common SENSE

VOLUME 19, ISSUE 1
JANUARY/FEBRUARY 2012

THE NEWSLETTER OF THE AMERICAN ACADEMY OF EMERGENCY MEDICINE

FAAEM
always means
board certified

PRESIDENT'S MESSAGE

Howard Blumstein, MD FAAEM

Here I am nearing the end of my term as president, and I experienced a small victory that thrilled me.

A fourth year student emailed me with a question. He had discovered that a contract management group (CMG) ran a residency program where he had interviewed. He wanted to know how I thought this might impact his experience.

I told him that all residency programs must be accredited by the ACGME and must meet extensive requirements designed to ensure that residents receive a quality education. All programs are reviewed on a periodic basis. Further, I said I thought that the core teaching faculty at these programs would be dedicated to teaching and ensuring a quality education.

But there were potential drawbacks, I said. CMGs sponsor residency programs for a reason. Were they really interested in education? That's a hard claim to make when they actively recruit non-EM trained residency graduates to work in the EDs they control. We have heard that CMGs use training programs as a venue for inculcating young doctors with the idea that CMGs are good employers and treat their people fairly. I will let AAEM members judge the truthfulness of that concept. Little freebies like scrub shirts with the company name embroidered on them go a long way towards winning hearts and minds. But did the student really want to endure 3-4 years of that propaganda?

I let the student know about the horror stories we have heard. CMGs were reported to assign residents to work on shifts alongside weak attending physicians. They counted on the residents to make up for the deficiencies of those attendings. Or they might demand that residents moonlight in hospitals controlled by the CMG. Nothing better for your business model, I suppose, than a ready bullpen of replacements to fill in when you have staffing problems. But is that best for the residents?

And what happens when a resident approaches a faculty member to ask about a job opportunity or the pros and cons of different employment models? Will that faculty member offer unbiased advice? Can they do so when most CMGs offer contracts that allow them to fire their docs without cause?

But having an opportunity to tell a single student that there are pros and cons of choosing a training program sponsored by a CMG is not my little victory. It's the fact that I was asked the question. Listen:

For years, members of the AAEM boards have been pulling out their collective hair and suffering over the question of why so many emergency docs have been willing to line up to work in EDs controlled by the CMGs. Mass insanity? Masochism? Just plain stupidity? Perhaps. But most board members over the years believe that the primary problem has simply been failure to understand.

Many of our colleagues think they have a good thing going, working for these CMGs. Many think they have no options. Or, they do not understand how they are being fleeced.

The obvious solution has been education. So board members, especially the president, travel to residency programs and meetings, telling the story of why we believe that contract holders (not just the large CMGs) are bad for both patients and doctors. How their business model violates the law and endangers physicians' licensure. We try to put information about CMGs in our publications, meetings and promotional material. And, frankly, our failure to spread the word more effectively has been frustrating.

But the tide is turning. Over two years, I have spoken at dozens of programs, and the interest expressed by young physicians is palpable. We recently began trying to address student emergency medicine interest groups (EMIGs) during residency visits when possible. I get more and more inquiries about fairness and working conditions from doctors at all levels of training. Take home message: the word is spreading. Not as fast as I had hoped, but it is spreading.

Get the AAEM Fact of the Day and other AAEM Updates.

Find us on Facebook

INSIDE THIS ISSUE

EDITOR'S Letter

ASSISTANT EDITOR'S LETTER

Do You Like What You do for a Job?

Mark Patrick Doran, DO FAAEM

Just recently, I walked into another ER shift, took sign-out from a colleague ready to hand over duty, and proceeded to take on the brunt of patients waiting to be seen. The ER that night was its usual hectic pace. Seated in a hallway bed just across from my workplace area was an innocent looking elderly gentleman who wasn't on my list of 'follow-ups' or patients 'to-be-seen.' He was quietly minding his time, waiting for an ambulance to return him to his residence.

As I walked past him, I noticed a military patch on the breast of his jacket. Being the grandson of a 1st Division U.S. Marine, World War II Pacific Theater – Guadalcanal, I immediately recognized the blue background, red trim and stars to be that of the Southern Cross and similar wartime locale. After squaring away a few orders and surveying the department, I took a moment to walk over and inquire about the patch. He proceeded to tell me about his experiences as a staff assistant to a U.S. Army colonel while stationed in the Philippines during World War II, a "tough old dog that demanded our best but always treated us well." His voice broke a bit as he lamented the loss of "so many good young guys from my high school class." The story of one of his close childhood friends stationed with the U.S. Army Air Force in the European Theater behind the controls of a P-51 Mustang, out of ammunition, and outmaneuvering three German Messerschmitts put a spark in his voice and smile on his face. He told me how he had gone to college on the GI Bill, became a microbiologist, worked at a U.S. Army research facility, and later in the pharmaceutical profession. Then he looked at me and asked, "Do you like what you do for a job?" Somehow, it caught me off guard as I had not expected such a question. I replied, "Yes, I enjoy my profession because you never know who you'll meet or how you'll be a part of that moment along the course of someone's life." I was trying to be as honest as I could to a man that had answered my inquiries without hesitation. He smiled and nodded, thanked me

continued on page 5

AAEM Mission Statement

The American Academy of Emergency Medicine (AAEM) is *the* specialty society of emergency medicine. AAEM is a democratic organization committed to the following principles:

1. Every individual should have unencumbered access to quality emergency care provided by a specialist in emergency medicine.
2. The practice of emergency medicine is best conducted by a specialist in emergency medicine.
3. A specialist in emergency medicine is a physician who has achieved, through personal dedication and sacrifice, certification by either the American Board of Emergency Medicine (ABEM) or the American Osteopathic Board of Emergency Medicine (AOBEM).
4. The personal and professional welfare of the individual specialist in emergency medicine is a primary concern to the AAEM.
5. The Academy supports fair and equitable practice environments necessary to allow the specialist in emergency medicine to deliver the highest quality of patient care. Such an environment includes provisions for due process and the absence of restrictive covenants.
6. The Academy supports residency programs and graduate medical education, which are essential to the continued enrichment of emergency medicine, and to ensure a high quallity of care for the patients.
7. The Academy is committed to providing affordable high quality continuing medical education in emergency medicine for its members.
8. The Academy supports the establishment and recognition of emergency medicine internationally as an independent specialty and is committed to its role in the advancement of emergency medicine worldwide.

Membership Information

Fellow and Full Voting Member: $365 (Must be ABEM or AOBEM certified in EM or Pediatric EM)
Associate Member: $250 (Limited to graduates of an ACGME or AOA approved Emergency Medicine Program)
***NEW**: Fellows-in-Training Member: $75 (Must be graduates of an ACGME or AOA approved EM Program and be enrolled in a fellowship)
Emeritus Member: $250 (Must be 65 years old and a full voting member in good standing for 3 years)
Affiliate Member: $365 (Non-voting status; must have been, but are no longer ABEM or AOBEM certified in EM)
International Member: $150 (Non-voting status)
Resident Member: $50 (voting in AAEM/RSA elections only)
Transitional Member: $50 (voting in AAEM/RSA elections only)
Student Member: $20 or $50 (voting in AAEM/RSA elections only)
*Fellows-in-Training membership includes Young Physicians Section (YPS) membership.

Pay dues online at www.aaem.org or send check or money order to: AAEM, 555 East Wells Street, Suite 1100, Milwaukee, WI 53202
Tel: (800) 884-2236, Fax (414) 276-3349, Email: info@aaem.org.
AAEM is a non-profit, professional organization. Our mailing list is private.

Physician's Retaliation Suit under EMTALA Whistleblower Provisions Advances

Kathleen Ream, Director of Government Affairs

On October 26, 2011, the U.S. District Court for the Southern District of Texas denied a hospital's motion to dismiss a physician's retaliation claims alleging that his hospital privileges were terminated for reporting EMTALA violations (Zawislak v. Memorial Hermann Hospital System, S.D. Tex., No. 4:11cv01335, 10/26/11).

The Facts

On or about February 18, 2010, Memorial Hermann Hospital System suspended Walter Zawislak's medical staff privileges to treat patients at Memorial Hermann. Zawislak describes that "on two occasions unstable emergency room patients were transferred from Memorial Hermann to another trauma center because Memorial Hermann's oncall trauma surgeon was either unavailable or unqualified to address the patient's injuries." Zawislak reported the oncall trauma surgeon's conduct to the hospital's emergency department medical director and to the Root Cause Analysis Committee. He asserts that in a countermove, Memorial Hermann conducted a peer review of him which resulted in allegations of substandard care. Also according to Zawislak, "as a result of Memorial Hermann's peer review, his medical staff privileges were suspended and his employer, Team Health, terminated his employment."

Memorial Hermann took further action on April 8, 2010, by publishing to "the National Practitioner's Data Bank (NPDB) that it had taken an adverse action against Dr. Zawislak for substandard care." Zawislak disputed the publication and requested its removal by posting on January 14, 2011, by certified mail, a letter of complaint to the U.S. Secretary of Health & Human Services.

Further, Zawislak filed suit, arguing that his privileges were suspended "in retaliation for disclosing and objecting to Memorial Hermann's alleged Emergency Medical Treatment and Active Labor Act (EMTALA) violations." Zawislak also asserted a state law claim of defamation against Memorial Hermann for publishing in the NPDB that it took an adverse action against his clinical privileges for purported substandard care. Defendant Memorial Hermann moved to dismiss, contending that Zawislak 1) failed to exhaust his administrative remedies; 2) failed to allege facts sufficient to overcome the statutory presumption that the hospital is immune from liability pursuant to the Health Care Quality Improvement Act (HCQIA); and 3) failed to state a claim for relief under EMTALA's antiretaliation provision.

The Ruling

1. Federal Rule Exhausting Administrative Remedies

Memorial Hermann argued that plaintiff's claim of defamation arising from the NPDB report is subject to dismissal for failure to exhaust administrative remedies and that Zawislak did not allege "any facts demonstrating that before filing suit he followed the procedures set out in the applicable federal regulation to dispute the accuracy of Memorial Hermann's report." A physician may dispute the accuracy of the NPDB report by filing a written dispute with the Secretary of Health within sixty days of receiving the report. The district court affirmed that "more than sixty days lapsed between plaintiff's receipt of the NPDB report and the time he sent the Secretary of Health… Thus, Dr. Zawislak did not follow the procedures."

However, the court also found that "disputing the accuracy of the report with the Secretary of Health is not a prerequisite to filing suit…[and that] resort to administrative remedies is not required before filing suit." Zawislak did "not seek the correction of the report. Instead, he complains of harm he has suffered as a result of the already filed report. Because procedures only provide for the correction of a report, the Court does not believe that administrative exhaustion is required before Plaintiff may proceed with claims asserted in the complaint. Therefore, defendant's motion to dismiss for failure to exhaust administrative remedies must be denied."

2. Immunity Under HCQIA

In light of the immunity conferred under HCQIA, the defendant argued that it is shielded from liability advanced in the plaintiff's suit about decisions reached in the Memorial Hermann professional review process. "The HCQIA was enacted to provide for effective peer review and interstate monitoring of incompetent physicians, and also to provide qualified immunity for peer review participants. In order for immunity to apply under the HCQIA, the professional review action must be taken:

1. in the reasonable belief that the action was in furtherance of quality health care,
2. after a reasonable effort to obtain the facts of the matter,
3. after adequate notice and hearing procedures are afforded to the physician involved or after such other procedures as are fair to the physician under the circumstances, and
4. in the reasonable belief that the action was warranted by the facts known after such reasonable effort to obtain facts and after meeting the requirement of paragraph (3) [above]."

The district court wrote that "[w]hile it is true that Memorial Hermann enjoys a presumption that its professional review action met the fairness and due process requirements, the Court is persuaded that Dr. Zawislak has alleged sufficient facts to suggest he may be able to rebut the presumption by a preponderance of the evidence." Zawislak pled facts asserting that the hospital terminated his privileges in retaliation against his EMTALA protected report that oncall physicians transferred individuals before providing stabilizing treatment. The court determined that "[i]f Memorial Hermann acted on this basis, a trier of fact could find that such a decision was not grounded in considerations of quality health care, and was instead intended to protect Memorial Hermann's oncall physicians and other medical personnel." Zawislak's complaint also claims that the review committee did not consider the actions of the oncall physicians or Zawislak's treatment of the patients at issue. "If Memorial Hermann did not consider this evidence," the court stated, "a trier of fact could conclude that the reviewing committee did not make a reasonable effort to obtain the facts." Thus with a plausible claim that defendant failed to meet the fourth requirement for HCQIA immunity, the court decided that Memorial Hermann's motion to dismiss on HCQIA immunity grounds must be denied.

