Emergency department safety – An active shooter in the ED

Preston Fedor, MD, St. Lukes Hospital, Bethlehem, PA

The first things we heard were the gunshots. We would later learn that a patient’s estranged husband had shot his way through our security guard and receptionist.

As more shots rang out, we could tell they were getting closer. Our greatest fear was confirmed by blood-soaked people scrambling toward us in the hallway. Before the alert came through the overhead loudspeakers, staff and patients were already running—running into open rooms, out the ambulance bay doors, into radiology...they were running everywhere.

We had only seconds to push gurneys and wheelchairs bearing patients into lockable spaces as we tried desperately to comprehend what was happening. Then he appeared—the lone gunman. In contrast to all around him, he was resolute and confident. He marched steadily toward the room where his ex-wife and son were trying to hide. He fired indiscriminately at the remaining patients, nurses, doctors, and others he encountered along the way. He found what he was looking for and took his ex-wife, his terrified son, and a nurse hostage.

What followed was a two-hour standoff during which the police department’s Emergency Response Team (ERT) attempted to negotiate with the barricaded gunman. Ultimately, the hostages were rescued unharmed after a fatal shootout took place between the ERT and the perpetrator. In all, 13 staff members and two patients were killed during the initial 5-minute-shooting rampage in the emergency department. Many more were injured, some of them seriously.

continued on page 10
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Thank you very much for your interest in advertising with EM Resident. As the largest organization to represent the needs of the emergency medicine resident, we are able to reach a unique and important niche of our specialty. EMRA’s mission statement is to promote excellence in patient care through the education and development of emergency medicine residency-trained physicians. It is our belief that this provides the best patient care in an emergency department setting.

To support our mission and provide the greatest advantage to our residency-trained members searching for jobs, we welcome you to advertise in EM Resident, but require that all positions advertised in our publication be addressed only to board-certified/board-prepared, residency-trained emergency physicians.

For the sake of consistency, the use of the terms “ED,” “emergency department,” and “emergency physicians” are preferable to using “ER” or any such derivation.

Your support is very important to us, and we appreciate your compliance with these guidelines. Please respect this policy and reflect its sentiment in your advertisements. EM Resident has the right to refuse any advertisement that does not meet these guidelines.

Thank you again for advertising in EM Resident.

To place a classified or display ad in EM Resident, contact Leah Stefanini, 866.566.2492, ext. 3298, e-mail lstefanini@emra.org, or fax 972.580.2829. Information for advertisers can also be found at www.emra.org.

EM Resident is published six times per year. Ads received by May 1 will appear in the June/July 2011 issue. EM Resident subscriptions are available only to individuals and institutions that are not considered eligible for EMRA membership as per the EMRA bylaws. For information on how to subscribe please contact Leah Stefanini, 866-566-2492 ext. 3298 or email lstefanini@emra.org.
President’s message

Take part in healthcare reform

The widely debated healthcare bill of last spring, or more formally, the Patient Protection and Affordable Care Act, celebrated its one-year anniversary on March 23, 2011. Despite the passage of what is arguably the most sweeping change to our healthcare system in decades, healthcare has continued to receive a significant amount of legislative attention. Politicians on all sides of the debate are lining up, some calling for repeal of the law and some for the modification of particular provisions. Regardless of the outcome of this legislative session, the healthcare landscape in which we will practice will look markedly different than the environment of the past.

Legislative action in Washington has had substantial impact on the provision of healthcare, and this is particularly true regarding emergency care. Advocating for our patients and their well-being is increasingly requiring emergency medicine physicians to become active participants in local, state, and national governments. As a testament to this increased political activism, the current 112th Congress now has a total of 19 physicians among its members, including one emergency physician.

Advocacy is increasingly being recognized as a vital part of physician practice, and many residencies are incorporating educational experiences into their programs to help expose residents to the political process. In addition to the efforts at your home institution, EMRA and ACEP have a collection of opportunities available for those residents who are interested in becoming more involved.

For any resident interested in the political process, the ACEP Leadership and Advocacy Conference, May 22-25 in Washington DC, is an excellent place to begin. Lectures by healthcare experts, introduction to legislative reforms, and Capitol Hill visits are just the highlights of this high-yield, four-day conference. The EMRA Emergency Medicine Advocacy Handbook is an excellent primer for your legislative experience and provides short chapters on current advocacy topics.

For a more in-depth experience in Washington, EMRA and the ACEP DC office offer a one-month health policy mini-fellowship. This fellowship allows residents to work closely with staff as they lobby for particular healthcare legislation and regulation. Advocacy efforts continue at the state level as well, with many opportunities for residents to become active in their ACEP state chapters.

The future of the healthcare landscape will continue to change in the months and years to come. The political process will continue to influence the way all healthcare is delivered, and for that reason, physician participation in the process is essential. Take the opportunity during your residency to dive into these programs and jump-start your career in political activism.
Mission Statement

EMRA promotes excellence in patient care through the education and development of emergency medicine residency-trained physicians.
March 28, 2011

Dear EMRA member,

On March 23rd, 2010, President Obama signed into law the Patient Protection and Affordable Care Act (PPACA), legislation that promises to change the practice of medicine in America. The bill, as amended, is 2,409 pages in length, yet the work of the bill has only begun. As enactment of the law accelerates, regulations will be created that will likely expand the bill to ten times its current size. Within these newly written pages of legislation, the future of medicine and of our specialty will be defined. These regulations will shape our practice environment for decades to come.

At this crucial point, it is paramount that our specialty not be fragmented into organizations and groups, each with a distinct agenda and advocating for different interests. Instead, the degree of our success will depend on our ability to act as a collective body that speaks with a single voice in Washington. The Emergency Medicine Action Fund represents our specialty’s efforts at creating this singular, powerful voice. The Action Fund is a group created by ACEP and designed to bring EM organizations together, pool limited resources, protect our specialty, and steer regulatory change. The Action Fund will be composed of representatives from major emergency medicine organizations, and EMRA is proud to announce that we have been offered and have accepted a seat on the Action Fund’s Board of Governors.

EMRA strongly believes that the goals of the Action Fund will preserve and promote the future of emergency care in our nation. We recognize that as residents and medical students, no group has a greater stake in the outcome of healthcare regulation, as it is our future that hangs in the balance. We live in a time of unparalleled change and will face unprecedented challenges as healthcare reform is enacted. With this in mind and on behalf of our members, EMRA’s Board of Directors is proud to announce that it has pledged at total of $100,000 over the next two years to the ACEP Emergency Medicine Action Fund.

This donation, made possible by the success of our investments and product development, represents our conviction to advocate for our specialty and our commitment toward defining our own future, rather than passively observing the engines of change. As an organization, we emphatically believe that the time to act on healthcare reform is now and that the actions we take matter. If we do not act to define our future as emergency physicians, someone else will.

Already this year, we have seen government-proposed cuts to funding for regional poison control centers and graduate medical education—cuts which threaten our education and our specialty. These proposals are but a portent of the battles to come as accountable care organizations, value-based purchasing, and other issues loom. On the Emergency Medicine Action Fund Board of Governors, EMRA will champion resident and medical student views and interests on these types of key topics.

For decades, our mission has been to promote excellence in patient care through the education and development of emergency medicine residency-trained physicians. EMRA now finds itself at a critical crossroads where we must act on issues beyond education to help ensure that the value of our education is preserved and that a healthy practice environment exists for all that have trained and are training. EMRA is proud to have joined the Emergency Medicine Action Fund, to have a seat on its Board of Governors, and to represent emergency medicine residents and students the country over. Together, we can not only brave these times of uncertainty, but have a hand in ensuring our specialty’s place in the future of healthcare.

Sincerely,
The EMRA Board of Directors
Emergency Medicine Action Fund Fact Sheet

“As healthcare changes dramatically in the next few years, what we do – or what we fail to do – will likely define how emergency physicians practice for the foreseeable future.”

– Sandra Schneider, MD, FACEP
ACEP President

What is the Emergency Medicine Action Fund (EMAF)?
In January 2011, the ACEP Board of Directors voted to create the Emergency Medicine Action Fund to generate additional financial support for our existing advocacy efforts in Washington, DC. As part of the Action Fund’s commitment to advancing the needs of emergency medicine, six stakeholder organizations have been invited to sit on the Board of Governors. They include AAEM, AACEM, ACOEP, EDPMA, EMRA, and SAEM. Along with ACEP, these organizations will help guide the direction of the Action Fund to address the federal regulatory issues that matter to you.

Why should you get involved?
The Patient Protection and Affordable Care Act (PPACA) has the potential to dramatically change emergency medicine. As this major healthcare law is finalized through the complex federal regulatory process, EMAF gives us the opportunity to get involved in this process with a clear and influential voice to define how emergency physicians practice in the future. Evolving practice models and demonstration projects, such as accountable care organizations and bundled payments, are just two examples of critical areas where we need to focus our efforts. The Action Fund provides an important tool to unify and strengthen our influence with federal agencies in a way that is more effective than individual groups and organizations could achieve on their own.

What if I am opposed to PPACA or believe that the U.S. Supreme Court will overturn some or all of the Act?
While no one can predict the outcome of the legal challenges to PPACA, our expert advisors believe that the prevailing trends driving healthcare change are overwhelming, and that federal regulation will inevitably impact the practice of emergency medicine in many fundamental ways. EMAF will greatly enhance our ability to respond proactively, regardless of the direction of the U.S. courts and Congress.

How is the EMAF different than current emergency medicine advocacy efforts?
In addition to expanding the efforts of the ACEP staff in Washington, DC, the Action Fund allows us to engage some of the most prominent and influential law firms and consultants, including Alston & Bird and Health Policy Alternatives. These firms are known and respected for their regulatory expertise, comprehensive understanding of complex reimbursement issues, and their ability to research and identify effective means of communicating the value of emergency medicine to important stakeholders. All of these consultants, including Hart Health Strategies, have been critical players in health policy for more than 20 years. These relationships will be vital in our commitment to influence necessary change in the years ahead.

How does the EMAF differ from NEMPAC?
The National Emergency Medicine Political Action Committee, NEMPAC, gives contributions to candidates who actively support emergency medicine and the needs of emergency physicians. NEMPAC has been an effective tool alongside our legislative advocacy efforts; however, NEMPAC funds can only be used to support candidates. The Action Fund will greatly expand our efforts to impact federal regulatory issues in ways that NEMPAC cannot.

How will the EMAF use your contribution?
The majority of the spending (75 to 80 percent) is for new initiatives, such as:

continued on page 8
Retaining renowned consulting and law firms Alston & Bird LLP, Hart Health Strategies, and Health Policy Alternatives

Hiring additional staff to focus on regulatory issues

Commissioning studies, like quantifying the value of emergency medicine, to support our position with regulators

Coordinating high-level meetings with regulatory agencies

Developing additional public relations campaigns

The remaining spending would augment the ongoing advocacy activities undertaken by the staff in ACEP’s Washington, DC office. Additionally, the current changes to our healthcare system require significant additional resources to address the regulatory challenges posed by the Patient Protection and Affordable Care Act.

Who will set the EMAF agenda and make the spending decisions?

An 18-member Board of Governors will set the agenda for the Action Fund and determine how funds are spent, in collaboration with ACEP staff, committees, members and other emergency medicine organizations. Ten of these Board seats are allocated for the largest donors to the fund. All Board of Governors decisions are final unless the full ACEP Board of Directors votes by a two-thirds margin to override a Board of Governors decision.

What are the EMAF contribution levels?

Participants in the Action Fund may contribute at one of three levels:

- **Governors Circle**, minimum contribution of $100,000
- **Contributors Circle**, contributions between $50,000 and $100,000
- **Sustainers Circle**, any contribution up to $50,000.

Contributors of $100,000 or more are automatically eligible for one of the 10 seats on the Board of Governors. Small to mid-sized emergency physician groups within chapters, regions, or existing business affiliations can combine resources to become a coalition that would qualify for one of the seats. The coalition members would then appoint its representative for the Board of Governors.

Terms are for one year and reappointment to the Board of Governors requires an annual contribution. The size and composition of the Board could change over time based on contributor response and participation.

How can you ensure you have a voice if you or your group does not contribute at the $100,000 level?

The Emergency Medicine Action Fund offers contributors, large or small, the opportunity to help shape emergency medicine’s regulatory agenda. Like ACEP’s committees, there is no restriction on who may propose an issue for consideration. And as the Board of Governors begins to develop its priorities, it will seek input from a variety of sources. Because the federal reform process is expected to play out over several years, contributors to the Emergency Medicine Action Fund will have many opportunities to voice their views.

How can you make a payment? Is there an installment plan?

Those interested in contributing at any level can find a contribution form online at www.acep.org/EMActionFund. Installments can be set up but the total contribution pledged must be paid in full within 12 months. The goal is to raise $1 million in the Action Fund’s first year and we hope to grow to $2 million in year two.

What else do you need to know?

All contributors to the Action Fund will receive regular activity reports, be eligible to participate in meetings with executive branch staff, U.S. Representatives and Senators, and have access to a members-only EMAF website.

For further information, contact Gordon Wheeler, ACEP’s Associate Executive Director, at gwheeler@acep.org, or 800-320-0610, ext. 3016.
Call for Applications!
2011-2012 EMRA-ACEP Health Policy Mini-Fellowship Recipients

The EMRA/ACEP mini-fellowship provides a four week experience centered out of ACEP’s Washington, DC office.

This is a intensive, short-term policy curriculum that will provide meaningful advocacy exposure.

Call for Applications!

Applications for the 2011-2012 Health Policy Mini Fellowship are due July 15, 2011

For more details and to apply online visit www.emra.org

Dr. Carol Rivers’ EM Board Review

Dr. Rivers' nationally recognized Board Review materials are available through Ohio ACEP. The NEW Sixth Edition of Dr. Carol Rivers' Preparing for the Written Board Exam in Emergency Medicine is now available.

Order Yours Today!
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Emergency department safety —
An active shooter in the ED

Preston Fedor, MD
St. Lukes Hospital
Bethlehem, PA

continued from cover

Fortunately, this was just an elaborate active shooter drill held inside our busy emergency department. Real nightmarish scenarios such as these, however, are becoming all too common in emergency departments across the country. We often hear about someone walking into a healthcare setting with a firearm, a patient brandishing a weapon, or a visitor attacking staff. Research consistently reinforces the impression that workplace violence has been increasing in a variety of workplace settings, particularly in the healthcare environment.

A recent national survey demonstrated that about 25 percent of nurses in the emergency department experienced physical violence more than 20 times in the preceding three years. Additionally, the National Emergency Department Safety Study detailed almost 3,500 physical attacks on staff (residents and attending included) in five years at the 65 emergency departments studied. Perhaps more startling, 20 percent of these emergency departments reported guns or knives present on a daily or weekly basis.

As residents, we focus all of our brainpower on learning the ins and outs of patient care, procedures, and emergency department flow. We don’t often think about how the emergency department is run, who is looking out for our safety, or what measures are in place to protect the lives of everyone in the department should something happen. The sooner you start asking the right questions and come to understand these issues, the more empowered you will be to prevent the terrible consequences of such an event.

Does your emergency department have a plan in place for an active shooter or other terrorist events? How will you and your colleagues be warned of such an occurrence? Do you know where the lockable, safe spaces are in your department? What do you do with the patients? What security measures are in place to prevent an armed assailant from wreaking havoc? Who makes these decisions anyway?

These same questions and the very real specter of violence in the emergency department, led our Emergency Management Committee to create this drill and conduct it in cooperation with our local police department. Believe it or not, most police departments (and their tactical teams) have no experience in the complex physical space of our clinical setting. As such, full-scale drills such as this not only ready the staff for a security emergency, but also allow the law enforcement officers to be more prepared and to serve us better.

Many lessons were learned as a result of this drill, both from the clinical and law enforcement perspectives. Below are the main take away points for the emergency department.

1. A pre-determined emergency code announced over the PA is an essential warning mechanism. It grants staff and patients additional time to either evacuate or hide.
2. Staff must be trained to move quickly, hide, and stay hidden. Despite hearing shots fired and the warning announced overhead, some staff were curious and moved towards the shooting. Others peeked out from their hiding spot to see what was going on.
3. It is difficult to convince doctors and nurses to leave their patient’s sides, even to save their own lives.
4. Patient comfort measures such as reflective windows and blinds impede law enforcement’s ability to do reconnaissance from the outside.
5. A mechanism to divert incoming ambulance traffic and walk-in patients must be established and drilled.
6. It is essential to provide local law enforcement with an emergency department reference book with floor plans, location of oxygen shutoffs, type of ventilation, security radio frequencies, etc.
7. Emergency department staff should remain available to manage alarming ventilators, monitors, and beds. Alternately, a member of the Tactical EMS team can be familiarized with these issues.

Believe it or not, you as a resident have more clinical experience and emergency department know-how than most of the administrators who develop your security plans. Get involved. Find out who is making the decisions about your future well-being and offer to add your perspective. Your practical contributions may provide the needed impetus to make your workplace a safer environment.

