prohibit notification of law enforcement without patient consent. The emergency department team arranges for a social worker to meet with Anna. As part of this consult, the social worker uses the Danger Assessment (DA) tool and finds her level of

Table 1: Factors Associated with a Higher Risk for Intimate Partner Homicide

RISK FACTOR	ADJUSTED ODDS RATIO
Abuser unemployment	5.09
Access to firearm	7.59
Abuser's use of illicit drugs	4.76
Highly controlling abuser and separation after living together	8.98
Threats with a weapon	4.08
Victim left abuser	4.04
Victim left abuser for another partner	4.91
Strangulation	6.70 (attempted homicide) 7.48 (completed homicide)
Abuser used a gun	41.38

SOURCE: AM J PUBLIC HEALTH. 2003;93(7):1089-1097.

danger extreme. Armed with this information, the social worker counsels Anna and contacts the local domestic violence hotline, which arranges for a crisis counselor to come to the

hospital to talk to Anna. With Anna's permission, police are notified. The agency helps her secure a legal protective order with law enforcement and assists her with seeking safe housing upon hospital discharge.

Danger Assessment Tool

The DA is a tool used to estimate the risk of being killed by an intimate partner (IP) in a violent intimate relationship. It consists of a calendar to assess the frequency and severity of incidences of abuse and 20 yes-or-no questions. The results of the 20-question portion are categorized as:

- <8: Variable danger
- 8-13: Increased danger
- 14-17: Severe danger
- >18: Extreme danger

Recent modifications of the DA include versions for same-sex relationships and immigrants and a simplified five-item version.

Why is the DA important? Every year, 1,500 to 1,600 women are killed by an IP, accounting for 40 percent to 50 percent of all femicides in the United States. Approximately 67 percent to 80 percent of IP homicides involve a history of physical abuse prior to the murder. Use of the DA can help identify those at greatest risk for homicide.

We recommend the DA for all emergency department patients following IP violence (IPV). Hospitals should have 24-7 access to a social worker or a representative from the local IPV advocacy center to come to the emergency department, administer the assessment, and provide the patient with safety-planning options. Telephonic advocate consultation and/or emergency department staff administration of shorter versions of the DA may also be reasonable options.

DIGITAL TOOLS

myPlan app

Created by Nancy Glass, PhD, MPH, RN, and Johns Hopkins University to help individuals determine if a friend or family member is in an unsafe relationship. Assessment tool in the app. www.myplanapp.org

One Love app

Created by relatives in memory of a woman killed by her intimate partner, the app uses DA questions and provides instant scoring. Provides all persons with the tools necessary to assess danger from IPV in a patient, friend, or themselves. www.joinonelove.org/get-help

The emergency department staff should know how to access the available resources to help victims of IPV and how to assess patients for danger (see Table 1). All of us who care for IPV victims must anticipate their needs beyond emergency department care (DA). The consequences of not knowing their level of risk can be lethal.

Editor's Note: See the online version of this article at ACEPNow.com for a list of resources for further reading. You can also turn to page 18 to read more about strategies to screen for IPV in the emergency department and help patients who may be at risk of violence from a partner. ⚡

INTIMATE PARTNER VIOLENCE DANGER ASSESSMENT SUBCOMMITTEE

Carolyn J. Sachs, MD, MPH, FACEP (chair)
Rebecca Barron, MD, MPH
Wendy Macias-Konstantopoulos, MD, MPH
Ralph Riviello, MD, FACEP

Sonbol Shahid-Salles, DO, MPH, FACEP
Tomi St. Mars, MS, RN, CEN, FAEN (ENA)
PUBLIC HEALTH COMMITTEE
Isabel A. Barata, MD, FACEP, FAAP (chair)

66TH ANNUAL DETROIT TRAUMA SYMPOSIUM

November 8 - 9, 2018
MGM Grand Detroit

Designed to address the continuum of care of the injured person. Attendees will gain knowledge about their own specialties as well as an increased knowledge and appreciation of the work of others on the trauma team.

- Initial Trauma Evaluation & Treatment
- Hemostasis & Clotting Disorders in the Trauma Patient
- Brain Injury: Evolving Concepts
- Hospital-Based Violence Prevention Programs
- Vascular, Colorectal & Pediatric Trauma
- Sunrise Sessions for Doctors, Nurses and EMTs

This activity has been approved for AMA PRA Category 1 Credit™

For a complete list of topics and speakers or to register, go to:
www.DetroitTrauma.org

For more information: 313.577.3310 or cluiz@med.wayne.edu

DMC
Detroit Receiving Hospital

WAYNE STATE UNIVERSITY
SCHOOL OF MEDICINE

WHAT I WISH I KNEW...

DR. DAHLE is the author of *The White Coat Investor: A Doctor's Guide to Personal Finance and Investing* and blogs at www.whitecoatinvestor.com. He is not a licensed financial adviser, accountant, or attorney and recommends you consult with your own advisers prior to acting on any information you read here. He will be speaking at the ACEP Scientific Assembly in October and would love to meet you there.

Should I Purchase My Residence During Residency?

Tips for managing your living situation—and debt—during training

by **JAMES M. DAHLE, MD, FACEP**

The questions of whether to buy a house during residency and whether to pay off a mortgage or student loans first have both a short and a long answer. The short answer is, “no and neither.” The long answer is a great discussion of some principles of personal finance and investing.

Inexperienced and first-time homeowners often make two mistakes that lead them to buy a home inappropriately. It isn't entirely their fault. There are entire industries—home builders, real estate agents, lenders, and title agents, to name a few—that are highly incentivized to encourage physicians and others to buy homes early and often, regardless of the financial consequences.

Don't Get Sucked in by Homeownership Myths

The first mistake is the assumption that if the monthly mortgage payment is less than rent, then it is a good idea to buy a home. The second mistake is the assumption that if you sell a home for more than you paid for it (ie, that you made money), then you made a good financial decision in buying it. Unfortunately, neither of these is true. However, myths like these, combined with a seemingly odd but nearly universal burning desire to acquire a home by residents (and perhaps their significant others), have led many doctors to lose a lot of time, effort, and money due to their decision to purchase their residence during residency.

Physicians don't always lose money buying a residency home. I figure that during a three-year residency, they end up coming out ahead about one-third of the time. That likely climbs to 50 percent of the time with a five-year residency. I am a big fan of long-term homeownership for societal, social, and financial reasons. However, the general rule should be

to buy a home only when both your social and professional situations are stable. Since residency is, by its very nature, an unstable professional situation (and often an unstable social situation), most residents would be well-served by renting a home throughout their entire residency. They are likely to come out ahead financially, and even if they don't, they are unlikely to come out very far behind.