3. EMTALA Claim

Memorial Hermann maintained that plaintiff was not a whistleblower under EMTALA and, therefore, failed to allege a cause of action, and his claims should be dismissed. Outlining the civil enforcement provisions of EMTALA, the court noted that the law created "a private right of action for any individual who suffers personal

continued on page 4

Washington Watch - continued from page 3

harm as a direct result of a participating hospital's violation of a requirement of the statute. EMTALA also contains a section entitled 'Whistleblower protections' which prohibits hospitals from taking adverse action against two classes of individuals: 1) physicians and other personnel who refuse to authorize the transfer of an individual with an emergency medical condition that has not been stabilized and 2) hospital employees who report a violation of EMTALA."

The court concurred with Memorial Hermann that Zawislak did not fall within the first class of whistleblowers because he failed to allege a situation in which he refused to authorize the transfer of an unstable patient. However, where the hospital reasoned that Zawislak was not a hospital employee, the court was not able "to identify any decisions construing the meaning of 'employee' in the whistleblower provision." Thus the court found that "[w]hether a physician with hospital privileges is considered an 'employee' for the purposes of the whistleblower provision appears to be a case of first impression." The court reasoned that because EMTALA "affirmatively prohibits hospitals from taking adverse action against 'any hospital employee,'" it cannot be implied that the statute "permits hospitals to take adverse action against physicians with hospital privileges who have observed and reported EMTALA violations. Such a result would seem to contradict the very purpose of EMTALA. The legislative purpose of the statute is best served by construing it to prohibit participating hospitals from penalizing physicians with medical privileges…Accordingly, the whistleblower provision must be construed to include physicians with medical privileges within the definition of 'hospital employee.'" Therefore, the court denied the defendant's motion to dismiss.

To examine the court's full opinion, go to: http://ia600703.us.archive.org/32/items/gov.uscourts.txsd.879218/gov.uscourts.txsd.879218.13.0.pdf

State Peer Review Privilege Only Protects Materials Not Relevant to EMTALA Claim

On November 2, 2011, a federal magistrate judge of the U.S. District Court for the District of Colorado held that the plaintiffs may discover hospital peer-review documents relevant only to the plaintiffs' federal law claim that a hospital violated EMTALA by discharging their daughter absent stabilizing her emergency medical condition. Other peer review materials sought by the plaintiffs were not directly relevant to the EMTALA claim, to the extent they were protected under the state peer review privilege law (Etter v. Bibby, D. Colo., No. 1:10 cv 557, 11/2/11).

The Facts

In the early morning of March 22, 2008, Johanna Etter took her daughter Gabrielle Etter to the Delta County Memorial Hospital's (DCMH) emergency department. Gabrielle was discharged later the same day. The next day, Gabrielle returned to DCMH, was transferred to Children's Hospital, and died shortly after arrival as a result of pneumonia and infection.

Gabrielle's parents filed suit in federal court asserting violation of EMTALA by DCMH, alleging that "when Gabrielle was discharged from the emergency department on March 22, 2008, she had an emergency medical condition that the Hospital was required to screen for and stabilize before it discharged her." Plaintiffs also asserted under Colorado law three negligence claims against DCMH and two physicians, Charles King Bibby, Jr., MD, and Timothy Carter Meilner, MD. The federal district court had subject matter jurisdiction over the EMTALA claim, under which federal law creates a cause of action, and supplemental jurisdiction over the other three claims.

This particular court decision is on Plaintiffs' Motion to Compel Documents from Defendant Delta County Memorial Hospital. Specifically in the Etters' discovery request, they asked DCMH to produce "the following documents:

3. Produce any reports, files or reviews that refer or relate to Gabrielle Etter's care on March 22, 2008, including, but not limited to, any quality assurance reports, peer review reports and morbidity/mortality reports…

7. Produce any and all reports or files relating to Dr. Bibby, including, but not limited to, credentialing files, peer review files, quality assurance reports, morbidity/mortality reports, hospital privileges, and any reports relating to the deaths of patients under his care."

DCMH challenged the requests, arguing that the peer-review documents are privileged pursuant to the Colorado Peer Review Act and that those peer-review materials were irrelevant to the EMTALA claim, the only federal claim in the case and, therefore, federal law requires recognition of the state law privilege.

The Ruling

In analyzing the procedure for reviewing the materials, the court noted that discovery in federal courts generally is governed by the Federal Rules of Civil Procedure and that Rule 501 provides that federal privilege law controls in cases proceeding under federal question jurisdiction. "Here, federal law provides the rule of decision for the EMTALA claim but not the state law negligence claims… The court perceives two issues regarding whether the peer review documents must be produced: 1) are they relevant to the subject matter, and 2) are they otherwise privileged?"

Failure to properly diagnose a medical condition cannot serve as the basis for a violation of EMTALA's Requirements…[nor does EMTALA] hold hospitals accountable for failing to stabilize conditions of which they are not aware, or even conditions of which they should have been aware. The court, therefore, reasoned that "[w]hether Gabrielle Etter received an appropriate screening examination and stabilizing treatment can be established from the medical records, Delta Hospital's policies and procedures, and deposition testimony."

Although all fifty states and the District of Columbia have recognized some form of medical peer review privilege, the federal court noted that Congress has declined to extend the peer review privilege to materials produced by medical peer reviews. It also affirmed other federal court precedent that "where medical peer review materials are relevant only to state law negligence claims and not to an EMTALA claim, state privilege law applies and peer review materials are privileged."

While the court considered that the Etters' request for production of the peer review records may be relevant to the EMTALA claim, the court was not persuaded that all peer review documents would be relevant to the subject matter of the plaintiffs' EMTALA claim. "The other peer review documents sought by Plaintiffs do not inform the query relevant to EMTALA liability, that is, how Delta Hospital treated other patients with similar symptoms…Any additional peer review documents are not likely to lead to admissible evidence regarding the EMTALA claim, as 'EMTALA does not guarantee that the hospital's emergency room personnel will correctly diagnose a patient's condition as a result of the emergency room screening.'"

Given the restricted relevance the peer review materials had to plaintiffs' EMTALA claim and Fed. R. Evid. 501's recognition of

continued on page 5

Editor's Letter - continued from page 2

for the conversation, and asked if I could find him a cup of coffee while he waited for that ride.

I thought to share this story as part of my first assistant editor's letter as it struck a personal cord in my career as an emergency medicine physician. Amidst all of the debate about best practice, implementation of EMR's, talk about changes to insurance reimbursement, and government directed takeover of the medical establishment…the elderly gentleman reminded me of why many of us got into medicine - the people, the individuals, what makes them who they are and not just another diagnosis or disposition. It's the one and only concept that will never change in our professional practice…a concept full of rewards that we need to keep in focus throughout our career.

As the gentleman was being escorted out of the ED by the ambulance crew, he looked over and we exchanged salutes. He probably did not know that I was saluting him for more than his service to country. He essentially was the answer to the question "Do you like your job?" At this time, I salute the members of AAEM and what you do every time you step into the role of an emergency medicine physician. I look forward to serving in my new position as assistant editor for AAEM's *Common Sense* publication. Dr. David Vega, chief editor, and the many contributors continue to put forth a valuable resource for the members of AAEM and the emergency medicine community. I sincerely look forward to connecting with you amongst the pages of *Common Sense* and within the mission of AAEM.

Washington Watch - continued from page 4

state law privilege when state law provides the rule of decision, the court determined that plaintiffs were entitled to production of the peer review records limited to Gabrielle Etter and other patients presenting at the emergency department with similar symptoms and conditions. After reviewing *in camera* (i.e., a private examination with the judge of confidential or sensitive information) the tendered peer review documents, the court determined that only certain pages of the hospital peer review records were relevant to plaintiffs' claim of EMTALA violations and thus were discoverable. Accordingly, the court ordered that the Etters' "Motion to Compel Documents" from DCMH was properly produced to Plaintiffs, but in all other respects, plaintiffs' motion was denied.

To read the full text of the decision, go to http://law.justia.com/cases/federal/district courts/colorado/codce/1:2010cv00557/118195/75.

EMTALA case synopses prepared by Terri L. Nally, Principal, KAR Associates, Inc.

AAEM Antitrust Compliance Plan:

As part of AAEM's antitrust compliance plan, we invite all readers of *Common Sense* to report any AAEM publication or activity which may restrain trade or limit competition. You may confidentially file a report at info@aaem.org or by calling 800-884-AAEM.

2011 100% ED Groups

We would like to recognize and thank the following ED groups for participating in our 2011 100% ED Group Membership. We sincerely appreciate the enthusiastic and continuous support of these physicians and their groups.

- Bay Care Clinic LLP – WI
- Campbell County Memorial Hospital – WY
- Cascade Emergency Associates – WA
- Chesapeake Regional Medical Center – VA
- Drexel University – PA
- Eastern Carolina Emergency Physicians (ECEP) – NC
- Edward Hospital – IL
- Emergency Specialists of Oregon (ESO) – OR
- Fort Atkinson Emergency Physicians (FAEP) – WI
- Fredericksburg Emergency Medical Alliance, Inc – VA
- Memorial Medical Center – IL
- Northeast Emergency Associates – MA
- OSF Saint Anthony – IL
- Physicians Now, LLC – VA
- Salinas Valley Memorial Hospital – CA
- Santa Cruz Emergency Physicians (SCEP) – CA
- Southern Colorado Emergency Medical Assoc (SCEMA) – CO
- Space Coast Emergency Physicians – FL
- Temple University Hospital – PA
- University of Louisville – KY
- West Jefferson Emergency Physician Group – LA

AAEM ED Group Membership NEW AND IMPROVED!

AAEM instituted group memberships to allow hospitals/groups to pay for the memberships of all their EM board certified & board eligible physicians. Each hospital/group that participates in the group program will now have the option of two ED Group Memberships.

- 100% ED Group Membership - receives a 10% discount on membership dues. All board certified and board eligible physicians at your hospital/group must be members.
- ED Group Membership - receives a 5% discount on membership dues. 2/3 of all board certified and board eligible physicians at your hospital/group must be members.

For these group memberships, we will invoice the group directly. If you are interested in learning more about the benefits of belonging to an AAEM ED group, please visit us at www.aaem.org or contact our membership manager at info@aaem.org or (800) 884-2236.

2012 Membership Applications Now Being Accepted!

Plan ahead for your future. Secure your AAEM membership at the price of $365 per year. Full voting multi-year memberships now available for up to 10 years.

Have You Set Up Your Member's Login Account?

- Check your membership status or payment history
- Update your contact information
- Pay your membership dues
- Register for upcoming events

To set up your initial login account,
please visit http://aaem.execinc.com/edibo/LoginHelp.
Please contact info@aaem.org or 800-884-2236 with any questions.

American Board of Emergency Medicine

3000 Coolidge Road
East Lansing, Michigan 48823-6319

517.332.4800
fax 517.332.2234
www.abem.org

December 15, 2011

Howard Blumstein, M.D., President
American Academy of Emergency Medicine
555 East Wells Street, Suite 1100
Milwaukee, WI 53202-3823

Dear Dr. Blumstein:

The American Board of Emergency Medicine read the recent article in Common Sense—The Value of Board Certification and Residency Training in Emergency Medicine—with great interest. The review was shared with all of our directors. Please extend our appreciation to all of the authors. We feel that the evidence was well-presented and quite supportive. We agree with the authors' conclusion that board certification and appropriate training enhance the quality of care delivered to our nation's ill and injured.

My Warmest Regards,

Earl J. Reisdorff, M.D.
Executive Director

EJR/vmd
F:\S\ABR\Associations\AAEM\2011\Response to Common Sense Article-December.doc

cc: Richard N. Nelson, M.D., ABEM President
Heatherlee Bailey, M.D.

American Board of Emergency Medicine
2012 Subspecialty Application Cycles and Certification Examinations

Emergency Medical Services
Diplomates of any American Board of Medical Specialties Member Board can now become board certified in Emergency Medical Services (EMS). The first certification examination will be administered in the fall of 2013. Eligible diplomates have three application pathways to certification: a practice pathway, practice-plus-training pathway, and a training pathway. ABEM will accept applications between October 1, 2012 and June 30, 2013.