The issue of emergency department and healthcare safety is one that affects us all (some more startlingly than others) and one that we must start thinking about right now as residents. Start asking questions. What plans are in place already? What security issues remain unresolved? How can you help with these? What are you going to do should the worst case scenario happen on your next shift?

Lessons learned

Website resources
• ACEP’s Tactical Emergency Medicine Section at www.acep.org/sections
In an effort to address the problem of increased violence targeted at healthcare providers in the emergency department, EMRA authored a resolution that was adopted by the American College of Emergency Physicians (ACEP) at Scientific Assembly, 2010. The resolution states that ACEP believes in maximum legal penalties for verbal threats, physical violence, or any other form of assault against medical students, residents, fellows, and attendings working in the emergency department. Additionally, ACEP will advocate for increased awareness of violence against healthcare providers in the emergency department and for increased safety measures in all emergency departments.

Finally, to help establish a federal standard that mandates workplace violence protections in the emergency department setting, ACEP advocates for all states to sign into law that violence against healthcare providers in the emergency department have a maximum elevated category of offense and subsequently, maximum criminal penalty. At this time, the resolution has been forwarded to the State Legislation Committee and the Public Health and Injury Prevention Committee for implementation.

References
Advocacy: Moving beyond the legislative world

Advocacy corner

It was a popular healthcare reform slogan: “Don’t let the government come between me and my doctor!” But as physicians, we are all aware that both governmental and insurance regulations play a large role in the practice of medicine.

The Center for Medicare and Medicaid Services (CMS), a part of the larger Department for Health and Human Services, administers a $750 billion budget, paying for the medical expenses of a substantial proportion of all Americans. To receive reimbursement for the services provided to Medicare and Medicaid patients, hospitals must meet the CMS Conditions of Participation (CoPs). Since the passage of the Social Security Amendments of 1965, a partnership has existed between CMS and The Joint Commission (JCAHO) whereby hospitals may be surveyed by CMS or The Joint Commission for the purposes of deeming compliance with the CoPs.

The CoPs are broad regulations for hospital operations, covering many areas of the hospital (including Emergency Services), and CMS frequently issues “interpretive guidelines” to guide surveyors in interpreting and applying the Conditions. The hospital must adhere to these guidelines in their treatment of all patients, not just Medicare or Medicaid patients, in order to be deemed in compliance.

In February 2010, CMS issued updated Interpretive Guidelines on Anesthesia Services, which had the potential to restrict the use of procedural sedation in the emergency department by interpreting the administration of any amount of propofol as deep sedation and then requiring all the criteria for anesthesia to be met. Emergency physicians reviewing the guidelines were highly concerned about an adverse impact on patient care. When patients come to the emergency department requiring joint reductions and cardioversions, how could we provide prompt and adequate analgesia and sedation to perform these procedures without performing procedural sedation with the use of agents such as propofol?

In March 2010, the presidents of ACEP, AAEM, and ENA (Emergency Nurses Association) composed a letter to CMS requesting clarification on their new guidelines. A team of physicians and ACEP Federal Affairs Director, Barbara Tomar, worked together to review the literature on the safety of procedural sedation—particularly using propofol in the emergency department. Many
When patients come to the emergency department requiring joint reductions and cardioversions, how could we provide prompt and adequate analgesia and sedation to perform these procedures without performing procedural sedation with the use of agents such as propofol?

studies in the U.S. and Canada have shown an excellent safety profile and rapid recovery time with the use of propofol for emergency department procedural sedation.

In April 2010, I was spending the month in ACEP’s Governmental Affairs office in Washington, DC as the ACEP-EMRA Health Policy Mini-Fellow. As part of my work, I assisted with the literature review and was invited to attend a meeting with CMS officials regarding the guidelines. With then ACEP President Angela Gardner, AAEM President Harold Blumstein, and ENA President Diane Gurney on speakerphone, Barbara Tomar and I met with CMS staff in Baltimore, MD and discussed the issues surrounding procedural sedation in the emergency department.

We provided relevant medical literature, as well as information on the comprehensive training that emergency medicine residents receive in the use of sedating agents and proper airway and cardiovascular monitoring. This training makes us uniquely qualified amongst non-anesthesiologists to perform “rescue” for sedations that become deeper than expected, given our skills in airway management and cardiovascular resuscitation.

In January, a revision of the Interpretive Guidelines was released, and all of our concerns were addressed. The new guidelines continue to state that each hospital must determine clinical privileges for anesthesia administration. But they also acknowledge that the particular environment of the emergency department and the specialized training of emergency physicians means that we may determine our own guidelines on the use of procedural sedation in our clinical environment. Appropriate nationally recognized guidelines, including the ACEP Clinical Policy on procedural sedation, can now be used to govern the use of sedation in emergency departments.

With this change, emergency physicians will be able to continue to provide comprehensive care to our patients using the most appropriate sedating agent as guided by the clinical situation. Clearly, accomplishing this revision required advocacy efforts, but this was not the most familiar lobby-your-congressman advocacy. Regulatory advocacy has always been a necessity—requiring frequent interaction with federal employees in HHS, CMS, and other national agencies to ensure that as laws are applied, the perspectives of emergency physicians and emergency patients are considered.

The passage of the Patient Protection and Affordable Care Act (PPACA) initially required legislative advocacy, but now that the law has passed, it has created a mountain of new legislation requiring interpretation. Our regulatory advocacy efforts are more crucial than ever. With this concern in mind, ACEP has just created the Emergency Medicine Action Fund (EMAF) to allow various groups of emergency physicians to work together to positively impact the regulatory implementation of the PPACA. This will be a group to watch in the coming months and years, particularly as new payment methods for physicians like bundled payments and accountable care organizations (ACOs) are put into place.

To learn more about current advocacy issues, be sure to attend the ACEP Leadership and Advocacy Conference in Washington, DC, May 22-25! Also consider applying to be the next ACEP-EMRA Mini-Fellow. Applications are due July 15th, and more information is available at EMRA.org. Read more about the EMAF and the CMS guidelines on sedation on at ACEP.org.
2011 ACEP Leadership and Advocacy Conference

May 22-25, 2011
Washington, DC

For complete conference schedule and registration, visit www.acep.org.
Registration deadline: May 6, 2011

Be sure to ask your academic chair about participating in the EMRA Chair’s Challenge.

EMRA/YPS Residents and First Timers Track Leadership and Advocacy Essentials

May 22, 2011
11:00 am-12:00 pm EMRA Health Policy Committee Meeting (All EMRA and ACEP Young Physician Section Members invited to attend)

12:30 pm - 12:40 pm Welcome and Introduction
Andy Sama, MD, FACEP
ACEP Vice President;
Nathan Deal, MD, EMRA President

12:40 pm - 1:20 pm Introduction to Advocacy
Alison Haddock, MD,
EMRA Legislative Advisor
and ACEP-EMRA Mini-Fellowship Alumna

1:20 pm - 2:00 pm Current Issues in Health Policy
Nathaniel Schlicher, MD, JD,
Immediate Past EMRA Legislative Advisor

Health Economics
Ethan Booker, MD, FACEP, YPS Member

Roundtable Discussion
Facilitated by EMRA Board of Directors and YPS Leaders

Delivering Powerful Presentations
Presented by The Communications Center

Resident and Young Physician Section Reception
Underwritten in part by Team Health and Ortho-McNeil

May 22, 2011 Chair’s Challenge Leadership and Advocacy Conference Scholars Program

Support the development of our specialty’s future leaders and patient advocates

What the ACEP Leadership and Advocacy Conference does for Emergency Medicine Residents:

✓ Exposes them to the legislative process
✓ Fosters in them the advocacy spirit
✓ Teaches them the skills needed to effectively communicate issue-related messages
✓ Empowers them to actively use these skills as leaders

The experience culminates with the residents, along with the other conference attendees, meeting with their U.S. Senators and Representatives on Capitol Hill to discuss the most important health policy issues. For complete schedule and registration form, please visit www.acep.org.

Chair’s Challenge commitment deadline: May 1, 2011

For more information and sponsorship forms, please visit www.emra.org
# EMRA Activities at the 2011 SAEM Annual Meeting

**June 2-5, 2011**

*Boston Marriott Copley, 110 Huntington Avenue, Boston, MA 02116*

## Board of Directors

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<td>Thursday, June 2</td>
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<td>EMRA Board of Directors Meeting</td>
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## Representative Council

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<td>Rep Council Reference Committee Work Meeting</td>
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<td>EMRA Rep Council Welcome Breakfast &amp; Registration</td>
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## Committees

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## Other Fun Stuff

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<td>EMRA Spring Awards Reception</td>
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<td>11:30am-1:00pm</td>
<td>EMRA Leaders Transition Luncheon (invitation only)</td>
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<td>EMRA Resident SimWar Competition</td>
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<td>Saturday, June 4</td>
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<td>EMRA National EM Jeopardy Contest</td>
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Mad libs in the media

The death of a (noun) just feet from a/an (place) has left his family in grief, upset (noun), and drawn a request for an investigation from a (noun), all asking why an officer was told to call the (adjective) number for a (medical condition) victim just outside the hospital door.

“It’s certainly very frustrating for the (occupation) who are not (different occupation) in a hospital parking lot, to be told they have to call for a (vehicle) to help this man. The officers didn’t stand there and argue, they continued (verb),” Simpson said. “But they were in disbelief.”

(Proper noun) said he was ‘(adjective)’ about the way the incident was handled. “It is not just heartbreaking, but incomprehensible that a (place) fully capable of treating this medical emergency left police officers with no (noun) to tend to a patient,” Blumenauer said. “If the police statements are correct, this incident (verb) common sense and it may well defy (noun).”

“They left him to (verb),” wife Luis Garcia said.

This is a mad lib modification of a newspaper article I read last week. Which of these, the mad lib or the actual newspaper clip (see below), do you think is closer to the actual truth? After reading the article, I spent an inordinate amount of time reading all (yes, all…) the online comments in response to the article. Do you know what I learned after reading all of this? Nothing. I learned absolutely nothing! Not one of the entities involved in this situation challenged themselves to paint a complete picture of what happened.

We all remember that social studies lecture about media bias. None of us are naïve enough to believe what we hear on TV or read on the all-knowing internet is completely true, but maybe we are not entirely in tune with how much the media guides the public’s perception and feelings about healthcare. It is not simply how and what they publicize; it’s hidden in the stories they choose not to cover as well.

There have been several large public events where political figures have hosted informative seminars and town-hall meetings regarding the healthcare reform bill. Often, these meetings are filled to capacity with concerned citizens gathered to find out more information. It is predictable and unfortunate that no major media outlet will broadcast this display of rational-minded citizens discovering the truth via professional and respectful dialogue.

Instead, on the internet, we read things like, “Why didn’t the nursing supervisor have life saving tPA on her? She could have carried it in a bag of syringes, or a waist belt, hip harness or apron. How could they not hang a drip bag of tPA in the parking lot?” (That was my favorite online comment in response to the man in the story above who had a car accident on hospital property.)

Instead, we have an increasing number of misguided citizens with unreasonable expectations propagating misinformation
“None of us are naïve enough to believe what we hear on TV or read on the all-knowing internet is completely true, but maybe we are not entirely in tune with how much the media guides the public’s perception and feelings about healthcare.”

with wild abandon. To a large extent, our patients are forming opinions of us (as part of the healthcare system) based on articles like these. Despite how much we as physicians work to build rapport with our patients on a personal level, for some patients, our “reputations” precede us, and we are seen as part of the problem.

Since most people get their information about health care and healthcare providers from major media outlets, the responsibility of educating our citizens on the topic has fallen upon the media. At a time like this, amidst the most significant healthcare reforms in nearly half a century, it is sad that media bias and political spin results in public ignorance and confusion. In a free and democratic society, I believe fair and adequate media coverage is a personal right, something that I am entitled to, that I should not have to pay for. Sound familiar?

The death of a Cuban immigrant just feet from an emergency room has left his family in grief, upset police, and drawn a request for an investigation from a congressman, all asking why an officer was told to call the emergency services number for a heart attack victim just outside the hospital door.

“Hospital said they won’t come out,”

Officer Andrew Hearst radioed to dispatch. “We need to contact AMR first.” The officers were stunned.

“It’s certainly very frustrating for the officers who are not medical professionals in a hospital parking lot, to be told they have to call for an ambulance to help this man. The officers didn’t stand there and argue, they continued CPR,” Simpson said. “But they were in disbelief.”

Congressman Blumenauer said he was “deeply concerned” about the way the incident was handled. “It is not just heartbreaking, but incomprehensible that a hospital fully capable of treating this medical emergency left police officers with no medical equipment to tend to a patient,” Blumenauer said. “If the police statements are correct, this incident defies common sense and it may well defy federal law.”

“They left him to die,” wife Luis Garcia said.

Find the compete article at www.oregonlive.com/portland/indexssf/2011/02/portland_police_try_to_save_a.html

Please send us your thoughts on this article at speaker@emra.org.
Staying up to date in today’s information-saturated world is a daunting task. The amount of information that comes to us through various forms of media is truly unbelievable. We have access to this information via e-mail, twitter, chat accounts, the intranet, television, radio, and printed information. Despite the increasing ease with which we can access information through our computers, mobile devices, and the press, I would propose that most of us feel a bit overwhelmed by the volume of information we find when seeking an answer to a question and the personal and professional information thrust upon us on a daily basis.

Whether or not you are a proponent of technology or are happy with the amount of information available to you in your personal and professional lives, technology and the information age are here to stay. Expectations exist within medicine that we, as physicians, need to be up to date with the latest and best literature within our field of practice. The recent push within all of medicine to be evidence-based urges us to integrate the best available research evidence with our own clinical expertise to all patient encounters.

I am going to provide you with some online technologic tools that are available to you when sifting through the ever-increasing amount of medical information produced, with a particular focus on finding the best, high-quality information available on a resident’s budget. I am writing only to provide my personal overview of what I have found helpful. This is not intended to be a comprehensive assessment of online resources available, and I have no personal interest in any of the mentioned technologic tools. Much of the information included has been extracted directly from the websites of the mentioned resources and is cited with quotations.

The first concept that I’ll introduce is that of “push” and “pull” resources. A “push” resource is a physician-centered alerting system to provide high-quality, relevant, and ideally, pre-appraised assessments of the literature for use in clinical practice. The typical push resource comes in the form of an e-mail, a newsletter, or a mailing.

Within emergency medicine, there are many resources available with a subscription cost such as Journal Watch – Emergency Medicine and Emergency Medicine Practice. Many of these services are available at a discount to residents or free with membership to an emergency medicine resident organization. My two favorite push resources that are available free are Evidence Updates and Medscape – Emergency Medicine.

With Evidence Updates, the British Medical Journal Group and McMaster University’s Health Information Research Unit are collaborating to provide you with access “to current best evidence from research, tailored to your own health care interests, to support evidence-based clinical decisions.” According to the website of Evidence Updates, “this service is unique: all citations (from over 120 premier clinical journals) are pre-rated for quality by research staff, then rated for clinical relevance and interest by at least three members of a worldwide panel of practicing physicians.”
My working on a clinical shift.

To be used "on the favorite applications, as they are designed of the available pull resources are my ries of the best available evidence. Many provide short, easily accessible summa-

pre-appraised topics and questions that "Pull" resources are repositories of pre-appraised and highly recommended.

"Pull" resources are repositories of pre-appraised topics and questions that provide short, easily accessible summaries of the best available evidence. Many of the available pull resources are my favorite applications, as they are designed to be used “on the fly” in real time when working on a clinical shift.

My first recommendation is Best BET’s (Best Evidence Topics) a website developed in the “Emergency Department of Manchester Royal Infirmary, UK, to provide rapid evidence-based answers to real-life clinical questions, using a systematic approach to reviewing the literature.” This resource has an easily searchable database and many emergency medicine specific reviews. Several other searchable resources are available at a subscription cost but may be available to residents free through their institution such as: Essential Evidence Plus, ACP Journal Club, Clinical Evidence, and Annals of Emergency Medicine Evidence Based Medicine.

My two favorite, no cost, evidence-based search engines available to residents are the DARE and TRIP databases. With the DARE database, the Centre for Reviews and Dissemination “undertakes systematic reviews evaluating the research evidence on health and public health questions of national and international importance.”

The TRIP database seeks to answer real clinical questions using the principles of evidence-based medicine. The TRIP database searches multiple EBM database websites in additional to PubMed for the most relevant information related to your topic.

Many residents like the convenience of general searching engines such as Google or Yahoo, but I would urge you to concentrate on those engines focusing on pre-appraised and scholarly information that limit the amount of material that you have to screen. Google Scholar provides the Internet searching capabilities of Google but focuses the search on scholarly websites. Use Google Scholar to find information from “scholarly proceedings, meetings, academic publishers, professional societies, preprint repositories, universities and other scholarly organizations as well as primary journal articles.”  With Google Scholar, you benefit from the familiar Google approach to sorting search results that we love so much.