They say time heals all wounds, and this is also the case with homeownership. The longer you own a home, the more years the substantial round-trip transaction costs (typically about 15 percent of the purchase price) can be spread over. If you need a home to appreciate 15 percent to cover your transaction costs (real estate agent fees, title insurance, loan costs, upgrades, mortgage payments after vacating, etc.) but a home only appreciates at 3 percent per year, it is easy to see why it typically requires about five years for homeownership to have been a good financial decision. There is a sense that you throw away money on rent but build equity by paying a mortgage. Nobody ever stops to think that you also throw money away on real estate agent fees, title insurance, property taxes, mortgage interest, lawn maintenance, and a new roof.

Things to Consider If You Do Buy

If you have decided that you are one of the few who should disregard the above advice and are now wrestling with the question of whether to pay down the mortgage or pay off student loans, bear in mind that the right decision of what to do with disposable income may very well be neither. The first financial priority for disposable income for a resident is often obtaining the match in the hospital 401(k) or 403(b). In addition, investing in a Roth IRA or your employer's Roth 401(k) or Roth 403(b) is also an excellent use of disposable income. Paying off consumer debt like credit cards and car loans and building up an

emergency fund of three months of expenses are also excellent uses of disposable income. At any rate, you are certainly not limited to paying down debt.

Of course, don't pay down debt that you expect someone else to pay off for you. If you anticipate being directly employed by a 501(c)3 (nonprofit) employer after residency, then enroll in and start making payments in an approved income-driven repayment program, like REPAYE, to maximize the amount you may be able to have forgiven, tax-free, through the Public Service Loan Forgiveness program. Private employers may also be willing to pay off some or all of your debt. If you anticipate paying off your loans yourself, then making extra payments is certainly a good use of disposable income. The decision of whether to invest or pay down debt, barring a few extreme situations, has no correct answer—only a correct answer for you. Given the limited disposable income and all the great uses of it for the typical resident, it seems unlikely the best use would be to pay down mortgage debt.

The most important financial task for residents, at least after acquiring basic insurance policies like disability insurance and, if someone else depends on their income, term life insurance, is to develop a written financial plan for what they will do with their first 12 monthly paychecks after residency. The habits put in place during this most important year of a physician's financial life will largely determine the financial pathway for their remaining five to seven decades.

While your primary focus during residency should be learning to become a compassionate and competent emergency physician while maintaining your wellness and that of your colleagues, it is also the time to begin laying the foundations of financial success. You can do this by becoming financially literate and making smart decisions about housing, spending, saving, and investing. ➔

Leadership Transition

Q&A with Dr. Vidor Friedman

In June, Vidor E. Friedman, MD, FACEP, was selected by the ACEP Board of Directors (BOD) to serve as President-Elect following the resignation of ACEP President-Elect, John Rogers, MD, FACEP. Dr. Friedman recently sat down with *ACEP Now* Medical Editor in Chief and ACEP BOD member Kevin Klauer, DO, EJD, FACEP, to discuss stepping into the role of ACEP President-Elect.

KK: Vidor, these are very interesting times for ACEP. For the first time in the history of the organization, a President-Elect has resigned from the BOD. Can you shed some light on what had happened? What caused this transition when John decided to step down from his role?

VF: I've had several conversations with John since the June board meeting. John didn't share his thoughts before he made this decision with anybody on the Board. I was sitting right next to him Monday at the Audit Committee meeting

and Tuesday at the Finance Committee meeting, and he didn't share that he was thinking about this. Given all that's happened, I think, as John said in his letter to the ACEP Council [available at ACEPNow.com], this was a decision he came to over many months since the last annual meeting. John had heard that some members had concerns that he was not board-certified. He felt it was best for the College if he stepped out of the way to make certain this issue didn't negatively reflect on the organization. He thought it was going to continue to be a distraction.



Dr. Friedman

KK: How did you and the Board feel about this?

VF: The Board found out about this Tuesday [June 26] afternoon, right before our Board meeting started. Between Tuesday afternoon

and mid-day Wednesday, John was asked to reconsider his resignation at least five times; we were all very supportive of him being the President. John's mind was made up. Despite the fact that the Board and staff were very supportive of him, he felt that this was still the best decision for the College and specialty. The Board had to make a decision about filling the position or leaving it vacant. We felt that, given that the committee assignments for 2019 weren't finalized and that there were another three months until the end of the annual meeting, it was important to fill the role.

Not everyone understands what the President-Elect does. I've been tasked with doing in three months what normally takes a year, and I can tell you that there's quite a bit that the President-Elect is involved with in terms of setting the College up for the next year.

Prior to filling the role, we confirmed again on Wednesday evening that John was not going to reconsider. Thursday morning, the Board decided to hold a special election as outlined in the bylaws for this specific circumstance. The election was conducted by the Council officers and ACEP's general counsel.

Although the actions of the Board will need to be ratified by the Council at their annual

meeting, the Board's hope was to elect an individual who would not just serve for three months as President-Elect, but would also transition to be the President of the College, starting Sept. 30, as would have normally occurred with John's position.

KK: Vidor, having previously run for president-elect, you are very familiar with the process and the requirements of the role.

VF: I ran last year, and I was runner-up to Dr. Rogers.

KK: So you had an opportunity to express your vision for the College to the Council, and as you stated, you were runner-up, so this was not an unusual result.

VF: That's correct. Also, just so the everyone knows, it was not an uncontested election at the Board meeting. There were six Board members who stepped forward, and then one withdrew his nomination before the vote took place. This wasn't a rubber-stamping of an individual. This was carefully considered and conducted according to the bylaws.

Editor's Note: Visit ACEPNow.com to read Dr. Rogers' letter to the Council about his resignation and the full version of this Q&A. ➔

How to Help Victims of Intimate Partner Violence

Screening for interpersonal violence in the emergency department

by RALPH RIVIELLO, MD, MS, FACEP;
AND HEATHER V. ROZZI, MD, FACEP

The Case

A 32-year-old female with facial injuries is brought to the emergency department by her sister. She states that she was walking her dog and fell forward onto the pavement when the dog pulled on the leash. She denies injuries other than those to her face (see Figure 1). She is uncertain whether she lost consciousness and complains of a headache.

Introduction

In the United States, more than one in three women and nearly one in three men have experienced sexual violence, stalking, or physical violence by an intimate partner.¹ Among female victims of homicide committed by an intimate partner, nearly half had been emergency department patients within the two years prior to their deaths.² The majority of victims of intimate partner violence (IPV) were emergency department patients multiple times without being identified as victims of IPV, even when injury was the presenting complaint.³ Clearly, emergency department staff have a unique opportunity to identify victims of IPV and to provide safety planning and community referrals.