Hospice and Palliative Medicine
The American Board of Internal Medicine (ABIM) will administer the certifying examination in Hospice and Palliative Medicine on October 4, 2012. Physicians may apply through one of four pathways – ACGME-accredited fellowship training in Hospice and Palliative Medicine, unaccredited fellowship training in Hospice and Palliative Medicine, practice-plus-training, and past certification with the American Board of Hospice and Palliative Medicine (ABHPM). Application pathways through unaccredited fellowship training, practice-plus-training, or past certification with ABHPM will end June 1, 2012.

Internal Medicine-Critical Care Medicine
Diplomates of the American Board of Emergency Medicine (ABEM) now have the ability to become board certified in Critical Care Medicine (CCM). On September 21, 2011, at the General Assembly meeting of the American Board of Medical Specialties (ABMS), a joint program between the American Board of Internal Medicine (ABIM) and ABEM was unanimously approved. Emergency physicians can now supplement their Emergency Medicine residency training by participating in Internal Medicine–sponsored Critical Care Medicine (CCM) fellowships. Upon completion of CCM training, these individuals would be eligible to seek board certification. ABEM will issue the CCM certificate to its diplomates, but the certificate would indicate that the standards are the same as those of ABIM.

The ABIM will administer the certifying examination in Critical Care Medicine on November 14, 2012. ABEM will accept applications between March 1 and June 1, 2012.

Medical Toxicology
ABEM will administer the certifying examination in Medical Toxicology on November 12, 2012. ABEM diplomates and diplomates of ABMS boards other than the American Board of Pediatrics (ABP) and the American Board of Preventive Medicine (ABPM) may apply to ABEM if they have completed an ACGME-accredited two-year fellowship program in Medical Toxicology. ABEM will accept applications between January 16 and April 16, 2012. Diplomates of ABP or ABPM must submit their applications through ABP and ABPM, respectively.

Sports Medicine
The American Board of Family Medicine (ABFM) will administer the certifying examination in Sports Medicine July 19 – 21, 2012. ABFM will also administer the examination to specifically designated candidates November 7 through 12, 2012. Contact ABEM for additional information on the November examination. ABEM diplomates who have completed ACGME-accredited fellowship training in Sports Medicine must submit their Sports Medicine applications to ABEM between February 1 and June 1, 2012, if they wish to take the examination in July.

Undersea and Hyperbaric Medicine
The American Board of Preventive Medicine (ABPM) will administer the certifying examination in Undersea and Hyperbaric Medicine October 1 through 12, 2012. ABEM diplomates who have completed ACGME-accredited fellowship training in Undersea and Hyperbaric Medicine must submit their Undersea and Hyperbaric Medicine applications to ABEM between March 1 and July 2, 2012.

To request a certification application for one of these subspecialties, please write or call the ABEM office. Eligibility criteria for ABEM diplomates are available on the ABEM website, www.abem.org.

AMERICAN BOARD OF EMERGENCY MEDICINE
3000 Coolidge Road
East Lansing, MI 48823-6319
Telephone: 517.332.4800
Fax: 517.332.4853

Recognition Given to Foundation Donors

Levels of recognition to those who donate to the AAEM Foundation have been established. The information below includes a list of the different levels of contributions. The Foundation would like to thank the individuals below that contributed from 11/20/11 to 2/19/12.

AAEM established its Foundation for the purposes of (1) studying and providing education relating to the access and availability of emergency medical care and (2) defending the rights of patients to receive such care, and emergency physicians to provide such care. The latter purpose may include providing financial support for litigation to further these objectives. The Foundation will limit financial support to cases involving physician practice rights and cases involving a broad public interest. Contributions to the Foundation are tax deductible.

MEMBER

Kevin Beier, MD FAAEM
Crystal Cassidy, MD FAAEM
Robert M. McNamara, MD FAAEM
Lillian Oshva, MD FAAEM

DONOR

William T. Durkin, Jr., MD MBA FAAEM
Albert L. Gest, DO FAAEM

CONTRIBUTOR

Steven Aks, MD FAAEM
Senthil Alagarsamy, MD FAAEM
Leonardo L. Alonso, DO FAAEM
Terence J. Alost, MD MBA FAAEM
Jonathan D. Apfelbaum, MD FAAEM
Carmelito Arkangel, Jr., MD
W. Lynn Augenstein, MD FAAEM
Kian J. Azimian, MD FAAEM
Dudley C. Backup, MD FAAEM
Jennifer L. Baker, MD FAAEM
Garo Balkian, MD FAAEM
William M. Barnett, MD FAAEM
Paul S. Batmanis, MD FAAEM
John W. Becher, DO FAAEM
Brian F. Beirne, DO FAAEM
Philliph I. Bialecki, MD MHE FAAEM
Brent A. Bills, MD FAAEM
Vincent M. Blum, MD FAAEM
Leo R. Boggs, Jr., MD FAAEM
Michael A. Bohrn, MD FAAEM
Kevin J. Bonner, MD FAAEM
Eric W. Brader, MD FAAEM
Antonio L. Brandt, MD FAAEM
Shaun D. Brennan
J. Allen Britvan, MD FAAEM
Kevin Robert Brown, MD FAAEM
David P. Bryant, DO FAAEM
Leo W. Burns, MD FAAEM
Linda B. Burns, MD FAAEM
Mark Burr, MD JD FAAEM
Bruce R. Bush, MD FAAEM
Anthony J. Callisto, MD FAAEM
John W. Cartier, MD FAAEM
Carlos H. Castellon, MD FAAEM FACEP
Jeffrey J. Chambers, MD FAAEM
David C. Chapman, MD FAAEM
Donald A. Chiulli, MD FAAEM
William B. Chung, MD FAAEM
Garrett Clanton, II, MD FAAEM
Joseph E. Clinton, MD FAAEM
Jordan Yechiel Cohen, MD FAAEM
Thomas R. Coomes, MD FAAEM
Gaston A. Costa, MD
Steven K. Costalas, DO FAAEM
David C. Crutchfield, MD FAAEM
Lara J. De Nonno, MD FAAEM
Anthony J. Dean, MD FAAEM
Vincenz L. DeCastro
Francis X. Del Vecchio, MD FAAEM
Manuel J. Delarosa, MD FAAEM
Jonethan P. DeLaughter, DO FAAEM
Anthony B. DeMond, MD
Pierre G. Detiege, MD FAAEM
Matthew D. Dickson, DO FAAEM
Robert L. Dickson, MD FAAEM
Steven E. Diebold, MD FAAEM
Jeff D. Disney, MD FAAEM
California R. Do, MD FAAEM
Aaron D. Dora-Laskey, MD FAAEM
Christopher I. Doty, MD FAAEM
Eustace L. Edwards, III, MD FAAEM
Carolann Eisenhart, MD FAAEM
Sundeep Jayant Ekbote, MD FAAEM
Michael S. Euwema, MD FACEP FAAEM
David A. Farcy, MD FAAEM FCCM
Neal N. Faux, MD FAAEM
Michael J. Federline, MD FAAEM
James E. Ferguson, MD FAAEM
Clifford J. Fields, DO FAAEM
Jeffrey L. Fitch, MD FAAEM
Mark A. Foppe, DO FAAEM
Ryan P. Frank, DO FAAEM
Kevin T. Franks, DO FAAEM
William T. Freeman, MD FAAEM
Robert A. Frolichstein, MD FAAEM
Paul W. Gabriel, MD FAAEM
Gary M. Gaddis, MD PhD FAAEM
Uyo E. Gallo, MD FAAEM
David E. Garces, MD FAAEM
Robert Bruce Genzel, MD FAAEM
Kathryn Getzewich, MD FAAEM
Samuel H. Glassner, MD FAAEM
Brad S. Goldman, MD FAAEM
John G. Gomez, MD FAAEM
Matthew C. Gratton, MD FAAEM
Michael N. Habibe, MD FAAEM
Dennis P. Hanlon, MD FAAEM
Jack L. Harari, MD JD FAAEM
Mark J. Harrell, MD FAAEM
Floyd Wright Hartsell, MD FAAEM
Ross A. Heller, MD FAAEM
Mel E. Herbert, MD FAAEM
Edward W. Hessel, MD FAAEM
Matthew P. Hevey, MD FAAEM
Patrick B. Hinfey, MD FAAEM
Andrew LP Houseman, MD FAAEM
Randall A. Howell, DO FAAEM
Joseph C. Howton, MD FAAEM
Timothy J. Huschke, DO FAAEM
Matt K. Hysell, MD FAAEM
Behram Irani, MD FAAEM
Leland J. Irwin, MD FAAEM
Howard E. Jarvis, III, MD FAAEM
Andrew S. Johnson, MPH FAAEM
Carroll Don Johnson, MD FAAEM
Dominic A. Johnson, MD FAAEM
Donn E. Johnson, MD FAAEM
Michael N. Johnston, MD FAAEM
P. Scott Johnston, MD FAAEM
Jonathan S. Jones, MD FAAEM
Colin G. Kaide, MD FAAEM
Shammi R. Kataria, MD FAAEM
Kathleen P. Kelly, MD FAAEM
Sara E. Kelly, DO FAAEM
John H. Kelsey, MD FAAEM
Lenard M. Kerr, DO FAAEM
Eric M. Ketcham, MD FAAEM
Scott K. C. King, MD FAAEM
Michael Klein, MD FAAEM
Kevin P. Kooiker, MD FAAEM
Ron Koury, DO FAAEM
Gerhard Anton Krembs, MD FAAEM
Steven L. Kristal, MD FAAEM
Stephen Lamsens, MD FAAEM
Gregory G. Lawson, MD
Stanley L. Lawson, MD FAAEM
Theodore G. Lawson, MD FAAEM
Linh T. Le, MD FAAEM
Benjamin W. Leacock, MD FAAEM
Alexander D. Lee, MD FAAEM
R. Sean Lenahan, MD FAAEM
Aaron P. Lentz, MD FAAEM
Stephen R. Levinson, MD FAAEM
David G. Lindquist, MD FAAEM
Bruce E. Lohman, MD FAAEM
Christopher M. Lombardozzi, MD FAAEM
Manuel E. Lopez Diaz, MD FAAEM
Gregory J. Lopez, MD FACEP FAAEM
John W. Love, MD FAAEM
Freda Lozanoff, MD DO FAAEM
Maja L. Lundborg-Gray, MD FAAEM
John F. Madden, MD FAAEM
Nidhi Mahendru, DO FAAEM
Gerald E. Maloney, Jr., DO FAAEM
Edmundo Mandac, MD FAAEM
John R. Matjucha, MD FAAEM
Amal Mattu, MD FAAEM
Dan M. Mayer, MD FAAEM
Douglas W. McFarland, MD FAAEM
Robert Mcloughlin
Russell H. McUne, MD FAAEM
David E. Meacher, MD FAAEM
James J. Mensching, DO FAAEM
Graham Scott Meyer, MD FACEP FAAEM
Charles Chris Mickelson, MD FAAEM
Trevor Mills, MD FAAEM
Peter B. Mishky, MD FAAEM
Jeffrey Alan Moore, MD FAAEM
Teresita Morales-Yurik, MD FAAEM
Lisa Moreno-Walton, MD MSCR FAAEM
Claud E. Morgan, MD FAAEM
Jason C. Morgan, MD FAAEM
Sergey M. Motov, MD FAAEM
Andre J. Mouledoux, Jr., MD FAAEM
Deborah R. Natale, MD FAAEM
Michelle S. Nathan, MD FAAEM
James A. Newman, MD FAAEM
Juan M. Nieto, MD FAAEM
Vicki Norton, MD FAAEM
Marcus Obeius, DO FAAEM
Paul D. O'Brien, MD FAAEM
James V. Pavlich, DO FAAEM
Hector L. Peniston-Feliciano, MD FAAEM
Jeffery M. Pinnow, MD FAAEM
Scott H. Plantz, MD FAAEM
Brian R. Potts, MD MBA FAAEM
John T. Powell, MD FAAEM
Michael S. Pulia, MD FAAEM
Nadeem Qureshi, MD FAAP FCCM
Vitaut N. Ragula, MD FAAEM
Scott A. Ramming, MD FAAEM
Kim Raney-Ciofani, MD FAAEM
Kevin C. Reed, MD FAAEM
Jeffrey A. Rey, MD FAAEM
Matthew P. Rhames, MD FAAEM
Liston M. Rice, III, MD FAAEM
Phillip L. Rice, Jr., MD FAAEM
Thomas A. Richardson, MD FAAEM
Jake Roberts, DO FAAEM
Kevin G. Rodgers, MD FAAEM
Edgardo M. Rodriguez, MD FAAEM
David S. Rosen, MD MPH FAAEM
Steven B. Rosenbaum, MD FAAEM
Marc N. Roy, MD FAAEM
Eric M. Rudnick, MD FAAEM
Brad L. Sandleback, MD FAAEM

continued on page 9

Upcoming AAEM–Sponsored and Recommended Conferences for 2012

AAEM is featuring the following upcoming sponsored and recommended conferences and activities for your consideration. For a complete listing of upcoming endorsed conferences and other meetings, please log onto http://www.aaem.org/education/conferences.php

