An Effective Voice for EM
Highlights from the 2014 ACEP Leadership and Advocacy Conference

Nearly 550 attendees at Leadership and Advocacy Conference (LAC) this year explored major issues of health care reform implementation that impact the emergency medicine. In addition to getting up to speed on the issues, practicing physicians, residents, and medical students also learned how to be more effective advocates for our patients, our specialty, and the public. The highlight of the meeting is always ACEP Lobby Day, when conference attendees descend on Capitol Hill to discuss our issues and concerns with congressional leaders. The bills discussed by ACEP during our visits to the Hill this year propose real solutions to real problems that we face every day in caring for patients in the ED. This year’s CONTINUED on page 4

ACEP POLL SHOWS ED VISITS ON THE RISE
ACEP members are urged to take actions to accommodate growing needs
by KAREN APPOLD

An online poll of emergency physicians conducted by ACEP showed that 86 percent of respondents expect emergency department visits to rise over the next three years. This could be due, in part, to the Jan. 1, 2014, implementation of the Affordable Care Act (ACA). Additionally, 77 percent reported that their EDs are not equipped for such significant increases. (You can view the complete poll results at http://newsroom.acep.org/ACEP-Emergency-Visits-Up-Since-Implementation-of-ACA.) CONTINUED on page 9

WASHINGTON STATE BEST PRACTICES
7 TIPS TO REDUCE ED MISUSE
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The Official Voice of Emergency Medicine

July 2014
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A NEW SPIN
Stennes: Strength in Numbers

Google Glass debuts in the ED, helping EPs streamline patient care
by CAROL PATTON
SEE PAGE 10
Criticism over HRT Coverage

As a practicing, board-certified emergency physician, I was concerned to respond to the recent May 2014 issue in regards to the cover stories “The Battle for Youth” and “Is Hormone Replacement Therapy Too Good to Be True?” I was under the impression that ACEP was the official voice of emergency medicine and not current trends in anti-aging. I looked forward to the latest articles in regards to controversies over TPA use, managing sepsis, or even documentation. I don’t think anti-aging warrants front-page coverage on our monthly newsletter. Place it in the back or even link to the webpage.

Secondly, as a 45-year-old male who uses HRT personally, I don’t believe Eric G’s results are only because of HRT. He either benefitted from a combination of HRT, diet management, and exercise or was using supratherapeutic doses, which are dangerous. The usual response, no matter what their advance directive may say, is, “Oh, no. I’ve always wanted to die a natural death, not hooked up to any tubes or machines.” There’s a wealth of resources on this available. Just search for “allow natural death.”

—Chuck Pichler, MD, FACEP
Kirkland, Washington

Bring Simple Language to End-of-Life Decisions

In response to “How to Approach End-of-Life Care Discussions, Determine Treatment Goals for Patients Near Death in the Emergency Department,” May 2014) The conversation changes completely if one uses “allow natural death” in the family discussion instead of the clinical terms “no CPR,” “do not resuscitate,” “no code,” etc.

I have had patients and families respond as if all the weight in the world was lifted from their shoulders when I have asked, “If while you are here in the hospital your heart or breathing stops and you die a natural death, do you want us to do anything about that?”

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THE BREAK ROOM

ACEPNow
The Official Voice of Emergency Medicine

EDITORIAL STAFF

EDITOR
Dawn Antoline-Wang
dawantoline@wiley.com

MANAGER, DIGITAL MEDIA AND STRATEGY
Jason Carris
jcarris@wiley.com

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

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

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

PUBLICATIONS STAFF

EXECUTIVE EDITOR/PUBLISHER
Lisa Dionne
lidionne@wiley.com

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

ADVERTISING STAFF

DISPLAY ADVERTISING
Mike Lamattina
mlamattina@wiley.com
(781) 388-8548

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

EDITORIAL ADVISORY BOARD

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Strength in Numbers: A Call to Action

by RICHARD STENNES, MD, MBA, FACEP

W hen the same question continues to be asked, this might mean that the answers lacked solutions.

I have advocated for an expanded ACEP membership since day one. The argument has failed based primarily on “exclusivity in the club.” Although recognizing residency training and board certification in emergency medicine as the standard is important, the masses seem to disregard the fact that vast numbers of physicians working as emergency physicians have no EM training but receive all of the educational and financial benefits that ACEP and the American Medical Association (AMA) provide for them.

Historical Perspective

I joined ACEP in the early 1970s. In California, we needed a mechanism to go to Sacramento to lobby for money for Medi-Cal; Bill O’Riordan, Walt Edwards, I, and others did just that.

We realized early on that our efforts would require more sophistication, like the big boys in Sacramento, and so CAL/ACEP hired a lobbyist, Jim Randlett. Often, our legislative efforts did not bear fruit, but they did stop some bad things from happening—A continued theme today.

We also realized that money talks (and bullshit walks) and that a political action committee (PAC) would be necessary to prompt legislators to listen more closely, and so EM-PAC was formed.

John McDade, president in about 1975, asked me to assume the chair of the Government Finance Committee during the Nexus 75 meeting in Palm Springs. I started marching on Washington, DC, with our part-time lobbyist, Terry Schmidt, again looking for money in some direct or indirect fashion.

Jack Wood of Wood, Lucksinger, and Epstein in Houston was one of the nation’s recognized experts in Medicare rules and reimbursement and was retained to accompany me to the Medicare offices in Baltimore to look for improved reimbursement. We won.

During the winter ACEP Symposium meeting in Bermuda in the ’70s, the option for independent contractor status for emergency physicians was being contested. I asked the Board for $20,000 to march on Washington, and we prevailed. This was a money issue, and this recurrent theme continues in present time.

It became apparent that our efforts to protect the practice of emergency medicine and the interests of emergency physicians needed full-time lobbying, and the College opened its own office in Washington.

We realized that a good message couldn’t reach the ears, hearts, and minds of legislators without numbers and money. This was the birth of NEMPAC.

What was, and remains, largely unknown to most physicians is the incredible effect that the Relative Value Scale Update Committee (RUC) of the AMA has on directing money to emergency medicine. Mike Bishop, MD, FACEP, and others before him have represented EM at the RUC and have done an outstanding job.

As ACEP president, I was at the Reagan White House for the signing of EMTALA into law in 1986. In theory, EMTALA was to protect patient access to emergency care. The net effect to us has been more patients, and that means more opportunity.

We passed a law in California that precluded nonemergency physicians from testifying against emergency physicians in medical-malpractice cases. This was an effort to reduce risk and malpractice costs—again, a money issue.

The EM Landscape Today

One must ask who has benefited from all of these efforts. Arguably, society has as we have improved emergency care immensely, but more specifically, all physicians (and advanced practice providers) who work in emergency medicine have benefited. Of note, in approximately 40 percent of visits to California EDs, patients are reportedly seen by physician assistants (PAs). They are clearly practicing EM and are not physicians, but PAs do a fine job and are a permanent piece of our workforce.

My experience suggests that, at least outside of major metropolitan areas, most emergency care is delivered by non–EM-trained physicians. Interestingly, they all have the benefits provided by ACEP but contribute nothing when it comes to “carrying the water” on regulatory and legislative matters. Free-loaders? I don’t think so. We’ve refused their help and their participation.

I work in a rural Minnesota ED with up to three physicians and one nurse practitioner on duty at many times. I started staffing my hometown ED in 1992, with the objective of staffing it with residency-trained emergency physicians. Even today, with a pay scale at the 50th percentile, there are only two American Board of Emergency Medicine–certified physicians working there. The rest are family practice trained and do a wonderful job. They may not possess all the knowledge of those trained in EM in recent years, but this situation illustrates two points: there is an ongoing shortage of residency-trained emergency physicians in rural America, and emergency care is delivered effectively every day by those not trained in emergency medicine.

Imagine our membership and lobbying numbers if we somehow included these physicians as members of ACEP in some unique category. We have many sections within ACEP, but they don’t add numbers or dollars because existing members are the only pool for section membership. A new section/category could be a substantive portion of ACEP membership. When Washington or Sacramento looks out on the horizon and sees a bigger group of physicians all rowing the boat together, our strength and influence will be notably enhanced while ACEP’s mission of continuing to improve emergency care will be more completely actualized.

We are recognized as a big player in the house of medicine as evidenced by the recent election of an emergency physician, Steven Stack, MD, FACEP, as president-elect of the AMA.

Any fear that we would lose what we have achieved by adding members who practice our specialty but are not EM trained is no longer applicable, in my opinion. Quite the contrary, I think our stature and effectiveness would grow.

As a past president, I’m often silent on such issues as I watch the College and specialty grow and develop. It’s time to break the silence. I ask that you consider my thoughts carefully as we move into the future as an established, well-respected specialty. We are only benefited by strength in numbers. ☺

DR. STENNES was ACEP president from 1985 to 1986.
key issues were psychiatric patient boarding, the lack of resources for mental health care, the lack of funding for graduate medication education, and the need for liability protection for EMTALA care provided in the ED. (See sidebar for more information.)

This conference may seem quite intimidating to those who don’t consider themselves political experts. You might think that the conference is really only for the “club” of political geeks who have been attending since the conference first started back in the 1990s. It’s natural to feel that a member of Congress will recognize inexperience and eat you alive in a discussion about health care policy. Well, you would be completely wrong.

This conference is designed for everyone, from the political novice to the crustiest political wonk in the specialty. Perhaps that is the best thing about it. Beyond the issues, data, and charts, politics is really about building relationships. The strength of LAC is that it brings together residents, students, and young physicians who are new to the game and full of new ideas and incredible energy with others who are more seasoned in the specialty in order to network and learn from one another. During the first two days, there are great presentations about current health care policy issues and building leadership skills. In addition to focusing on national-level policies and health care reform, we must realize that each of us is a leader every time we don our stethoscopes and pick up a chart. The leadership development sessions and experiences are designed to nurture skills and techniques that can be used at the chapter and national levels of ACEP—and help you in your professional and private life.

Highlights of this year’s lectures included a very informative and entertaining opening presentation titled “The Gift of Leadership” by Mark Levin, BAI, Inc. president, and a luncheon talk by Patrick Conway, MD, MSc, who is the deputy administrator for innovation and quality and chief medical officer at the Centers for Medicare & Medicaid Services. Dr. Conway highlighted the challenges and opportunities of creating new paradigms for the delivery and financing of health care as our population grows and ages.