Multiple organizations, including ACEP and The Joint Commission, recommend universal screening for IPV.⁴ Studies suggest that universal screening results in higher rates of identification of IPV.⁵ However, in reality, screening is far from universal. In one study of 433 women presenting to emergency departments, only 13 percent either volunteered information about IPV or were screened for IPV.⁶ A larger study of 4,641 adult women presenting to emergency departments suggested that patients want emergency department staff to ask about IPV, but fewer than 25 percent were screened.⁷

Emergency department staff cite several barriers to screening.⁸ The physical layout of many emergency departments makes it difficult to screen patients privately. Language barriers and time constraints may impede screening as well. Many emergency department staff have preconceived notions of what a victim of IPV should look like and do not screen patients who do not fit that profile. Given the prevalence of IPV, many of those responsible for screening have a personal or family history of IPV, which may make screening difficult. Other providers do not screen because they do not know what questions to ask or they are not familiar with community resources.

Screening

The ED staff responsible for screening for IPV varies among emergency departments. Often, the IPV screen is included in the initial triage

FIGURE 1: INJURIES TO THE PATIENT'S FACE. **FIGURE 2: INJURIES TO THE PATIENT'S NECK.**



PHOTOS: BRANDI CASTRO, RN, SANEIA, SANEIP

TABLE 1: COMMON IPV SCREENING QUESTIONS

Universal Violence Prevention Screening Protocol	<p>Have you been in a relationship with a partner in the past year? If yes, within the past year has a partner:</p> <ul style="list-style-type: none"> • Slapped, kicked, pushed, choked, or punched you? • Forced or coerced you to have sex? • Threatened you with a knife or gun to scare or hurt you? • Made you feel afraid that you could be physically hurt? • Repeatedly used words, yelled, or screamed in a way that frightened you, threatened you, put you down, or made you feel rejected?
Partner Violence Screen	<p>Have you been hit, kicked, punched, or otherwise hurt by someone within the past year? If so, by whom?</p> <ul style="list-style-type: none"> • Do you feel safe in your current relationship? • Is there a partner from a previous relationship who is making you feel unsafe now?

SOURCE: ROZZI HV, SMALE LE. UNCIVIL UNION: INTIMATE PARTNER VIOLENCE. CRIT DECIS EMERG MED. 2018;32(5):3-9.

assessment. Many departments have found that triage screening is impractical due to lack of privacy and critical medical conditions requiring immediate stabilization. If this is the case, the patient's primary nurse or physician should screen as soon as practical. Clinical decision support in the electronic medical record may help prompt screening. For screening to be performed routinely, it must be built into the standard workflow.

Multiple methods of IPV screening have been studied in the emergency department, including direct questioning, written surveys, and computer-based surveys. Rates of identification are higher with self-administered surveys, whether paper-based or computer-based, than with direct questioning.⁹ Regardless of the method of screening, it is important to screen in a private location without visitors, including children over the age of two. Use nonjudgmental language, such as, "Because I see so much violence in my practice, I ask everyone these questions."

There are several validated IPV screens that may be modified to fit a particular patient's situation.¹⁰ Table 1 has a list of common screening questions. (See "Danger Assessment for Intimate Partner Violence" on page 16 for more on screening tools.)

Disclosure

If patients disclose that they are a victim of IPV, provide an empathetic response such as, "I'm sorry that happened to you. How can I help?"

For many reasons, not all patients who disclose IPV are able to leave their abusive situations. Many victims of abuse stay for financial reasons. Others fear for themselves, their families, and their pets if they were to leave. Victims are the experts on their own safety, and it is the responsibility of the emergency physician to provide patients with resources and referrals tailored to the individual situation.

In some states, emergency physicians are mandated to report IPV to law enforcement. Emergency physicians should become familiar with the statutes in the jurisdictions in which they practice, and should inform patients of what they are legally required to report so that patients can make informed decisions about what to share with their physician.

Safety Planning

If the screen is positive, the patient requires a safety plan prior to discharge. It is important to know what resources are available in your area for victims of IPV. Depending on your hospital's policy, social work, forensic nurses, or community IPV organizations may be able to assist with safety planning. Ideally, the IPV

advocate should meet with the patient in the emergency department. If the patient declines assistance from the IPV advocate, contact information for community resources should be provided. Many IPV victims store this information in their phones under a fictitious name, as abusers may look at their victim's contact list.

Case Conclusion

You note the circular injury on the patient's right cheek (see Figure 1), which appears to be consistent with a bite wound. She also has injuries to the neck (see Figure 2) that are inconsistent with the history provided. When the patient goes to radiology for imaging, her sister is asked to remain in the emergency department. Before the radiology tech comes into the room, you ask the patient, "Many times, injuries like this are caused by another person. Did someone hurt you?" The patient begins to cry as she reveals that her husband punched her repeatedly. She lost consciousness and did not recall what happened after that. She begs that her sister not be told, but she is willing to speak privately with the hospital social worker. Once finished in the emergency department, she plans to take her dog and stay at a friend's home.

Editor's Note: Visit ACEPNow.com to view the references for this article. ➔

PEARLS FROM THE
MEDICAL LITERATURE

DR. RADECKI is an emergency physician and informatician at Kaiser Permanente NW and affiliated with the McGovern Medical School at UTHealth. He blogs at Emergency Medicine Literature of Note and can be found on Twitter @emlitofnote.



ILLUSTRATION: CHRIS WHISSEN PHOTOS: SHUTTERSTOCK.COM

It's Been a Nice Run, Tamsulosin

Recommendations are swinging away from medical expulsive therapy

by RYAN PATRICK RADECKI, MD, MS

It wasn't so long ago that there was absolute consensus on the use of medical expulsive therapy (MET) for the treatment of ureterolithiasis. The 2007 American Urological Association/European Association of Urology combined guidelines decreed the use of alpha-blockers the law of the land for ureteral stones managed by observation.¹ Even as recently as

2014, the Cochrane review on the topic was unequivocally in favor of alpha-blockers for MET for ureterolithiasis.² Now, the evidence has virtually turned on its head.

This comes as no surprise to those who have been following the tale spun by those disavowing the use of tamsulosin. The foundational medical evidence reads like a classic setup for medical reversal. When the 2014 Cochrane review was conducted, it identified 32 studies evaluating the use of MET for ureterolithiasis. Of these, only seven studies had adequate blinding to treatment for physicians and patients. Only six studies reported a mechanism for blinding group allocation. Another eight studies reported outcomes not matching their methods. Most trials involved fewer than 100 patients, were conducted in the Balkans and southeast Asia, and included sponsorship bias. Only two trials were of high-quality and prospectively registered, and these two were among those failing to show a benefit for MET.