AAEM–Sponsored Conferences

May 16-18, 2012
Inter-American Emergency Medicine Conference
Panamericano Buenos Aires Hotel
Buenos Aires, Argentina
http://www.aaem.org/education/iaemc/

October 3-4, 2012
AAEM Pearls of Wisdom Oral Board Review Course
Las Vegas, NV
www.aaem.org

October 20-21, 2012
AAEM Pearls of Wisdom Oral Board Review Course
Chicago, Dallas, Los Angeles, Orlando, and Philadelphia
www.aaem.org

October 23-26, 2012
Pan-Pacific Emergency Medicine Congress (PEMC)
Coex Convention and Exhibition Center
Seoul, South Korea
http://www.pemc2012.org

February 11-13, 2013
19th Annual Scientific Assembly
The Cosmopolitan Resort and Casino
Las Vegas, NV

Do you have an upcoming educational conference or activity you would like listed in *Common Sense* and on the AAEM website? Please contact Marcia Blackman to learn more about the AAEM endorsement approval process: mblackman@aaem.org.

All sponsored and recommended conferences and activities must be approved by AAEM's ACCME Subcommittee.

AAEM–Recommended Conferences

May 9-12, 2012
SAEM Annual Meeting
Chicago, IL
http://am2012.saem.org

May 18-20, 2012
The Difficult Airway Course-Emergency™
Boston, MA
www.theairwaysite.com

May 23-25, 2012
High Risk Emergency Medicine- San Francisco
San Francisco, CA
www.highriskem.com

June 8-10, 2012
The Difficult Airway Course-Emergency™
Chicago, IL
www.theairwaysite.com

June 27-30, 2012
14th Annual International Conference on Emergency Medicine
Dublin, Ireland
www.icem2012.org

September 21-23, 2012
The Difficult Airway Course-Emergency™
Seattle, WA
www.theairwaysite.com

October 26-28, 2012
The Difficult Airway Course-Emergency™
Atlanta, GA
www.theairwaysite.com

November 16-18, 2012
The Difficult Airway Course-Emergency™
Las Vegas, NV
www.theairwaysite.com

AAEM
Young Physicians Section

Invested in your future.

Call for Mentors

Find us on Facebook

Interested in shaping the future of emergency medicine? YPS is looking for established AAEM members to serve as volunteers for our virtual mentor program.

For more information, visit http://www.ypsaaem.org/mentors/ or contact us at info@ypsaaem.org.

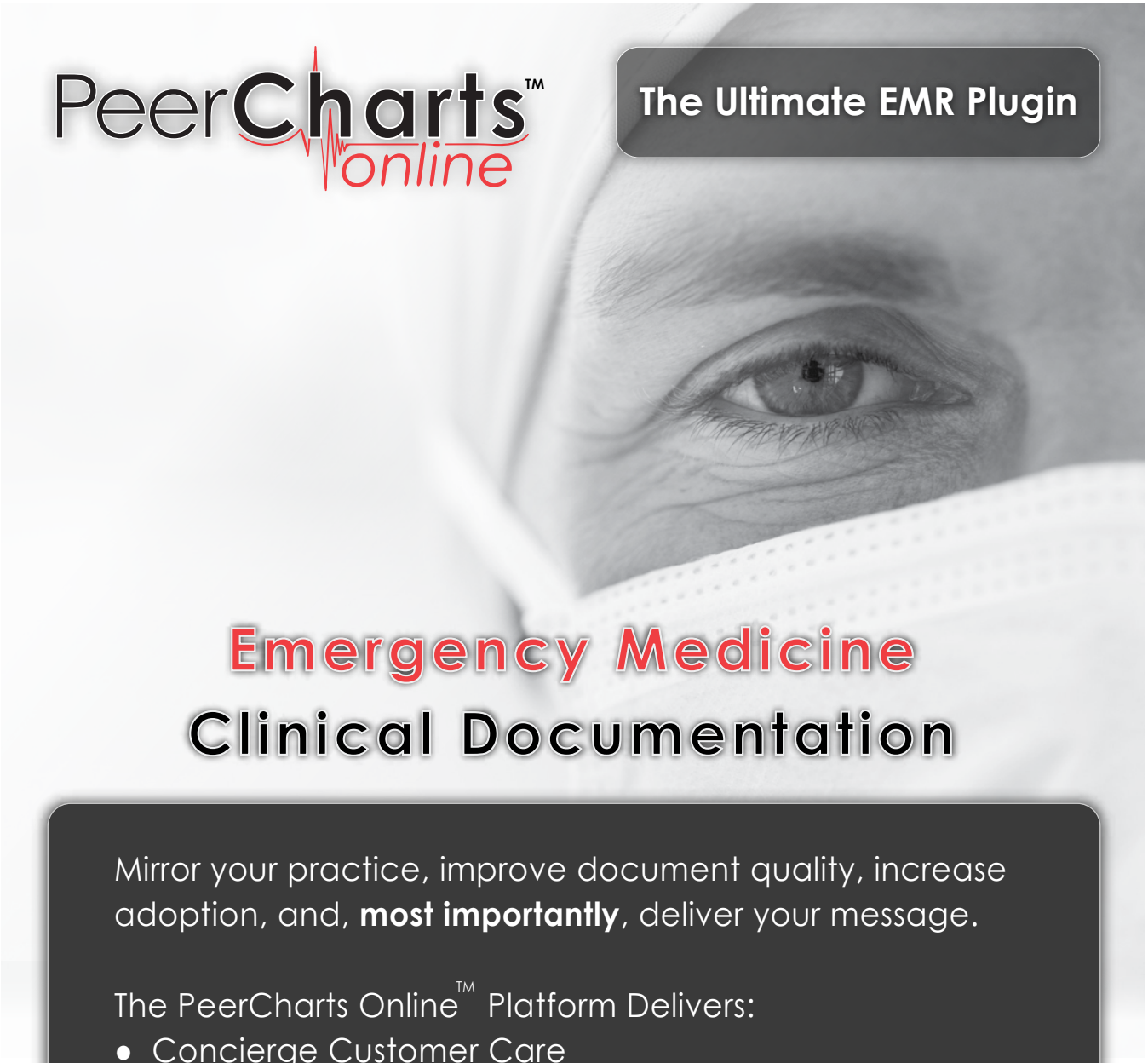
YPS membership not required.

Recognition Given to Foundation Donors - continued from page 8

Tom Scaletta, MD FAAEM
C. Blake Schug, MD FAAEM
Sarah B. Serafini, MD FAAEM
Philip R. Sharp, MD FAAEM
Richard D. Shih, MD FAAEM
Jonathan F. Shultz, MD FAAEM
Michael E. Silverman, MD FAAEM FACEP
Mark O. Simon, MD FAAEM
Larry L. Simpson, MD FAAEM
Roman Skylar, MD FAAEM
Michael Slater, MD FAAEM
Robert D. Slay, MD FAAEM
Evans S. Smith, MD FAAEM
Ryan J. Smith, MD
Donald L. Snyder, MD FAAEM
Stefan O. Spann, MD FAAEM
Matthew T. Spencer, MD FAAEM
Keith D. Stamler, MD FAAEM
David R. Steinbruner, MD FAAEM
Nathan Stephens, DO
Joel B. Stern, MD FAAEM
Timothy D. Sturgill, MD FAAEM
James J. Suel, MD FAAEM
Gregory J. Sviland, MD FAAEM
Richard J. Tabor, MD FAAEM
Zachary Tebb, MD FAAEM
Mark D. Thompson, MD FAAEM
Martin R. Tice, MD FAAEM
Robert Boyd Tober, MD FAAEM
Douglas E. Todd, MD FAAEM
David Touchstone, MD FAAEM
Owen T. Traynor, MD FAAEM
Matthew W. Turney, MD FAAEM
Phyllis A. Vallee, MD FAAEM
Patricia L. VanDevander, MD MBA FAAEM
Arlene M. Vernon, MD FAAEM
Christopher P. Visser, MD FAAEM
Matthew J. Vreeland, MD FAAEM
Roland S. Waguespack, III, MD FAAEM
James S. Walker, DO FAAEM
Steven M. Walkotte, MD FAAEM
Marvin A. Wayne, MD FAAEM
Benjamin Wedro, MD FAAEM
Kay Whalen
Brian J. Wieczorek, MD FAAEM
William David Wilcox, MD FAAEM
Joanne Williams, MD FAAEM
Janet Wilson
Shawn P. Wilson, MD FAAEM
Richard Clarke Winters, MD FAAEM
Emily Wolff, MD FAAEM
Samuel Woo, MD FAAEM
Patrick G. Woods, MD FAAEM
George Robert Woodward, DO FAAEM
Mark E. Zeitzer, MD FAAEM FACEP
Michael F. Zorko, MD FAAEM

PeerCharts™ online

The Ultimate EMR Plugin



Emergency Medicine
Clinical Documentation

Mirror your practice, improve document quality, increase adoption, and, **most importantly**, deliver your message.

The PeerCharts Online™ Platform Delivers:

- Concierge Customer Care
- Personalized Content to Mirror Your Practice
- Simple and Convenient EMR/EDIS Interoperability
- Flexible Click, Talk, Type™ Input
- Single-Click Clinical History
- Maximum Efficiency at Minimum Cost
- SaaS Platform Simplicity (no installation; low initial cost; secure anywhere access)

EvolveMed
175 West 200 South #4004, Salt Lake City, UT 84101 ● 800.301.4901
www.peercharts.com

A Vision for the Future of YPS

Jennifer Kanapicki, MD FAAEM
YPS Secretary/Treasurer

The AAEM Young Physician's Section (YPS) was established in 2006 to assist our young members as they transition through the early years of independent practice. The past five years have seen exponential growth for this section, and each year the board of directors has worked hard to provide more resources and opportunities for our members. We have created the CV & Cover Letter Review to perfect your CV. We have established the Mentor Program that pairs you up with a seasoned physician that can offer career advice and guidance. Want to break into the lecture circuit as a young physician? We have helped sponsor Open Mic at Scientific Assembly that gives you this chance. (You can find information about all our member benefits at www.ypsaaem.org).

We are very proud of what we have to offer...but still want to give you more. This led us to creating the 2011 Membership Survey we sent out asking you, our members, about what type of offerings you would like to see in the future. Here are the top five topics that came up and what we are doing about them.

1. Legislation

In our survey, nearly 85% of our members said they joined YPS to learn more about the issues being supported by AAEM, with an outstanding 90% wanting to receive updates on important legislation.

We at AAEM pride ourselves in offering you a "one-stop" shop for federal legislative and regulatory information: The Legislative Action Center. This part of our website contains information on the important policy issues that AAEM is tracking for you. You can search congressional databases by name, state, committee, or leadership, and send messages to your legislators directly from the site. You can access information on elections and candidates (especially important given the upcoming presidential race). We even have a media guide to help you find your local news sources. Stay informed. Sign up on this website for AAEM email alerts to receive information on important policy issues or pieces of legislation that arise. Our Legislative Action Center can be found as a link under the advocacy page accessed through www.AAEM.org or you can go to http://capwiz.com/aaem/home/.

Current news and updates
can now be found on the AAEM website
www.aaem.org

2. Networking opportunities

50% of YPS members want more networking opportunities, and to help we have established an email listserv and Facebook fan page. Both offer a chance to interact with other YPS members, and we encourage you to post any topics of interest to start the conversation. Hopefully these will be a place members can use to ask questions to their colleagues, stimulate discussions, and allow for brainstorming.