The last group of evidence-based resource that I’ll discuss is the online clinical reference. These are online textbooks authored by the “experts” in field. These clinical references have a variable amount of critical appraisal and evidence-based medicine applied to their content. Those references that provide links to primary full text articles are particularly helpful.

Many residents are familiar with this type of resource and use references regularly in clinical practice. Examples include Up-To-Date, DynaMed, and MD Consult. All require a hefty subscription fees but often are available free to users through their institution. In addition to searching the content of the reference, many of these resources offer push resources that are particular useful (i.e., DynaMed).

Like any technology, these information push and pull resources are designed to make your life simpler. My suggestion is to try several of the resources presented to you in this article and find those that you like best and stick with them. When considering your favorites and new resources that come available, make sure you consider how the information is appraised and evaluated when making your decisions.

Your time is valuable, and you need to focus your professional reading on the information resources that truly have the best information available. Allow these evidence-based medicine resources to do the work for you, and select those resources that fit into your work environment and personal life easiest.

Reference websites
2. Best BET’s http://www.bestbets.org/
3. Emergency Medicine Practice www.ebmedicine.net/
4. Evidence Updates http://plus.mcmaster.ca/EvidenceUpdates/
7. TRIP database www.tripdatabase.com/
8. DARE database www.crd.york.ac.uk/crdweb/
10. Up-To-Date www.uptodate.com/home/index.html
Fever is a common complaint of adults presenting to the emergency department. Differentiating life-threatening from self-limited illnesses can often present a dilemma given the wide range of plausible diagnoses associated with fever. Recognizing infectious and non-infectious causes of fever that require emergent intervention, which may or may not involve empiric antimicrobial therapy, can be challenging and rewarding. In this article and subsequent ones to follow, I hope to lay out practical approaches to thinking about fever in adults encountered in the emergency department from an infectious diseases perspective.

The goal is to review the differential diagnoses of fever in several adult patient populations encountered in the emergency department including individuals with a history of human immunodeficiency virus (HIV), chemotherapy-induced neutropenia, transplant-related immunosuppression, and recent travel. In many of these populations, a definitive etiology of fever may not be established until well into their hospitalization. Nevertheless, we, as emergency physicians, play an integral role in identifying the risk of serious infection, initiating a rational diagnostic evaluation, and ensuring timely delivery of appropriate broad-spectrum antimicrobial therapy.

An elevation in body temperature above the normal range has been recognized as a cardinal manifestation of disease since the earliest days of medicine. From the four humors of Hippocratic medicine to the modern-day concepts of thermoregulation and cytokine cascades, our grasp of fever, its causes, and its definition continues to evolve. In 1868, Carl Reinhold August Wunderlich established normal body temperature as 98.6°F (37.0°C) with an upper limit of 100.4°F (38.0°C) after studying more than a million axillary body temperature readings in some 25,000 patients. While these numbers have been engrained upon generations of physicians, recent evidence using far more accurate oral temperature measurements suggest that the upper limit of normal may in fact be closer to 37.7°C (99.9°F) in healthy adults under the age of 40, and even as low as 37.2°C (99.9°F) in the early morning as a consequence of the normal diurnal variation in body temperature. Fever in elders, where inflammatory responses are frequently blunted, has been defined as a persistent oral temperature ≥37.2°C (98.9°F) or a rise in temperature of ≥1.3°C (2.3°F) relative to the elder’s baseline. These refinements in the defining fever are important to consider as we set about evaluating the acutely febrile adult in the emergency department.

It is important not to confuse fever with hyperthermia, which stems from ineffective heat dissipation. While high fevers may occasionally be encountered in the setting of severe infection, body temperatures >41.0°C (105.8°F) are more likely indicative of hyperthermia, which may occur in the setting of environmental extremes, endocrine disorders (e.g., hyperthyroidism, pheochromocytoma), medications (e.g., anesthetics, neurolupect agents), and illicit drug use (e.g., cocaine, amphetamines).

Amidst the hectic environment of the emergency department, the history and physical examination play an integral part in generating a meaningful differential and directing the diagnostic workup of the acutely febrile patient. First and foremost, it is important to clarify the patient’s definition of “fever”. Is it subjective, tactile, or measured, and if so, by what method? Oral and rectal temperatures are generally considered more accurate than axillary or tympanic membrane temperatures, with oral temperatures typically measuring 0.4°C (0.7°F) lower than rectal temperatures. The magnitude, duration, and consistency of the fever should be elicited. Fevers lasting less than two weeks are far more likely to be
infectious in origin than those lasting more than a month. Associated symptoms including cough, headache, abdominal pain, and rash should be sought. Together, these may point towards familiar clinical syndromes (e.g., fever and headache, fever and abdominal pain). In elders, infections often present atypically with few localized and frequently muted signs. Fever and any change in mental or functional status in an elder must be considered infectious until proven otherwise given the high mortality associated with infection in this vulnerable population.

The immune status of the patient should be characterized. Malignancy, chemotherapy-induced neutropenia, HIV infection, primary immunodeficiencies, asplenia, long-term corticosteroid use, and immunosuppressive therapy to prevent transplant rejection or treat certain rheumatologic or inflammatory diseases (e.g., biologic drugs including anti-tumor necrosis factor-alpha agents) all shape the scope of infection possible. Comorbid chronic diseases including diabetes mellitus, congestive heart failure, and peripheral vascular disease may predispose to or exacerbate acute infection.

Temporal relationships between fever and medical interventions should always be considered. Antibiotic exposure followed by diarrhea and fever may herald a serious *Clostridium difficile* infection. Recent surgery could translate into a wound infection or more extensive intra-abdominal complications (e.g., abscess). Implanted orthopedic hardware and other devices may become infected at any time. Frequent contact with the healthcare setting may predispose to particularly aggressive or difficult to treat infections with resistant organisms including methicillin-resistant *Staphylococcus aureus* (MRSA), vancomycin-resistant *Enterococcus* (VRE), and extended-spectrum beta-lactamase (ESBL) producing Gram negative bacilli.

At a minimum, a social history should identify sick contacts, intravenous drug use, homelessness, and any risk-taking sexual behavior that might render the patient at risk for acquiring HIV and other sexually-transmitted diseases. Relevant food, water, recreational (e.g., hunting, camping), occupational, travel, or animal exposures may shed valuable light in the appropriate clinical context. It is important to be aware of endemic infections (e.g., histoplasmosis, blastomycosis, coccidioidomycosis, West Nile Virus) within your geographic region of practice as well as trends in epidemic and seasonal infections circulating in the community (e.g., influenza).

A methodical and detailed physical examination can provide more information to help establish the etiology of fever. In addition to the heart, lungs, and abdomen, an examination of the oropharynx, lymph nodes, and skin should be pursued. In elders and other debilitated patients, it is important to search for decubitus ulcers and chronic wounds in dependent areas that might be prone to infection. Tunneled intravenous catheters used for hemodialysis, parenteral nutrition, or vascular access should be thoroughly inspected for erythema, induration, or drainage.

Pneumonia, urinary tract infection, soft tissue infection, meningitis, and sepsis represent the most common infectious causes of fever in adults presenting to the emergency department. Empiric antimicrobial coverage should take into account the suspected site of the infection, commonly implicated microorganisms, risk of antibiotic-resistant bacteria, and local antimicrobial susceptibility patterns if available (usually in the form of an institutional antibiogram). Specific antibiotic regimens are beyond the scope of this article. Antipyretics may alleviate the symptoms of fever but do not improve patient outcomes. Non-steroidal anti-inflammatory drugs (NSAIDs) and acetaminophen inhibit prostaglandin synthesis through the cyclooxygenase pathway, thereby reducing hypothalamus-mediated fever. External methods including cooling blankets, fans, and water sponging may be useful in some situations where fever is refractory to antipyretics.

Fever will always be a staple of emergency medicine. As a result of our broad residency training, we are well-equipped to stratify risk in febrile patients, accurately identifying those that may require more aggressive attention and ultimately hospital admission. Infectious diseases account for a significant portion of fevers encountered in the emergency department, though elevated body temperatures may accompany a host of other critical non-infectious diagnoses including but not limited to thromboembolism, rheumatologic diseases, and malignancy. Knowing which febrile patients are at greatest risk for what types of infectious complications shall serve as the topic of the articles to follow.

References

February 2011 meeting report

As your new Residency Review Committee (RRC) representative, I will be writing a series of articles that will examine current issues pertaining to the Accreditation Council for Graduation Medical (ACGME), the RRC and the Council of Review Committee Residents. Each article will focus on specific issues being discussed and the potential impact on emergency medicine training. For my first article, I will begin with a discussion of the structure of these organizations, the current topics being discussed, and a brief summary of the most recent RRC meeting.

What exactly is the ACGME?
The ACGME is a private, nonprofit organization established in 1981 and headquartered in Chicago, IL. The mission statement of the ACGME is to “improve health care by assessing and advancing the quality of resident physicians’ education through accreditation.” The ACGME accomplishes this mission by setting standards for graduate medical education (GME), collecting case log data, monitoring duty hours, conducting resident surveys, following up resident concerns or complaints, and accrediting residency programs. The ACGME delegates accreditation authority to each specialty RRC. The ACGME board of directors oversees the development of common program requirements, such as duty hour standards and GME policy.

What is meant by “accreditation” versus “certification?”
Accreditation is a “voluntary” process of evaluation and peer review by a non-governmental organization. For emergency medicine residencies, the ACGME provides accreditation. Certification is a process to assure that a medical specialist has successfully completed an approved educational program and evaluation. After you complete residency and pass written and oral boards, the American Board of Emergency Medicine (ABEM) and American Osteopathic Board of Emergency Medicine (AOBEM) will provide board certification.

How does a residency program maintain accreditation?
The ACGME is responsible for ensuring the quality of approximately 8,400 accredited residency and fellowship programs in 121 specialty and subspecialty areas of medicine. Collectively, the programs are responsible for the education of more than 105,000 residents. The ACGME relies on a system of specialty experts to determine accreditation decisions. There are 27 Review Committees that carry out this task. On average, every program undergoes a full review every 3.5 years. To initiate the process, your program director will submit a program information form (PIF) that addresses program requirements determined by the ACGME and RRC.

Jonathan Heidt, MD
Director-at-Large/
RRC-EM Representative
Washington University
St. Louis, MO
After submission of the PIF, the ACGME will conduct a site visit. The site visitor is knowledgeable of the program requirements and is meant to be an objective fact finder. The ACGME representative then prepares a report with the PIF, which is forwarded to the RRC. Based on this information, the RRC is then able to render an accreditation decision and citations for areas to improve.

**Are residents directly involved in this process?**

In 1999, an ACGME bylaw change was instituted which required one resident to serve as a full voting member on each RRC. EMRA strongly supports resident involvement in the accreditation process and has delegated a Board of Directors member to serve in this role. The ACGME has also developed the Council of Review Committee Residents (CRCR) made up of each resident RRC member. The CRCR acts as an advisory body to the ACGME concerning resident matters, GME, and accreditation. The chair of the CRCR serves on the ACGME board of directors. The CRCR meets twice a year in Chicago to discuss issues pertinent to all residents. For example, the CRCR took part on the new duty hour task force.

There are currently multiple issues confronting the ACGME, RRC, and CRCR that will have a great impact upon emergency medicine. Examples of such issues include the initiation of new duty hour standards, the “Milestones Project” (outcome based promotion), GME funding, and new program requirements. Each RRC Update article will examine one topic with potential impact upon our specialty. There are multiple changes occurring within residency training, and I promise that EMRA will represent you well!

Finally, the most recent RRC meeting, from February 11 to 13, just concluded. The following programs have received accreditation:

- One new Core EM program was approved:
  - University of Washington, Seattle, WA (PGY1-4; 12 residents/yr)

- Two new Toxicology Fellowships were approved:
  - University of Arizona/UPHK Graduate Medical Education Consortium Program, Tucson, AZ
  - Ohio State University Hospital Program, Columbus, OH

Congratulations to these new programs!

“The purpose of the reviews is to ensure that all residents graduating from an ACGME-accredited program receive equivalent and adequate training.”

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**2011 ACEP Research Forum Abstract Submissions**

October 15-16
San Francisco, CA

**Abstracts Due: April 29, 2011**

This year, the ACEP Research Committee will also present awards for best medical student paper and best resident paper.

The **Best Medical Student Paper Award** will be given to a medical student who is the primary investigator of an outstanding abstract presentation.

The **Best Resident Paper Award** will be given to a resident who is the primary investigator of an outstanding abstract presentation.

Awards will be presented at the **2011 ACEP Research Forum**
My last week in the hospital, I met my childhood idol. I was so star-struck when I met Dr. Red Duke that I could barely mumble more than a meek ‘hi’ and an extra goofy wave.

I have this good friend whose doppelganger is the Dallas Cowboys quarterback Tony Romo. This might not seem very cool if you aren’t a Cowboys fan, but it definitely makes going out to dinner in Dallas interesting. People stare from across the restaurant, whisper, giggle, and snap pictures with their cell phones, and free drinks just seem to have a way of ending up on our table.

I’ll admit that I have a healthy fascination with famous people. I love red carpet season, gossip blogs, and the checkout-line magazines. I’ll also admit that it’s completely absurd that we exalt people for no other reason than being famous.

Fortunately, people don’t go to medical school to become famous, so the concept of “famous physicians” might seem to be a contradiction. But should it be? Shouldn’t we exalt and honor those physicians who did amazing things that are still hard to imagine? And what about those who may not have done anything worthy of fame other than motivate and encourage you on your path in medicine?

Each night as a child, I watched the health segment on the news given by Dr. Red Duke. For whatever reason, this was my favorite thing on television. I can assume it was the budding physician in me, but I can’t discount Dr. Duke’s fantastic mustache. This year, I rotated at the hospital where Dr. Duke still rocks the trauma hall.

My last week in the hospital, I met my childhood idol. I wanted to tell him that I watched him every night as a little girl and that I now had his picture pinned to my bulletin board. The picture is of Dr. Duke and Dr. Denton Cooley, another Texas physician that my adorable chocolate lab is named after.

When non-medical people come to my house, I usually have to explain why I have a picture of two old men looking down on me while I study. I was so star-struck when I met Dr. Red Duke that I could barely mumble more than a meek “hi” and an extra goofy wave. When he walked away, I giggled and texted my friends.

Recently, I got an email announcing the upcoming ground rounds speaker for the emergency medicine residency program. It said, “Rosen…as in the book.” I was beyond excited, as if I had just won front row tickets to my favorite band. That morning I got up early and sat in the back of the crowded room, hanging on every word. It was an unbelievable privilege to be the presence of this educator, this hilarious man, this physician, this founding father of emergency medicine. It’s still a little wild that someday I’ll be an emergency medicine physician and that somehow puts me in the same category as Dr. Rosen.

It reminds me of a young patient I saw in the emergency department, brought in by his father for a cut on his arm. The cut was small enough that it made me wonder why they were concerned enough to bring him in. After a few minutes, I learned the 8-year-old boy wanted to be a doctor when he grew up. He was so excited about being in the busy emergency department and wanted to learn about everything that was going on around him. He asked a million questions as I applied the teeniest amount of dermabond. He wanted to be a doctor, just like me. Man, did that make me feel cool. It made me wonder if Drs. Rosen, Duke, and Cooley know how cool they actually are.

After the long journey of medical school, we stand at graduation looking out onto the beginning of our real lives. While medical school may seem like an eternity, four years is a drop in the bucket compared to the amount of time you’ll be a practicing physician. It will be easy to become cynical and jaded, maybe to forget how awesome medicine really is. I plan on keeping my picture of Duke and Denton on my desk, along with the picture I snapped of Rosen on my cell phone. It gives me that giddy, school-girl feeling that I want to carry with me throughout my career. Things will inevitably be tough some days, but I hope that feeling will remind me how much I love medicine and the opportunity to attempt to be like those physicians that are famous to me.
Learning medical spanish

Imagine you have a Spanish-speaking patient with chest pain, and you’re entering your fifteenth minute on hold, waiting for the interpreter. You are eventually connected, and ask if the patient has ever had a heart attack. After several minutes of back-and-forth with the patient, the interpreter simply answers, “No.” A family member present in the room sees the patient shake his head and gives a lengthy, alternate explanation—in Spanish.

If you’ve ever been in a similar situation, you must have thought about how useful it would be to speak and understand Spanish. Although learning a new language while you are still learning the practice of medicine may seem like a daunting task, there are methods available that have worked for many an (aspiring) doctor.

The most obvious approach is to take a medical Spanish class, typically meeting once or twice a week. But this may be too great a time commitment for those of us in medical training, especially if we have a child, spouse, or other significant obligations. In some cases, a personal tutor might be a better option. Although more expensive than group classes (don’t expect to pay less than $20 per hour), tutoring offers a flexible schedule and instruction tailored to your level. Neither classes nor private tutoring, however, offer much of what is most useful for picking up Spanish—the hours spent hearing, reading, and speaking the language.