The Latest Evidence

However, since that most recent Cochrane review, three significant, high-quality trials assessing the utility of tamsulosin for ureterolithiasis have been published. The first, published in *The Lancet* in 2015, tested three arms: nifedipine, tamsulosin, and placebo.³ The primary outcome was eventual need for urological intervention, not radiological stone passage. Across all three groups, approximately 20 percent of all participants ultimately underwent urological intervention, with no reliable difference between the groups. Secondary outcomes, such as use of pain medication and days until stone passage, however, relied upon patient self-reporting and were returned in only 62 percent of patients. No differences in the secondary outcomes for analgesic use, time to stone passage, and health status were seen between the three groups.

The next trial, published in the *Annals of Emergency Medicine*, specifically required follow-up imaging to assess for stone passage.⁴ Unfortunately, only 78 percent of those enrolled returned for the required 28-day scan, reducing the study's statistical power. Stone passage was 87 percent in the tamsulosin arm versus 82 percent with placebo, with the bulk of the observed difference coming from patients for whom stone size was greater than 5 mm. While there are threats to internal validity with this study and potential subgroups with benefit, these results still further erase the certainty of benefit associated with tamsulosin.

Third, we have another prospective trial published in *JAMA Internal Medicine*, this one split into two phases, an initial "patient-reported" passage phase followed by a "CT follow-up" phase.⁵ Approximately half of the 512 patients were enrolled in each phase, with the overall results broadly consistent with the other trials. Patient-reported passage was similar

as were all secondary measures of resource utilization, subsequent urological intervention, and disability. There was a 6 percent absolute advantage from tamsulosin with regard to radiological evidence of stone passage during the CT follow-up phase. However, unlike the prior studies, there was no benefit observed with regard to stone passage for stones greater than 5 mm in size, and instead, the subgroup favoring tamsulosin in this cohort related to stone location. The few upper ureteral stones enrolled were observed to have a higher passage rate with tamsulosin than with placebo.

Finally, the last bit of evidence comes from a study presented at the 33rd Annual Congress of the European Association of Urology in April and is not yet available in manuscript.⁶ These authors aimed primarily to evaluate the effect of MET on stone passage specifically focused on the subgroups previously identified for possible benefit. This observational study of 3,127 patients whose stone passage was compared via multivariate analysis showed no associated benefit for MET regardless of stone size or location.

Conclusion: Limited to No Benefit from Tamsulosin

The long story made short: Any benefit from tamsulosin for ureterolithiasis is small and fleeting. When multiple trials fail to consistently show benefit from a specific treatment, this does not eliminate the possibility of a beneficial effect, but the expected effect size should be quite small. Tamsulosin and other alpha-blockers are generally well-tolerated but do have rare adverse effects, particularly in older adults. As the expected benefit diminishes, the risk-benefit ratio converges to unity and the value of this treatment vanishes.

The most recent publication from the European Association of Urology on this topic,

published back in 2016, held the view that any benefit, if one were likely, would be restricted to ureteral stones greater than 5 mm in size.⁷ This is a similar conclusion to the recently updated Cochrane review.⁸ As these guidelines and reviews continue to be updated, I expect any recommendations for the use of MET to further narrow or disappear entirely. As always, generalizing aggregate data from trials to an individual clinical scenario is imprecise, and it remains reasonable to offer tamsulosin on a case-by-case basis. If any benefit is to be derived, it appears those with larger, proximal ureteral stones are the best candidates for therapy. That said, the strength of the evidence is limited, and it may be conclusively found that the use of tamsulosin has no benefit at all. ☛

The opinions expressed herein are solely those of Dr. Radecki and do not necessarily reflect those of his employer or academic affiliates.

References

1. Preminger GM, Tiselius HG, Assimos DG, et al. 2007 guideline for the management of ureteral calculi. *J Urol*. 2007;178(6):2418-2434.
2. Campschroer T, Zhu Y, Duijvesz D, et al. Alpha-blockers as medical expulsive therapy for ureteral stones. *Cochrane Database Syst Rev*. 2014;(4):CD008509.
3. Pickard R, Starr K, MacLennan G, et al. Medical expulsive therapy in adults with ureteric colic: a multicentre, randomised, placebo-controlled trial. *Lancet*. 2015;386(9991):341-349.
4. Furyk JS, Chu K, Banks C, et al. Distal ureteric stones and tamsulosin: a double-blind, placebo-controlled, randomized, multicenter trial. *Ann Emerg Med*. 2016;67(1):86-95.e2.
5. Meltzer AC, Burrows PK, Wolfson AB, et al. Effect of tamsulosin on passage of symptomatic ureteral stones: a randomized clinical trial [published online ahead of print June 18, 2018]. *JAMA Intern Med*.
6. Shah TT, Gao C, O'Keefe A, et al. The effects of medically expulsive therapy (MET) on spontaneous stone passage (SSP) in patients presenting with acute ureteric colic. *J Urol*. 2018;199(4S):e387-e388.
7. Türk C, Knoll T, Seitz C, et al. Medical expulsive therapy for ureterolithiasis: the EAU recommendations in 2016. *Eur Urol*. 2017;71(4):504-507.
8. Campschroer T, Zhu X, Vermooij RW, et al. Alpha-blockers as medical expulsive therapy for ureteral stones. *Cochrane Database Syst Rev*. 2018;4:CD008509.



CME Now
A new continuing medical
education feature of ACEP Now

LOG ON TO
<http://www.acep.org/ACEPCME/>
TO COMPLETE THE
ACTIVITY AND EARN
FREE AMA PRA
CATEGORY 1 CREDIT.



DR. DARK is assistant professor of emergency medicine at Baylor College of Medicine in Houston and executive editor of PolicyRx.org.

Insurance ≠ Access

Fractured health care system makes follow-up challenging, even for insured patients

by **CEDRIC DARK, MD, MPH**

We address a common misconception, even elicited by former President Barack Obama, that increasing health insurance coverage would ultimately reduce emergency department visits. Many Americans, even politicians, complain that people go to the emergency department unnecessarily. Perhaps it isn't our fault as emergency physicians. It isn't the fault of patients, either, for not knowing where is the "right" place to seek care.

Instead, maybe we should look at the incentives our current system provides for the delivery of health care to better understand this phenomenon.

It continually amazes me that un- or under-insured patients must come to our public hospital, via the emergency department, for something as simple as orthopedic follow-up after being diagnosed elsewhere with a broken arm or leg—emergency departments being the only place beholden to EMTALA. We see them, take off their splint, and repeat the X-rays, then the orthopedics resident puts on a new splint and we schedule them for a clinic visit. It's duplicative and inefficient.

I have even provided some curbside advice to a cashier at a restaurant regarding fracture care. She was wondering if she should return to the emergency department to get her splint converted into a cast because she couldn't find an orthopedist to see her without insurance. Freed from the confines of the EMTALA mandate, I could openly discuss finances with her and explain the most cost-effective way of obtaining care. I instructed her to save up the cash for the orthopedic visit as opposed to coming back to the emergency department. Otherwise, she would have been responsible for an additional ED bill without getting the definitive orthopedic care she needed.