Also part of increasing networking opportunities are mixers. Members want more opportunities to interact with their peers. Keep checking our website for updated information on our next social venture.

3. More CME events

80% of our members said they were "somewhat likely or very likely" to attend a CME event. The majority people would like to see one every year. Chicago was the most popular choice for a midwest event so we are tentatively planning an event for August 2012 in the Windy City. Be on the lookout for more details this spring.

4. Mentoring

Our mentoring program is designed to provide young physicians with an opportunity to be paired with a seasoned physician who can offer advice, share experiences, and provide career guidance. According to the survey, nearly 25% of members had "never heard of it." We want to change this! We hope to reach out to more people so they can utilize this amazing benefit. We are currently expanding our mentor pool and hope to automatically enroll recent residency graduates in the program. If you haven't already done so, become a mentor/mentee at: http://www.ypsaaem.org/mentors/.

5. Access to publish in AAEM's *Common Sense* Newsletter

Almost half of our members found access to publish in AAEM's *Common Sense* newsletter "very valuable." However, in reality there haven't been many submissions from our members. To help motivate and inspire you to pick up your pens, we are implementing a contest that will award a $25 gift card and year of free membership to any YPS member whose article is accepted for publication in *Common Sense*. So, please write for us! We are always looking for new people to add their knowledge and opinions to *Common Sense*. Please contact info@ypsaaem.org for information and submission.

In summary, you, our members, have spoken and we, your board, are listening. We are always striving to make YPS better for you and fully plan to make your ideas reality. Please browse our website, and take advantage of all we have to offer. You want something I didn't mention? We accept late submissions, so write us and let us know.

Attention YPS and Graduating Resident Members

CV & Cover Letter Review

Are you ready?

Enhance your credentials.
Increase your job opportunities.

The AAEM Young Physicians Section (YPS) is excited to offer a new curriculum vitae review service to YPS members and graduating residents.

The service is complimentary to all YPS members. If you are not a YPS member, visit us at www.ypsaaem.org to join and learn about the additional membership benefits.

FAAEM
always means
board certified

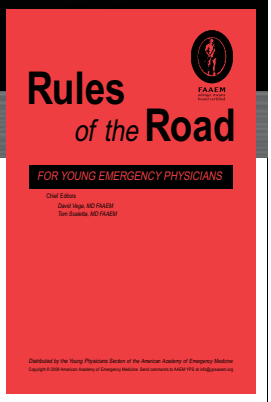
For graduating residents, a $25 Service Fee is required, which will be applied to your YPS dues if you join AAEM as an Associate or Full Voting Member. This offer is only valid for the year following your residency graduation.

For more information about YPS or the CV Review service, please visit us at www.ypsaaem.org or contact us at info@ypsaaem.org.

The Young Physicians Section (YPS) presents

Rules of the Road
for Young Emergency Physicians

$25.00 for AAEM members (plus shipping & handling)
$50.00 for non-members (plus shipping & handling)



- All YPS members receive a complimentary copy
- Sponsored by:
  EMSeminars: www.emseminars.com
  Emergency Excellence: www.emergencyexcellence.com
- For more information visit www.ypsaaem.org or contact us at info@ypsaaem.org.

Now Available!

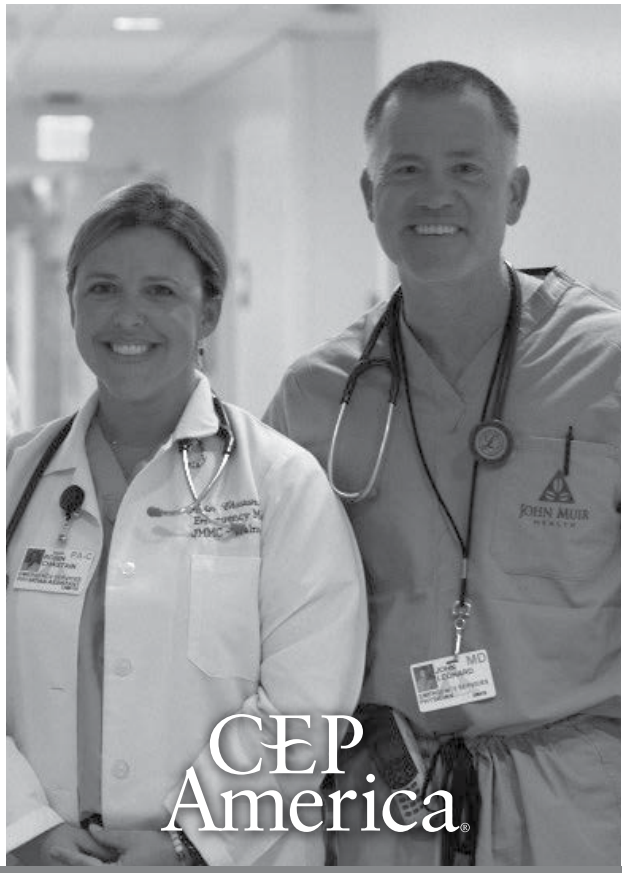
Ahead of the Curve, Without the Cost

As the challenges of keeping up with healthcare reform rise, many independent physician groups struggle with the increasing complexity of managing the ED.

CEP America is here to help. Partner with the leading democratic emergency medicine group in the U.S. and be part of a team that believes in democracy, transparency, excellent practice support, and individual site autonomy.

"We feel empowered as valued members of our local group and as equal Partners in CEP America. Among our successes in the past years, we can count improved relations with administration, nursing, and the medical staff–all which contribute to excellent job satisfaction for each one of us."

-Laura J. Mellick, MD
Adventist Medical Center, Portland, OR
(Joined CEP America in 2005)



Visit **info.cep.com/independent** for more information

RESIDENT PRESIDENT'S MESSAGE

2012 Brings New Projects for AAEM/RSA

Teresa M. Ross, MD
AAEM/RSA President

JM is a 35yo female with a history of recurrent migraines.

As instructed by her neurologist, she takes ibuprofen for minor headaches and reaches for her Imitrex (sumatriptan) when she feels the building aura and temporal throbbing that signals a true migraine. Every 6 months or so, even two doses of sumatriptan fails to control her severe headache, at which time her husband drives her to the emergency department, her head buried in her knees, for rescue medication. By the time she arrives, she is sometimes vomiting from the intensity of her pain.

Typically, an IV is placed, and she receives IV ketorolac and IV prochlorperazine. She then rests in a dark room, and within 20 minutes, the pain and nausea subside. Within 2 hours, she is home, feeling better. This is not an unexpected outcome: IV administration of prochlorperazine is first line treatment for migraine in the emergency department according to the American Academy of Neurology 2000 migraine guidelines.[1]

The other week, JM was unable to get her usual medications, due to a nationwide shortage of IV prochlorperazine. Could she take the medication by mouth? It was still available PO, the nurse offered. Looking at JM gagging into her plastic emesis bag, we determined the answer was definitely no. Now what?

And so the nationwide issue of drug shortages, pharmaceutical company disclosures, and FDA (Federal Food and Drug Administration) oversight comes to life for another patient.

The issue of drug shortages is finally receiving attention in Congress, with two active House and Senate bills (H.R. 2445/S. 296) striving to add enforcement to an October executive order that pushed to condemn drug stockpiling and improve drug shortage reporting.[2, 3] A bipartisan Senate working group is investigating root causes of the drug shortages, and a Utah senator is drafting another bill to add financial incentives to proposed enforcements.[4] The *New England Journal of Medicine (NEJM)* published a strong call to action for legislators and pharmaceutical companies to rise to public obligation and meet demand of critical generic drugs.[5]

As physicians, we should care. As emergency physicians, we must care. AAEM/RSA's Advocacy Committee is working to show why this issue needs to be on our radar: drug shortages don't just affect patients – they now affect OUR patients and OUR treatment choices. In order to advocate for patients like JM, we must familiarize ourselves with a growing list of unavailable medications and the surrounding issues.

Between 2009 and 2010, the list of drugs on shortage grew from 157 to 178 and currently exceeds 275 FDA approved therapies.[4] Originally comprised of mostly anesthetic and oncologic drugs, the list is creeping into our domain: black widow spider venom, calcium chloride, etomidate, fentanyl, furosemide, ketorolac, labetalol, ondansetron, phenytoin, prochlorperazine and rabies immunoglobulin.[6] The majority of the medications are for IV use, and the suspicion is that the cost to produce these generic drugs outweighs the negotiated reimbursement by most hospital or insurance systems – in particular, Medicare.

What is the impact of these shortages? Few of these medications have adequate alternatives by function or cost. Change is also prone to error. This crisis means worse outcomes for our patients, increased risk of medical error, increased costs for caregivers and taxpayers, and a general undermining of confidence in our country's health care system. According to research by Premier, drug shortages could cost U.S. hospitals at least $415 million annually.[4] The *NEJM* cited expert opinion that federal government pricing and rebate programs are a significant contributing factor to the current drug shortage crisis.[5] Many U.S. pharmaceutical companies earn more by selling their generic drugs abroad.

What's been done? President Obama's executive order on "Reducing Prescription Drug Shortages" heightened reporting requirements for potential manufacturing shortages, in particular for "critical drugs" - those that are life supporting or life sustaining, or that prevent debilitating disease. The order also instructed the FDA to accelerate reviews of new applicants seeking to enter the generic market and to inform the Justice Department about possible collusion or price gouging related to the shortages.

House bill H.R. 2445 and Senate bill S. 296 are now on the table to further strengthen the executive order. They propose a formal six month notice for manufacturing shortages of "critical drugs" and heighten enforcement by empowering the FDA to expand its Drug Shortage Program (DSP). Currently, only three staffers within the FDA DSP handle drug shortages for the entire country, and there is no mandatory reporting.

In the works is a bill by Senator Orrin Hatch (R-Utah) proposing financial incentives for manufacturers to avoid letting drug shortages develop or create contingency plans for when they do. In his December 7 address to Congress, the Senator said he is "working on a solution that will continue to improve coordination between manufacturers and the government, but that also addresses some of the federal price control and rebate structures that prevent the true costs of bringing these important medicines to patients."[4] Options include making drugs on the FDA's Drug Shortage Program temporarily exempt from the heavily discounted Drug Pricing Program.

In the same vein, a recent *New York Times* piece by oncologist and former White House adviser Emanuel Ezekiel proposed that such relaxation of FDA price controls could promise a long-term solution by empowering supply and demand. He writes (regarding cancer drugs), "[o]nce a drug becomes generic, Medicare should stop paying, and it should be covered by a private pharmacy plan. That

continued on page 14

Resident President's Message - continued from page 13

way prices can better reflect the market, and market incentives can work to prevent shortages."[7]

While that may be a viable long-term solution, measures like H.R. 2445 and S. 296 may help patients like JM now. Along with supporting such legislation, we should aim to help to shape it. Of particular significance are the yet-undefined "critical drugs" to be included in Senator Hatch's bill – and AAEM/RSA is on board to help craft the definition to include emergency-relevant drugs.

How do we help? The definition of "critical drugs" is currently determined by the "Regulatory and Legislative Recommendations from the Drug Shortages Summit Steering Group." Historically, this group includes the following associations (because their medications were often listed): American Society of Health-System Pharmacists, the American Hospital Association, the American Society of Anesthesiologists, the American Society of Clinical Oncology, and the Institute for Safe Medication Practices. AAEM/RSA is looking to add our support, because the national shortages are increasingly affecting ER docs, and we believe that our patients' interests need be included in determining what drugs are counted as "critical drugs."

We are on Capitol Hill to introduce our thoughts on critical drugs: what we rely on for sick and dying patients, what we reach for to treat pain safely, and what we need to meet joint commission measures and medical standards of care. Only by communicating with our legislators can we ensure that our interests and the interests of our patients are clearly represented.

For questions or further resources, remember that RSA is *"With you all the way!"*

Dr. Ross welcomes your email correspondence at teresa.ross@medstar.net.