Without question, the most efficient way to learn Spanish is to enroll in a medical Spanish immersion program. Dozens of these programs are available in Central and South America, and one of them may already be affiliated with your medical school or residency. If not, they can easily be found on the Internet. If you choose an accredited program, most residencies and medical schools will award you credit for your time spent abroad. I spent six months at a medical Spanish program with its own community clinic in Guatemala. I arrived with nothing more than “Hola,” “Sí,” and “Hasta la vista, baby,” but returned to the United States comfortable with my patient interviews in conversational Spanish.

Unfortunately, most of our schedules are too busy to allow more than a single month abroad. But the intensive nature of these programs allows you to make significant progress in a short time, even if you have no prior Spanish experience. While participating in the program, you will spend all day, every day, using the language. Most programs include four to five hours of clinical practice daily, followed by four to five hours of one-on-one Spanish language instruction. The precise nature of your clinical experience will depend upon the program. For me it was supervised, direct patient care. At other programs, participants shadow local physicians or assist brigades of visiting doctors.

Many programs encourage you to live with a Spanish-speaking family during your stay, and they will usually make those arrangements for you. I found the cultural experiences that I gained from this to be some of the most valuable. While learning how to make tortillas, my host grandma described her decades-long struggle with the pain of rheumatoid arthritis. Similarly, my host mom told me about the intricacies of family planning for her daughters while chopping onions. This unscripted time away from the clinic (and my fellow “gringos”) helped me to feel more comfortable using my newly-acquired Spanish language skills. Conquering your insecurity is essential to learning a new language.

After you’ve taken the time to learn Spanish, you’ll need to use it as much as possible. It’s easy to let a colleague with better Spanish lead patient interviews or answer an instructor’s questions. Many will tell you that speaking is the most difficult aspect of learning a language, and the only way to get better is to spend time practicing. So, pipe up!

Make note of your inevitable mistakes, and learn the correct word or phrase so that you can say it right the next time. You can continue to work on your language skills after the classes have ended by making vocabulary flashcards, watching movies, reading books en Español (Harry Potter es muy bueno!), or attending Spanish language meet-ups. The adage, “If you don’t use it, you lose it,” definitely applies here.

After the classes and programs are over, you may still want to use an interpreter at first. After all, you don’t want to miss a life-threatening diagnosis because you conducted your patient interview in broken Spanish. But your ability to communicate in Spanish will continue to improve with time, and even basic Spanish skills will increase the efficiency and accuracy of your history and physical exam.

An increasingly large number of Spanish-speaking patients present to emergency departments nationwide each year. Learning to speak Spanish will not only provide you with an enriching experience, but will also provide you with an increasingly valuable tool that you can use throughout your career.
Against medical advice

I picked up the patient’s chart to discover a fifth case of undifferentiated abdominal pain assigned to me on this ten-hour shift. As a savvy fourth-year sub-intern, I was sure that I already knew all of the tricks that this complaint could throw my way. Walking into the room, I discovered a 35-year-old man who had been taking copious amounts of Goody’s Powder to soothe his chronic lumbar pain. This, along with his alcohol use, had certainly been the cause of his dark coffee ground emesis mere hours before.

I raced to situate a bedpan under the patient after he informed me in colorful detail that he had to “go.” It couldn’t wait. The nurse told me the patient’s systolic was in the 80’s, just as I removed the bedpan containing at least a liter of bright red blood. I sprinted to alert the resident.

The patient quickly received multiple liters of fluid and several units of packed red blood cells, and his blood pressure began to improve. At this point, the patient informed me that he had to “go” again—this time, he meant home. Although his post-transfusion hematocrit was 27 and his blood pressure was just barely within normal range, there was nothing we could do or say that would change his mind.

Emergency physicians face a growing number of patients who decide to leave against medical advice (AMA). One recent study listed a rate of nearly three percent, which may itself be an underestimation of the problem.1 Unfortunately, the factors generally blamed for this large number (e.g., lack of insurance, mental illness, emergency department overcrowding) show no signs of declining in the near future. Emergency physicians should expect to face this situation on a regular, if not increasing, basis.

AMA encounters are a potential litigation nightmare. Patients leaving of their own free will often do so with bitter discontent, seeking legal help in hopes of finding a solution to their medical circumstances. You need to implement a good offense to defend yourself against this unwanted complication, starting with thorough and appropriate documentation. In a recent article, Drs. Monico and Schwartz discuss seven points to remember when recording your patient encounter.2

1. Document that the patient possesses the competence and capacity to make healthcare decisions. Highlight the patient’s clear history and demonstrate their ability to reason. Including a Glasgow coma score can aid in documenting full mental capacity. Always note a lack of intoxication and distracting injury.
2. Document that the patient was informed of the extent and limitation of the evaluation conducted up to the point the patient expressed the desire to make an AMA decision.
3. Document that the patient and physician were in agreement during discussions of the presenting signs and symptoms and that the patient was made aware of the specific concerns the physician had regarding the presentation.
4. Document that the patient was informed of the risks of forgoing treatment and the reasonably foreseeable complications that could result.
5. Alternatives to the suggested treatment, if they exist, should be discussed and documented. Continued observation in the emergency department is an appropriate alternative that should be offered.
6. Explicitly state and document that the patient left AMA as well as the specific care and treatment that was refused.
7. Document that the patient was provided the opportunity to ask questions, offered timely follow-up, and received discharge instructions. Each patient leaving AMA should be encouraged to return if they change their mind regarding treatment.

My patient presented a particularly difficult challenge for both my medical team and his own family when he decided to leave AMA. One by one, the attending, resident, nurse, and myself sat down next to him, discussing the various treatment options and potential outcomes for each. Even his mother and wife tearfully pleaded with him to stay at the hospital for further treatment. Nevertheless, as my patient casually walked out the exit, I knew that everything had been done - short of handcuffing him to the bed.

Resources
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Baltimore, MD
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on their matches with the following residencies

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Tech talk

Clinical informatics and emergency medicine

It’s not the average resident who has created two widely-used medical websites and one of the most popular medblogs on the internet. In this issue, we profile Graham Walker, a resident at St. Luke’s-Roosevelt and next year’s Simulation Medicine fellow at Stanford University.

Z) Tell me about the inspiration behind MDCalc and theNNT.

G) I made MDCalc during my Internal Medicine months as a medical student. I would get pimped on all these formulas and equations, and when I went to find the answer, there wasn’t a good user-friendly website out there that contained them all. I figured I could do a better job; thus, MDCalc was born. Over the years, I’ve focused it more on the needs of emergency medicine because that’s the space in which I practice, but I still try to add equations for other specialties if they send me a request.

TheNNT started out initially as an idea for another page on MDCalc. We have a really rockstar Journal Club here at St. Luke’s-Roosevelt, and I realized there was no good source for all these likelihood ratios we were talking about. We pulled in a few EBM-friendly attendings, had some brainstorming sessions, and went from there. Right now, I do all the web work for the site, and the attendings write the majority of the reviews. I’ve written four or five myself.

We’ve toyed with the idea of making dynamic pre- and post-test probability calculators for things like appendicitis, using evidence-based likelihood ratios of white count, fever, migratory pain, etc. When you get down to the nitty-gritty of it, however, it’s very difficult to decide what goes where in the calculators. If we do it, we want to do it well.

Z) Why do you think Over!My!Med!Body! was so successful?

G) Over!My!Med!Body! was the blog I wrote during medical school. I have no idea why it was so successful. Maybe it’s people’s obsession with learning about medical training. I found it to be a great outlet for a lot of the issues that came up when I was a medical student, and a lot of the challenges that I faced. Rarely, I go back and read one of my old posts. I’m clearly a different person and physician now, but it’s certainly nice to recall how I was feeling about a subject. It’s funny – even though I don’t blog there any more, I’m still one of the top hits on Google for “I hate medical school.” When I read that post, I remember how frustrating it all was. But I’m glad I stuck with it. I wouldn’t change my job for anything.

Z) How do you balance your resident clinical duties, personal life, and still do all this?

G) I don’t separate my life into those categories, and I think that helps. What I mean is when I’m doing my online blogging/coding/whatever, I’m learning at the same time. When you have to go through original articles to figure out how they calculated X, or which bilirubin they used for the Glasgow Alcoholic Hepatitis Score, you’re learning from it. And I’ve changed my online reading habits.

“I made MDCalc during my Internal Medicine months as a medical student. I would get pimped on all these formulas and equations, and when I went to find the answer, there wasn’t a good user-friendly website out there that contained them all.”
“What’s the NNT for secondary MI prevention with statins? 83. What’s the NNT for secondary MI prevention with the Mediterranean diet? 18. Four times better.”

don’t show cost- or time-savings with electronic medical records? The EMRs studied are designed by people with no clinical sense or idea of workflow. And they’re frequently studied at big academic institutions that buy and implement some of the most bloated, ugly, poorly-designed EMRs out there. Perfect example: why is it 2011 and not a single EMR that I’ve seen puts a CBC and Chem7 in the order that the physician is trained to think about them? It’s absolutely idiotic.

Z) Where do you plan on going from here?

G) I’m headed back to Stanford, my old medical school stomping grounds, where I’ll be their Simulation Medicine fellow (and with the weather we’ve had in New York this year, I can’t wait!). I’m looking forward to advancing Sim and using it to teach medical students and residents, as well as practicing as a junior faculty member in the ED at Stanford.

Zac Kahler is a PGY-2 at Carolinas Medical Center and on the Editorial Advisory Council for EM Resident. In medical school, he was an avid reader of Over!My!Med!Body! and linked to it as often as possible from his own blog, www.agraphia.net. You can follow Dr. Walker’s continuing web presence via his web portal, www.grahamazon.com.
1. A 65-year-old woman is brought to the emergency department on a hot summer day. The woman’s daughter says that her mother had been working in her greenhouse all day and was too weak to walk. Past medical history is significant for hypertension and diabetes; current medications include metoprolol and Glucophage. Blood pressure is 120/60 lying down and 100/60 standing; pulse rate is 100 lying down and 130 standing; respiratory rate is 22, and temperature is 38.3°C (101°F). Physical examination reveals that her skin is warm and dry and the lungs are clear. She is weak but appropriately oriented and has no focal neurologic signs. A dextrostick is 120. Urinalysis demonstrates a specific gravity of 1.035 and trace ketones without any evidence of infection. What is the most appropriate management?
   A. Chest radiograph with antibiotics
   B. Head CT scan with lumbar puncture
   C. Hospital admission
   D. Toxicology screening
   E. Volume replacement

2. A 40-year-old man presents complaining of a severe sore throat of 1 day’s duration, as well as odynophagia, dysphagia, fatigue, and chills. Vital signs are blood pressure 120/84, pulse rate 110, respiratory rate 22, and temperature 39.1°C (102.5°F). His voice is slightly muffled, but he is not drooling. His lungs are clear. A severe pharyngitis is present with a midline uvula and no retropharyngeal or submental swelling. The patient’s teeth are in good repair, and cervical adenopathy is present. What is the most likely diagnosis?
   A. Angioneurotic edema
   B. Epiglottitis
   C. Foreign body
   D. Ludwig angina
   E. Peritonsillar abscess

3. A 24-year-old woman presents because she cannot catch her breath. Symptoms have been present for the past 30 minutes. She is in moderate respiratory distress but is able to communicate with the nurses if distracted. Vital signs include blood pressure 130/84, pulse rate 120, respiratory rate 24, and oxygen saturation 97% on room air. She has a health card with multiple scheduled appointments, including psychiatric appointments. What is the most appropriate initial management?
   A. Arterial blood gas sample
   B. Chest radiograph
   C. ECG
   D. History and physical examination
   E. Psychiatric referral

4. A 35-year-old man arrives by ambulance from the local transit system’s repair garage. His mental status is altered, and he is minimally responsive to both questions and pain. Physical examination reveals no apparent trauma, but the patient is exhibiting Kussmaul respirations. He has a sweet smell to his breath, and a yellowish-green fluid is noted on his jacket. Vital signs are blood pressure 110/70, pulse rate 110, respiratory rate 30, and temperature 36°C (96.8°F). Which laboratory test result will be most helpful in guiding initial management?
   A. Blood dextrose level
   B. Electrolytes, including BUN and creatinine
   C. Ethylene glycol level
   D. Serum osmolar gap calculation
   E. Urinalysis

5. A 40-year-old man is brought in by ambulance from the local steel mill. His coworkers had noticed that he was confused and acting inappropriately while working at his station pouring molten steel. The EMTs state that the patient was diaphoretic, hypotensive, and felt warm to touch. Family members are contacted and disclose that the patient is in good health and had visited his psychiatrist 2 weeks earlier for a medication adjustment. There are no known allergies, and he is otherwise healthy. On examination, the patient is agitated and does not respond appropriately. He is noted to be tachycardic, diaphoretic, hypotensive, febrile to 38.5°C (101.5°F), and has generalized rigidity. What is the most likely diagnosis?
   A. Delirium tremens
   B. Heat stroke
   C. Malignant hyperthermia
   D. Meningitis
   E. Neuroleptic malignant syndrome
Dear Editor,

I read the two separate articles in the December/January EM Resident (38: 1) concerning “How do you define an emergency physician?” with great interest, because this is a particularly important question, and one that all EMRA members should insist that our EMRA leadership address forcefully.

Unfortunately, the answer to the question was not contained in either otherwise excellent article. In the 21st century, the answer to this should be clear: “an emergency physician is someone who has formally trained or certified in the specialty of emergency medicine.” While most feel that it is respectful and reasonable to extend this definition to those who began practice in the last century, and are otherwise committed full time to the practice of emergency medicine, and otherwise would not be included, the line absolutely must be drawn no further than that.

Some may argue that other physicians who do not meet this definition but who work in the ED should be included. This thinking is dangerous, and was explicitly rejected by our founders, who in the early 1970 had to counter the argument that “a site of practice does not define a specialty.” They agreed, dismissing the contention that anyone working in an ER was an emergency physician, and thereby achieved recognition in the house of medicine for our unique knowledge and skills. A specialty, and an emergency physician, is defined by the confirmed and formal achievement of skills and knowledge, period.

Is this just semantics? No. Why? Because of other questions that confront us. Is there a shortage of emergency physicians? Yes, there is—if you look at it from the standpoint of how many are trained or certified. No, there isn’t—if you look at it from the standpoint of “are all the shifts filled?” The answer that we give has serious policy consequences that should not be taken lightly. How do we as a specialty expect to get funding from policy makers to reduce the shortfall of emergency physicians if we are not capable of accepting the definition that determines that a shortage exists?

Why should we be afraid to not include the few thousand physicians who may be working in EDs today who do not meet the above criteria? They do not belong to our organizations, nor do they qualify to. Defining them as emergency physicians does not help their patients; it actually contributes to deceiving them.

Is our reluctance to be forceful in our definition a form of politeness, tiptoeing around the sensibilities of those not trained in EM who may have started working in the emergency department in the past decade? That would be a shame, as this issue is too important for that. To make matters worse, the other specialties don’t even want us to call their graduates “emergency physicians.” Leaders of family medicine, long the major source of non-emergency specialists in the ED, have clearly indicated that they prefer “family physicians providing emergency care.” So why are we tiptoeing?

The definition of “emergency physician” is not complicated, it is simple. Going forward, you will qualify, and your classmate who is doing a primary care residency and then taking a job working in an ED should not. Historical issues of the 20th century notwithstanding, “it’s not the location, it’s the training.” EMRA must make every effort to insure that the definition of emergency physician is one that going forward into the future absolutely requires training in emergency medicine, and that this definition is forcefully promoted by EMRA, adopted by ACEP, and shapes any future debate on the subject.

Sincerely,

Robert E. Suter, DO, MHA
EMRA Life Member, Dallas, TX
Case presentation

A 30-year-old man with a history of insulin-dependent diabetes mellitus, coronary artery disease, and hypertension presented to the hospital with multiple complaints, including general weakness, dyspnea, and lightheadedness. Initial vital signs: BP 120/70 mm Hg; HR 100 beats/min; RR 18 breaths/min; T 98.9°F (37.2°C). His physical examination was unremarkable.

Approximately three hours after arrival, the patient complained of lightheadedness and weakness with repeat BP 70/30 mm Hg and HR 50 beats/min. At this time, he confided in the physician that the true reason for his visit was the ingestion of fifteen 90mg tablets of diltiazem in a suicide attempt.

Initial therapy included several IV boluses of 0.9 percent sodium chloride, calcium chloride, glucagon, and finally a norepinephrine drip which resulted in transient improvement in systolic blood pressure. However, he quickly developed bradycardia and hypotension which were unresponsive to atropine or glucagon.

Over the next three hours multiple pharmacologic agents, including repeat boluses of calcium chloride and continuous infusions of both glucagon (5 mg/h) and phenylephrine were initiated, without improvement in blood pressure. At this time the poison center was contacted and recommended a high dose insulin infusion (1-2 units/kg bolus followed by an infusion at 1-2 units/kg/hour).