Our health care system is upside down. Americans believe no one should die or suffer irreparable harm during the moment of their emergency, but we offer next to nothing for prevention or follow-up care. The design of our health care financing system caters only to people with insurance or enough cash to satisfy the appetite of outpatient physicians. People in the margins of society, without significant financial resources, are lucky if they qualify for Medicaid.

Some policy wonks have argued Medicaid is worse than no insurance at all.¹ While I don't agree with that bleak assessment, especially because it does protect individuals and families from financial calamity in time of serious illness, Medicaid does appear to offer substandard options for care, as we see in the journal club below, notably when it comes to obtaining specialist care.^{2,3}

References

1. Roy A. Oregon study: Medicaid 'had no significant effect' on health outcomes vs. being uninsured. Forbes website Available at www.forbes.com/sites/theapothecary/2013/05/02/oregon-study-medicaid-had-no-significant-effect-on-health-outcomes-vs-being-uninsured. Accessed July 31, 2018.
2. Medford-Davis L. Obamacare shields from financial harm. Policy Prescriptions website. Available at: <http://www.policyprescriptions.org/obamacare-shields-from-financial-harm>. Accessed July 17, 2018.
3. Dark C. No difference between public & private coverage. Policy Prescriptions website. Available at: <http://www.policyprescriptions.org/no-difference-between-public-private-coverage>. Accessed July 17, 2018.

EMRA + POLICYRx HEALTH POLICY JOURNAL CLUB

Orthopedic Appointment Availability 5 Times Higher for Uninsured Than for Medicaid

by **VIDYA ESWARAN, MD**

Increase outpatient services and you'll decrease expensive ED visits, or so the popular axiom goes. This only works, however, if enough outpatient visits are available. A study by Medford-Davis et al examined the availability of outpatient orthopedic ankle appointments by insurance status.¹

Privately insured patients had an 85 percent chance of success in securing appointments. Interestingly, the uninsured had the same odds as the privately insured in getting appointments. Both the insured and uninsured had much higher odds of receiving appointments than patients with Medicaid.

To make matters worse, most clinics were unable to offer Medicaid patients any resources about where they could receive care. When the authors checked the list of orthopedists accepting Medicaid, 15 stated they didn't accept Medicaid, 11 did not treat ankle injuries, nine did not have working telephone numbers, and only three were able to schedule an appointment.

For the uninsured, just because appointments were available did not necessarily mean they were affordable. On average, uninsured patients were asked to pay \$353.74, with only two patients able to secure appointments for less than \$100. A quarter of clinics offered discounts for those paying in cash, and 8 percent offered payment plans. Clinics were compensated by privately insured patients at an average rate of \$236 for a clinic visit and \$36 for an X-ray, \$77 less than the average charge to the uninsured. Medicaid, on the other hand, compensated clinics at a rate of \$55 to \$101 for the office visit and \$26.73 for an X-ray. Only one in seven Medicaid patients were able to secure outpatient appointments. Uninsured patients, while better able to schedule appointments, encountered prohibitively high charges.

I'm sure I'm not alone in looking at patient complaints in the electronic medical record and wondering why patients were coming to the ED with problems that could clearly be treated in an outpatient setting. After reading this article and considering the amount of time the researchers must have spent attempting to schedule appointments, I am no longer surprised. When balancing real-life responsibilities such as work and childcare, who has the time to call multiple clinics to schedule an appointment? If we as a health care system truly believe that reducing ED visits and hospitalizations is the way to reduce health care costs, we must ensure that systems are in place to facilitate accessible and affordable outpatient care.

Reference

1. Medford-Davis LM, Lin F, Greenstein A, et al. "I broke my ankle": access to orthopedic follow-up care by insurance status. *Acad Emerg Med*. 2017;24:98-105.

DR. ESWARAN is an EM resident at Northwestern University in Chicago.



ILLUSTRATION: CHRIS WHISSEN & SHUTTERSTOCK.COM

Are You FACEP Eligible?

Deadline extended to August 20!

Become a Fellow

Show Your Commitment to Emergency Care

Apply Now!
acep.org/fellow

Ilka Langston McKinney, MD, FACEP
Port Saint Lucie, Florida

American College of
Emergency Physicians®
ADVANCING EMERGENCY CARE

ACN_0818_1194_0718



DR. FAUST is an emergency medicine resident at Mount Sinai Hospital in New York and Elmhurst Hospital Center in Queens. He tweets about #FOAMed and classical music @jeremyfaust.

#TipsForNewDocs

Twitter hashtag contains a wealth of wisdom

by **JEREMY SAMUEL FAUST, MD, MS**

Conventional wisdom tells patients to avoid the hospital in July. With hospitals teeming with a fresh crop of medical school graduates who have been doctors

for less time than it's been since your last haircut, the fear is that both the quality and efficiency of medical care tanks this time of year.

Of course, there is actually little data to support the notion of a July effect.¹ Person-

ally, I am most concerned about September, when a false sense of security may set in.

However, summer is the time when new doctors are most eager to learn and sea-

CONTINUED on page 22

CLASSIFIEDS

Featured Physician and Leadership Opportunities

ARKANSAS

Ft. Smith
Van Buren

FLORIDA

Boynton Beach
Brooksville
Clearwater
Dunedin
Englewood
Ft. Lauderdale
Ft. Pierce
Ft. Walton Beach
Kissimmee
Lakeland
Lake Worth
Miami
Newberry
Ocala
Okeechobee
Orlando
Oviedo
Palm Harbor
Panama City
Pensacola
Plant City
Port Charlotte
Port St. Lucie
Punta Gorda
Sanford
Sarasota
Sebring
St. Petersburg
Tampa Bay
Vero Beach
West Palm Beach

GEORGIA

Atlanta
Augusta
Canton
Cartersville
Covington
Cumming
Demorest
Dublin
Duluth
Fayetteville
Lawrenceville
Macon
Snellville
Waycross

KENTUCKY

Bowling Green
Cave City
Frankfort
Glasgow
Murray

LOUISIANA

Figure 1 (Left): Caption

NORTH CAROLINA

Fayetteville
Lumberton

SOUTH CAROLINA

Dillon
Little River
Manning
Myrtle Beach

TENNESSEE

Chattanooga
Dickson
Hendersonville
Knoxville
Lebanon
Nashville

LEADERSHIP OPPORTUNITIES

Clearwater, FL
Ft. Lauderdale, FL
Ft. Walton Beach, FL
Inverness, FL
Kissimmee, FL
St. Petersburg, FL
Vero Beach, FL
West Palm Beach, FL

PEDIATRIC EM OPPORTUNITIES

Augusta, GA
Dublin, GA
Ft. Lauderdale, FL
Macon, GA
Nashville, TN
Orlando, FL
Panama City, FL
Pensacola, FL
Tampa Bay, FL
West Palm Beach, FL



■ Featured locations

OUR DOCTORS ENJOY:

- Leadership Development
- Exceptional Practice Support
- Robust Referral Program
- Malpractice with Tail Coverage
- Stable, Long-Term Contracts
- CME Allowance
- National Leadership Programs

■ ■ **Envision**
■ ■ PHYSICIAN SERVICES

Apply by sending your resume to:
MakeAChange@evhc.net
Call: 877.226.6059

soned physicians are at their most committed to teaching. With that in mind, the Twitter hashtag #TipsForNewDocs has become something of an annual tradition in June and July. Here are some of my favorites from this year (lightly edited for clarity).