In addition to the educational programs, there are great social events including opportunities to network with emergency physician leaders from throughout the country at the Opening Reception and the Congressional Reception. This year, ACEP’s National Emergency Medicine Physicians Political Action Committee (NEMPAC), had a reception for VIP donors at the United States Botanic Garden just outside the Capitol. NEMPAC and the Emergency Medicine Physicians Political Action Committee (EMP PAC) cohosted fund-raisers for two emergency physicians in Congress, Rep. Joe Heck (R-NV) and Rep. Raul Ruiz (D-CA).

The high point of the conference is the visit to Capitol Hill. The opportunity to have your voice heard by your elected officials is one of the most exciting things an emergency physician can ever experience, especially for the first-timers. Physicians are grouped by state and by district. The afternoon is spent in a small group with colleagues from your state, traveling from office to office to meet with the

CONTINUED on page 6

NOW APPROVED FOR MULTIPLE INDICATIONS

Now can be used for:

- Reduction of the risk of stroke and systemic embolism in patients with NVAF
- Treatment of DVT and PE
- Reduction in the risk of recurrence of DVT and PE

Indications and Usage

PRADAXA® (dabigatran etexilate mesylate) capsules is indicated:

- to reduce the risk of stroke and systemic embolism in patients with non-valvular atrial fibrillation;
- for the treatment of deep venous thrombosis and pulmonary embolism in patients who have been treated with a parenteral anticoagulant for 5-10 days;
- to reduce the risk of recurrence of deep venous thrombosis and pulmonary embolism in patients who have been previously treated

It is contraindicated in the following conditions:

- • History of major bleeding
- • History of severe gastrointestinal (GI) bleeding
- • Active pathological bleeding
- • A history of non-valvular atrial fibrillation
- • Active pathological bleeding
- • A history of non-valvular atrial fibrillation
- • A history of significant gastrointestinal (GI) bleeding
- • A history of non-valvular atrial fibrillation
- • A history of significant gastrointestinal (GI) bleeding

IMPORTANT SAFETY INFORMATION ABOUT PRADAXA

WARNING: (A) PREMATURE DISCONTINUATION OF PRADAXA INCREASES THE RISK OF THROMBOTIC EVENTS. (B) SPINAL EPIDURAL HEMATOMA

(A) PREMATURE DISCONTINUATION OF PRADAXA INCREASES THE RISK OF THROMBOTIC EVENTS

Premature discontinuation of any oral anticoagulant, including PRADAXA, increases the risk of thrombotic events. If anticoagulation with PRADAXA 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

Spinal or epidural hematomas may occur in patients treated with PRADAXA 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:

- a history of bleeding disorders
- 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
- unusual timing between the administration of PRADAXA 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 who are or will be anticoagulated.

Please see boxed WARNING and accompanying brief summary of full Prescribing Information.

NVAF: non-valvular atrial fibrillation; DVT: deep vein thrombosis; PE: pulmonary embolism.

ACCPNOW JULY 2014

The Official Voice of Emergency Medicine
**EMTALA Medical Liability Reform**

The Health Care Safety Net Enhancement Act of 2013 (H.R. 36/S. 961)

Co-sponsored by multiple members of the House and Senate, and passed in the House by voice vote in 2012, this bill would provide liability protection for EMTALA-related care in the emergency department to emergency physicians and ED employees under the Public Health Safety Act.

**Graduate Medical Education**

The Resident Physician Shortage Reduction Act of 2013 (H.R. 1180/S. 577)

This bill would expand the current cap, in place since 1997, on the number of Medicare-supported graduate medical education slots in the United States. It would create 15,000 new training slots over five years with one-third of the positions each year directed to hospitals already operating over their resident limits and half of the positions dedicated to training physicians in specialty shortages. ACEP also supports funding for the National Health Care Workforce Commission that was authorized under the Affordable Care Act in 2010 but remains unfunded.

**Medicare Reimbursement**

The SGR Repeal and Medicare Provider Payment Modernization Act of 2014 (H.R. 4015)

Although Congress averted a 24 percent cut in Medicare reimbursement to physicians this year, the latest patch still does not address the flaws with the SGR payment formula. This bill would completely repeal the SGR and replace it with a workable formula.

**Safe Harbor Liability Protections**

The Saving Lives, Saving Costs Act (H.R. 4106)

This bill would provide increased liability protection in the form of legal safe harbors to physicians who demonstrate they followed clinical guidelines developed by a multidisciplinary panel of experts. These safe harbors would provide physicians the opportunity to have their case heard in federal court, making the case subject to mandatory alternative dispute resolution rather than trial.

**DR. MOODY** is an emergency physician and ED medical director for Mountain States Health Alliance in Norton, Virginia; president-elect for Tennessee ACEP; and an ACEP Councillor since 2011.

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**IMPORTANT SAFETY INFORMATION ABOUT PRADAXA (cont’d)**

**CONTRAINDICATIONS**

PRADAXA is contraindicated in patients with:
- active pathological bleeding
- known serious hypersensitivity reaction (e.g., anaphylactic reaction or anaphylactic shock) to PRADAXA.
- mechanical prosthetic heart valve

**WARNINGS & PRECAUTIONS**

Increased Risk of Stroke with Discontinuation of PRADAXA

Periapical discontinuation of any oral anticoagulant including PRADAXA in the absence of adequate alternative anticoagulation increases the risk of thrombotic events. If PRADAXA is discontinued for a reason other than pathological bleeding or completion of a course of therapy, consider coverage with another anticoagulant.

**Risk of Bleeding**

- PRADAXA increases the risk of bleeding and can cause significant and sometimes fatal bleeding. Promptly evaluate any signs or symptoms of blood loss (e.g., a drop in hemoglobin and/or hematocrit or hypotension). Discontinue PRADAXA in patients with active pathological bleeding.
- Risk factors for bleeding include concomitant use of medications that increase the risk of bleeding (e.g., aspirin, platelet inhibitors, heparin, thrombin, or therapeutic use of NSAIDs). PRADAXA anticoagulant activity and half-life are increased in patients with renal impairment.
- Recovery of Anticoagulant Effect: A specific reversal agent for dabigatran is not available. Hemodialysis can remove dabigatran; however clinical experience for hemodialysis as a treatment for bleeding is limited. Activated prothrombin complex concentrates, recombinant factor VIIa, or concentrates of factor IX or X may be considered but their use has not been evaluated. Protamine sulfate and vitamin K are not expected to affect dabigatran anticoagulant activity.

**Consider administration of platelet concentrates where thrombocytopenia is present or long-acting antiplatelet drugs have been used.**

**Spinal/ Epidural Anesthesia or Puncture**

When neuraxial anesthesia (spinal, epidural anesthesia) or spinal puncture is employed, patients treated with anticoagulants are at risk of developing an epidural or spinal hematoma which can result in long-term or permanent paralysis. To reduce potential risk of bleeding with concurrent use of dabigatran and epidural or spinal anesthesia/analgies or spinal puncture, consider the pharmacokinetic profile of dabigatran. Placement/removal of an epidural catheter or lumbar puncture test performed when the anticoagulant effect of dabigatran is low but exact timing to reach a sufficiently low anticoagulant effect may vary. It is unknown if anticoagulation is required or if anticoagulation is followed by a specific neuraxial test. Consider neuraxial anesthesia and analgesia procedures that do not require a lumbar puncture test in patients treated with anticoagulants. In patients with a history of anticoagulant therapy, neuraxial anesthesia should be performed with appropriate precautions.

**Thromboembolic and Bleeding Events in Patients with Prosthetic Heart Valves**

The safety and efficacy of PRADAXA in patients with bileaflet or mechanical prosthetic heart valves (recently implanted or implanted more than 3 months prior to enrollment) was evaluated in the phase 2/3/4 INTEGY trial. INTEGY was terminated early because of significantly more thromboembolic events (valve thrombosis, stroke, transient ischemic attack, and myocardial infarction) and an excess of major bleeding (predominantly post-operative pericardial effusions requiring intervention for hemodynamic compromise) in patients on PRADAXA vs warfarin. Therefore, the use of PRADAXA is contraindicated in patients with mechanical prosthetic heart valves. Use of PRADAXA for the prophylaxis of thromboembolic events in patients with AFO in the setting of other forms of valvular heart disease, including bioprosthetic heart valve, has not been studied and is not recommended.

**Effect of P-gp Inducers & Inhibitors on Dabigatran Exposure**

Concurrent use of PRADAXA with P-gp inducers (e.g., rifampin) reduces exposure to dabigatran and should generally be avoided. P-gp inhibition and impaired renal function are major independent factors in increased exposure to dabigatran. Concomitant use of P-gp inhibitors in patients with impaired renal function is expected to increase exposure of dabigatran compared to either factor alone.

**Reduction of Risk of Stroke/ Systemic Embolism in NMAF**

- For patients with moderate renal impairment (CrCl 30-50 mL/min), consider reducing the dose of PRADAXA to 75 mg twice daily when coadministered with P-gp inhibitors such as saquinavir, ritonavir, or paclitaxel.
- For patients with severe renal impairment (CrCl 15-30 mL/min), avoid concomitant use of PRADAXA and P-gp inhibitors.
- Concomitant Use of PRADAXA and P-gp inhibitors.

**ADVERSE REACTIONS**

The most serious adverse reactions reported with PRADAXA were related to bleeding.

**NMAF**

- Most frequent adverse reactions leading to discontinuation of PRADAXA were bleeding & gastrointestinal (GI) events (e.g., hematoma, hemorrhage, hemorrhagic gastritis, hemorrhagic eroding gastritis, and GI ulcer).
- In patients ≥75 years of age, the risk of major bleeding may be greater with PRADAXA vs warfarin.
- Patients on PRADAXA 150 mg had an increased incidence of GI adverse reactions. These were commonly dyspepsia (including abdominal pain upper, abdominal pain, abdominal discomfort, and epigastric discomfort) and gastrointestinal symptoms (including nausea, vomiting, diarrhea, anorexia, and abdominal pain).