Discussion

Calcium channel blockers (CCBs) are frequently prescribed drugs primarily used for the treatment of hypertension as well as dysrhythmias. While their use has steadily increased over the years, reports of overdose and deaths have also increased. The hallmark of severe toxicity with CCBs (especially verapamil and diltiazem) is cardiogenic shock with bradycardia and hypotension from profound vasodilation. While many treatments have been studied to reverse this effect, there is no treatment that has been shown to consistently reverse the effects of severe CCB toxicity.

Patients with severe CCB poisoning are often treated with calcium, glucagon, atropine, and pressors, but despite maximal supportive care, deaths occur. In the last decade, the use of high-dose insulin for cardiogenic shock has gained increased attention for a variety of other causes such as sepsis and drug poisoning. Currently, evidence supports the use of high-dose insulin as an inotropic agent.

Initially, the proposed mechanism of insulin therapy was thought to be due to catecholamine release, but evidence suggests insulin’s action may be due to enhanced myocardial utilization of carbohydrates. Under normal
“In the last decade, the use of high-dose insulin for cardiogenic shock has gained increased attention for a variety of other causes such as sepsis and drug poisoning.”

circumstances, the heart catabolizes free fatty acids (FFAs) for its energy needs. In situations of stress such as cardiogenic shock, the stressed myocardium switches preference from FFAs to carbohydrates. The metabolic support of insulin is believed to be the reason for positive inotropic support.

Experimental models of insulin therapy show that very large doses of insulin (2.5-10 units/kg!) may be required to obtain inotropic support; however, the dose required in humans are typically less than what is used in animal models (1-2 units/kg). This is still considerably higher than what most clinicians are accustomed to in the treatment of other conditions such as diabetic ketoacidosis (where the dose is typically 0.1 units/kg). It is important to bear in mind that insulin receptors are saturable and the excess insulin is primarily to enhance inotropy.

The major adverse effect associated with the use of large amounts of insulin, especially in insulin-naive patients, is hypoglycemia. Most patients typically receive empiric supplemental dextrose as well as frequent glucose monitoring and often can be managed this way. The other potential complication is hypokalemia from the intracellular shift of potassium.

It is important to remember that patients maintain normal total body potassium stores and do not experience true deficiency (unless there are other reasons such as concomitant diuretics).

In summary, the primary treatment goal of high-insulin euglycemia is to improve inotropy to maintain organ perfusion to critical areas such as the brain and kidney until the duration of the drug wears off.

**Case conclusion**

The patient was started on high-insulin euglycemic therapy as recommended by the poison center. They also advised to carefully monitor the potassium as well as glucose. The patient improved within an hour of the initiation of high-insulin euglycemic therapy, and all other pressors were weaned off. He was eventually discharged in good health two days later.

**Reference**

With Leadership and Advocacy Conference coming up at the end of May in Washington, DC, it seems appropriate to talk about a hot topic in healthcare – the concept of value.

Value, value everywhere

There has been much published recently on the subject, and it is being billed as something that all interested parties – providers, patients, payers, and policymakers – can get on board with. A recent *New England Journal of Medicine* article by Michael Porter laid down the gauntlet, saying that the over-arching goal of healthcare delivery should be obtaining value for patients. Porter explains that the concept of value – defined as outcomes divided by cost – is capable of integrating other commonly cited goals of health care, such as quality, safety, and cost containment.

There are multiple government initiatives on the horizon that center around the concept of value in healthcare. The most obvious of these (if only by name) is the Value-Based Purchasing (VBP) Program, which was required under the Affordable Care Act (ACA). This is intended to provide a way to link results to payments, and to hold health care providers accountable for cost and quality.

Other initiatives you’ve likely heard of include Accountable Care Organizations and Episodes of Care. Accountable Care Organizations (ACO’s) are groups of providers for Medicare patients that agree to be accountable for patient care, as well as the quality and cost of that care. The goal of ACO’s is to keep patients healthy, so it will be important to see how emergency department visits are viewed in this philosophy. Episodes of Care (EOC) plan to increase value by reforming how providers are paid. Specifically, a bundled reimbursement would be provided for an episode, and the money would have to be split amongst the involved providers.

How does emergency medicine fit in?

Obviously, care for a medical condition or a population of patients almost always involves multiple healthcare providers, and how emergency medicine is viewed within the system will be of great importance going forward. Being able to demonstrate value will be linked to payments, and there is concern that emergency physicians might not receive their fair share.

When talking about bundled payments for a full care cycle, the natural question is, what portion would go towards the emergency department visit? It also brings up the fact that emergency department visits differ – they can provide acute interventions, they can lead to admission, they can address chronic medical problems, and they can provide routine care. Simple models view emergency department visits as the first step in a hospital admission. This makes sense, since in 2006, 50 percent of non-obstetric hospital admissions came through the emergency department.

But there is concern about how emergency medicine care will be viewed
in terms of chronic and routine care. If the emergency department visit does not generate a hospital admission, most methodologies consider it “inappropriate” or “a failure of the system.” It has also been suggested that too much routine healthcare is delivered in over-resourced, expensive hospital facilities. And while it might be an appropriate goal to put routine care in an office or a clinic, it needs to be emphasized that emergency physicians do not choose their patients, and that factors beyond our control lead patients to utilize the emergency department.

**ACEP, and Moving Forward**

ACEP recognizes the importance discussing value in healthcare – convening both the Value-Based Emergency Care Task Force and the Episodes of Care Task Force. Looking forward, ACEP is interested in qualitative and quantitative studies that demonstrate the value of emergency care. Currently, there is too much focus on conditions that can be treated in other settings, and more focus should be placed on conditions that need to be seen in the emergency department. Also, communication and care coordination skills should be emphasized in addition to the fact that emergency medicine provides quality medical care at all hours.

As healthcare reform continues to take shape, the value of emergency medicine needs to be demonstrated. Emergency Physicians should be leading the charge; and data and facts are required. Policy makers need to know what we provide for our patients. Our patients need to know that we are there for them. And with new initiatives on the table, payers need to know to provide us with our fair share.

**References**

8. ACEP’s Episodes of Care Task Force Report
Medical liability caps remain a contentious topic in medicine and politics. Recently, physicians and lawmakers fought to make federal medical liability reform part of the Patient Protection and Affordable Care Act, but they were not able to broker a deal. This may be because in many states caps are unconstitutional while the US Supreme Court has found caps in other areas of the law to be unconstitutional.

Currently, 33 states have enacted some type of medical liability reform. Most of these states have caps on non-economic damages including: pain, suffering, physical and emotional distress, disfigurement, and physical impairment. Most of these states still allow for economic damages such as future medical expenses, loss of wages, wheelchairs, and other medical supplies, and nursing homes/home health aides.

The constitutions of Arizona, Kentucky, Pennsylvania, and Wyoming specifically state that caps are prohibited. The supreme courts in Illinois, Alabama, Georgia, Wisconsin, Oregon, and Washington ruled non-economic caps unconstitutional. The supreme court of Texas found caps unconstitutional, but the public felt so strongly that they voted to amend their constitution to allow caps.

Twelve other states have found caps to be constitutional. Sixteen states with liability reform have not had a constitutional challenge.

Two states are in the midst of litigation. In Delaware, the plaintiff can only receive non-economic damages if the medical injury was maliciously intended or the result of wanton and willful misconduct. Maine only has a cap on wrongful death suits. Therefore, patients who are injured and survive have no caps on their suits, but relatives of patients that die as a result of medical negligence have a cap on their claims.

The six states that assert caps are unconstitutional do so on the basis of one or more of the following: The Equal Protection Clause, the Due Process Clause, Access to the Courts, the Right to a Jury Trial, and/or the Separation of Powers.

The Equal Protection Clause demands all people are treated the same under the law. Some state supreme courts have found caps unconstitutional under this clause because the caps create two groups of people who are treated differently under the law. The first group is patients who have minor injuries and can be fully compensated under the cap. The second group is patients that are severely injured and cannot be fully compensated under the cap.

Also, caps create two groups of “tortfeasors,” people who are seeking justice under tort law. The first group is those injured by healthcare providers and are confined to a capped award. The second group is people injured by non-healthcare providers, such as lawyers and business professionals, and do not have capped awards.

The law discriminates against patients who were injured by healthcare providers because these tortfeasors do not have the same opportunity for restitution as...
other plaintiffs in tort law cases. Caps also discriminate against those with low income—including the young, stay-at-home parents, and the uneducated—because they are not able to get large economic damages based on loss of wages.

Under the Due Process Clause, Access to the Courts, and the Right to a Jury Trial, the state supreme courts express that caps interfere with the people’s constitutional rights to use the courts because the caps deny the plaintiffs full access to a jury. In Feltner v. Columbia Pictures Television, the US Supreme Court rules, “It is in the sole province of the jury to determine damages in order to preserve the substance of the common law right of trial by jury.” In this case, the Supreme Court cites decisions dating to the 1700s, demonstrating a long history of the preservation of jury awards. Therefore, under federal law, medical liability caps may be unconstitutional.

The Separation of Powers Clause establishes that the legislative, judicial, and executive powers are separate and distinct. State supreme courts attest that caps allow the legislature’s power to encroach on the judiciary because caps disregard the facts of the case and place a pre-determined amount of damages on the case regardless of the evidence.

Also, caps interfere with judiciary’s right to grant a remittitur and replace it with a legislative remittitur. A “remittitur” is a ruling by the judge to reduce the amount of damages granted by a jury if the amount exceeds the amount demanded or if the amount is excessive.

The 10th Amendment of the Bill of Rights also creates a division of power between the federal government and state governments. Traditionally, tort law has been the domain of the state, meaning that each state has the right to legislate their own laws in regard to tort law, including medical liability laws. Consequently, a federally mandated cap may violate the 10th Amendment.

There are a number of alternatives to medical liability caps that may be constitutional. In a concurring opinion, two Missouri Supreme Court justices write that remittitur would be constitutional in their state. If the plaintiff did not agree to the decreased amount, a new trial would be granted.

The Missouri justices also say that administrative proceedings that are substituted for common law damages (jury trials)—such as in workers’ compensation proceedings—are constitutional. Therefore, the creation of an administrative court to hear medical liability cases may also be constitutional.

Alternatively, sliding scale damages may be constitutional because they would be based on the severity of the injury and would not be placing an arbitrary cap on all suits regardless of the facts of the case. Sliding scale damages would allow more severely injured patients greater compensation and would ensure that patients with injuries of similar severity get the same compensation, unlike juries that may give different amounts for the same injury.

The National Association of Insurance Commissioners already has an injury severity scale that could be applied to medical liability. Physicians, lobbyist, and lawmakers should keep these models in mind as they may be constitutional solutions to the problem of medical liability reform.

References
3. Lebron v. Gottlieb Memorial Hospital, 930 N.E. 2d 895 (IL, 2010).
7. Lebron v. Gottlieb Memorial Hospital, 930 N.E. 2d 895 (IL, 2010).
13. See Kelly and Mello, supra note 1.
14. Id.
15. Id.
17. 24-A M.R.S.A. sec 4313.9.
20. Id.
Epistaxis, an ENT physician’s perspective

Dr. Jonathan Ida is a senior fellow at Cincinnati Children’s Hospital Medical Center and a graduate of the otolaryngology residency at Tulane University. He will assume a faculty position at Children’s Memorial Hospital in Chicago this summer.

Epistaxis is among the most common otolaryngology consultations in the emergency department, so we sat down to discuss the management of epistaxis from an ENT physician’s perspective.

What steps should be taken before calling a consult?

Initial management is with a topical decongestant/vasoconstrictor such as Neo-Synephrine or Afrin and applying direct pressure by pinching the vestibule above the nostrils for 15 minutes (or use a nose clip). Ideally, blood pressure is controlled to a level below 140/90. If this doesn’t work, place a nasal packing (balloon or sponge) on the floor of the nasal cavity at 1 mm past the orifice.

When to call a consult?

Once one has made a reasonable attempt at medical management and packing with a period of observation, the consultant should be contacted. Furthermore, a post-surgical bleed after any sinonasal procedure within ten days should always be seen by a surgeon, as anatomy is altered and the probability of an anterior septal bleed drops significantly.

What about antibiotics?

Any patient with packing in place should receive a course of antibiotics active against Staphylococcus aureus to prevent toxic shock. Common choices include Augmentin, clindamycin, doxycycline, or Bactrim.

When should you admit?

Any patient with a posterior pack should be strongly considered for admission given the risk of respiratory compromise due to the naso-pulmonary reflex. Similarly any patient with bilateral packing or a concomitant bleeding disorder should be admitted.

Discharge instructions?

Packing should stay in for three days and follow-up should be arranged with an ENT doctor or with the placing emergency physician. A decongestant twice a day during that period, along with frequent saline spray to the nose will keep the packing moist. Moist packing is much easier to remove and reduces the risk of post-removal bleeding. Both the patient and follow-up ENT doctor will appreciate a moist pack.

Can you provide some packing tips?

Be generous with decongestant and anesthetic, such as lidocaine HCl or Pontocaine, with a mucosal atomizer and test sensation with a cotton-tip applicator. Do not skimp; it will enhance your first attempt success, particularly in children. After identifying the affected nostril, start with an anterior pack and if that fails, place a posterior one. Next, consider bilateral packs, and if those don’t work, operative or radiological intervention may be necessary. If using a sponge packing, try applying sterile water (avoid saline, lubricants or ointment when using Rapid Rhino) to speed expansion of the pack.

What pitfalls to avoid?

One should always be cognizant of the blood loss volume, and resuscitate as needed. Recognizing an out-of-control bleed is important (i.e., carotid blowout via sphenoid sinus) along with exacerbating factors, such as post-surgical, chronic disease, or
“All posterior nasal packs must be admitted for monitored observation due to a known naso-pulmonary reflex that can cause respiratory failure and death.”

cogulopathy. Also, remember that all posterior nasal packs must be admitted for monitored observation due to a known naso-pulmonary reflex that can cause respiratory failure and death.

Key history points for the consultant?
Anticoagulant or antiplatelet use, drug use (i.e., cocaine increases BP), recent surgery, amount of blood loss, signs of shock, prior attempts to control, and hereditary disorders such as HHT, VWD, and hemophilia. Clearly communicate the level of urgency; many otolaryngologists take home call and good phone communication can speed the process of obtaining an operating or angiography suite if needed.

Tricks of the trade?
A properly placed nasopharyngeal foley catheter works well for posterior bleeds. Use plenty of decongestant and anesthetic and lubricate the catheter with viscous lidocaine. Insert the foley until the tip is visualized in the back of the mouth. Inject the balloon with three milliliters of saline and pull gently until it lodges in place. Be sure to prepare your patient for this and have an emesis basin ready. This blocks off the nasopharynx, allowing the physician to pack the nasal cavity thoroughly. Using ¼ inch packing gauze strips slathered in Bactroban, the gauze is layered in the nose from bottom to top, adding layers in an S-shape until the nasal cavity is packed completely. Secure the catheter at the nare with a clip or hemostat covered with gauze to prevent irritation. Also, familiarize yourself with other materials that can be used, like Floseal (a grainy paste that is great for generalized oozing), Tisseel, Surgicel, Vitagel, etc. All of these are brand name procoagulant materials that are safe for nasal packing.

What damage control methods can be taken?
Recently, I had a post-TPA patient who had a traumatic insertion of a NG tube resulting in copious bleeding and a patient with serious facial injuries after a tree fell on them. Once the airway was secured, I packed their oro- and naso-pharynx with a Vagipak, kerlex, and other gauze products along with their nose. This is a “shotgun” method, but it is amazing how effectively it works. (Thanks to Dr. Jeffrey Kaizek for showing me this.)

Any pediatric-specific thoughts?
Kids (and adults) often present with minor, intermittent nosebleeds. First, examine the nose and see if you can locate the source (visible anterior septal vessel). If so, dab it gently with silver nitrate. As long as the use of silver nitrate is judicious, the risk of perforation is extremely low, especially when used unilaterally. Otherwise, counsel them to keep the nose moist (lots of saline spray) multiple times a day and apply Bactroban ointment to both nares twice a day for two weeks. Pinch the nostrils to slide the ointment up the nose. Afrin twice a day for three days helps prevent further bleed during healing. If no relief after this regimen, then an ENT office visit is recommended.
Comparison of dopamine and norepinephrine in the treatment of shock

Research question
Does the choice of norepinephrine over dopamine as a first line vasopressor agent reduce the death rate of patients in shock?

Need for this study
There are very few randomized, double blind, placebo controlled trials which appropriately address this issue. In general, the addition of vasopressor agents is not well established as superior to fluid resuscitation alone in reduction of mortality. This study is an important step in establishing and validating existing guidelines for the treatment of shock.