From Wendy Johnson, MD, MPH (@Artivism), a family medicine physician and medical director of La Familia Medical Center in Santa Fe, New Mexico: “One of the best axioms I’ve heard re: medicine: ‘Don’t just DO something, STAND there!’ When in doubt,

stop for a minute, think about the whole picture, think about the patient’s story. You almost always have time, except in the most emergent situations.”

This is a great reminder that medical school often emphasizes what treatments and tests we might utilize in the most unusual circumstances, but in reality, such heroics are not only unnecessary, they may even prove harmful.

Elianna Saidenberg, MD (@ESaidenberg), a fellow in patient experience in the depart-

ment of medicine at The Ottawa Hospital in Ontario, added: “Until a patient dies, there is treatment. May not be disease-modifying, but there is treatment of pain and other symptoms. Never, ever tell a patient or family that care or treatment is being withdrawn.”

In other words, it is not a matter of doing everything or doing nothing but rather determining what kind of care a patient needs in each moment.

This tweet by Louis Mullie, MD (@LouisMullie), an internal medicine resident at

Centre Hospitalier de l’Université de Montréal, about how to stay out of trouble when performing procedures should probably be posted on the walls in most hospitals. “If you meet resistance, don’t push. If you (or someone else) breaks sterility, speak out—can you swear on your patient’s life that the procedure was clean? If you feel uncomfortable at any step, call for senior help.”

Marleny Franco, MD (@MFrancoMD), a pediatric emergency medicine specialist at Children’s Hospital of Philadelphia and St.

CLASSIFIEDS

ENVISION PHYSICIAN SERVICES OFFERS...

A COMMITMENT TO EXCELLENCE IN IMPROVING OUR PATIENT'S LIVES.

GREGG MOJARES

Gregg Mojares, DO
Emergency Medicine

We're now hiring in the state of Georgia.

Not only will you be supported by one of the country’s most dynamic physician groups, Georgia has a lot to offer and it’s not just the peaches.

- Lower cost of living than the national average
- Ranked the fifth most-tax friendly state by Kiplinger
- Friendly place to live with great schools, diverse culture, and beautiful weather

To learn more about our opportunities, visit EnvisionPhysicianServices.com/SATL or call 866.856.2033

Envision
PHYSICIAN SERVICES



Mary Medical Center, tweeted about an all-too-common error. “Don’t use a child as a language interpreter. It’s inappropriate, unfair to the child & family, and unethical. Get a proper in-person or phone interpreter.”

Consider the legal implications. I can’t imagine wanting to face a deposition, let alone a jury, in a case in which a child was permitted to serve as the medical interpreter. In fact, many *adults* can’t even decode half of the things we say, even in their own language (a reminder to avoid jargon and never to assume that patients have complete medical literacy).

Mark Reid, MD (@MedicalAxioms), a hospitalist in Denver, has published an entire book of modern medical quips, from serious

to hysterical, that would have made even Dr. William Osler swoon with jealousy. Among Dr. Reid’s tweets sporting this hashtag is: “Some patients make themselves vomit in an attempt to relieve severe nausea. It’s not a trick or deception in an attempt to be taken seriously. It’s an age-old ‘home remedy.’”

It is indeed all too tempting to chalk up a patient’s self-induced vomiting (or their tympanic membrane piercing attempts to do so) as a form of malingering or an attempt to gain our attention. But this tweet is a reminder to keep an open mind about our patients’ motivations.

Gabrielle Inglis, MD (@GabrielleInglis), a family medicine physician in Boston,

brilliantly flipped the script with a list of #TipsForAttendings, underscoring that, as supervisors and mentors, we have an enormous impact on both the academic and emotional well-being of our trainees. Here are her top five:

1. “Make your expectations clear for how and when to review cases with you and remember, every staff they work with wants it done differently.”
2. “Explicitly tell them to take a break to eat—and not just ice cream rounds but real food.”
3. “If you notice them becoming flustered while presenting, chances are it’s a reflection of your demeanor. Be curious, kind

and patient.”

4. “Role model respect for everyone you work with in the hospital—including the unsung heroes, clerks and custodial staff.”

5. And finally, most important, “Don’t be a jerk.”

Want more? Visit these hashtags on Twitter. Do you have any great tips for new (and old) doctors? Send them my way or post them on Twitter with the hashtag included. ➕

Reference

1. Jena AB, Sun EC, Romley JA. Mortality among high-risk patients with acute myocardial infarction admitted to U.S. teaching-intensive hospitals in July: a retrospective observational study. *Circulation*. 2013;128(25):2754-2763.

CLASSIFIEDS



The Emergency Group, Inc.

Honolulu, Hawaii

The Emergency Group, Inc. (TEG) is a growing, independent, democratic group that has been providing emergency services at The Queen’s Medical Center (QMC) in Honolulu, Hawaii since 1973. QMC is the largest and only Level 1 Trauma Center in the state and cares for more than 65,000 ED patients per year. QMC opened an additional medical center in the community of West Oahu in 2014, which currently sees 60,000 ED patients annually.

Due to the vastly growing community in the West Oahu area, TEG is actively recruiting for EM Physicians BC/BE, EM physicians with Pediatric Fellowship who are BE/BC and an Ultrasound Director. Physicians will be credentialed at both facilities and will work the majority of the shifts at the West Oahu facility in Ewa Beach, Hawaii.

We offer competitive compensation, benefits and an opportunity to share in the ownership and profits of the company. Our physicians enjoy working in QMC’s excellent facilities and experience the wonderful surroundings of living in Hawaii.

.....
 • MEET US at ACEP18
 • at the EMRA JOB FAIR
 • Booth # 116
 • October 1, 2018 5pm - 7pm
 • San Diego Marriot Marquis
 • Grand Ballroom
 •

Maryland: Annapolis

Independent, democratic and well-established group at community hospital with excellent specialty support, located in beautiful Annapolis MD, seeks BC/BE physician for partnership and non-partnership opportunities. Benefits include flexible scheduling, generous CME, comprehensive medical plan, outstanding 401k match and excellent compensation. Convenient to Baltimore and DC. Contact Yolanda Cormier at 443-481-1293 or ycormier@aahs.org.