**DVT/PE**

- Rates of any Gl events were higher in patients receiving PRADAXA 150 mg vs warfarin and placebo.
- In the active-controlled studies, there was a higher rate of clinical myocardial infarction (MI) in PRADAXA patients (2.2% [1/461]) vs warfarin (0.5% [4/737] vs placebo (0.2% [1/462]) per patient-years).
- In the placebo-controlled study there was similar rate of non-fatal and fatal clinical MI PRADAXA patients (5.9% [5/81]) vs placebo (6.1% [6/97]) vs warfarin (4.2% [3/72] per patient-years).
- GI adverse reactions were similar in patients receiving PRADAXA 150 mg vs warfarin. They were commonly dyspepsia (including abdominal pain upper, abdominal pain, abdominal discomfort, and epigastric discomfort) and gastrointestinal symptoms (including nausea, vomiting, diarrhea, anorexia, and abdominal pain).

**Drug hypersensitivity reactions** were reported in ≤0.1% of patients receiving PRADAXA.

**Other Measures Evaluated**

In NMAF patients, a higher rate of clinical MI was reported in patients who received PRADAXA (0.7/100 patient-years for 150 mg dose) than in those who received placebo (0.1/100 patient-years).

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you can have. This is more important than a physician, constituent, and American citizen of Congress themselves. In a congressional office...

During the Capitol Hill visits, you meet with your US senators. 

JULY 2014 The Official Voice of Emergency Medicine
Seven Best Practices to Reduce ED Misuse

IN WASHINGTON STATE, POLITICIANS AND PROVIDERS COLLABORATE TO REDUCE COSTS AND IMPROVE CARE

BY STEPHEN H. ANDERSON, MD, FACEP, and NATHAN SCHLICHER, MD, JD, FACEP

A ter a three-year saga of flawed public policy, difficult politics, and dangerous regulatons, Washington Chapter ACEP is proud to report the success of the “ER is for Emergencies” program, which has achieved unprecedented results. It started in 2010 with a legislative mandate borne out of the necessity to save money in the state budget as a result of the recession. The Washington State Health Care Authority (HCA) proposed a $36 million annual savings through a policy “just not pay” after the third ED visit judged to be nonemergent in 12 months. Calling ED providers “poor stewards of the health care dollar” in print and making a direct threat to prudent layperson protection, the HCA then went on to create a nonemergent list of 700-plus diagnosess, which included chest pain, hemorrhage with miscarriage, and sudden loss of vision. Despite our attempts to work with the regulators, litigation became the only option to stop the dangerous proposal.

Washington Chapter ACEP stepped up by engaging 90 percent of our providers to create the Washington State Emergency Medicine Action Fund and file suit. National ACEP and the Emergency Medicine Action Fund provided financial support for litigation and experienced researchers to provide data on the dangers. We brought allies including the Washington State Medical Association, Washington State Hospital Association, other physician specialties, and patient advocacy groups. The providers won the battle in court but were committed to helping the state improve care and save money.

A Solution Where Everyone Wins

This was the turning point. While the HCA pushed back, the legislature sought solutions and asked for ideas. We established ground rules of preserving access to emergency care; protecting the prudent layperson standard; and delivering high-quality, cost-effective care. We realized we had to invest some money in infrastructure and then build a system around communication. Through advocacy in the capital and the governor’s mansion, an aggressive public relations effort, and tenacity, the legislature passed Bill 2217, creating the Washington State Seven Best Practices...
SEVEN BEST PRACTICES TO REDUCE ED MISUSE | CONTINUED FROM PAGE 7

1. Tracking of ED visits, with an automated notification sent to providers of any patient visiting five or more times in the last 12 months. All hospitals have adopted the program. This tracking includes a summary of prior visits, care plans from any facility in the state, and safety warnings such as violence or radiation alerts.

2. Implementation of an education program for all providers, administrators, and patients via forums, webinars, handouts, and posters in ED waiting rooms (see the January 2014 issue of ACEP Now for more on these posters).

3. Identification of the highest utilizers, along with follow-up and care plans for them. This population had significant issues, including 86 percent with mental health issues and 41 percent with addiction issues. The key for these patients was an emphasis on case management with care plans and coordination with primary care.

4. A requirement that “frequent flyers,” or overutilizers, are seen by primary care within 72 hours.

5. Creation of a statewide narcotics program. A 17-point program was adopted by all ED providers that created a statewide standard for prescribing opioids for chronic, noncancer pain.

6. A requirement that providers enroll in the prescription-monitoring program (PMP). Despite 96 percent enrollment, the reality is that the current data pull system is difficult to use. Thus, this summer, the PMP data will be pushed through the Emergency Department Information Exchange system. This eliminates the pull method and the inherent bias in provider selection.

7. Creation of a feedback system to track success for both the HCA and individual departments and their providers.

The first-year results of this effort exceeded everyone’s expectations. A full report is available at http://www.hca.wa.gov/Documents/EmergencyDeptUtilization.pdf. Highlights include a 9.9 percent reduction in overall ED Medicaid visits and a 10.7 percent reduction among frequent utilizers. The ER is for Emergencies campaign resonated, and our low-acuity visits dropped 14.2 percent. What about opioid-overdose deaths? We reduced narcotic prescriptions from the EDs 24 percent! This contributed to Washington being one of several states to decrease opioid-related deaths annually for the last three years. Finally, in what began as a budget-generated policy, we saved the state more than $34 million and counting.

The economics of health care are changing, but the foundation of preserving access to care should remain paramount. With expanding Medicaid enrollment, many states will be trying to rein in costs, and Washington’s solution is an option for significant savings. The Centers for Medicare & Medicaid Services recently moved to protect
“We conducted the poll to be sure that emergency departments had an understanding of future needs and that they will have the resources to meet the demand,” said Alex M. Rosenau, DO, FACEP, president of ACEP and senior vice chair of the department of emergency medicine at Lehigh Valley Health Network in Allentown, Pennsylvania.

**The Issues at Hand**

Although more Americans now have health care coverage, being covered doesn’t necessarily guarantee access. “Some people will have difficulty finding a primary care physician (PCP) because many have full schedules,” Dr. Rosenau said. “A delay in addressing chronic care can lead to acute emergencies.” Medicaid patients also commonly present to the ED because many PCPs, specialists, and urgent care centers typically don’t accept them due to low reimbursement. In fact, according to the poll, more than 35 percent of respondents are now seeing more Medicaid patients.

**ACEP’s Poll Should Be Viewed as an Alarm and a Call to Action.**

—Alex M. Rosenau, DO, FACEP, ACEP President

By 2020 there may be a shortage of up to 91,500 physicians; about half of these will be PCPs. The projected number of physicians will be insufficient to meet the needs of an aging population requiring more care. One factor creating this problem, Dr. Rosenau said, is that “the number of graduate medical education slots has been frozen for almost two decades.”

Care of patients with acute psychiatric illness is another growing problem. In the poll, 84 percent of respondents reported that these patients linger for days in the ED, waiting for a hospital bed—which clogs the ED system. “This is cruel and can lead to violent episodes,” Dr. Rosenau said. This occurs, in part, because few psychiatrists accept Medicaid or private insurance.

According to Michael J. Gerardi, MD, FACEP, President-Elect of ACEP, senior vice president of Emergency Medical Associates, and director of pediatric emergency medicine at Morristown Medical Center in Morristown, New Jersey, many more psychiatric patients could go home if more acute care options, such as intensive outpatient programs, were available. In addition, he said, “Physicians are hesitant to discharge many patients who would be fine as an outpatient due to liability concerns.”

To resolve these issues, Dr. Rosenau and Dr. Gerardi advise:

- Enacting liability reform (which the poll ranked as the most important solution to improving emergency care)
- Urging the government to increase the number of paid slots for physician training
- Enticing psychiatrists to see more patients by increasing Medicaid rates to Medicare rates
- Using telemedicine to increase access to psychiatrists who have inadequate availability due to manpower shortages and limited insurance/federal/state program participation
- Increasing the number of intensive outpatient treatment centers and programs
- Increasing inpatient capacity
- Addressing unfunded mandates, such as EMTALA

**What is the most important issue policy makers should address to improve emergency care?**

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<thead>
<tr>
<th>Option</th>
<th>0%</th>
<th>10%</th>
<th>20%</th>
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<tr>
<td>Enact liability reform</td>
<td>32%</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Provide adequate reimbursement</td>
<td>18%</td>
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<tr>
<td>Increase the number of primary care providers accepting Medicaid</td>
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<tr>
<td>Ensure everyone has health insurance coverage</td>
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<td>Other</td>
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**Are you seeing any of the following shifts in payer mixes? (Check all that apply.)**

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<tr>
<td>More privately insured patients</td>
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<tr>
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<tr>
<td>Not Sure</td>
<td>33%</td>
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**In your opinion, what type of long-term impact will the Affordable Care Act have on...?**

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<td>4%</td>
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<tr>
<td>Quality and patient safety</td>
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<td></td>
<td></td>
<td>11%</td>
</tr>
<tr>
<td>Disaster preparedness</td>
<td>29%</td>
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<td></td>
<td>21%</td>
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</table>

**Do psychiatric patients “board” in your emergency department?**

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<td>No</td>
<td>16%</td>
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**Action Needed**

Armed with the poll’s results, Dr. Rosenau and Dr. Gerardi urge ACEP members to share the information with individuals who have decision-making power (eg, state and federal legislators, medical societies, and hospital administrators). For an even greater impact, Dr. Rosenau and Dr. Gerardi recommend becoming involved in local politics or supporting your state’s medical society chapter.

Dr. Gerardi said that congressional representatives are willing to listen because emergency physicians care for many of their constituents. “Stories illustrating the data win the day inside the halls of Congress,” he said. “If you can’t visit your congressman, share your stories with ACEP, and we will take them to Washington, D.C., for you.”

ACEP is urging Congress to make a firm commitment to emergency medicine patients by holding a hearing to examine whether additional strains are occurring in the ED safety net as a consequence of ACA.

**Stories Illustrating the Data Win the Day Inside the Halls of Congress.**

—Michael J. Gerardi, MD, FACEP, ACEP President-Elect

**Future Outlook**

Dr. Rosenau maintains that all U.S. citizens deserve health care coverage. Of those polled, 34 percent believed that the ACA will have a positive impact on access to emergency care in the long term.

But in the near and middle term, there is a danger that there won’t be adequate infrastructure to ensure adequate care. “We need Congress to act,” Dr. Rosenau said. “Many politicians think emergency medicine contributes to the high cost of medical care, but ultimately, it is a valuable service for a reasonable price for 136 million people per year.”