Methodology
- **Definition of shock**: MAP <70 or SBP <100, CVP <12, PAP <14, plus signs of tissue hypoperfusion (i.e., altered mental status, mottled skin, urine output of <0.5 ml/kg/hr, serum lactate >2 mmol/L) after 1000mL of crystalloid or 500mL of colloid.
- **Study Type**: Randomized, multicenter. Treatment and data collection teams were blinded to study group.
- **Study Population**: ICU patients at eight sites in Belgium, Austria, and Spain.
- **Inclusion Criteria**: All patients >17 years of age in whom vasopressor agent was required for treatment of shock.
- **Exclusion Criteria**: Use of alternate vasopressor agent for >4 hrs during episode of shock, serious arrhythmia (rapid Afib with rate >160, VTach), or declared brain death.

Study findings
In this study, 1,679 patients were enrolled (858 in dopamine group and 821 in norepinephrine group). Patients were followed to day 28. The distribution of single shock types was septic (62 percent), cardiogenic (17 percent), and hypovolemic (16 percent). Overall, there was no significant difference in survival for either group at discharge, 28 days, six months, or 12 months. Patients receiving norepinephrine were less likely to need an alternative drug.

There were increased arrhythmias in the dopamine group, the most common of which was atrial fibrillation; consequently, patients receiving dopamine were more likely to have the study drug discontinued in favor of open-label norepinephrine. Following a pre-determined subgroup analysis, the authors did note a survival benefit in patients with cardiogenic shock receiving norepinephrine.

Author’s conclusions
The authors conclude that no difference in mortality exists between patients treated with dopamine versus norepinephrine as a first line vasopressor; however, they note increased 28-day mortality in cardiogenic shock among patients receiving dopamine. Patients receiving first-line dopamine also had significantly higher rates of arrhythmia than those with norepinephrine.

Limitations
Study design and definitions of shock limit the implications of this study. The authors define shock as: MAP <70 or SBP <100,
with evidence of tissue hypoperfusion following adequate resuscitation (1000ml crystalloid or 500ml colloid). It is debatable if this small volume really constitutes adequate fluid resuscitation prior to deeming the patient to be in refractory shock.

As the goal of the study drugs was to examine the vasopressor effect, the dose of norepinephrine and dopamine used in this study were equipotent in terms of \( \alpha \)-adrenergic activity. However, the \( \beta \)-adrenergic activity of dopamine exceeds that of norepinephrine, which may explain the increased rate of arrhythmias in the dopamine group (increased heart rate was noted in this group too, supporting this possibility).

### How this study could change clinical practice

Current American College of Cardiology and American Heart Association guidelines recommend dopamine over norepinephrine in patients hypotensive secondary to acute myocardial infarction. This study adds to the preponderance of data suggesting norepinephrine should be the vasopressor of choice for the treatment of shock, particularly cardiogenic shock. With equivalent mortality, norepinephrine was associated with fewer adverse events in all types of shock. Thus, norepinephrine may soon be the preferred first-line vasopressor for patients in shock.

#### Table 1 – Summary of Key Study Findings

<table>
<thead>
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<th>Mortality</th>
<th>Dopamine</th>
<th>Norepinephrine</th>
<th>P value</th>
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<tbody>
<tr>
<td>During ICU stay</td>
<td>50.2</td>
<td>45.9</td>
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<tr>
<td>During hospital stay</td>
<td>59.4</td>
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<td>At 28 days</td>
<td>52.5</td>
<td>48.5</td>
<td>0.10</td>
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<tr>
<td>At 6 mo</td>
<td>63.8</td>
<td>62.9</td>
<td>0.71</td>
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<td>At 12 mo</td>
<td>65.9</td>
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<th>Adverse Events</th>
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<td>Arrhythmias (%)</td>
<td>24.1</td>
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<td>Myocardial Infarction (%)</td>
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<th>Days without need for</th>
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<tr>
<td>Trial Drug</td>
<td>11.0</td>
<td>12.5</td>
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<td>Open-label pressors</td>
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<table>
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<th>Mortality reduction by Norepinephrine</th>
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<tr>
<td>Cardiogenic Shock</td>
<td>-</td>
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<td>Hypovolemic Shock</td>
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<tr>
<td>Septic Shock</td>
<td>-</td>
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</table>
International medicine

Haiti – one year later

On Tuesday, January 12, 2010 at 16:53 local time, a 7.0 earthquake occurred just 15 miles west of Port-au-Prince in Leogane, Haiti. The initial shock crippled an already poor country, and by January 24, there were 52 recorded aftershocks of 4.5 or greater. It left Haiti in ruin with an estimated 3 million people affected - 230,000 dead, 300,000 injured, and 1,000,000 homeless. Infrastructure was destroyed with 250,000 residences and 30,000 commercial buildings collapsed or severely damaged.

On the morning of November 5, 2010, another natural disaster wreaked havoc on Haiti as Hurricane Tomas arrived on the mainland. With torrential rains and fierce winds, the nation reported flooding within hours of the storm’s arrival. Seven people were reported dead and two missing.

In the aftermath of these disasters, an epidemic was brewing. In the rubble of this developing nation, flooding rains and decreased access to proper sanitation lead to an increase in fecal-oral transmission of disease. The situation was ideal for cholera, and it did not disappoint. Days after Hurricane Tomas, on November 10, an epidemic cholera strain was confirmed in Haiti.

Cholera is a potentially fatal bacterial infection that causes severe diarrhea and dehydration. The disease is most often spread through the ingestion of contaminated food or drinking water.

In Haiti, the majority of cases have been reported in the Artibonite Department, approximately 50 miles north of Port-au-Prince. The Haitian Ministry of Public Health and Population reported that as of November 14, 17,418 were hospitalized and 1,065 deaths were reported due to cholera.

In the midst of this, we found ourselves on a plane to Port-au-Prince. Our group consisted of a pediatric emergency medicine attending and two emergency medicine residents from Good Samaritan Hospital Medical Center in West Islip, New York, along with three medical students.

We went down with an organization called Heart to Heart International, which was established in 1992 with one main goal: making the world a healthier place to live and work. They have been able to do this by providing medical education, delivering medical aid to hospitals and clinics, responding to those in crisis, and addressing community health concerns around the world.

Timothy Hageman, MSIII evaluating a child of a few days old for omphalitis.
Since the earthquake in January, Heart to Heart has been in Haiti to help provide medical aid. They established their base of operations in Pétion-Ville, in a house that was once the residence of the Minister of Finance. Heart to Heart called it “The Maison,” or house with heart. From here, they operate two clinics, one in Port-au-Prince and one in Leogane, where they have seen and treated thousands of patients. For more information or to see more pictures of Heart to Heart volunteers in action, visit www.hearttoheart.org.

We arrived in Port-au-Prince and were greeted by locals playing island music at the exit gates. As we left the airport, you could feel the crowdedness of the city. We met our driver, who loaded us into our mode of transportation around Haiti—a Heart to Heart’s caged flatbed truck.

Our first glimpses of Haiti from the back of the flatbed truck were of beauty and dismay. We saw lovely hillsides with residences built upon them. As we got closer, we saw that most were destroyed with caved-in roofs, yet people were still living in them.

We noted a large stretch of land that had now become a vast tent city, which thousands called home. We passed by many such tent cities and saw the flags of the various countries that donated the tents printed on the sides of them. People were selling plantains, drinks, or electronics. Many had set up their vegetables for sale along the remaining wall of a collapsed building.

During the drive, we saw many “pancake houses” as they were called, since what was once a four-story building was now four huge slabs of concrete stacked on top of each other. We passed by what was once a huge church that now lay in rubble, as well as the capitol building whose dome was now on its side.

Our group had the privilege of working in the Port-au-Prince clinic, set up on the third floor of a Nazarene church. As you enter in the morning, the side pews were filled with individuals of all ages waiting to be seen. Patients were triaged according to age with highest priority given to the youngest children, followed by the elder population, then adult females, finally adult males.

We had two exam tables, with a student or resident on one side and a licensed physician on the other, allowing us to see around four people at a time, each of us working with a translator to get our histories. We were armed with our stethoscopes, our focused questions, and some knowledge of local diseases.

We also worked with another group of nurse mid-wife volunteers who saw a portion of the females with OB/Gyn complaints. A head nurse, hired by Heart to Heart, ran the wound clinic area, which consisted of an exam table and an assortment of supplies. Here, burns could be debrided, wounds cleaned and dressed, and abscesses drained.

After patients were seen in either the wound care area or received physicals, those deemed to need medication were sent to the other side of the balcony where a pharmacy was set up. A local pharmacist employed by Heart to Heart staffed the pharmacy. He filled the orders and was well-stocked with various medications, including the ever-useful amoxicillin, acetaminophen, and vitamins.

In this setting, we saw around 100 people each day. We saw a variety of pathology, including suspected typhoid, tuberculosis, continued on page 44
Pott’s disease, staph infections, burns, urinary retention, pneumonia, hypertension, diabetes, gastroenteritis, dehydration, arthritis, reflux, intestinal parasites, scabies, bed bugs, and vaginitis.

We performed procedures like wound-debridement and dressing, IV placement, IV medication administration, incision and drainage of abscesses, paronychia care, eschar removal, and even a suprapubic aspiration of an elderly male who could not pass urine.

Each patient met us with questions about their ailment and thanks for the time we spent with them. They shared stories of their plight in the country further stricken by natural disaster.

When asking a birth history of one of the pediatric patients, the presumed mother who brought the patient in said she really didn’t know, he wasn’t her child. She has just been caring for him since both his parents died in the earthquake.

The epidemic cholera strain was confirmed in Port-au-Prince, just days after Hurricane Tomas. In preparation for the anticipated cases, we held an evening meeting to discuss how we would organize an isolation area. We initiated the plan the next day as we separated patients who came in with complaints of diarrhea meeting the CDC criteria of three or more loose stools in 24 hours. Our preparation was not in vain.

The area we setup was removed from triage and the other examination areas to prevent cross-contamination. There, we had one physician and a translator plus an ample supply of gloves. We had oral rehydration solution and pedialyte for the children for those with dehydration.

We also had doxycycline and erythomycin for pediatric patients, if needed, to shorten the course of illness. Those that met the criteria of the CDC for suspected cholera with no other source of their symptoms were transported to a Cholera Treatment Center organized on the city outskirts.

The experience we had was a lesson in humility. To be able to help what little we could in a nation that has seen so much, they remained thankful for what little we could offer. Many had chronic or debilitating conditions that exceeded our resources. Sometimes, it was just listening that made the most difference.

In the end, they were grateful, as each patient we treated was sure to thank us and leave with a smile. For us, that was more than we could ask for—to see how the human spirit can prevail after so much tragedy and loss. The smile still on those faces made all the difference.
ECG case – “I’m feeling weak, Doc”

Case presentation
A 57-year-old male presents to the emergency department with complaints of weakness, nausea, and vomiting, which has been slowly worsening over the past two days. His past medical history is significant for congestive heart failure, a prior myocardial infarction (MI), and hypertension. He takes an assortment of medications but doesn’t remember their names, and he did not bring them to the emergency department. He adds that he began taking a new “heart” medicine the day before his symptoms began.

His vital signs on presentation are temperature 98.8, blood pressure 114/79, heart rate 40, respiratory rate 20, and pulse oximetry on room air 97 percent. The nurse hands you this ECG (Figure 1). What is the diagnosis and treatment?

continued on page 46

“The prudent emergency physician must always think beyond the AHA Guidelines when treating emergency department patients with dysrhythmias.”
Bradycardias can originate from the sinus node (sinus bradycardia), from the AV node (junctional rhythm), or from the ventricle (ventricular rhythm). The fact that the QRS complexes are narrow excludes a ventricular rhythm, and the absence of regular P-waves eliminates the possibility of an atrial rhythm (e.g., sinus rhythm), leaving us with diagnosis of a junctional rhythm.

The sixth QRS complex is preceded by a P-wave that has a very short PR-interval. The two major causes of a short PR-interval are accessory pathways (e.g., in Wolff-Parkinson-White Syndrome) and junctional rhythms. In this case, the latter is more consistent with the clinical scenario. Q-waves are present in leads V1-V2 consistent with a prior, septal MI. T-wave inversions in the inferior and anterolateral leads are present, suggesting acute cardiac ischemia.

**Discussion**

Given the temporal relationship of the patient’s new medication with the onset of her symptoms, the initial presumption was that the bradydysrhythmia was due to a medication effect. There are several medications that typically produce bradydysrhythmias: calcium-channel blockers, beta-blockers, digoxin, clonidine, and opiates are most common.

In this case, opiates were thought to be least likely because the patient had no history of opiate use, did not demonstrate clinical symptoms or signs of opiate toxicity (e.g., decreased mental status), and furthermore opiates tend more often to produce sinus bradycardia rather than junctional rhythms. Clonidine was thought to be unlikely as well—clonidine excess also tends to cause sinus bradycardia rather than junctional rhythms, and it also is more likely to produce hypotension in the presence of toxicity.

Digoxin was not considered the likely cause of the bradycardia for two reasons. First, there was no evidence of an atrial tachyarrhythmia, which is commonly found in patients with digoxin toxicity. Additionally, the classic ST-segment asymmetric downsloping and depression, commonly described as the Salvador Dali moustache or hockey-stick appearance at the end of the QRS complexes was absent as well.

By process of exclusion, the two most likely causes of the bradydysrhythmia were thought to be either calcium-channel blocker or beta-blocker toxicity. Unfortunately, there are no reliable ECG findings that distinguish these two possibilities, so when there is the possibility of toxicity of either of these two entities, many physicians will treat for both possibilities simultaneously by giving calcium plus glucagon.

In this case, because the patient had a history of congestive heart failure and coronary artery disease, the physicians thought it was much more likely that the patient had been prescribed beta-blockers. A presumptive diagnosis of beta-blocker toxicity was made, and the patient was treated with a small dose of glucagon. Glucagon is commonly associated with nausea and vomiting, so he was pre-treated with ondansetron.

Following administration of glucagon, the patient’s heart rate immediately improved to the eighties with return of sinus P-waves, and the T-wave inversions resolved as well. Later, during the patient’s emergency department course, his family members brought his medications from home and confirmed that he had been prescribed a higher dosage of a beta-blocker, but the patient had continued to take his old dosage as well.

The 2010 American Heart Association (AHA) Guidelines recommend treatment of symptomatic and unstable bradydysrhythmias with atropine as the usual first-line agent, followed by either transcutaneous pacing or infusions of dopamine or epinephrine. In the setting of advanced AV blocks, transvenous pacing is often recommended as well. It is important to remember, however, that the AHA Guidelines are primarily written to address complications of coronary artery disease. The Guideline recommendations are less effective when patients are suffering from complications of metabolic or toxicologic conditions.

In this case of beta-blocker toxicity, for example, atropine and catecholamine-class pressors (i.e., dopamine, epinephrine) would have been poorly effective. Similarly, in the setting of other toxicities or metabolic abnormalities, the AHA algorithms fare poorly. Calcium-channel blocker toxicity mandates treatment with calcium. Digoxin toxicity mandates treatment with DigiBind. Hyperkalemia-induced bradydysrhythmias mandate treatment with calcium and sodium bicarbonate. The prudent emergency physician must always think beyond the AHA Guidelines when treating emergency department patients with dysrhythmias.

**Case resolution**

The patient was admitted to the hospital and remained hemodynamically stable on telemetry. No further doses of glucagon were needed. Serial cardiac markers were sent by the in-patient physicians and were negative for myocardial injury. Medications were held for a full day and then resumed once hemodynamic stability was certain. The ECG prior to discharge demonstrated no further T-wave inversions or bradycardia. The patient and his family members were thoroughly counseled regarding proper medication dosing, and the patient was discharged on the third day.

**Reference**

EM Resident Appreciation Day

Left: In celebration of EM Resident Appreciation Day 2011 the faculty of the Northwestern Emergency Medicine Residency gifted each resident with a custom fleece-lined pullover. We celebrate Resident Appreciation Day a little early so that the residents have a treat to look forward to on the morning of the ABEM In-Training Exam.

University of Mississippi EM resident’s celebrated Resident Appreciation Day with a grab-bag full of goodies, donuts and free gourmet coffee from a local favorite coffee shop!

The Baylor College of Medicine Section of Emergency Medicine and Ben Taub General Hospital were proud to celebrate Emergency Medicine Resident Appreciation Day with our inaugural class of emergency medicine residents on Wednesday, March 2nd. Dr. Angela Gardner, ACEP Immediate Past President, presented the History of Emergency Medicine and offered a challenge to our residents to get involved in making a difference for their patients.

Future EMRA Members?

Griffin Achilles, EMRA Administrative Coordinator and Alicia Hendricks, EMRA Website Coordinator patiently awaiting their new little bundles of joy. And then...THEY ARRIVED! Congratulations Griffin and Alicia.

Alphabet Soup  Benjamin Lawner, DO, University of Maryland

Goal-Directed Triage
Can’t we just forgo the pain scale? I simply need two percocet and a work note.
Types of pediatric burns

Burns in a pediatric patient can be potentially devastating. According to the Centers for Disease Control, they are the third leading cause of unintentional injuries in children 0-18 years of age. Burns occur in a bimodal distribution, with children ages 0-4 having the highest incidence, followed by those 15-18 years of age. Scald injuries account for approximately 70-80 percent of all burns in children.