FOR SOME OF OUR MOST ELITE SOLDIERS, THIS IS THE THEATER OF OPERATIONS.

Becoming an emergency physician and officer on the U.S. Army health care team is an opportunity like no other. You can build a distinguished medical career by diagnosing and treating illnesses and injuries that require immediate attention. With this specialized team, you will be a leader - not just of Soldiers, but in critical health care.

See the benefits of being an Army medical professional at healthcare.goarmy.com/kj34



©2016. Paid for by the United States Army. All rights reserved.



EMERGENCY MEDICINE FACULTY
University of California
San Francisco

The University of California San Francisco, Department of Emergency Medicine is recruiting for full-time faculty. We seek individuals who meet one or more of the following criteria: Clinically-oriented emergency medicine faculty with outstanding and original contributions in education and training, and/or noteworthy innovation in clinical practice; individuals with a track record of successful research activities, as demonstrated by peer-review publications and funding. Rank and series will be commensurate with qualifications.

The Department of Emergency Medicine provides comprehensive emergency services to a large local and referral population with approximately 130,000 visits a year at UCSF Medical Center, Zuckerberg San Francisco General (ZSFG), and UCSF Benioff Children's Hospital San Francisco. UCSF Medical Center, ranked as the best hospital in California, has a 29-bed ED, a 10-bed Observation Unit, and serves about 45,000 patients in the emergency department patients. ZSFG, a level 1 trauma center, paramedic base station and training center, opened a new hospital and 60-bed emergency department in 2016, including a dedicated pediatric ED. The Department of Emergency Medicine serves as the primary teaching site for a fully accredited 4-year Emergency Medicine residency program, which currently has 54 residents and fellowships in education, EMS, global health, toxicology, research, pediatric emergency medicine and ultrasound. Research is a major priority of the department with over 100 peer-reviewed publications each year. There is an active and successful health services research group, as well as in a number of other disciplines within EM. There are opportunities for leadership and growth within the Department and UCSF School of Medicine.

Board certification or eligibility in emergency medicine is required. All applicants should excel in bedside teaching and have a strong ethic of service to their patients and profession.

The University of California, San Francisco (UCSF) is one of the nation's top five medical schools and demonstrates excellence in basic science and clinical research, global health sciences, policy, advocacy, and medical education scholarship. The San Francisco Bay Area is well-known for its great food, mild climate, beautiful scenery, vibrant cultural environment, and its outdoor recreational activities.

PLEASE APPLY ONLINE AT:
<https://aprecruit.ucsf.edu/apply/JPF000XX>

UCSF seeks candidates whose experience, teaching, research, or community service has prepared them to contribute to our commitment to diversity and excellence. UCSF is an Equal Opportunity/Affirmative Action Employer. The University undertakes affirmative action to assure equal employment opportunity for underutilized minorities and women, for persons with disabilities, and for covered veterans. All qualified applicants are encouraged to apply, including minorities and women. For additional information, please visit our website at <http://emergency.ucsf.edu/>.



Emergency Medicine Physician Opportunities in Picturesque Maine!
Live, work, play in Maine!

Eastern Maine Medical Center has emergency medicine physician opportunities throughout Maine with flexible schedules and exceptional work/life balance. Opportunities are available for BC/BE physicians in Bangor, Ellsworth, Blue Hill and Waterville!

- Dynamic physician-led collaborative ED model
- Supportive hospital administration
 - Engaged patient population
 - Flexible scheduling/no call
 - Medical student teaching options
- Full spectrum of sub-specialty backup and consultation
- In-house collaborative hospitalist service, radiology and Night Hawk Services
- In-system LifeFlight of Maine Air/Ground critical care transport program

- In-system EMMC ACS-verified Level II Trauma Center less than one hour away from affiliates sites:**
- Trauma Service: on-call consult
 - Critical Care Intensivists: on-call consult
 - Pediatric Intensivists: on-call consult

Highly desirable, family-centered communities throughout Maine! Year-round access to Maine's unmatched coastline, mountains and lakes; limitless outdoor recreation opportunities and unspoiled natural beauty!

Competitive compensation package: relocation, sign-on bonus and loan repayment.
 Contact: Jamie L. Grant, Provider Recruiter, Email: providerjobs@emhs.org



NOW HIRING
in Emergency Medicine

The academic Department of Emergency Medicine at the CU School of Medicine is dedicated to excellence in clinical care, teaching and mentoring, research and scholarship, and innovation. Denver is a highly desirable place to live, work, and raise a family. We offer salaries commensurate with qualifications, relocation assistance, physician incentive program, CME allowance, and a comprehensive benefit package.

COMMUNITY POSITIONS

- Community Practice Physicians

ACADEMIC POSITIONS

- Faculty (all ranks)
- Critical Care (ACCM pathway preferred)
- Research
- Ultrasound

Fellowships

- Administration, Operations & Quality
- Climate & Health SciencePolicy
- Critical Care-Anesthesia
- Emergency Medical Services
- Research
- Toxicology
- Ultrasound
- Wilderness Medicine

Learn more about us at:

www.medschool.ucdenver.edu/em

For additional information, please contact:

Frances Schulz, HR Manager, Emergency Medicine
frances.schulz@ucdenver.edu

LOS ANGELES CALIFORNIA

DOWNTOWN LOS ANGELES:

Quality STEM Stroke Center, good Metrics, paramedic receiving (no peds inpatients). Physician coverage 38-40hrs/day with NP & PA 12 hrs/day. 1.9 pts/hr, core group physicians average 20 years tenure. Require Board certified or Board eligible (residency trained) with experience. Day & night shifts (max 5 nights/mo.). Salary competitive.

SAN FERNANDO VALLEY:

Paramedic receiving 130-bed hospital, 10-bed ER, 1500/pts mo. with NP & PA coverage and overlapping doctor shifts.

TUSTIN - ORANGE COUNTY:

New ER opening December, paramedic Receiving, 110-bed hospital, 9 bed ER, Anticipate 600-900 visits/mo. Base + Incentive (patient volume + RVU) 24 hr. Shifts

LOS ANGELES:

Low volume 700/mo. urgent care non-Paramedic receiving, less stress, 20 yr. contract w/stable history. Patients 1/hr. Base + incentive

NORWALK:

Low volume 600/mo. Paramedic receiving. Patients 8/hr. 10-year history stable. \$110/hr. 24hr shifts available

FAX CV to 213-482-0577
or call 213-482-0588, or email
neubauerjanice@gmail.com



Practice
made
perfect.

Great Career vs. Great Life? Have Both

We provide the support and flexibility needed to balance your career and life outside of medicine.