“ACEP’s poll should be viewed as an alarm and a call to action,” Dr. Rosenau concluded.

—KAREN APPOLD is a writer in Pennsylvania

**Reference**

Last September, emergency physicians at Beth Israel Deaconess Medical Center in Boston began testing a new technology that may forever change the way they deliver patient care. It weighs less than a pound, instantly retrieves critical patient data and clinical information, and takes pictures and records videos that other physicians can see in real time.

Google Glass made its debut last year and is already in the hands of emergency physicians at Beth Israel, Rhode Island Hospital in Providence, and Brigham and Women’s Hospital in Boston. The wearable technology is a touch- or voice-activated computer featuring an optical face-mounted display. Emergency physicians believe the device can serve as an effective diagnostic, decision-support, and patient-tracking tool, but just like with any new technology, they say it needs to evolve to reach its full potential.

At Beth Israel, a handful of emergency physicians are integrating the HIPAA-compliant device into patient care, said Terrance Lee, MD, a resident physician in emergency medicine at Beth Israel. Dr. Lee and others worked with San Francisco-based Wearable Intelligence to develop an application that would display everything from patient triage vitals to lab and radiology results on Glass.

Just as impressive, the device’s camera scans QR (quick response) codes displayed on the outside of every patient room. The patient’s information instantly pops up on Glass. Although the technology enables physicians to quickly access data between patient rooms and spend more time at the patient’s bedside, Dr. Lee said reactions have been mixed.

“Some physicians need to be more familiar with the device, especially those not tech-savvy or comfortable with computers, while others are trying it out and making it work for them,” he said. “Anecdotally, we’ve had great responses from patients of all ages ... they’re intrigued by Glass and how we’re using it.”

**PREDICTING PLENTY OF POTENTIAL**

Before it was used in a clinical setting, Google Glass was tested at the simulation center at Brigham and Women’s Hospital for five months. Charles Pozner, MD, an emergency physician who runs the center, and other emergency physicians have been working with several IT partners and universities, including MIT, in hopes of introducing a more mature product to the clinical environment.

“We want to be able to integrate it with some of the equipment that we use within the [emergency] department,” he said. “We’re trying to figure out what is important to put on the screen in order to make [it] the most efficient ... if you put too much on the screen, ultimately, you will overwhelm the clinician and maybe make things even worse.”

Likewise, Mike Stone, MD, FACEP, chief of the division of emergency ultrasound in the department of emergency medicine at Brigham and Women’s, has been working with another software developer to display ultrasound images on Glass while performing ultrasound procedures. While physicians must use both hands to perform ultrasounds, he explains that they also switch their gaze multiple times from the procedure to an ultrasound screen.

“A real-time, heads-up display during the procedure enables you to continue looking at the patient while performing the procedure,” said Dr. Stone, adding that accurate hand placement is critical for obtaining quality images. With Google Glass, he said, a physician can see what trainees in another room are seeing and help guide their hands.

Meanwhile, integrating the device with existing technology is proving challenging, said Dr. Pozner. He said “thoughtful development” of Google Glass is critical, especially where doctor-patient interactions are concerned.

“If we approach it strictly from a technology [perspective], we will fail,” Dr. Pozner said. “If we approach it from how the technology can make things better and how it can improve the doctor-patient relationship, we’ll have much more chance of success.”

Since February, Rhode Island Hospital has been testing a HIPAA-compliant stripped-down version of Google Glass for real-time audio-visual dermatology consults with patients. This study is part of a larger program at Brown University to train the next generation of doctors in the safe and appropriate use of technology in healthcare, said Paul Porter, MD, a physician in the emergency departments of Rhode Island, Hasbro Children’s, and The Miriam hospitals and associate professor of emergency medicine at Brown University.

“There’s nothing more discouraging to patients than watching a doctor’s face buried in a keyboard,” he said, adding that another study will investigate the efficacy of emergency medical service providers using Google Glass with stroke victims.

Other than a short battery life, occasional overheating, and a handful of dropped calls, Dr. Porter said physicians and patients have been extremely satisfied with Google Glass. So far, only one patient declined its use during her care for reasons unknown.

He said the technology helps emergency physicians put their eyes back on the patient instead of a desktop screen, which enhances physician-patient relations.

“And that’s good,” Dr. Porter said. “That’s very good.”

**“THERE’S NOTHING MORE DISCOURAGING TO PATIENTS THAN WATCHING A DOCTOR’S FACE BURIED IN A KEYBOARD”**

—Paul Porter, MD

**CAROL PATTON** is a freelance journalist based in Las Vegas.
Should We Use Cricoid Pressure During RSI?

If an assistant’s hand is placed on the patient’s neck, it should be for the sole purpose of assisting with external laryngeal manipulation to allow better glottic exposure.

Cricolol!

“For all the good it does, you might as well just stick it up your Arse”

References
Decriminalizing Chronic Pain: How to Approach Those Without Adequate Follow Up

by JIM DUCHARME, MD, CM, FRCPC

SCENARIO 1: Mr. Smith is a 42-year-old male who has come to the ED because he is in severe pain from a chronic low back condition lasting at least 10 years. He cannot stand upright. He moved into town when his company closed two months ago so he could stay with his sister. He is unemployed. He says his meds—duloxetine, tramadol, and celecoxib—are running out. There is no pain clinic in the community, and he has no family physician.

SCENARIO 2: Mrs. Smith is a 51-year-old female with 15 years of chronic neuropathic leg pain. She has been discharged by her family physician because her urine tested positive for cocaine twice—she admits this because she is desperate to get care. The physician rapidly tapered her off opioids (in 10 days), and she has just finished a horrible week of withdrawal. She comes into the ED with severe pain and has no analgesic prescriptions.

These types of scenarios are not rare in emergency medicine. After all, we are the safety net for health care. Patients with varying types of chronic medical conditions and nowhere else to go end up in the emergency department and are routinely seen in county hospitals. Emergency physicians have had no training in any chronic medical condition, including chronic pain with its inherent biases and risks of opioid misuse. Just as we do not provide ongoing care for patients with insulin-dependent diabetes, we should not provide ongoing care for patients with chronic pain. There is a difference, however: patients with the former can continue to receive insulin and can often be cared for in hospital or community clinics, whereas the latter are shunned. Further, emergency physicians have received zero training in chronic pain and so often have a starting viewpoint that this is “not our problem.”

When you talk to patients with chronic pain who have been successfully managed, they will usually state how they have learned to deal with their problem and how their coping skills have improved. They will tell you that medications ultimately played a minor role—essential for getting the pain under control at the start but less important as other steps are taken. The American Pain Society will tell you that mindfulness is an essential primary aspect of care for these patients. Patients with fibromyalgia will experience a 75 percent decrease in pain if they complete and maintain a four-day-a-week exercise program for at least four to six weeks. How does this help us in the ED? We need to sit down with these patients and help them review how they are in charge of their illness; dependency on others is a sign of failure. Specifically, areas patients need to work on include:

1. Learning about their illness/condition. We need to help educate them about the (minimal) role of the ED as well as what their condition is and why they have pain.

CHRONIC PAIN: THEIR PAIN OR YOURS?

A NATIONAL PROBLEM

ADASUVE® (loxapine) inhalation powder 10 mg

Orally inhaled medicine indicated for the acute treatment of agitation associated with schizophrenia or bipolar I disorder in adults

INDICATIONS AND USAGE

ADASUVE® (loxapine) inhalation powder, for oral inhalation use, is a typical antipsychotic indicated for the acute treatment of agitation associated with schizophrenia or bipolar I disorder in adults. Efficacy was demonstrated in 2 trials in acute agitation: one in schizophrenia and one in bipolar I disorder. Limitations of Use: As part of the ADASUVE Risk Evaluation and Mitigation Strategy (REMS) Program to mitigate the risk of bronchospasm, ADASUVE must be administered only in an enrolled healthcare facility.

HOW LONG CAN YOU WAIT?

WARNING: BRONCHOSPASM and INCREASED MORTALITY IN ELDERLY PATIENTS WITH DEMENTIA-RELATED PSYCHOSIS

Bronchospasm

ADASUVE can cause bronchospasm that has the potential to lead to respiratory distress and respiratory arrest. Administer ADASUVE only in an enrolled healthcare facility that has immediate access on-site to equipment and personnel trained to manage acute bronchospasm, including advanced airway management (intubation and mechanical ventilation). Prior to administering ADASUVE, screen patients regarding a current diagnosis, history, or symptoms of asthma, COPD and other lung diseases, and examine (including chest auscultation) patients for respiratory signs. Monitor for signs and symptoms of bronchospasm following treatment with ADASUVE. Because of the risk of bronchospasm, ADASUVE is available only through a restricted program under a Risk Evaluation and Mitigation Strategy (REMS) called the ADASUVE REMS. Increased Mortality in Elderly Patients With Dementia-Related Psychosis

Elderly patients with dementia-related psychosis treated with antipsychotic drugs are at an increased risk of death. ADASUVE is not approved for the treatment of patients with dementia-related psychosis.

• ADASUVE is contraindicated in patients with the following:
  – Current diagnosis or history of asthma, chronic obstructive pulmonary disease (COPD), or other lung disease associated with bronchospasm
  – Acute respiratory signs/symptoms (e.g., wheezing)
  – Current use of medications to treat airways disease, such as asthma or COPD
  – History of bronchospasm following ADASUVE treatment
  – Known hypersensitivity toloxapine or amoxapine. Serious skin reactions have occurred with oralloxapine and amoxapine

• ADASUVE must be administered only by a healthcare professional
  – Prior to administration, all patients must be screened for a history of pulmonary disease and examined (including chest auscultation) for respiratory abnormalities (e.g., wheezing)

• Administer only a single 10 mg dose of ADASUVE within a 24-hour period by oral inhalation using the single-use inhaler

IMPORTANT SAFETY INFORMATION
We are all responsible for every script we write. No physician in the ED should initiate opioids for patients with chronic pain, renew prescriptions of opioids for such patients, or provide short-acting opioids to “get them out of the ED.”