References:

1. Silberstein, Stephen D. "Practice parameter: Evidence-based guidelines for migraine headache (an evidence-based review): Report of the Quality Standards Subcommittee of the American Academy of Neurology." *Neurology* 2000:55; 754.
2. House bill H.R. 2445 and Senate bill S. 296, "Preserving Access to Life-Saving Medications Act."
3. Executive order 13588: "Reducing Prescription Drug Shortages," Oct 31 2011. <http://www.whitehouse.gov/the-press-office/2011/10/31/executive-order-reducing-prescription-drug-shortages>.
4. Address to the United States Senate hearing: "Drug Shortages in America," Senator Orrin Hatch, (R-Utah), Dec 7 2011. <http://www.hatch.senate.gov/public/index.cfm/2011/12/drug-shortages-in-america>.
5. Chabner, Bruce A. "Drug Shortages — A Critical Challenge for the Generic-Drug Market." *N Engl J Med* Dec 8 2011; 365:2147-2149. <http://www.nejm.org/doi/full/10.1056/NEJMp1112633>.
6. American Society of Health-System Pharmacists. "Current Drug Shortage Bulletins." Accessed Dec 28 2011: <http://www.ashp.org/DrugShortages/Current/>.
7. Emanuel, Ezekiel J. "Shortchanging cancer patients." *New York Times,* Opinion; Aug 6 2011. <http://www.nytimes.com/2011/08/07/opinion/sunday/ezekiel-emanuel-cancer-patients.html?_r=1>.

RESIDENT EDITOR'S LETTER

The Advancing Role of Technology in Emergency Medicine Education and Training; An Interview with Mel Herbert, MD FAAEM

Ali Farzad, MD
AAEM/RSA Publications Committee Chair

We are in an age of information explosion, overloaded by an expanding knowledge base that is accelerating at an unprecedented rate. It has been estimated that the world's body of knowledge will double every 35 days by 2015.[1,2] Physicians in particular must be able to process this ongoing onslaught of newly discovered information throughout their careers. As new information arrives and replaces the old, the knowledge base of physicians must be supplemented with new training and opportunities for continued learning. Discovering how to obtain and sustain lifelong learning will be critically important to modern physicians.

There is also a new generation of learners. Students in today's medical schools are primarily "digital natives," in contrast to "digital immigrants, and traditionalists."[1,3,4] Born into a digital world, these young "digital natives" speak the language of technology fluently, as a native tongue. Having grown up with easy access to Google, Wikipedia and digital textbooks/references, these learners use of and attitudes towards technology are dramatically different from those of their parents and teachers, the "digital settlers or immigrants." These are people who learned to use technology after a formal education, before access to computers was available to them - not "born digital" but who now "live digital." They now use digital technologies, but do so "with an accent," typical of someone who has learned a new language as an adult. Lastly, the "traditionalists" grew up without technology and have not embraced it as a core part of their teaching. With most students and residents now being "digital natives," they expect their education to reflect their level of technology integration. Medical schools and residency programs will have to shift their approach to teaching in this digital age, as these new learners will inevitably bring about change in the way their education is structured and delivered.

In this article, I will attempt to explore the advancing role of technology in emergency medicine (EM) education and training by picking the brain of one of our true leaders in EM education. Dr. Mel Herbert has kindly allowed me to ask him a few questions about how EM education and training can be improved through the proper implementation of technology. Dr. Herbert is host of Emergency Medicine: Reviews And Perspectives (EM:RAP), a monthly audio series for all things emergency medicine. Since 2001, EM:RAP has served as the perfect example of how technology can be effectively implemented to make learning easier and more effective. EM:RAP features some of the best speakers in EM who discuss and teach through an effective audio format. It is one of the fastest growing audio publications in emergency medicine with over 8,000 subscribers, and it has recently implemented Web 2.0 technology in a new website that makes it easier to use and learn from than ever before.

Mel Herbert, MD FAAEM

AF: *So Dr. Herbert, please tell us a little bit about yourself and your educational background. Where are you from? Where did you do your training? How did you choose to specialize in emergency medicine?*

Dr. Herbert: I was born in Australia, and in the 1980s, I went from high school straight to medical school in Melbourne, Australia, at Monash Medical School. I took a year off, in 1987, to study abroad and do a bachelors of medical science at UCLA. I worked for NASA during that year, which sounds really cool, but basically it was just hanging rats by their tails. I loved America, and I had a great time here. I knew even then that I wanted to come back to do more training in the U.S. after finishing medical school. As it turned out, I ended up getting married to an American at the end of that year, went back to Australia, and finished medical school. I did a couple years of residency before returning to the states to do an emergency medicine residency. In choosing a specialty, I liked the emergency department the most because I could do my work and then go home; I liked the lifestyle. When I was a student, one of my senior residents told me, "You know I like EM because our patients come in really, really sick, we make them a little less sick, and then we send them upstairs." I thought it was a humorous slant on it, but I liked the idea of being able to deal with everything. I was also very afraid as a student that people would eventually expect me to actually know something. I was afraid that I would witness someone choking during dinner or see someone's kid get hit by a car and that if I was a dermatologist, I would not know what to do. That's a part of EM that I love. It makes me feel like a real doctor. I also love the procedural aspects and generally just like the concept of providing emergency care. Of course, it is not without its problems, but it is just an absolutely wonderful field.

AF: *What do you think about the role of technology in medical training? How about EM education and training, specifically? What are the areas of study that can be supported with technology in your opinion?*

Dr. Herbert: I don't think we have even scratched the surface of what we should to be doing. There are a number of different ways you can divide this up, but I'll try and stick to the stuff that I know. Bill Gates is trying to do this; he has had this revelation, and I share the idea with him. Look, in EM we have close to 170 different residency programs, and in those programs, we are trying to teach residents how to do many different things, be it didactics, professionalism, procedures, etc. In terms of just the raw didactics information that we have to digest, there is a lot of redundancy and inefficiency. It seems crazy to me that a tiny little EM residency program in Mississippi is trying to create and present a didactic program from scratch, while giant programs in L.A. and New York try to do the same thing, yet all individually. Some programs have world experts

continued on page 16

Resident Editor's Letter - continued from page 15

and the absolute best educators in some topics, but these educators are absolutely atrocious in other subjects and topics. This is true everywhere. For every single residency program to try and produce their own didactic program seems labor intensive and inefficient. Instead, what we should strive for is a unified resource consisting of the best speakers, the best lecturers and the best information about EM in one centralized location that is accessible to everyone, everywhere, at anytime.

So, what I am really interested in with EM:RAP, Essentials and some of the other products we are working on, is assimilating the best and most interesting didactic program, available in easily digestible chunks, so then it can be disseminated to everybody. I think it is better for learners to go home and watch a video, interact with it, listen to some audio, then come to rounds or the classroom prepared for discussion and problem-solving sessions. A lot of learning occurs during discussion after the students have had a proper introduction to the basics of a topic, rather than spending a lot of hours just sitting there and passively listening to lecture that may or may not be useful. So I see the future of medical education being benefited by having a collection of the best speakers and best talks easily available to learners in a centralized location so students can learn in their own way, at their own pace, and then apply what they have learned practically in small group sessions at their respective residency programs. That's when the real education will occur.

AF: *How did EM:RAP start? What is the goal of the program? How has EM:RAP progressed throughout the past 10 years? What can we expect from the future of EM:RAP?*
Dr. Herbert: EM:RAP started in 2001, and like all good programs, it came out of a complete failure. Before EM:RAP, I enjoyed listening to audio programs like audio digest to educate myself in my car during my commute. Audio can be a very efficient form of learning, as you can usually multitask and learn while driving, running, etc. So I started a program before EM:RAP that was for nurse practitioners called Nurse Practitioner Informer. It went for about a year and a half and was well received, similar in nature to EM:RAP, but I did all of the content myself, and it just drove me insane. I was not smart enough at the time to realize that I did not have to do all the content myself and that finding others to help would actually make it a lot better. I stopped recording thinking "I can't do this," but I really believed in the audio format as a great way to learn and decided to later start EM:RAP with Rick Bukata.

Since the program was launched in 2001, it's been a continued process of making changes and improvements. It used to be just really long lectures that were edited to add emphasis and summary. Over time, we started working with organizations like AAEM to broadcast big national lectures and decided to pay the speakers for their quality lectures, which is something that other people did not do. Recently, over the past few years, we moved away from just lectures to commentary by experts in their field who frequently do podcasts and are really professional, well known and well respected. The commentary is now interspersed in between the lectures, summaries and reviews. This helps bring important information from the foremost experts on a wide range of topics directly to the user. We just recently added in the past few months the C3 Board Review Project. It is a detailed, monthly summary of the things you need to know for boards, straight from textbooks but effectively reviewed in an audio format. What we want to do is get through the entire knowledge base of emergency medicine every three years, and then do it again and again, constantly improving the product.

Ultimately, in the future we will be combining emrap.tv (short video clip summaries) with EM:RAP and thus linking the audio and video content. We also have written summaries to cover all aspects and allow the users to read, listen, look and learn the content in an easy manner that promotes retention of the information. In addition, we are sending audio updates with short tidbits that are sent through email that emphasize what has been done as a review and also keep the reader up-to-date on the latest breaking information. The mobile platform is where most people will be consuming their information, and we created our new website with this in mind, which in its current form is spectacular, but it will be even better with many improvements to come.

AF: *As an educator, how do you incorporate technology to make education and training more effective and efficient for your students and residents?*
Dr. Herbert: We started this thing called EM Core Content at the residency about four years ago. We have these great lecturers come and talk, but at the end of five hours of lecture...how much can you really remember? For me, it was only two or three things. So I started recording our weekly conferences at USC. A lot of people record their grand rounds, but the key thing to make it work in my opinion is good audio quality. To get good quality audio you need good audio equipment, which gets very expensive, and it is not easy. I have been doing this for about 15 years, and there are still months when I listen and think, "Boy, it is still not quite right." The goal should be to get the best audio quality possible. There is so much visual content that both the slides and speaker should be recorded. However, if you really want to make something interesting and enjoyable to watch, you need multiple cameras, so it looks like CNN. We, as instructors of emergency medicine and medical education in general need to raise the bar and use technology to create high quality professional audio and video that will captivate the audience.

Dr. Stuart Swadron and I do a lot of small group teaching, where we refer our students to listen to our educational materials like EKG videos at home before we discuss it in person. It gives people the opportunity to listen and learn at their own pace because people learn very differently, and some people have a lot of knowledge in one area and not so much in others. This method is much more powerful, as opposed to being in a big group where learners may avoid discussing what they do not understand. The educators who implement this most effectively are the language and learning people, like Rosetta Stone and others who have spectacular ways of learning new languages while incorporating this visual, written and audio technology. We are blatantly trying to follow their lead in creating a better learning experience using technology. People learn at different speeds, and technology allows us to create a place where people can learn at their own pace, but it always comes back to having really good quality educators. The best person I've seen do this...honestly, is Stuart Swadron. He is somebody who is able to take multiple sources of information that are very complex and

continued on page 17

Resident Editor's Letter - continued from page 16

summarize it down to useful tidbits. You can have all the audio and video equipment in the world and make it look slick, but in the end, success is always going to come from a master educator. Someone like a Stuart Swadron, a Billy Mallon, a Corey Slovis (and the names go on); someone who can take the information and synthesize it into chunks that make sense to someone in EM. So it always comes down to having the best educators, and then we use technology to present the information in the most effective way possible.

AF: *As a clinician, how do you use technology to make your life easier? Any suggestions for must have software, apps or resources to help others do the same?*
Dr. Herbert: I use my iPhone at work. Constantly. I use it to pull up information I need at the point of care in real time. But there are a few things that I think we don't do well with that technology. Don't forget the power of that phone. Here is one way I've been using it. If I have a consultant that I want to share information with, I take pictures of the physical exam finding in question, and I send it directly to my consultant. This speeds things up and allows me to more quickly disposition patients who are in need of specialty care.

Another use is to provide more useful discharge instructions. We write stuff on a piece of paper that people never read or lose. Well why not record your instructions on your phone and email it to them directly? Now, people may freak out about the medico legal consequences of this, and yes, this will have to play out. But, we should not hold back on using technologies like this that will clearly improve the care we provide for our patients out of fear of litigation. Yes, you could get sued for not saying the exact right thing on your discharge instructions, but you can also get sued right now because you did not write everything down perfectly. So don't be afraid of the lawyers; we should embrace this technology and use it to help and educate our patients. Just remember about the HIPPA laws, and make sure to get full consent from all your patients, but I think there is an enormous potential for us to help our patients by using this technology to educate them on the fly.