Join our team

teamhealth.com/join or call 866.750.6256



TEAMHealth®

EPT EMERGENCY PHYSICIANS OF TIDEWATER, PLC

Emergency Physicians of Tidewater (EPT) is a physician-owned, physician-run, democratic group of ABEM/AOBEM eligible/certified EM physicians serving the Norfolk/Virginia Beach area for the past 40+ years. We provide coverage to 5 hospital-based EDs and 2 free-standing EDs in the area. Facilities include a Level 1 trauma center, Level 3 trauma center, academic medicine and community medicine sites.

All EPT physicians serve as community faculty to the EVMS Emergency Medicine residents. EMR via EPIC. Great opportunities for involvement in administration, EMS, ultrasound, hyperbarics and teaching of medical students and residents. Very competitive financial package and schedule. Beautiful, affordable coastal living.

Please send CV to eptrecruiter@gmail.com or call (757) 467-4200 for more information.

Academic Emergency Medicine Physicians

The University of Chicago's Department of Medicine, Section of Emergency Medicine, is seeking full-time faculty members to serve as Emergency Physicians as we prepare to open a new adult emergency department and establish an adult Level 1 Trauma Center. Academic rank is dependent on qualifications. Applicants are required to be board certified or board eligible in emergency medicine and to be eligible for Illinois licensure by the start of appointment. Responsibilities will include teaching in the educational programs sponsored by the Section and participation in scholarly activity. We seek candidates looking to develop an academic niche that builds upon our faculty expertise in basic and translational research, health equity and bioethics research, geriatric emergency care, global emergency medicine, medical education, prehospital medicine, aero-medical transport, and ultrasound. We host one of the oldest Emergency Medicine Residency programs in the country and serve as a STEMI receiving hospital, a Comprehensive Stroke Center, a Burn Center, and a Chicago South EMS regional resource hospital. The Adult ED has an annual volume of 65,000 and our Pediatric ED cares for 30,000 patients per year, including 1,000 level 1 trauma patients.

This position provides competitive compensation and an excellent benefits package. Those interested must apply by uploading a cover letter and current CV online at academiccareers.uchicago.edu/applicants/Central?quickFind=55160. Review of applications will continue until all available positions are filled.

The University of Chicago is an Affirmative Action/Equal Opportunity/Disabled/Veterans Employer and does not discriminate on the basis of race, color, religion, sex, sexual orientation, gender identity, national or ethnic origin, age, status as an individual with a disability, protected veteran status, genetic information, or other protected classes under the law. For additional information please see the University's Notice of Nondiscrimination at http://www.uchicago.edu/about/non_discrimination_statement/. Job seekers in need of a reasonable accommodation to complete the application process should call 773-702-0287 or email ACOppAdministrator@uchicago.edu with their request.



{ Job Opportunities }

ASSISTANT MEDICAL DIRECTOR

PEDIATRIC EMERGENCY MEDICINE LEADERSHIP OPPORTUNITIES

ASSOC PROGRAM DIRECTOR

VICE CHAIR, RESEARCH

EMERGENCY MEDICINE RESEARCHER POSITIONS

The Emergency Medicine Department at Penn State Health Milton S. Hershey Medical Center seeks energetic, highly motivated and talented physicians to join our Penn State Hershey family. Opportunities exist in both teaching and community hospital sites. This is an excellent opportunity from both an academic and a clinical perspective. As one of Pennsylvania's busiest Emergency Departments treating over 75,000 patients annually, Hershey Medical Center is a Magnet® healthcare organization and the only Level 1 Adult and Level 1 Pediatric Trauma Center in PA with state-of-the-art resuscitation/trauma bays, incorporated Pediatric Emergency Department and Observation Unit, along with our Life Lion Flight Critical Care and Ground EMS Division. We offer salaries commensurate with qualifications, sign-on bonus, relocation assistance, physician incentive program and a CME allowance. Our comprehensive benefit package includes health insurance, education assistance, retirement options, on-campus fitness center, day care, credit union and so much more! For your health, Hershey Medical Center is a smoke-free campus. Applicants must have graduated from an accredited Emergency Medicine Residency Program and be board eligible or board certified by ABEM or AOBEM. We seek candidates with strong interpersonal skills and the ability to work collaboratively within diverse academic and clinical environments. Observation experience is a plus.

FOR ADDITIONAL INFORMATION, PLEASE CONTACT:



PennState Health



Susan B. Promes, Professor and Chair, Department of Emergency Medicine, c/o Heather Peffley, Physician Recruiter, Penn State Health Milton S. Hershey Medical Center, 500 University Drive, PO Box 855 Mail Code A595, Hershey PA 17033, Email: hpeffley@pennstatehealth.psu.edu

OR apply online at: <http://hmc.pennstatehealth.org/careers/physicians>

Penn State Health Milton S. Hershey Medical Center is committed to affirmative action, equal opportunity, and the diversity of its workforce. Equal Opportunity Employer – Minorities/Women/Protected Veterans/Disabled.

Where you live is a reflection of who you are.
Over 200 locations and growing.



So is where you work. If you want to be part of a large, stable group, take a look at US Acute Care Solutions. We are the largest, physician-owned group in the country, with over 200 locations, each chosen to appeal to the different tastes and lifestyles of our clinicians. Best of all? Every USACS physician becomes an owner in our group, creating unbeatable camaraderie. Our commitment to physician ownership is a reflection of who we are and what we care about most: our patients, and living the lives we've always dreamed of.

Visit USACS.com and discover why more than 3,000 providers serving over 6 million patients a year are proud to call US Acute Care Solutions home.



Own your future now. Visit usacs.com
or call Darrin Grella at 844-863-6797 careers@usacs.com



SYNDROMIC TESTING FROM BIOFIRE:

Improve Patient Outcomes.

BioFire's syndromic testing allows you to quickly identify infectious agents that produce similar symptoms in patients. BioFire's innovative PCR technology provides answers in a clinically actionable timeframe using any of the FilmArray® Panels:

-  **Respiratory Panel:** Enable a faster, more informed diagnosis that can reduce the usage and duration of antibiotic administration and decrease length of hospital stay.
-  **Blood Culture Identification Panel:** Reduce time to effective therapy and antimicrobial de-escalation which may improve patient survival rates.
-  **Gastrointestinal Panel:** Quickly ruling in or out enteric pathogens may improve patient care by preventing misdiagnosis and mistreatment.
-  **Meningitis/Encephalitis Panel:** Quickly identifying a CNS infection as viral, bacterial or fungal may reduce patient mortality.

To learn how syndromic testing from BioFire can help YOU improve patient outcomes, visit biofiredx.com

Data on file at BioFire Diagnostics.



Syndromic Testing: The Right Test, The First Time.

Respiratory • Blood Culture Identification • Gastrointestinal • Meningitis/Encephalitis