In the emergency department, the majority of pediatric burns can be ultimately managed in the outpatient setting. Only 9-10 percent of pediatric burns will require inpatient admission, with an overall mortality rate less than two percent.

Even though most burns emergency physicians encounter are minor, we must be prepared to handle serious burns and their complications. Certainly, control of a patient’s airway is paramount if there are signs of inhalation injury. These signs include oral and facial burns, singed nasal hairs, sooty sputum, and stridor or wheezes on auscultation.

One of the most important interventions for a burn patient is fluid resuscitation. Significant burns can cause intravascular volume depletion, leading to shock, multi-organ failure, and death. In addition, there is increased risk for rhabdomyolysis. The Parkland formula is a well-known method for calculating fluid needs:

\[
4 \times \text{child’s weight in kilograms} \\
\times \%\text{TBSA involved}
\]

Infuse half of this amount in the first eight hours and the rest over the next 16 hours. Place a Foley catheter and titrate fluid resuscitation to a goal urine output of 1-2 ml/kg/hr.

Although it is important to administer fluids, over-resuscitation can cause pulmonary edema, ARDS, or compartment syndrome in the extremities or abdomen. These complications significantly increase morbidity and mortality.

It is important to characterize burns by appearance, location, and involved surface area. Burns are classified as superficial, superficial-partial, deep-partial, and full-thickness burns (Figures 1-3). Calculate the percent total body surface area (%TBSA) of the burn. This, along with burn location, will help determine management and disposition. Pay special attention to burns that involve the surface over a joint, hand, or perineum, as the healing process may lead to contracture formation.

Several methods can be used to estimate %TBSA. The Lund and Browder chart is a way to get a precise measurement, but this method is time consuming. The palm method allows the emergency physician to estimate %TBSA by using a patient’s palm, which is approximately one percent of TBSA. The well-known Rule of Nines is quick, but often inaccurate. Perhaps the best hybrid of accuracy and speed used to characterize %TBSA is found on the website www.sagediagram.com. Physicians can use their cursor to select the extent of partial and full thickness burns. The program then estimates the burn’s %TBSA for you.

Treatment in the emergency department is typically straightforward. Clean the affected area with soap and water, then debride as needed, and dress the wound. Many burns will blister. Though management of blisters is controversial, most authors agree that removal of the blister with subsequent debridement is helpful to characterize the burn’s appearance. Treat most superficial burns with topical products like bacitracin or neomycin.

For more extensive burn injuries—such as full-thickness burns or deep partial-thickness burns—apply silver sulfadiazine or silver nitrate. These agents have broad antimicrobial properties and are more bactericidal than bacitracin or neomycin. There are also many specialized dressings used to treat superficial
and deep partial-thickness burns. Know what is supplied at your institution, and be familiar with the indications for their use.

When full-thickness burns are circumferential and involve the chest or the extremities, an escharotomy (where an incision completely goes through the depth of the eschar) is performed (Figure 4). This is to relieve constriction at the affected site to prevent respiratory compromise or development of compartment syndrome.

When dealing with pediatric burns, always consider the possibility of child abuse. Burn presentations that may suggest child abuse include: burns of the hands or feet in a stocking and glove distribution, skin sparing at flexure lines, or sharp lines of demarcation. Patterned burns or those involving the buttocks and perineum should also raise suspicion for child abuse.

Initially, stabilization and resuscitation of a pediatric burn victim is the first priority. The emergency physician should then determine which patients need further care or can be safely discharged. Prior to discharging home, give tetanus immunization (if indicated) and arrange close follow up. When making a disposition, always consider the medico-legal ramifications from potential scarring, contractures, or infection.

Burns that are more extensive or in high-risk areas will need to be transferred to a specialized burn center where the patient can be managed by a burn surgeon. Tables 1 and 2 provide guidelines from the American Burn Association for disposition.

Burn injuries are frequently seen in emergency departments, ranging from minor scalds to life and limb threatening injuries. Initial management and disposition of the burn patient is critical.

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<tr>
<th>Table 1. ABA indications for admission to hospital</th>
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<td>Age &lt; 10 yo w/ 5-10% TBSA burn</td>
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<tr>
<td>Age &gt;10 yo w/ 10-20% TBSA burn</td>
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<td>Full thickness burn 2-5% TBSA</td>
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<td>Circumferential burn</td>
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<tr>
<td>Suspected inhalational injury</td>
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<td>Increased risk of infection (ex. DM or sickle cell disease)</td>
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<td>Age ≥ 10 yo w/ &gt;20% TBSA burn</td>
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<td>Full thickness burn &gt;5% TBSA</td>
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<td>Any burn to face, eye, ears, genitalia, or perineum</td>
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<td>Inhalation injury</td>
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References
7. www.sagediagram.com
Meckel’s diverticulum: expanding the differential diagnosis for acute intestinal obstruction

Abstract
Meckel’s diverticulum is the most prevalent congenital anomaly of the gastrointestinal tract. Most cases are symptomatic by the second year of life. Consequently, it is predominantly considered in the differential diagnosis for abdominal pain in the pediatric population. This case report details a 69-year-old female with symptoms of acute intestinal obstruction that were subsequently attributed to a rare, but important, condition within the adult population: symptomatic Meckel’s diverticulum.

Preface
During the first two years of medical school, a barrage of information is pitched at medical students at an unbelievable rate. It is a commonly-held belief that getting through medical school does not necessarily require the student to be a rocket scientist. Rather, it requires the student to remember an extremely vast amount of information. Most of this information is stored and cataloged in the medical student brain as practical and can be retrieved quite readily. Other information is not practical and quite inconvenient to retain. There is still a third type of information that is seldom needed, but somehow easier to regurgitate than other vital facts that the medical student should know.

The case presented below illustrates that, while some of the disease states presented during your first two years of medical school may seem to have higher utility than others, in actuality everything you learn can come into play when you stop dealing with paper patients and start dealing with real ones.

Introduction
Meckel’s diverticulum occurs as a result of failed involution of the omphalomesenteric duct. It is the most common congenital anomaly of the gastrointestinal tract, affecting approximately two percent of the general population. Illness related to Meckel’s diverticulum is commonly considered in the pediatric population, as most cases become symptomatic by two years of age. However, it has been reported that only 50 percent of patients who develop symptoms related to Meckel’s diverticulum are less than ten years of age, and approximately 90 percent of Meckel’s diverticula persist as clinically silent malformations. When a symptomatic Meckel’s diverticulum is identified in the adult population, it typically presents with intestinal obstruction.

Case report
M.K., a 69-year-old Japanese female with past medical history significant for remote abdominal hysterectomy and a successfully-resected colonic adenocarcinoma, presented to the emergency department with complaints of one day of acute, severe, crampy, and diffuse abdominal pain. The pain was described as nine out of ten in severity. It was initially located in her lower abdomen, but soon spread to the epigastrium with radiation to the right shoulder and back. Immediately after finishing her dinner that evening, she felt nauseated and had one episode of bilious emesis containing undigested food. She denied any hematemesis or coffee ground emesis. The patient had a normal bowel movement that morning but had not had any further bowel movements or flatus since that time.

On presentation to the emergency department, she was in mild distress with normal vital signs. Sclerae were non-icteric. Breath sounds were clear and present bilaterally. The abdomen was...
slightly distended with diminished bowel sounds, and she was diffusely tender with mild abdominal rebound tenderness. No focal masses or hepatosplenomegaly were noted. The rectal exam was heme-negative without pain or masses.

Intravenous morphine was administered, and her pain improved to three out of ten. A nasogastric tube was inserted and revealed dark green, heme-positive fluid. Electrocardiogram revealed a normal sinus rhythm with T-Wave inversions in leads V1-V5. Troponin I Levels were obtained and can be found in Table 1. Chest x-ray revealed no acute findings. A CT scan with oral and IV contrast revealed mild colonic diverticulitis with minimal nonspecific mesenteric edema at the mid-pelvis of uncertain etiology. Ultrasound exams of the abdomen and pelvis were negative.

The patient was treated with IV fluids, analgesics, nasogastric suction, and bowel rest. She continued to complain of pain and oral and IV contrast revealed minimal nonspecific mesenteric edema at the mid-pelvis of uncertain etiology. Ultrasound exams of the abdomen and pelvis were negative.

The patient was treated with IV fluids, analgesics, nasogastric suction, and bowel rest. She continued to complain of pain and developed increasing abdominal distention after admission. An upper GI series showed residual Gastrografin in the small bowel after 23 hours and non-dilated loops of small bowel. The colon was not visualized.

After five days of inpatient conservative treatment, the patient was taken to the operating room for exploratory laparotomy. At surgery, she was found to have a gangrenous and perforated Meckel’s diverticulum at the distal ileum with free spillage into the right lower quadrant. Also present were significantly dilated proximal loops of bowel and evidence of a small bowel obstruction.

The patient’s postoperative course was prolonged due to *Escherichia coli* peritonitis. She was treated with piperacillin-tazobactam and was eventually discharged home on post-operative day seven.

**Discussion**

This 69-year-old patient presented with the acute onset of severe, diffuse, crampy abdominal pain associated with bilious vomiting and obstipation. Her past medical history of hysterectomy and segmental colon resection led the treating physician to consider the possibility of obstruction due to adhesions. In adults, a conventional differential diagnosis for small bowel obstruction would include adhesions, volvulus, intussusception, hernia, stenosis, stricture, acute paralytic ileus, superior mesenteric artery syndrome, fecal impaction, chronic colonic pseudo-obstruction, chronic intestinal pseudo-obstruction, diverticulitis, megacolon, lymphoma, colon carcinoma, ulcerative colitis, and Crohn’s disease.

Meckel’s diverticulum was not considered as a causative pathology in this case due to its rarity as a cause of acute abdominal pain in the adult patient. It is important to note that the most commonly-reported presentations associated with symptomatic Meckel’s diverticulum in the adult population are intestinal obstruction, painless bleeding and ulceration, and diverticulitis. Intestinal obstruction related to Meckel’s diverticulum occurs in 25 percent of all symptomatic patients and in the majority of symptomatic adult patients, as a result of either ileocolonic intussusception or intestinal volvulus.

**Conclusion**

Meckel’s diverticulum is a well-known cause of pediatric abdominal pain or intestinal obstruction but is rarely symptomatic in adult patients. Although uncommon, the possibility of symptomatic Meckel’s diverticulum should be considered in the differential diagnosis of adult patients presenting with abdominal pain, evidence of bowel obstruction, or gastrointestinal bleeding.

**References**


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Risk management pitfalls for pediatric sedation in the emergency department

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1. “I must give an anticholinergic in conjunction with ketamine to minimize complications due to aspiration from salivary secretions.” Although atropine has been shown to decrease the amount of observed secretions, in numerous randomized, controlled studies, it has not been shown to be of any additional benefit in preventing airway complications.

2. “I can’t give narcotics for pain relief prior to sedation because this could lead to complications with oversedation.” One retrospective chart review aimed at answering this question showed no significant differences in adverse events between patients who had received narcotics prior to sedation versus those who had not. Providing appropriate, preferably short-acting, analgesia while awaiting procedural sedation is the humane thing to do.

3. “This patient has multiple face and scalp hematomas from being an unrestrained passenger in a rollover motor vehicle collision. He needs sedation for fracture reduction prior to getting admitted. Can I use ketamine to sedate him?” Although the data are conflicting regarding the use of ketamine in patients with head injury/increased ICP, some studies have clearly documented increased ICP with ketamine administration. For this patient, who is at high risk for intracranial injury and increased ICP, a different sedative agent should be strongly considered for fracture reduction.

4. “I have a three-month-old patient who needs sedation for femur fracture reduction and cast placement. Is ketamine a reasonable choice?” Children younger than 3 months of age seem to have more adverse respiratory events when treated with ketamine sedation. Therefore, it is probably better to use another agent, followed by prolonged post sedation monitoring or admission for overnight observation to ensure that no delayed adverse events occur.

5. “This patient has hypoesthesias and weakness in his hand from a forearm fracture. His last PO intake was two hours ago. I should therefore wait two more hours before I can sedate him, despite his neurologic deficits.” Several published guidelines recommend four to six hours of fasting before moderate or deep sedation, but this patient has a neurologic deficit that must be attended to promptly. Studies have shown that there is no relation between adverse respiratory events and fasting. In this patient, prompt reduction supersedes the risk of aspiration, and the procedure should be performed immediately. The clinician should always be ready with appropriate suctioning and equipment to secure the airway in the event of emesis.

6. “This patient, whom I sedated with ketamine for a lumbar puncture to evaluate her headache and fever, has an elevated opening pressure. Does she have pseudotumor cerebri?” The elevated opening pressure is most likely due to the ketamine. Several studies have shown that ketamine can increase ICP. If an opening pressure is needed to rule in or rule out a specific diagnosis, the clinician should choose a sedative agent other than ketamine to assure an accurate and valid opening pressure.

7. “Laryngospasm is so rare; I don’t need to have the emergency airway cart nearby during this sedation.” Although laryngospasm is indeed rare, the clinician should be ready to respond immediately if and when it does occur. This includes having the appropriate equipment at or near the bedside.

8. “The patient is getting ketamine, which is a potent analgesic, so he doesn’t need a digital block for repair of this fingertip amputation.” Ketamine is a potent analgesic, but it is not uncommon for patients to flinch or move in response to painful stimuli. This is particularly true after the drug has reached its peak concentration and the dissociative anesthetic state starts to wane. The local infiltration of lidocaine or bupivacaine to the site will prevent discomfort but also movement during the procedure as he begins to wake up.

9. “Ketamine is unsafe to use in areas outside of the operating room.” Several studies have explored the safety of ketamine use in emergency departments, sedation suites, and dental or ophthalmology clinics. The results indicate ketamine is safe in such settings as long as the appropriate guidelines are followed, monitoring and safety equipment are available, and the practitioner is well trained in recognizing and managing respiratory emergencies.
Risk management pitfalls for management of anticoagulated patients in the emergency department

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1. “His head CT was negative and his neuro examination was normal. Of course I sent him home.”
Delayed intracranial bleeds have been reported in anticoagulated patients with mild head injury. Although there is not universal agreement on the management of these patients, both observation and repeat CT scan have been suggested in the neurosurgical and trauma literature.

2. “I was just treating her UTI. I didn’t have time to review all her medications.”
Many elderly patients are on warfarin, and many antibiotics interact with this drug. A few minutes reviewing medications could save you hours in court time later.

3. “She didn’t complain of abdominal pain. I didn’t even consider the possibility of a retroperitoneal hemorrhage.”
Abdominal pain is present in less than two-thirds of these cases. The patient may also complain of hip, thigh, or groin pain. These diverse presentations need to be considered in the anticoagulated patient.

4. “I reviewed the med list. There was no mention of the supplements that interfere with warfarin.”
Many patients don’t consider supplements drugs. They have to be specifically asked about supplement use.

5. “Of course I gave him vitamin K subcutaneously for his elevated INR. That’s how we always did it when I trained.”
The subcutaneous use of vitamin K is unpredictable, and this route is not recommended by the ACCP guidelines.

6. “I saw the abdominal wall ecchymosis. I thought it was from his injections of LMWH.”
Cullen’s sign is the presence of periumbilical ecchymosis and is associated with retroperitoneal hemorrhage.

7. “The liver patient was bleeding and his INR was elevated. I gave him PCC to reverse his coagulopathic state. How could I predict he was going to have a stroke?”
PCC is only for warfarin-induced coagulopathy. It may cause thrombotic complications in all other circumstances.

8. “I gave her vitamin K before I transferred her to the tertiary center for her intracerebral bleed. I knew she was on warfarin, but I didn’t think she would expand her bleed.”
Although treatment may be limited by what resources are available, PCC, rFVIIa, or FFP should be considered prior to transfer if it doesn’t cause undue delay.

9. “He was another patient with severe back pain. Everybody thinks their back pain is severe.”
In the anticoagulated patient, spinal epidural hematoma must be considered.

10. “I didn’t consider compartment syndrome. It was only minor trauma.”
With the anticoagulated patient, these volume-space problems may occur with even minor trauma. They must be anticipated, and good discharge instructions are a must.
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Maryland, Cumberland: Small Town Lifestyle, Big City Compensation in Scenic Cumberland, MD, MEP is seeking experienced BC/BR Emergency Medicine Residency-Trained Physicians to join our team at the Western Maryland Regional Medical Center (WMRMC) in Cumberland, MD. MEP offers an exceptional productivity based compensation plan, a significant sign-on bonus, and a comprehensive benefits package including malpractice with tail coverage. Total compensation package of over $310,000. Leadership and ownership opportunities are available. WMRMC has an annual volume of over 55,000 with 40 hours physician coverage, and is the designated area-wide Level III Trauma Center. WMRMC offers a comprehensive range of general and specialty services in a new $268 million state-of-the-art hospital with 275 inpatient beds. Scribes assist physicians with charting, and a Rapid Medical Evaluation (RME) unit, increases throughput. Only a short driving distance from Pittsburgh, Baltimore and the Washington, DC area, Cumberland is an ideal area to enjoy award winning dining and local attractions. Affordable housing, great schools and year-round recreation, Cumberland has it all!