AF: *I'm sure you have thought a lot about the future of EM and EM education. Are you optimistic about the direction the field is taking? What would you change if you could?*
Dr. Herbert: I am extraordinarily optimistic about the direction the field is taking. I said it before, and I will say it again; I don't think we have even begun to scratch the surface of what we can do. We at EM:RAP have been involved for quite some time and hope to be further involved. I think there has been an explosion in how we can use technology to advance education; however, the problem is that as it gets easier to share information, a lot of people are throwing things online, and frankly, much of it is not very good. So our goal is to not just share information but to seek the best available stuff out there from the best speakers and give them incentive to continue to create great educational materials. The possibilities here are vast, and we have not even begun to go all the great things that are possible.

In regards to what I wish I could change, the CME process is really broken. The process of distributing the CME for your program is complicated for many reasons. Some of the reasons are just and in place to make sure everything is appropriately disclosed to limit bias from 3rd party interests. Small operations that are looking to provide CME can have a difficult time and need extensive resources as it is very expensive. Many times the people who have the resources and cash (usually drug companies) may have conflicts of interests and will present information with bias for their own benefit. Hence, these people are allowed to present the "educational materials," not necessarily because it is good information, but because they have lots of cash. This has been a concern of mine for several years - that a lot of the education physicians get for free is not focused on improving patient care, but rather, it is presented because these companies stand to benefit for disseminating biased information. As a learner, you must ask yourself, "Why am I getting this information for free?;" is it free because it is crap?, or is it free because some third party that somehow stands to benefit is paying for it? If there is a third party paying for it, then it is essentially marketing, and you should stay away from it. It is difficult enough to figure out what the right thing to do is when you are getting your education from a non-biased provider, but far more difficult if the person who is providing the information is also trying to sell you something other than just pure education. That's my beef.

AF: *You have clearly incorporated technology successfully to assist your teaching for many years now. What advice do you have for educators (digital immigrants or traditionalists) who would like start using technology to improve their teaching and practice?*
Dr. Herbert: There is a wealth of technology that now makes it possible to create audio and video products. The most important part is taking the time to research, understand and synthesize the material you want to present to make sure you have appropriately prepared to present it effectively. Don't forget the first step, which is to make sure you understand the information well. To be effective, an educator must have done the hard work of synthesizing the material and preparing the information to come up with the best and most interesting way to teach it. If you skip that, the rest of the stuff does not matter; all the technology and audio/video equipment in the world will not make that information useful.

AF: *What advice would you give to current residents (digital natives) who are looking to make their learning as effective and efficient as possible?*
Dr. Herbert: There are enormous amounts of information and resources available. Talk to your peers and colleagues, particularly fellow residents, and ask where people are getting their information, and figure out what works best for you. Everyone learns their own way, and finding out what works best for you is step number one. Remember the basic psychology of learning - that most people have to hear things multiple times before it can be retained in long-term memory. I suggest a learning schedule that promotes lots of repetition and encourages constant review. Remember that this is a life long learning profession. Emergency medicine as a specialty consumes the most CME when compared to any other single group in medicine that I am aware of. I think this is because EM is very broad field, but more importantly, based on fear. We have a very scary and very broad field that simply requires us to constantly educate ourselves in effort to be prepared to take care of our patients. Find what works for you, and use it frequently. Find things that you find interesting, and prepare to be a life-long learner.

continued on page 22

Spotlight on Leaders in Emergency Medicine: Mark Reiter, MD MBA FAAEM

Interview by Leana S. Wen, MD MSc
AAEM/RSA Secretary-Treasurer

Mark Reiter, MD MBA FAAEM

This is a new column in *Common Sense* where Dr. Leana S. Wen, AAEM/RSA secretary/treasurer, interviews leaders in emergency medicine about their experiences, perspectives and insights. The third installment is a conversation with a rising star in EM: Dr. Mark Reiter. Dr. Reiter is an attending emergency physician at St. Luke's Hospital in Bethlehem. He has held a number of leadership roles, including past AAEM/RSA president and current AAEM secretary/treasurer. He has been on the AAEM Board since 2005.

LW: *Tell me about your current position and what you do.*
Dr. Reiter: I'm a practicing emergency physician at St. Luke's Hospital in Bethlehem, Pennsylvania, where I am a member of the core faculty for our emergency medicine residency program. I'm also the CEO of Emergency Excellence, a company whose aim is to improve emergency department processes and performance.

LW: *Where are you from and where you did you get your training?*
Dr. Reiter: I grew up in New Jersey and graduated from Rutgers College. Then, I enrolled in an accelerated BA/MD program with the UMDNJ-Robert Wood Johnson Medical School. During this time, I also earned an MBA from Rutgers Business School. I then moved south for emergency medicine residency at the University of North Carolina-Chapel Hill.

LW: *Why did you choose emergency medicine?*
Dr. Reiter: I chose EM because I wanted to be a real doctor – someone who has a significant impact on people's lives.

LW: *You've held a number of leadership positions. When did you start becoming involved?*
Dr. Reiter: I starting getting involved in organized medicine in medical school, where I became very active within the American Medical Association (AMA). Later, as a student, I served as president of the New Jersey Medical Student Association and served on the Board of Trustees of the Medical Society of New Jersey. As a resident, I was appointed to the AMA Council on Legislation and served as vice chair of the North Carolina Medical Society Resident Section. In residency, I became very involved in AAEM. I was elected president of AAEM/RSA, which has a dual role as a member of the AAEM board of directors, and was a great opportunity to work with many of emergency medicine's finest leaders. Since then, I have continued to serve on the AAEM board of directors and am now the AAEM secretary/treasurer.

LW: *How did you get interested in your particular areas of expertise? Any lessons from your training that you'd like to share with us.*
Dr. Reiter: For me, being involved in organized medicine has been incredibly useful. I'd encourage all physicians, no matter what field or what stage of training, to get involved with professional organizations. You have to be involved to see the big picture, which allows you to advocate more effectively for your patients, your colleagues and your profession. Additional training, such as my MBA, has also helped prepare me to become a more effective leader within professional organizations and within the emergency department.

LW: *You have had significant involvement in shaping health policy. What do you think are the major problems facing health care today, and how would you go about addressing them?*
Dr. Reiter: Overall, the U.S. is delivering quality care – but we are not doing so in a sustainable way. Medical expenses are out of control, and there is far too much waste and overutilization. We have not implemented cost sharing in an effective way. Eventually, we need to realize we can't provide all possible care for all situations and move to some type of intelligent rationing like what was proposed in Washington a few years ago.

LW: *You've talked before about physician payment reform. Can you elaborate on this?*
Dr. Reiter: The current incentives for doctors don't make sense: actually, doctors are incentivized to prescribe maximal health services. The more you do, the more you get paid. You see this especially with doctors who own MRIs and echo machines and utilize these tests at rates far exceeding those who don't own the same equipment. All of this increases the utilization of medical services without added benefit. Defensive medicine is a huge problem, especially in emergency medicine, and will remain a huge problem until real tort reform is instituted. Then there are other problems, like poor coordination of medical services, subpar IT infrastructure, and interoperability and the problems with intermediaries like insurance companies and practice management groups. I can go on, but you get the point – there is a lot for us to do!

LW: *I'm sure you have thought a lot about the future of EM. Are you excited about being an EP in this era?*
Dr. Reiter: I am excited about being an EP, but the future of EM to me is deeply concerning. We blew an enormous opportunity in 2009 and 2010. This was America's best opportunity since Medicare was implemented to make significant, positive changes in our health care system. Instead of real reform, all we did was greatly expand the least effective insurance program (Medicaid), pay for more prescription drug coverage for Medicare, and add a ton of additional health care bureaucracy. We had a great opportunity to pass real tort reform, but we didn't. We had a great opportunity to create an effective, coordinated health care SYSTEM, but instead, we once again added a bunch of spare parts that don't make sense. That just means it's even more important now than ever to get involved and make a difference.

LW: *Do you have tips for young EPs who want to make a difference?*
Dr. Reiter: If your goal is to make an impact, the only way to do is to become involved. First, be informed about the issues. Find

continued on page 22

Resident Journal Review – Subarachnoid Hemorrhage

Samantha Wood, MD; Michael Allison, MD; Adam Brenner, MD; Michael Scott, MD; Daniel Boutsikaris, MD; Chris Doty, MD FAAEM; and Michael Bond, MD FAAEM

Headache is a common symptom encountered in the emergency department (ED), representing about 2% of all presenting complaints.[1] Subarachnoid hemorrhage (SAH) is a neurosurgical emergency and is diagnosed in about 1-3% of such ED patients. Guidelines for evaluation and diagnosis of subarachnoid hemorrhage published in 2009 emphasize the need to maintain a high level of suspicion for SAH in patients with an acute severe headache and recommend evaluation with head computed tomography (CT) scan followed by lumbar puncture (LP) if the CT scan is negative.[2]

High risk clinical characteristics for subarachnoid haemorrhage in patients with acute headache: prospective cohort study. Perry JJ, Stiel IG, et al. *BMJ* 2010; 341:c5204.

Clinical decision rules have been created for a variety of ED complaints. These rules serve to identify patients who are at low risk for certain disease processes and can reduce testing. Investigators from the University of Ottawa, who have previously described clinical decision rules for the ankle, knee, cervical spine and head trauma, set out to find a set of clinical characteristics that can identify patients with headache who need a workup for SAH.

This multicenter study was performed in Canada. It was a prospective investigation that included all alert (GCS 15) adult patients (>16 years age), who had a chief complaint of headache that was non-traumatic and reached peak intensity within one hour of its onset. Also included was any headache that resulted in syncope. It is important to note those patients who were not included in the study population. Excluded patients were those who presented more than two weeks after headache onset, those with prior SAH, those returning for headache after a complete headache workup with CT and/or LP, those with three headaches of a similar character within the past six months, any patient with papilledema or a focal neurological symptom, or those with history of hydrocephalus or cerebral neoplasm.

The study included 1,999 patients, 130 of whom were diagnosed with SAH. The definition of SAH included any subarachnoid blood on non-contrasted CT of the head, xanthochromia in the CSF, or RBC > 5x 10^6/L in the final sample of cerebrospinal fluid along with an aneurysm or AV malformation on cerebral angiography. The sample size was calculated a priori to establish a decision rule with 100% sensitivity. Physicians screened patients during their regular work shifts for inclusion in the study. A data form containing 33 clinical findings was completed by the investigating physician and repeated by a second physician if one was available. Patients were followed up with phone calls at one month and six months from their enrollment.

Recursive partitioning was used to find the most predictive variables of SAH. Three clinical decision rules were developed (listed below) and internally validated based upon their data set of nearly 2,000 patients. Each rule contains just four clinical variables:

1. age over 40, neck pain or stiffness, witnessed loss of consciousness, exertional onset
2. arrival by emergency medical services, age over 45, vomiting at least once, diastolic blood pressure > 100 mm Hg
3. arrival by emergency medical services, age 45 to 55, neck pain or stiffness, systolic blood pressure > 160 mm Hg

Sensitivity of each rule was 100% (CI 97%-100%), and specificities varied from 28.4% to 38.8%. Presence of one or more findings should prompt workup for SAH. If none of these variables were present, then physicians could reliably rule out SAH with near certainty. These rules would lower the current utilization of CT and LP in the study population by 10-20% in absolute terms.

The main limitation of this study was that up to 1/3 of eligible patients may not have been enrolled. These patients had very similar characteristics to the study population in terms of age, gender and arrival by ambulance. Of the non-studied population of potentially eligible patients, 2.7% were diagnosed with SAH compared with 6.5% of the study population, suggesting perhaps that this was a lower acuity population that was missed.

This study may prove to be groundbreaking, as it may lead to more selective workup for headache without missing SAH, thus reducing the need for diagnostic tests and decreasing ED length of stay for patients with headaches. **Though promising, these results need to be prospectively validated in more than one setting.** The Ottawa group is currently conducting such a study using each of the three clinical decision rules, with the hope of identifying one rule with 100% sensitivity. Clinicians should recognize patients with the above-mentioned features and carefully consider them for SAH workup; however, these rules are not yet ready for clinical application.

Trigger factors and their attributable risk for rupture of intracranial aneurysms: a case-crossover study. Vlak M, Gabriel J, et al. *Stroke* 2011; 42: 1878-1882.

Although aneurysm rupture can occur at any time, it may also be preceded by various stressors that are thought to cause the rupture. This study investigated patients with SAH and their exposure to trigger stressors shortly before symptom onset in comparison to their usual exposure to the same stressors.