Managing Medications

We are all responsible for every script we write. No physician in the ED should initiate opioids for patients with chronic pain, renew prescriptions of opioids for such patients, or provide short-acting opioids to “get them out of the ED.” The latter creates institutional dependency and also accelerates tolerance. There is no positive for patients other than

CONTINUED on page 14

2. Developing coping skills. Catastrophizing, social isolation, and despair all lead to marked worsening of the pain. Dealing with flare-ups in their pain by coming to the ED demonstrates a failure to understand their condition and how to deal with the worst days. You might want to ask a social worker to get involved for this discussion, as well.

3. Learning what the community has to offer. That means the staff in the ED needs to know what is available: social work, support groups for fibromyalgia, etc.

It is my experience that this type of discussion really takes more than 10 to 15 minutes and is worth every minute. If we do not take the time to explain their responsibilities and the role of the ED, these patients will keep returning, expecting to get a prescription and developing an ever-increasing institutional dependency—a poor coping trait and a growing burden on the ED.

Help Defuse the Situation Before Agitation Escalates Further

ADASUVE® (loxapine) inhalation powder

Help Defuse the Situation Before Agitation Escalates Further

For more information about ADASUVE, visit ADASUVE.COM

For REMS Program information, visit ADASUVEREMS.COM or call 855-755-0492

Reduction from baseline in agitation symptoms2,3

<table>
<thead>
<tr>
<th>ENDPOINT</th>
<th>SCHIZOPHRENIA</th>
<th>BIPOLAR I DISORDER</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 2 HOURS (FORWARD)</td>
<td>69%</td>
<td>33%</td>
</tr>
<tr>
<td>AT 10 MINUTES (BACKWARD)</td>
<td>1%</td>
<td>18%</td>
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</tbody>
</table>

The mean baseline PEC scores in all treatment groups were 17.3 to 17.7.

Important Safety Information (continued)

- After ADASUVE administration, patients must be monitored for signs and symptoms of bronchospasm at least every 15 minutes for at least 1 hour
- ADASUVE can cause sedation, which can mask the symptoms of bronchospasm
- Antipsychotic drugs can cause a potentially fatal symptom complex called Neuroleptic Malignant Syndrome (NMS), manifested by hyperpyrexia, muscle rigidity, altered mental state, irregular pulse or blood pressure, tachycardia, diaphoresis, and cardiac dysrhythmia. Associated features can include escitalopram creatine phosphokinase (CPK) concentration, rhabdomyolysis, elevated serum and urine myoglobin concentration, and renal failure. If NMS occurs, immediately discontinue antipsychotic drugs and other drugs that may contribute to the underlying disorder, monitor and treat symptoms, and treat any concomitant serious medical problems
- ADASUVE can cause hypotension, orthostatic hypotension, and syncope. Use with caution in patients with known cardiovascular disease, cerebrovascular disease, or conditions that would predispose patients to hypotension, in the presence of severe hypotension requiring vasopressor therapy, epinephrine should not be used
- Use ADASUVE with caution in patients with a history of seizures or with conditions that lower the seizure threshold. ADASUVE lowers the seizure threshold. Seizures have occurred in patients treated with oral loxapine and can also occur in epileptic patients
- Use caution when driving or operating machinery. ADASUVE can impair judgment, thinking, and motor skills
- The potential for cognitive and motor impairment is increased when ADASUVE is administered concurrently with other CNS depressants
- Treatment with antipsychotic drugs caused an increased incidence of stroke and transient ischemic attack in elderly patients with dementia-related psychosis; ADASUVE is not approved for the treatment of patients with dementia-related psychosis
- Use of ADASUVE may exacerbate glaucoma or cause urinary retention
- The most common adverse reactions (incidence ≥2% and greater than placebo) in clinical studies in patients with agitation treated with ADASUVE were dysgeusia, sedation, and throat irritation
- ADASUVE is contraindicated in patients with the following:
  - Known hypersensitivity to loxapine or amoxapine. Serious skin reactions have occurred with oral loxapine; patients with family history of skin disease should be monitored
  - Acute respiratory signs/symptoms (eg, wheezing)
  - Current or recent history of asthma, chronic obstructive pulmonary disease (COPD), or other lung conditions
  - Known or suspected concomitant serious medical problems

References:
1. ADASUVE (loxapine) inhalation powder. Prescribing Information. Teva Pharmaceuticals USA Inc. 2013

Please see Brief Summary of Prescribing Information, including Boxed Warnings, on following pages.
perhaps a two-hour decrease in pain, a pain they have had for years. Opioids should be re-

Other medications for pain, such as a tri-
cyclic or gabapentinoid for new zoster-relat-
ted neuropathic pain, may be of benefit and
worth initiating. A SSRI, such as duloxetine for chronic osteoarthritis or low back pain, com-
bined with acetaminophen or a NSAID may
provide valid relief. Patients can follow up in a
medical clinic without fear of bias and start on
the long road to stabilization. We do the same
for patients with hypertension, so why not for
chronic pain? To do so, however, means we
have to learn more about chronic pain condi-
tions and the medications and doses required.

Dosing for chronic pain may be very different
than for other indications, for example:• 300 mg gabapentin for seizure dis-
orders but up to 3,600 mg for pain
• 25–75 mg nortriptylline for depression but
up to 250 mg for neuropathic pain

Still, all patients with chronic pain are treated
the same way with medications: “start low and go slow,” avoiding adverse effects and identifying the lowest possible dose.

The starting dose you are comfortable prescribing will be the same starting dose a
pain physician would use, but they then take up to three months to get to the right dose and combination of medications.

It is up to the ED group as a whole to work with the hospital and community to identify potential resources for patients with chronic pain; that way, the nursing staff and the phar-macists can guide the patients properly. It is not our role to care for them on an ongoing basis but to educate and start them in the right direction. We are also there for acute worsen-
ing of their pain and to identify other patholo-
gies as causes of new or worsening pain. In the end, our ED role with patients with chronic pain is almost the same as for every other chronic medical condition.

BRIEF SUMMARY
ADASUVE® (loxapine) inhalation powder, for oral inhalation Use The following is a brief summary only; see full prescribing informa-
tion, included Boxed Warnings for complete product information.

WARNING: BRONCHOSPASM AND INCREASED MORTALITY IN ELDERLY PATIENTS WITH DEMENTIA-RELATED PSYCHOSIS

Bronchospasm
ADASUVE can cause bronchospasm that has the potential to lead to respiratory distress and respiratory arrest. Administer ADASUVE only in an enrolled healthcare facility that has immediate access on-site to equipment and personnel trained to manage acute bron-
chospasm, including advanced airway management (intubation and mechanical ventilation) (see Warnings and Precautions (5.1, 5.2)).

Prior to administering ADASUVE, screen patients regarding a current diagnosis, history, or symptoms of asthma, COPD and other lung
diseases, and examine (including chest auscultation) patients for respiratory signs. Monitor for signs and symptoms of bronchospasm following treatment with ADASUVE (see Dosage and Administration (2.2, 2.4) and Contraindications (4)).

Because of the risk of bronchospasm, ADASUVE is available only through a restricted program under a Risk Evaluation and Mitigation Strategy (REMS) (see ADASUVE REMS to Mitigate Bronchospasm (5.2)).

Increased Mortality in Elderly Patients with Dementia-Related Psychosis
Elderly patients with dementia-related psychosis treated with antipsychotic drugs are at increased risk of death. ADASUVE is not approved for the treatment of patients with dementia-related psychis-
ris (see Warnings and Precautions (5.3)).

INDICATIONS AND USAGE
ADASUVE is a typical antipsychotic indicated for the acute treatment of agitation associated with schizophrenia or bipolar I disorder in adults.

“Psychomotor agitation” is defined in DSM-IV as “excessive motor activity associated with a feeling of inner tension.” Patients experiencing agitation often manifest behaviors that interfere with their care (e.g., threatening behavior, escalating or urgent distress behavior—so called “agitation behavior”—leading clinicians to the use of rapidly absorbed antipsychotic medicna-
tions to achieve immediate control of the agitation (see Clinical Studies (14.9)).

The efficacy of ADASUVE was established in one study of acute agitation in patients with schizophrenia and one study of acute agitation in patients with bipolar disorder (see Clinical Studies (14.6)).

Limitations of Use
As part of the ADASUVE REMS Program to mitigate the risk of broncho-
spasm, ADASUVE must be administered only in an enrolled healthcare facility (see Warnings and Precautions (5.2)).

4 CONTRAINDICATIONS
ADASUVE is contraindicated in patients with the following:
• Current diagnosis or history of asthma, COPD, or other lung disease associated with bronchospasm (see Warnings and Precautions (5.1))
• Acute respiratory symptoms or signs (e.g., wheezing) (see Warnings and Precautions (5.1))
• Current use of medications to treat airway disease, such as asthma or COPD (see Warnings and Precautions (5.1))
• History of bronchospasm following ADASUVE treatment (see Warnings and Precautions (5.1))
• Known or suspected hypersensitivity to loxapine or amoxapine. Serious skin reac-
tions have occurred with oral loxapine and amoxapine.

5 WARNINGS AND PRECAUTIONS
5.1 Bronchospasm
ADASUVE can cause bronchospasm that has the potential to lead to respi-
atory distress and respiratory arrest (see Adverse Reactions (6.1)).

Administer ADASUVE only in an enrolled healthcare facility that has immediate access on-site to equipment and personnel trained to manage acute bronchospasm, including advanced airway management (intuba-
tion and mechanical ventilation) (see Boded Warning and Warnings and Precautions (5.2)).

Prior to administering ADASUVE, screen patients regarding a current diagnosis or history of asthma, COPD, and other lung disease associated with bronchospasm, acute respiratory symptoms or signs, current use of medications to treat airway disease, such as asthma or COPD; and examine patients (including chest auscultation) for respiratory abnormalities (e.g., wheezing) (see Dosage and Administration (2.2) and Contraindi-
cations (4)).

Monitor patients for symptoms and signs of bronchospasm (i.e., vital signs and chest auscultation) at least every 15 minutes for a minimum of one hour following treatment with ADASUVE (see Dosage and Administration (2.4)). ADASUVE can cause sedation, which can mask the symptoms of bronchospasm.
preynoscope or syncope. A systolic blood pressure ≥ 90 mm Hg with a decrease of ≥ 20 mm Hg occurred in 1.5% and 0.8% of the ADASUVE 10 mg and placebo groups, respectively. A diastolic blood pressure ≥ 50 mm Hg with a decrease of ≥ 15 mm Hg occurred in 0.8% and 0.4% of the ADASUVE 10 mg and placebo groups, respectively.