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Annals of Emergency Medicine

Resident Editorial Board Fellowship Appointment

The Resident Fellow appointment to the Editorial Board of Annals of Emergency Medicine is designed to introduce the Fellow to the peer review, editing, and publishing of medical research manuscripts. Its purpose is not only to give the Fellow experience that will enhance his/her career in academic emergency medicine and in scientific publication, but to develop skills that could lead to later participation as a peer reviewer or editor at a scientific journal. It also provides a strong resident voice at Annals to reflect the concerns of the next generation of emergency physicians.

Please visit Annals’ Website at www.annemergmed.com for a copy of the complete application.
Due date is July 11, 2011.

Questions should be directed to Stephanie Wauson, Editorial Director, Annals of Emergency Medicine, at 800-803-1403 x3222 ext. 3221, or by e-mail to swauson@acep.org.
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Maryland, Hagerstown: MEP, a privately owned Emergency Medicine physicians group, has an outstanding opportunity for BC/BP EM Residency-trained physicians at the brand new Meritus Medical Center in Hagerstown, MD. An hour from Washington, DC and Baltimore, greater Hagerstown is the fastest growing metro area in Maryland with affordable housing and numerous outdoor activities. Meritus is a not-for-profit hospital, opened in December 2010. The 500,000-square-foot, 267-bed regional medical center has an ED volume of 70,000. The hospital offers acute general inpatient services in addition to a regional Level III Trauma Center, an intensive care unit, a progressive care unit, a coronary care unit, and a pediatric unit. The emergency department features 52 beds with 4 trauma/code beds. Scribes assist physicians with charting, and a Rapid Medical Evaluation (RME) unit, increases throughput. Physicians’ coverage is 53 hours. MEP offers an exceptional compensation and benefits package, with above market compensation, and malpractice with tail coverage. Leadership and ownership opportunities are available to qualified physicians. A substantial sign on bonus is available. Contact AC McEwan at (301) 944-0049 or email CV to ACMcEwan@EmergencyDocs.com.

Michigan, Battle Creek: BC Emergency Medicine physician sought for democratic group in 50,000 volume ED. Excellent package offers shareholder status at one year with no buy-in! Benefits include pension, family medical plan, CME, incentive income, malpractice, more. Stable group with outstanding physician retention record. Contact Kim Rooney, Premier Health Care Services, (800)726-3627, ext. 3674, krooney@phcsday.com, fax (937)312-3675.

Michigan, Grand Blanc: Full Time/Part Time EM or EM/IM BC/BP physician for 60,000 volume ED and Obs. Unit. Genesys Regional Medical Center is a beautiful, 400 bed, state-of-the-art hospital built in 1997 with a 27-position EM Residency and most specialty residencies. Our EM physician corporation offers employee status with full benefits, including CME allowance, dues coverage, first year Profit Sharing, malpractice coverage, and very competitive hourly compensation. Applicants please call or send CV to: Michael J. Jule, DO, FACEP, Director Emergency Services, One Genesys Parkway, Grand Blanc, Michigan 48439-1477, or email to mjule@genesys.org, or call (810) 606-5951.
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Emergency Physicians of Tidewater (EPT) is a progressive, democratic group serving 7 hospitals in the Virginia Beach/Norfolk area. The practice includes level 1 and 2 trauma centers, as well as diverse community settings. EPT provides faculty for and directly supervises an EM residency program. Great niche opportunities in U/S, EMS, administration, tactical medicine, forensics, and hyperbarics. Well-staffed facilities. Competitive financial package leading to full partnership and profit sharing. Great, affordable coastal area with moderate year-round temperatures and beaches minutes away. Only EM BC/BP candidates accepted. Send CV to Emergency Physicians of Tidewater, 4092 Foxwood Dr., Ste. 101, Virginia Beach, VA 23462 • Phone (757) 467-4200 • Fax (757) 467-4173 • E-mail chercasp7@aol.com

New Hampshire, Manchester: Democratically governed emergency medicine group serving population of 37,000 visits yearly seeks BC/BP physician. We are located near the ocean, Boston and the White Mountains. New members share same night/weekend/holiday mix as other group members and are eligible for shareholder status in one year. Email response to KZaffino@CMC-NH.org or mail to Kathleen Zaffino MD 100 McGregor St. Manchester, NH 03102.

New Hampshire, Portsmouth: Portsmouth Emergency Physicians, PC in Portsmouth, NH is looking for a full-time RT BC/BP physician for 2011. Portsmouth Regional Hospital [Level II] receives transfers-in for cardiac and neurosurgery and is strong in virtually all call categories. The ED volume is 28,000 with ca. 20% admission rate, and we have double and triple coverage. This fee-for-service group has an excellent compensation package including health and liability insurance plus retirement, etc. On the coast of NH, Portsmouth is a very desirable community to live in, has a long maritime history and is approx 1 hour from the mountains and Boston. Contact Dr. Don Albertson by email at donalbertson@comcast.net.

New York, Long Island/East Patchogue: Brookhaven Memorial Hospital Medical Center is a Level II Trauma Center seeing 71,000 ED pts./yr. Quaint coastal community is host to this full-service facility. Outstanding partnership opportunity includes equal profit sharing, equity ownership, funded pension, open books, full benefits and more. Contact Ann Benson, (careers@emp.com), Emergency Medicine Physicians, 4535 Dressler Rd, NW, Canton, OH 44718. 800-828-0898 or fax 330-493-8677.

North Carolina, Charlotte: EMP is partnered with 6 community hospitals in Charlotte, Lincolnton, Pineville and Statesville. A variety of partnership opportunities are available in urban, suburban and smaller town settings with EDs seeing 20,000 -70,000+ pts./yr. EMP is an exclusively physician owned/managed group with open books, equal voting, equal profit sharing, equity ownership, funded pension, full benefits and more. Contact Ann Benson, (careers@emp.com), Emergency Medicine Physicians, 4535 Dressler Rd, NW, Canton, OH 44718. 800-828-0898 or fax 330-493-8677.

North Carolina, Kinston: Located in the center of eastern North Carolina, Kinston is less than 60 miles to the east are some of the most beautiful beaches of the Carolina coast and 35 miles from Greenville. 200-bed full-service community hospital treats 39,000 ED pts./yr. Outstanding partnership opportunity includes equal profit sharing, equity ownership, funded pension, open books, full benefits and more. Contact Ann Benson, (careers@emp.com), Emergency Medicine Physicians, 4535 Dressler Rd, NW, Canton, OH 44718. 800-828-0898 or fax 330-493-8677.

North Carolina, Manchester: DEM is looking for an EM BC/BP physician to join a 100-bed community hospital near the coast of NC. The new physician will be one of 6 on staff and will treat 25,000 pts./yr. We have hospitalist support. Excellent compensation package. Contact Ann Benson, (careers@emp.com), Emergency Medicine Physicians, 4535 Dressler Rd, NW, Canton, OH 44718. 800-828-0898 or fax 330-493-8677.

North Carolina, Mendocino: Providing high quality care in a progressive rural setting. Stand-alone EDs up to 70,000 pts./yr. Outstanding partnership opportunity includes equal profit sharing, equity ownership, funded pension, open books, full benefits and more. Contact Ann Benson, (careers@emp.com), Emergency Medicine Physicians, 4535 Dressler Rd, NW, Canton, OH 44718. 800-828-0898 or fax 330-493-8677.

North Carolina, Pineville: Small facility with approximately 32,000 pts./yr. Partnership opportunity includes equal profit sharing, equity ownership, funded pension, open books, full benefits and more. Contact Ann Benson, (careers@emp.com), Emergency Medicine Physicians, 4535 Dressler Rd, NW, Canton, OH 44718. 800-828-0898 or fax 330-493-8677.

North Carolina, Statesville: Portsmouth Emergency Physicians, PC is looking for an EM BC/BP physician to join a 100-bed community hospital near the coast of NC. The new physician will be one of 6 on staff and will treat 25,000 pts./yr. We have hospitalist support. Excellent compensation package. Contact Ann Benson, (careers@emp.com), Emergency Medicine Physicians, 4535 Dressler Rd, NW, Canton, OH 44718. 800-828-0898 or fax 330-493-8677.
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Ohio, Barberton and Wadsworth: SUMMA Health System-Barberton Hospital is a full-service community hospital in southern suburban Akron with 38,000 ED visits/yr. WRH Health System in Wadsworth sees 21,000 patients per year. Work at one site or combination of both. Outstanding partnership opportunity includes equal profit sharing, equity ownership, funded pension, open books, full benefits and more. Contact Ann Benson (careers@emp.com), Emergency Medicine Physicians, 4535 Dressler Rd, NW, Canton, OH 44718. 800-828-0898 or fax 330-493-8677.

Ohio, Cambridge: Southeastern Ohio Regional Medical Center is a 177-bed, full-service facility and Level III Trauma Center treating 34,000 ED pts./yr. Outstanding partnership opportunity includes equal profit sharing, equity ownership, funded pension, open books, full benefits and more. Contact Ann Benson (careers@emp.com), Emergency Medicine Physicians, 4535 Dressler Rd, NW, Canton, OH 44718. 800-828-0898 or fax 330-493-8677.

Ohio, Cincinnati: Situated in desirable Anderson Township, Mercy Hospital – Anderson sees 50,000 patients per year. Outstanding partnership opportunity includes equal profit sharing, equity ownership, funded pension, open books, full benefits and more. Contact Ann Benson (careers@emp.com), Emergency Medicine Physicians, 4535 Dressler Rd, NW, Canton, OH 44718. 800-828-0898 or fax 330-493-8677.

Ohio, Columbus: Democratic group opportunity in 22,000 volume ED located in an appealing NW Columbus suburb. Enjoy the advantages of a stable, established group including equity ownership and incentive opportunities, malpractice, family medical plan, expense account, employer-funded pension and additional benefits. Contact Amy Spegal, Premier Health Care Services, (800) 726-3627, ext 3682, aspegal@phcsday.com fax (937) 312-3683.

Ohio, Dayton: BP/BC EM physician sought to join solidly established, democratic group at 42,000 volume ED in northern suburb. Enjoy working in a collegial environment and outstanding physical plant. Excellent package includes malpractice, employer-funded pension, family medical plan, CME, incentive income and more. Contact Kim Rooney,

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- Willowbrook Freestanding ER, 6 miles east of main campus, 14 beds, CT, U/S, lab onsite, annual visits 12,000.
- Spring Cypress Freestanding ER, OPENING Fall 2011, 6 miles north of main campus, 10 beds, CT, U/S, lab onsite.

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- Willowbrook Freestanding ER, 6 miles east of main campus, 14 beds, CT, U/S, lab onsite, annual visits 12,000.
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Physicians are Independent Contractors, compensated with an hourly guarantee plus productivity based compensation model, and paid malpractice with tail coverage.

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**Ohio, The Ohio State University:** Department of Emergency Medicine seeks physician to work clinically in our 20 bed comprehensive ED observation unit. The physician will work with a team of experienced mid-level providers and deliver care to over 500 patients/month on more than 30 observation protocols. EM and IM experience preferred. For qualified applicants, flexibility available to split shifts in the ED and observation medicine. Compensation commensurate with qualifications, experience and academic appointment. Send CV to: Douglas A. Rund, MD, Professor and Chairman, OSU Emergency Medicine, 456 W. 10th Avenue, 4510 Crabbett Hall, Columbus, OH 43210; mary-jayne.fortney@osumc.edu; (614)293-8176. AAEOE.

**Ohio, The Ohio State University - Fellowship:** Jump Start Your Leadership Career at The Ohio State University Medical Center Administrative Fellowship. The Department of Emergency Medicine at The Ohio State University is seeking EM residency trained or Board certified candidates for a competitive two year Fellowship in Administration starting July 2011. Fellows will learn operational and financial skills necessary to lead any Emergency Department and develop key executive skills to become future leaders in the health care industry. Fellows also earn a fully funded MBA at the prestigious OSU Fisher College of Business. Contact: Mark Moseley, MD, MHA, Administrative Fellowship Program Director, at 614-293-8305 or via email at Mark.Moseley@osumc.edu. AAEOE.

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Pennsylvania, Pittsburgh: Alle-Kiski Medical Center in Natrona Heights is currently building a brand new ED to see 34,000 emergency pts./yr. The Western Pennsylvania Hospital-Forbes Campus sees 40,000 EM pts./yr. in Monroeville. Both are proximate Pittsburgh’s most desirable residential communities. Outstanding partnership opportunity includes equal profit sharing, equity ownership, funded pension, open books, full benefits and more. Contact Ann Benson (careers@emp.com), Emergency Medicine Physicians, 4535 Dressler Rd, NW, Canton, OH 44718. 800-828-0898 or fax 330-493-8677.

Pennsylvania, Sharon: EMP is pleased to announce our new affiliation with Sharon Regional Health System. Extremely supportive administration/medical staff, new ED, and full service capabilities make this a great place to work. Small city setting offers beautiful housing and abundant recreation less than an hour from Pittsburgh and Cleveland. Outstanding partnership opportunity includes equal profit sharing, equity ownership, funded pension, open books, full benefits and more. Contact Ann Benson (careers@emp.com), Emergency Medicine Physicians, 4535 Dressler Rd, NW, Canton, OH 44718. 800-828-0898 or fax 330-493-8677.

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**South Carolina, Waynesboro:** NES HealthCare Group is seeking a full-time emergency medicine physician to staff newly renovated Emergency Department of Burke Medical Center. Candidates must be BC/BP EM and have current ACLS and PALS. Competitive compensation, physician education and incentive program offered. This 40-bed facility has an annual ED volume of 12,000, and has been caring for the citizens of Burke County since 1951. Burke Medical Center is located 40 minutes south of Augusta and just west of South Carolina. Waynesboro offers small own charm with the conveniences of a “big city.” Contact: Megan Evans, Physician Recruiter, 1-800-394-6376, mevans@neshold.com or fax CV to 631-265-8875.

**West Virginia, Bluefield:** EM physician opportunity with democratic group. This 36,000 volume ED is on the WV/VA border. Excellent coverage of 36 physician hours plus 20 PA/NP hours daily. Benefits include shareholder opportunity, family medical plan, malpractice, pension, incentive income. Scenic location with appealing sports/recreational opportunities. Contact Rachel Klockow, Premier Health Care Services, (800) 406-8118, e-mail rklockow@phcsday.com, fax (954)986-8820.

**West Virginia, Wheeling:** Ohio Valley Medical Center is a 250-bed community teaching hospital with a brand new-ED under construction. AOA approved Osteopathic EM and EM/IM residency program. Enjoy teaching opportunities, full-specialty back up, active EMS, and two campuses seeing 26,000 and 22,000 pts./yr. Outstanding partnership opportunity includes equal profit sharing, equity ownership, funded pension, open books, full benefits and more. Contact Ann Benson (careers@emp.com), Emergency Medicine Physicians, 4535 Dressler Rd, NW, Canton, OH 44718. 800-828-0898 or fax 330-493-8677.

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Emergency medicine physicians, please contact Amy-Catherine McEwan at 301.944.0049 or e-mail CV to ACMcEwan@emergencydocs.com.
VIOLENCE in the Workplace

Workplace violence can range in intensity from verbal abuse or threatening actions to physical assaults or homicide. Violence headlines today’s news and is an unfortunate component in our work environment that is steadily increasing. It does not discriminate with race or wealth and can occur in all aspects of society. The National Institute for Occupational Safety and Health (NIOSH) as part of the Centers for Disease Control and Prevention (CDC) conducts research and make recommendations to improve worker safety and health. Common risk factors for hospital violence, such as overcrowding and long waits for service, are the topic of discussion in health care forums across the country. According to NIOSH findings the most frequent areas for violence in hospitals today occur:

- Psychiatric wards
- Emergency rooms
- Waiting rooms
- Geriatric units

Source: http://www.cdc.gov/niosh/docs/2002-101/

Surprising facts about Washington D.C.

- The longest escalator in the Western Hemisphere is found in the Metro Station of the DC suburb of Wheaton and is a 500 foot-long ride, more than twice the length of an average city block.
- The corridors of the Pentagon are nearly 18 miles long. With 6.6 million square feet of space, the Pentagon is one of the world’s largest buildings, larger than even the Empire State Building.
- DC has 715 libraries—only 118 fewer than New York City.
- The average $1 bill (printed at the Bureau of Printing and Engraving) remains in circulation for a period of 22 months.
- Each day the Bureau of Printing and Engraving produces some 35 million individual notes valued at $635 million.
- The longest speech ever in the United States Congress went on for more than 24 hours straight, delivered by Senator Strom Thurmond in 1957.

For a full schedule of events at ACEP’s Leadership and Advocacy Conference, see page 14.

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