In 5 Phase 1 studies, the incidence of hypotension was 3% and 0% in ADASUVE 10 mg and the placebo group, respectively. The incidence of syncope or presyncope in normal volunteers was 2.3% and 0% in the ADASUVE and placebo groups, respectively. In normal volunteers, a systolic blood pressure ≥ 90 mm Hg with a decrease of ≥ 20 mm Hg occurred in 5.3% and 1.1% in the ADASUVE and placebo groups, respectively. A diastolic blood pressure ≥ 50 mm Hg with a decrease of ≥ 15 mm Hg occurred in 7.5% and 3.3% in the ADASUVE and placebo groups, respectively.

5.2 Seizures
ADASUVE lowers the seizure threshold. Seizures have occurred in patients treated with lorazepam. Seizures can occur in epileptic patients even during antiepileptic drug maintenance therapy. In short-term (24-hour), placebo-controlled trials of ADASUVE, there were no reports of seizures.

5.3 Increased Mortality in Elderly Patients with Dementia-Related Psychosis
In placebo-controlled trials of atypical antipsychotics in elderly patients with dementia-related psychosis, there was a higher incidence of cerebrovascular adverse reactions (stroke and transient ischemic attacks), including fatalities, compared to placebo-treated patients. ADASUVE is not approved for the treatment of patients with dementia-related psychosis.

5.4 Bronchospasm and Airway Adverse Reactions in Pulmonary Safety Trials
Clinical pulmonary safety trials demonstrated that ADASUVE cannot cause bronchospasm as measured by FEV1, and as indicated by respiratory signs and symptoms in the trials. In addition, the trials demonstrated that patients with asthma or other pulmonary diseases, such as COPD, are at increased risk of bronchospasm. The effect of ADASUVE on pulmonary function was evaluated in 3 randomized, double-blind, placebo-controlled clinical pulmonary safety trials in healthy volunteers. Patients with asthma, and patients with COPD. Pulmonary function was assessed by serial FEV1 tests, and respiratory signs and symptoms were assessed. In the asthma and COPD trials, patients with respiratory symptoms or FEV1 decrease of ≥ 20% were administered rescue treatment with a bronchodilator and oxygen.

5.5 Hypotension and Syncope
ADASUVE is administered concurrently with other CNS depressants (see Drug Interactions (7.7)). Caution patients about operating hazardous machinery, including automobiles, until they are reasonably certain that therapy with ADASUVE does not affect them adversely.

6 ADVERSE REACTIONS
The following adverse reactions are discussed in more detail in other sections of the labeling:

• Hypersensitivity (serious skin reactions) (see Contraindications (4))
• Bronchospasm (see Warnings and Precautions (5.1))
• Increased Mortality in Elderly Patients with Dementia-Related Psychosis (see Warnings and Precautions (5.4))
• Neuroleptic Malignant Syndrome (see Warnings and Precautions (5.3))
• Hypotension and syncope (see Warnings and Precautions (5.1))
• Seizure (see Warnings and Precautions (5.6))
• Bradycardia for Cognitive and Motor Impairment (see Warnings and Precautions (5.7))
• Cerebrovascular Reactions, Including Stroke, in Elderly Patients with Dementia-Related Psychosis (see Warnings and Precautions (5.6))
• Anticholinergic Reactions Including Exacerbation of Glaucoma and Urinary Retention (see Warnings and Precautions (5.3))

6.1 Clinical Trials Experience
The clinical trials were 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.

The following findings are based on pooled data from three short-term (24-hour), placebo-controlled clinical trials (Studies 1, 2, and 3) of ADASUVE 10 mg in the treatment of acute agitation in patients with dementia-related psychosis. A total of 1,068 patients were enrolled in the studies (845 patients in the ADASUVE group and 223 patients in the placebo group). The most common adverse reactions were dyspnea, sedation, and throat irritation. These reactions occurred at a rate of ≥ 2% in the ADASUVE group and at a rate greater than in the placebo group. (Refer to Table 1.)

Table 1. Adverse Reactions in 3 Pooled Short-Term, Placebo-Controlled Trials (Studies 1, 2, and 3) in Patients with Schizophrenia or Bipolar Disorder

<table>
<thead>
<tr>
<th>Adverse Reaction</th>
<th>Placebo (n = 263)</th>
<th>ADASUVE (n = 259)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dyspnea</td>
<td>5%</td>
<td>16%</td>
</tr>
<tr>
<td>Sedation</td>
<td>10%</td>
<td>12%</td>
</tr>
<tr>
<td>Throat Irritation</td>
<td>0%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Question. I feel overwhelmed when I see all of the mutual funds available in my 401(k). How can I choose the right one?

Answer. Mutual funds are an excellent way to invest in stocks, bonds, and other securities. Mutual funds provide for broad diversification, economies of scale, and professional management not available to individual investors selecting securities on their own.

This task can be delegated to a competent advisor, but...
even if you use an investment manager, understanding this process will allow for evaluation of your adviser’s advice. Prior to evaluating a mutual fund for inclusion in your portfolio, it is important to first complete several prerequisite tasks. These include setting appropriate goals, developing an overriding investment plan (asset allocation), and selecting the most appropriate and tax-efficient combination of investing accounts (such as 401(k), Roth IRA, or a taxable brokerage account). Deciding on an asset allocation (what percentage of your portfolio to invest in each asset class) can be a difficult decision, but once completed, selecting appropriate mutual funds to fulfill the chosen asset allocation can be ridiculously easy.

**STEP 1: Match Funds to the Asset Allocation**

This might seem obvious, but many investors seem to get it wrong. If your hypothetical asset allocation plan calls for 30 percent of your portfolio to be invested in U.S. stocks, 30 percent in bonds, 20 percent in international stocks, 10 percent in real estate, and 10 percent in small value stocks, then you just need to select one fund for each of those categories. When evaluating mutual funds, the first consideration is to determine which assets the fund actually holds. If you are looking for a fund for your U.S. stock allocation, you do not want to look at a balanced fund (contains both stocks and bonds) or an all-world fund (invested in both U.S. and international stocks). Likewise, if you want a broadly diversified international stock fund, you can eliminate funds that invest solely in Japanese stocks, European stocks, or Brazilian stocks. This information can easily be found in the first few pages of the prospectus, on the fund summary page on the fund’s website, or on an independent website like Morningstar.com.

**STEP 2: Avoid Playing the Loser’s Game of Active Management**

All mutual funds are managed by professionals. However, the mission of most mutual funds is “beat the market,” outperforming an index composed of all the stocks (or bonds) in a particular asset class. The managers of these active funds try to buy investments likely to go up in value and sell investments likely to go down in value. Although it seems intuitive that highly trained, hard-working professionals could easily do this, it turns out to be extraordinarily difficult to outperform the market in the long run. Very few active managers will do this over any given period, and there is no reliable way to select them in advance.

According to data published in Allan Roth’s How a Second Grade Beats Wall Street, a typically managed mutual fund has about a 38 percent chance of beating an appropriate index in any given year. Over five years, that falls to 22 percent, and after 25 years (a typical physician career length), it is just 1 percent. In a five-fund portfolio, the chances are even worse, about 20 percent in any given year and 7 percent after five years. The solution to this dilemma is to avoid playing the game at all despite the all the effort, and money spent by financial institutions trying to get you to do so.

**STEP 3: Capture the Market Return**

There is another category of mutual funds called passive funds, which simply try to capture the market return rather than beat it. Most of these funds are index funds, which try to match the market return rather than beat it. The main reason index funds have better long-term returns than the vast majority of actively managed funds is that it costs a lot of money to try to beat the market. You have to hire a small army of analysts to meet with company executives and pour through earnings reports. The funds also spend a lot of money on commissions and bid/ask spreads every time the manager decides to buy or sell an investment.

Unfortunately, it turns out to be very difficult to generate sufficient excess returns (returns above and beyond what an index fund would provide) on an after-expense basis.

**Deciding on an asset allocation can be a difficult decision, but once completed, selecting appropriate mutual funds to fulfill the chosen asset allocation can be ridiculously easy.**

However, because index fund managers just have to match the market return, they rarely have to buy or sell anything and certainly don’t need to spend money on analysts. It can be very inexpensive to run index funds, often less than 0.1 percent per year ($10 on a $1,000 investment). They don’t need to spend money on analysts. It can be very inexpensive to run index funds, often less than 0.1 percent per year ($10 on a $1,000 investment). It’s often more than adequate to run index funds, often less than 0.1 percent per year ($10 on a $1,000 investment). To try to beat the market, you have to hire a small army of analysts to meet with company executives and pour through earnings reports. The funds also spend a lot of money on commissions and bid/ask spreads every time the manager decides to buy or sell an investment.

Unfortunately, it turns out to be very difficult to generate sufficient excess returns (returns above and beyond what an index fund would provide) on an after-expense basis. This chapter will help you understand how to invest your money in a reliable, low-cost manner that will allow you to meet your financial goals.
Make Sure a Prospective Job Is the Right One for You

By KEVIN M. KLAUER, DO, EJD, FACEP

It has been reported that up to 70 percent of emergency physicians leave their first job within two years. It’s in no one’s interest to hire physicians they won’t retain.

A bad fit isn’t usually a reflection on the physician but the result of misaligned expectations and a lack of open communication during the interview process. Convincing someone to hire you or convincing someone to take a job based on inaccurate or incomplete information is a common mistake. Before signing, you should feel comfortable asking the difficult questions to make certain the position is right for you. Here are the 10 questions you should ask to make certain you aren’t a square peg signing a contract for a round hole.

1. How many physicians have left in the past two years and why?
A revolving door may be a red flag you need to explore.

2. How can I develop professionally?
Any position you hold should help you develop professionally. Your director should be interested in your development as a person and as an emergency physician.

3. How long will you (the medical director) be staying in your position?
Most people identify with their boss and choose a position based on that relationship. If you are signing on to work with that person, make certain they’ll be the person for whom you’ll actually be working.

4. Is everyone paid the same?
You may or may not be interested in the nuts and bolts of how the compensation system works; however, you want it to be fair.

5. How is the relationship with the nurses, and how experienced are they?
Experienced nurses are a critical component of a well-run ED. Excessive turnover may result in less-experienced nurses working in the ED.

6. How many nurses have left in the past two years?
A revolving door on the nursing side may also be an indication of trouble.

7. Will I have an orientation? Will I be paid for any portion of the orientation?
A structured orientation is key for a successful start. It’s optimal to have a well-defined orientation process, and it’s a plus if when you start seeing patients, you are compensated for your time even during orientation shifts.

8. What performance expectations do you have?
Every medical director will have performance expectations. You need to know what they are before you accept the job. If you can meet or exceed them, great! If not, think twice about signing on the dotted line.

9. Are there plans for the hospital to change ownership?
Although hospital restructuring can be positive, it may also signal more change, including who staffs the ED.

10. Do you think the CEO will be staying in the position?
Much like hospital ownership, when a new CEO is hired, you can expect that policy change will follow. This can also result in a change in ED staffing models and partners.

The questions for “What I Wish I Knew...” come from Sarah Hopar, MD, and Jordan Celeste, MD. Dr. Hopar recently joined the staff at Vanderbilt University in Nashville, Tennessee. She is the legislative advisor for the Emergency Medicine Residents’ Association (EMRA). Dr. Celeste is EMRA president, is a fourth-year resident at Brown University in Providence, Rhode Island, and will be heading to Florida this summer to begin practice.

The Official Voice of Emergency Medicine
Tips for Paracentesis Using Continuous Wall Suction

A quick and safe way to drain this fluid without tying up resources at the bedside.

A 55-year-old male with severe ascites secondary to chronic cirrhotic liver disease presents to the emergency department for shortness of breath secondary to fluid accumulation and abdominal distention. He routinely visits the ED for therapeutic paracentesis, likely due to poor follow-up as a result of being uninsured. As usual, the department is very busy, and you have many critical patients who require your attention. Is there a quick and safe way to drain this fluid without tying up resources at the bedside?

You can use wall suction and several suction canisters to create a closed continuous drainage system for removing large amounts of ascitic fluid during a paracentesis.

Often, chronic liver failure patients will present to the ED for symptomatic drainage of their ascites. Many of these patients need to have several liters drained, and this can become time-consuming in a busy emergency department. This technique allows for a quick, clean, and easy way to continuously remove this ascitic fluid.

**EQUIPMENT NEEDED**

- Wall suction unit
- 3-way stopcock
- Tubing elbow
- 3, 5, or 10 ml syringe
- Suction tubing
- Paracentesis tray
- Several suction canisters

**TECHNIQUE**

1. Prepare the patient for a standard paracentesis, and place the patient on a monitor.

2. Ensure that wall suction is available, and attach standard tubing to the wall, with the opposite end connected to the first suction canister.

3. Another piece of tubing is then used to attach the first canister to a second canister.

4. It is important to note that most canisters have one port with a self-sealing filter (see Figure 2). Using this port will close the system and prevent continuous flow, so it is necessary to avoid this port, except for first canister connected to the wall.

5. Once all of the tubing is connected, ensure that all other ports are capped and sealed.

6. This process for adding canisters can be repeated several times, depending on the amount of fluid to be drained. This will effectively create a suction “train,” as shown in Figure 3.
Patient Selection
This technique may be applicable for stable patients with a large amount of ascites, usually chronic liver failure patients, who regularly have a significant amount of ascitic fluid removed via paracentesis. This may not be appropriate for patients with a small amount of ascites or unstable patients.

Cautions and Complications
Complications of paracentesis are infrequently encountered and have been reported as low as 1.6 percent in a 2009 study. Most of the complications encountered, such as bleeding from the puncture site or a persistent leak of fluid from the puncture site, are considered minor. Major complications are rarely encountered, and according to newer studies on paracentesis safety, coagulopathy does not seem to increase the risk of complications from a paracentesis. It is imperative that all patients undergoing a paracentesis are placed on a cardiac monitor and IV access is established prior to starting the procedure. Fluid shifts from ascitic fluid removal render the patients at risk for post procedure hypotension, electrolyte abnormalities (most notably hyponatremia), and third spacing leading to the most feared complication, pulmonary edema. Cirrhotic liver disease is linked to hepatopulmonary syndrome and cirrhotic cardiomyopathy, placing patients at risk of pulmonary edema as a result of fluid shifts if a large volume of fluid is removed during paracentesis. Recommended limits for total fluid removal vary depending on the source, but the consensus among guidelines is 5–6 liters without the need for volume expanders to lessen chances of major complications.

References

TECHNIQUE (CONTINUED)

7. After you have the desired number of canisters in your “train,” take the final end of suction tubing and place it tightly into a syringe (you must first remove the plunger). Based on the size of suction tubing used and syringes at your hospital, this setup may vary, as shown in Figure 4.

8. After successful insertion of the catheter into the peritoneal cavity, the suction syringe can be attached directly to the paracentesis catheter or first to a 3-way stopcock, as explained below in Step 10 (see Figure 5).

9. Turn the paracentesis catheter valve to the open position, and turn on the wall suction. The fluid will begin to drain into the first canister of the “train.” After filling the first canister to capacity, the fluid will continue to drain into the adjacent canister(s) without any intervention.

10. If you find that the flow stops, presumably from siphoning a loop of bowel to the catheter tip, you can integrate a 3-way stopcock with a syringe into the system (Figure 6A). This will allow you to flush the catheter with sterile saline or, preferably, the patient’s own ascitic fluid in order to push any bowel wall away from the catheter tip. If the flow stops, turn the 3-way stopcock to the off position to the suction syringe. Place the valve to the open position to a 10 ml or 50 ml syringe filled with the patient’s ascitic fluid; then flush 5–10 ml at a time through the catheter in an attempt to restore flow to the suction tip (Figure 6B). Ultrasound may also be used to determine the location of the catheter tip while flushing the fluid. Return the valve to the open position to the suction syringe, and resume the removal of ascitic fluid once flow is restored.

11. Figure 7 shows your final setup.
How to Perform an Ultrasound-Assisted Lumbar Puncture

Integration of ultrasound when determining ideal needle entry in a difficult case can prevent repeated failed attempts and the overreliance on consultative services.

Ultrasound guidance is an accepted practice for many emergency medicine procedures (eg, central venous cannulation, joint aspiration, peri-cardiocentesis), but it is not commonly associated with benefit in lumbar punctures. Patients with nonpalpable bony landmarks and/or failed attempts can benefit from anatomical localization with ultrasound. Integration of ultrasound when determining ideal needle entry in a difficult case can prevent repeated failed attempts and the overreliance on consultative services (eg, interventional radiology or anesthesiology). A simplified two-step approach—defining the correct lumbar level and the true anatomic midline—can make this often-difficult “blind” procedure controlled and precise.

Patient Positioning
We recommend placing the patient in a sitting position, with feet supported and moderate neck flexion. The goal is to enlarge the interspinous distance; however, positioning should be determined by patient tolerance and comfort. The lateral decubitus position is also amenable to bony localization with ultrasound.

Probe Selection
The curvilinear low-frequency (5–2 MHz) transducer is ideal for imaging nonpalpable bony landmarks in the difficult adult patient. In our opinion, the linear high-frequency transducer (commonly recommended for ultrasound landmark identification) is limited in only identifying structures under 6–9 cm in depth and not ideal in a patient with a large body habitus.

Bony Landmark Identification with Ultrasound
Set the ultrasound system to a depth of around 10–12 cm with presets for musculoskeletal imaging (the depth will have to be adjusted based on the patient). Position the curvilinear low-frequency transducer with probe marker cephalad near the presumed midline. Slowly slide the transducer in a caudal direction until the sacrum is noted. Then slide the probe cephalad (in a paramedian plane), counting the facet joints to the inferior and superior articular processes of the adjacent lumbar vertebrae. These facet joints will look like humps on the ultrasound image (see Figure 1). Then slide the probe caudal until the sacrum is visualized (horizontal hyperechoic line; see Figure 2). Delineating the most inferior aspect of the lumbar spine will allow for accurate localization of the L3-L4 and L4-L5 interspaces. From this position, slide the probe cephalad (in a paramedian plane), counting the facet joints to ensure that the initial attempt is not too caudal. Sonographers can use either the ultrasound system’s reference line or M-mode line to ensure that the center of the probe corresponds to the center of the ultrasound image. Mark the L4 and L3 facet joints (corresponding to L4-L5 and L3-L4 interspaces, respectively) on the skin surface (see Figure 3). Rotate the transducer to the patient’s left in order to locate the true anatomic midline. Identify the bony spinous process, then slide the probe cephalad and caudal, mark-
ing the direction of the bony midline (see Figure 4). Connect the surface markings from the midline and previously identified interspace levels for an ideal location for needle entry. We recommend marking and anesthetizing two interspace levels before performing standard aseptic technique for a lumbar puncture (ensuring that the patient does not make significant movements in between skin marking and lumbar puncture needle entry). Standard lumbar puncture technique should be followed, with the clinician aware that slight needle manipulations are to be expected even though the interspace has been visualized.

Summary

Ultrasound localization for lumbar puncture can be a useful adjunct when anatomic landmarks are not palpable and/or initial attempts fail. Difficult lumbar punctures are often due to nonpalpable bony anatomy, making ultrasound localization for lumbar puncture a useful adjunct for the emergency physician. Errors are often due to inferior estimation of Tuffier’s line (a horizontal line connecting the top of the iliac crests that is thought to represent the L4-L5 interspace) as well as not locating the true anatomic midline. A simplified two-step ultrasound localization method in which the L4-L5 or L3-L4 interspace and true anatomic midline are defined can help reduce procedural error in patients with nonpalpable anatomy. The reason for ultrasound localization of bony anatomy in the difficult patient is to reduce rates of failure and reliance on consultative services.

References

C ontinual improvement of safe, effective care delivery is a goal of every clinician. Involving our patients in shared decision making and discussing the value of low-yield testing and therapeutics is a fundamental ethical responsibility. The Choosing Wisely campaign, launched by the American Board of Internal Medicine in 2012, aims to publicize and engage clinicians and patients in support of such discussions.1

The initiative spans more than 30 specialties, including emergency medicine, and ACEP announced its first five recommendations at ACEP13 in Seattle. These recommendations, covered previously by ACEP Now, address imaging in minor head injury, urinary catheter placement, palliative and hospice care, abscess management, and fluid administration.2 However, many other specialties have produced recommendations for care of patients within their purview that have substantial overlap with the spectrum of care provided in the emergency department. Here are a few of the highlights from across the rest of the medical community:

**AMERICAN ACADEMY OF FAMILY PHYSICIANS**

*Don’t prescribe antibiotics for otitis media in children ages 2–12 years with nonscute symptoms where the observation option is reasonable.*

This is another recommendation, supported by recent American Academy of Pediatrics guidelines, aimed at reducing unnecessary antibiotic overuse.3 Otitis media is nearly universally a self-limited condition, and the observed relative curative benefit of antibiotics is counterbalanced by antibiotic-associated diarrhea and other adverse drug events.4

**AMERICAN ACADEMY OF OPHTHALMOLOGY**

*Don’t order antibiotics for adenoviral conjunctivitis (pink eye).*

Pink eye is contagious, unsightly, and uncomfortable—but typically clinically apparent as a local viral process for which antibiotics are not appropriate or beneficial.

**AMERICAN ACADEMY OF PEDIATRICS**

CT scans are not necessary in the immediate evaluation of minor head injuries; clinical observation/Pediatric Emergency Care Applied Research Network (PECARN) criteria should be used to determine
The use of advanced imaging—particularly low-yield imaging—might not be related to the patient’s concerns, but it is our responsibility to protect children from the harms of medical radiation.

**AMERICAN COLLEGE OF RADIOLOGY**

In the evaluation of simple syncope and a normal neurological examination, don’t obtain brain-imaging studies (CT or MRI). If dizziness is the emergency physician’s least-favorite complaint, syncope cannot be far behind. Most inpatient syncope evaluations do not identify a specific etiology related to syncope, and neuroimaging is of little use.

**AMERICAN COLLEGE OF RADIOLOGY**

Don’t do imaging for uncomplicated head-ache.

This has been the subject of several recent publications as well as a Centers for Medicare & Medicaid Services (CMS) quality measure. Atrumatic headache absent high-risk features by history of physical should not receive neuroimaging in the emergency department. CT, in particular, is sensitive primarily for hemorhage but not malignancy, and it may provide false reassurance.

**AMERICAN SOCIETY OF ANESTHESIOLOGISTS—PAIN MEDICINE**

Avoid imaging studies (MRI, CT, or X-rays) for acute low back pain with specific indications.

This recommendation is also supported by the American College of Physicians. Emergency physicians are very familiar with the red flag signs associated with an increased risk of serious pathology in the setting of acute, atrumatic back pain, and otherwise routine imaging is exceedingly low yield.

**AMERICAN SOCIETY OF HEMATOLOGY**

Don’t administer plasma or prothrombin complex concentrate for nonemergent reversal of vitamin K antagonists (e.g., warfarin, outside of the setting of major bleeding, intracranial hemorrhage, or anticipated emergent surgery).

Postthrombin complex concentrates, including the recent four-factor product approved in the United States, are efficacious, small-volume means to effectively reverse the coagula-thy associated with warfarin. However, these products are costly and may have increased thrombotic complications compared with fresh frozen plasma. Excepting situations where extremely rapid reversal is necessary, fresh frozen plasma should be utilized for all other conditions necessitating urgent correction.

**AMERICAN SOCIETY OF NUCLEAR CARDIOLOGY**

Don’t perform cardiac imaging for patients who are at low risk.

This broad recommendation has many implications for emergency medicine—and conflicts in some fashion with the current standard of early provocative testing endorsed by the American Heart Association. This medico-legal risk associated with chest pain has led to a “zero miss” culture...
of aggressive, extensive, and low-yield care. It has also further spawned a boom industry in support of CT coronary angiograms in the emergency department. However, all these imaging studies have test characteristics resulting in excessive false positives in a low-risk population, and their suboptimal appropriateness should be part of shared decision making with patients and families.

SOCIETY OF HOSPITAL MEDICINE–PEDIATRIC HOSPITAL MEDICINE

Don’t order chest radiographs in children with uncomplicated asthma or bronchiolitis.

Don’t routinely use bronchodilators in children with bronchiolitis.

Don’t use systemic corticosteroids in children under 2 years of age with an uncomplicated lower respiratory tract infection.

This set of recommendations encompasses a subset of pediatric visits to the emergency department, and these tests and interventions may be frequently performed in many settings. Despite the seemingly innocuous nature of these items, they are associated with rare benefits, exceeding the costs and harms.

Likewise, the evolution and additions to these lists are likely to continue in the months and years to come. A study group led by Jeremiah D. Schuur, MD, MHS, FACEP, at Harvard Medical School in Boston used a modified Delphi consensus to create a list of care with “little value” for the institution.1 The process proposed more than 64 items initially, and the team surveyed physicians about 17 of these and ultimately created its own top five:

1. Do not order CT of the cervical spine after trauma for patients who do not meet the National Emergency X-ray Utilization Study (NEXUS) low-risk criteria or the Canadian C-Spine Rule.

2. Do not order CT to diagnose pulmonary embolism without first-risk stratifying for pulmonary embolism (pretest probability and D-dimer tests if low probability).

3. Do not order magnetic resonance imaging (MRI) of the lower spine for patients with lower back pain without high-risk features.

4. Do not order CT of the head for patients with mild traumatic head injury who do not meet New Orleans Criteria or Canadian CT Head Rule.

5. Do not order coagulation studies for patients without hemorrhage or suspected coagulopathy (eg, with anticoagulation therapy, clinical coagulopathy).

Whether this list, or any of the Choosing Wisely recommendations, meets your expectations as representing the “low-hanging fruit” of low-yield care in your clinical setting, these efforts illuminate important cultural changes. Beyond the specific proposals by each specialty, it is clear physicians are acutely aware of the tests and therapies that are overused despite minimal benefit. These tools provide the first steps toward more robust resource stewardship efforts that will improve the cost-effectiveness of health care delivery.

References


More on Choosing Wisely

Choosing Wisely Initiative: www.choosingwisely.org

ACEP’s Choosing Wisely List: bit.ly/1mDAKvB

Look for ACEP’s next Choosing Wisely top five list in a future issue of ACEP Now!
Just the Pearls

by JEREMY SAMUEL FAUST, MD, MS, MA

If you enter #EMTOT (Emergency Medicine Tricks of the Trade) into a Twitter search you’ll certainly find some clever ideas. But this hashtag isn’t used as often as it could be. That doesn’t mean there aren’t a slew of tweets that fit the category. Here are five recent posts that should have been tagged #EMTOT, but weren’t.

1 Canadian EM physician Ken Milne, MD (@thesgem), kicks things off with one of my personal favorite tricks. “How about cranking tunes to distract kids during procedures? http://thesgem.com/2014/06/sgem76-sunny-days-pediatric-pain-control/ #FOAMed #MedEd.” The link goes to the blog post associated with Dr. Milne’s latest episode of his increasingly popular podcast, The Skeptics Guide to Emergency Medicine (tagline: “Meet ’em, greet ’em, treat ’em, street ’em”). Letting kids listen to music is not just being a nice doctor—it is evidence-based! Dr. Milne and his guest Anthony Crocco, MD, division head and medical director of pediatric emergency medicine at McMaster University in Hamilton, Ontario, discuss the 2013 JAMA Pediatrics paper “Music to reduce pain and distress in the pediatric emergency department. A randomized clinical trial.” They conclude that music can help control pain in children requiring painful procedures. The data aren’t as overwhelming as one might hope, but the study does support the practice. If nothing else, EM providers should have a low threshold to embrace inexpensive, safe, and patient-centered modalities whenever possible. Ideas like this might save the need for yet another needle.

2 On the other hand, sometimes another needle is necessary. But maximal pain is not. This is why small-bore “pigtail” chest tube catheters are beginning to replace conventional chest tubes for stable pneumothoraces, small hemothoraces, and pleural effusions. Mayo Clinic EM physician Daniel Cabrera, MD (@cabreraERDR), relays a short, free, and crystal-clear video (that’s a #FOAMed trifecta) produced by the department of emergency medicine at the University of Ottawa: “How to place a chest pigtail catheter, by @emergmedottawa Pig Tail http://youtu.be/nrxuZwFpigI.” This video is a reminder that, for some procedures, video-learning is an indispensable tool.

3 Our next trick-of-the-trade tweet comes from Australian flight and retrieval medicine guru Minh Le Cong, MBBS (@rfdsdoc). This trick is not ready for prime-time use in the ED setting, but worth sharing (disclaimer: the research came from my own institution). “Mount Sinai psychiatrists prove feasibility and safety of intranasal ketamine as rapid antidepressant. http://www.mountsinai.org/about-us/newsroom/press-releases/intranasal-ketamine-confers-rapid-antidepressant-effect-in-depression.” In the future, this therapy might be an effective stopgap for psychiatric patients not requiring emergent admission or psychiatric consult, but who would benefit from short term help until connecting with their outpatient provider.

4 On a completely different note, there is always room for improvement in the way we perform CPR. No amount of training prepares providers for the adrenaline of a real code. Despite some effort, I can’t seem to get my colleagues to slow down their CPR compressions to the desired rate of 100 compressions per minute. In a recent simulation study I ran, I noticed that out of 30 chest compression providers, not a single

CONTINUED on page 26
Rounding out the list is the tweet that inspired this month’s column. Casey Parker, MBBS (#broomedocs) is a general practitioner and hospital district medical officer in Broome, Australia and the creator of the excellent broomedocs.com emergency medicine blog. Dr. Parker challenges us to be creative and resourceful by presenting a case scenario, while imposing a constraint adhering to the recommended rate of compressions: “In real life, many of us have tried addressing this by playing a metronome during CPR. Unfortunately, the effect seems ephemeral and minimal. The problem stems, I believe, from people not knowing that “hard and fast” compressions can actually be too fast. But @TieDownTheHeartAust (a nonprofit Australian organization aiming to improve CPR survival rates) has an idea. Don’t just tell your colleagues and students what to do, but also tell them why. Their short tweet sums it up elegantly: “CPR — when YOU are supplying them with blood!” —when you push down say “BRAIN”, when you release say “HEART” [because] that’s how/when YOU are supplying them with blood!”}

**Reference**

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