Adult patients (greater than 18 years of age) who were admitted to a stroke center in the Netherlands with aneurysmal SAH were asked to complete a questionnaire regarding the circumstances surrounding the onset of their headache. They were asked about their exposure to several stressors within a defined "hazard period" leading up to their symptoms. Trigger stressors and their respective hazard periods included valsalva, heavy lifting, strong emotions, sexual activity, temperature change, vigorous physical exercise, use of tobacco or caffeine (hazard period of one hour); use of cocaine, marijuana, or sildenafil (hazard period of four hours); and fever,

continued on page 20

Resident Journal Review - continued from page 19

flu-like symptoms, and use of alcohol (hazard period of 24 hours). Patients were also asked to describe their "usual exposure" to these stressors. Patients who gave inconsistent answers when similar questions were phrased differently were excluded from the analysis.

Two hundred and fifty patients were included in the analysis. Relative risk was calculated for each stressor. Reported stressors found to be statistically associated with triggering of an aneurismal rupture included drinking coffee or cola, nose-blowing, straining for defecation, startling, anger, sexual intercourse and vigorous to extreme physical activity.

The main flaw of this study is the potential for recall bias. Another significant flaw is the failure to collect data on the most seriously ill patients or those who died (171 patients were excluded from the study due to death or severe disability). However, the less severely ill patient population that participated in the study represents the group in whom there is the greatest concern about missing the diagnosis of SAH in the ED. A final consideration is that it is not known what the specificity or sensitivity of these symptoms are for SAH as compared to other types of headaches.

The authors speculate that the association of the trigger stressors with SAH reflects the transient rise in blood pressure that accompanies most of the trigger exposures and suggest measures to reduce these exposures in patients with known SAH (e.g., eliminate caffeine, reduce constipation with stool softeners). For the emergency provider, this study is perhaps more useful as yet another reminder of the importance of history in making the diagnosis of SAH. As a small component of a thorough history, we should consider a patient's exposure to these stressors in the time leading up to the onset of their headache.

The next two articles investigate the sensitivity of modern CT in the diagnosis of SAH.

Given the substantial morbidity and mortality associated with SAH, the timely application of diagnostic modalities with sensitivity approaching 100% is paramount. Traditionally, initial diagnostic evaluation for SAH begins with non-contrast head CT, followed by LP if the head CT yields negative results. However, there are many drawbacks associated with the LP, including patient pain, discomfort and anxiety, the potential for complications, as well as time constraints inherent to the ED. The following two studies evaluate the sensitivity of modern head CT in the evaluation of SAH and consider the possibility that an LP may not be necessary if a CT performed within a certain period of time from symptom onset can be shown to have adequate sensitivity for excluding SAH.

Sensitivity of computed tomography performed within six hours of onset of headache for diagnosis of subarachnoid haemorrhage: prospective cohort study. Perry JJ, Stiel IG, et al. *BMJ* 2011; 343:d4277.

This prospective multicenter cohort study enrolled 3,132 alert, neurologically intact patients presenting with high risk headache. "Alert" was defined by a Glasgow coma score (GCS) of 15; "high risk" was defined as an atraumatic headache reaching maximal intensity within one hour or an atraumatic headache associated with syncope. The primary outcome was SAH, defined by the detection of subarachnoid blood on CT, xanthochromia identified in CSF, or any red blood cells detected in the final tube of CSF in conjunction with aneurysm identified on cerebral angiography.

Overall, of the 3,132 patient cohort, 240 (7.7%) were found to have SAH. A subset of 953 patients had head CT performed within six hours of headache onset; of these, 121 patients were diagnosed with SAH, and all cases were identified on head CT with 100% sensitivity (95% CI, 97-100%). At greater than six hours (n=2,179), the sensitivity was 85.7% (95% CI, 78.3-90.9%); the overall sensitivity of head CT among this cohort was 92.9% (95% CI, 89-95.5%). All studies were performed with third generation modern multi-slice scanners and interpreted by experienced local neuroradiologists or general radiologists who had access to pertinent clinical information but were blinded to patient participation in the study. Local laboratory technicians unaware of the study interpreted CSF for xanthochromia by visual inspection. Patients who did not have a definitive cause of their headache diagnosed in the ED were followed over six months; of the 1,931 patients in this category, 31 were lost to follow up, and none of the remaining patients were identified as having an SAH.

The study examines an extremely relevant clinical scenario in emergency medicine and includes a notably high risk headache patient cohort, as evidenced by the overall percentage (7.7%) of patients definitively diagnosed with SAH. There are, however, several limitations of this study. A CT in one patient presenting approximately 4.5 hours after headache onset was initially misinterpreted as normal, though the scan was retrospectively re-read as positive for SAH after an aneurysm was identified on cerebral angiography. In addition, not all patients with a normal head CT underwent LP, and therefore, did not receive the gold standard diagnostic test utilized in the study. Further, 13 patients who had a head CT within six hours of headache onset were lost to follow up. Although no cohort subjects were admitted to any regional neurosurgical referral centers, the single misinterpreted CT scan, lack of LP in all patients, and subjects lost to follow up suggest that the sensitivity of this study is more accurately described as approaching 100%, rather than being definitively labeled as 100%. Defining SAH by xanthochromia with visual inspection is also controversial (though it still remains the method used at most centers), and may be inherently biased and operator dependent. Finally, the requirement of a modern generation CT scanner with interpretation by a qualified radiologist limits the applicability of this study to EDs lacking access to such modern scanners and specialists.

Overall, the study demonstrates that the modern generation of CT scanners are extremely sensitive (approaching 100%) for detection of SAH if obtained within six hours of headache onset and when interpreted by qualified radiologists. Further studies with similar results could help remove the requirement for LP in some patients with suspected SAH.

continued on page 21

Resident Journal Review - continued from page 20

Determining the sensitivity of computed tomography scanning in early detection of subarachnoid hemorrhage. Cortnum S, et al. *Neurosurgery* 2010; 66: 900-903.

This retrospective chart review study conducted at a single neurosurgical unit examined patients admitted with suspected SAH or verified SAH within a five year enrollment period. Charts were reviewed to determine clinical history, examination findings, time from onset of symptoms to workup, and CT and LP results. All CTs were performed using a modern 64 slice multidetector scanner. SAH was defined by either positive head CT or LP showing xanthochromia by spectrophotometry. Eight patients were excluded because there was no clinical suspicion for SAH and an LP was not performed. Three additional patients were excluded because CT scan revealed an alternative diagnoses.

Overall, 499 patients were included in the analysis, of whom 296 patients were diagnosed with SAH (59%). Most (295) of these patients were diagnosed by CT. In one patient presenting six days after onset of symptoms, the diagnosis was made based upon LP results. CT was found to have a sensitivity of 100% for patients presenting within the first five days of symptom onset. Overall, CT sensitivity was found to be 99.7% (95% CI, 98.1-99.9%).

There are several limitations of this study. First, spectrum bias limits the applicability to ED patients; the study cohort consists of patients accepted to a neurosurgical unit, which represents a different population from undifferentiated headache patients in the ED. Moreover, there is no description of the presenting neurological status of these patients; therefore, it is possible that the study included patients with existing neurological deficits reflecting larger hemorrhages more likely to be visualized on CT. The high rate of SAH (59%) among the patient cohort also reflects an element of spectrum bias. In addition, a positive LP was defined by CSF xanthochromia by spectrophotometry; however, in the United States, most centers utilize visual inspection to determine the presence of xanthochromia, also limiting the applicability to the U.S. patient population. Another limitation is the retrospective nature of a chart review that inherently suffers from both selection bias and referral bias.

Despite these limitations, the authors state that it seems safe to omit lumbar puncture in patients with a negative head CT within three days from symptom onset based on their findings of very high sensitivity of CT in their patient population. Emergency providers must be aware of this data from the neurosurgical literature but must use extreme caution in applying it to the undifferentiated ED patient. It is important to note again that the Perry study (reviewed above), a prospective investigation, found an unacceptably low sensitivity of head CT for SAH of 85.7% when performed more than six hours after headache onset in patients presenting to the ED.

Evaluating the sensitivity of visual xanthochromia in patients with subarachnoid hemorrhage. Aurora S, Swadron S, et al. *JEM* 2010; 39: 13-16.

Past studies have found xanthochromia on lumbar puncture to have a sensitivity of 100% for subarachnoid hemorrhage, supporting the critical role of this study in the diagnostic algorithms and clinical guidelines. However, these studies used spectrophotometry to evaluate for the presence of xanthochromia, whereas the vast majority of hospitals (75% as of 2002) use visual inspection of CSF supernatant to determine the presence or absence of xanthochromia.[3] The authors of this article investigated the sensitivity of xanthochromia as determined by visual inspection of CSF.

This was a retrospective chart-review. The initial population pool of 1,323 patients was generated by identifying all patients evaluated in the ED over a 12 year period who were discharged with a diagnosis of SAH. One hundred and two (102) patients had a procedural charge for lumbar puncture or spinal tap. After excluding those patients for whom an official lab report of CSF color was not available, a confirmatory imaging study was not available, and those where the lumbar puncture was performed less than hours or more than two weeks from headache onset; the authors were left with 19 patients with imaging-confirmed SAH who had CSF results available. Nine (47%) of these patients had a positive finding of xanthochromia on visual inspection, while 11 (53%) were found to have clear CSF on visual inspection. The resulting sensitivity of visual inspection of xanthochromia for SAH was 47.3% and is at significant odds with prior studies showing the sensitivity of spectrophotometry determined xanthochromia to be 100%. This suggests that, in the majority of hospitals where spectrophotometry is not used, the absence of xanthochromia cannot be relied upon to exclude SAH.

There are a number of limitations to this study, the most prominent being the small number of patients who were included. However, for a variety of reasons including the sensitivity of CT (which is generally performed as an initial test in the workup of SAH), the pool of patients who both have a positive imaging study and undergo LP is quite small. The authors were also limited by difficulty accessing records and by failure of the laboratory to report CSF color in several cases. They also point out that they were not able to investigate the number of patients discharged with negative CSF results who subsequently were found to have SAH.

Despite these limitations, the number of patients with negative CSF for xanthochromia by visual diagnosis that were found by CT to have a SAH does strongly suggest that this test cannot be relied upon to exclude SAH. The authors suggest, however, that making spectrophotometry universally available would probably not be cost-effective, as its specificity of approximately 75% found in past studies would result in many unnecessary evaluations for SAH, including such costly and/or invasive studies as cerebral angiograms or MRA.

In conclusion, this study suggests that the absence of xanthochromia, when determined by visual inspection, is not sufficient to rule out SAH in headache patients. The emergency provider should be aware of what method for evaluation of CSF is used in his or her hospital and be attentive to the limitations of this result. One also needs to remember that it can take up to six hours for xanthochromia to develop, so an LP done <6 hours from symptom onset may be negative despite the fact that there is an SAH hemorrhage.

continued on page 22

Resident Editor's Letter - continued from page 17

Editor's Note: As a resident, the value of using technology to teach and make educational resources more accessible is clear. AAEM/RSA continues to support the education of our members, and in an effort to make your learning more efficient and effective we are proud to offer EM:RAP as a brand new free member benefit! We would appreciate your feedback on this article and your thoughts on the advancing role of technology in EM education. Please send comments and suggestions for future articles about technology and emergency medicine to alifarzadmd@gmail.com.

References

1. Robin BR, McNeil SG, Cook DA, Agarwal KL, Singhal GR. Preparing for the Changing Role of Instructional Technologies in Medical Education. *Acad Med.* 2011 - in early press. PMID: 21346506.
2. Cornall R. Speech at Queensland University of Technology Faculty of Law Graduation Ceremony. <http://www.ag.gov.au/www/agd/agd.nsf/Page/AbouttheDepartment_Speeches_2008_QUTFacultyofLawGraduationCeremony>. Accessed November 20, 2011.
3. Prensky M. Digital natives, digital immigrants. On the Horizon. 2001; 9:1–6.
4. Palfrey J, Gasser U. Born Digital. New York, NY: Basic Books; 2008.

Resident Journal Review - continued from page 21

Conclusions:

Headache is a common complaint seen in the ED, and SAH is one of the most feared causes of this symptom. Determining who is at risk for SAH, what diagnostic tests are necessary, and how to interpret the results of these tests can be challenging for the emergency physician. Some key points from the above studies are summarized below.

Take Home Points:

- Clinical decisions rules for SAH are not ready for clinical use, but may prove to be an effective method of limiting diagnostic testing while maintaining good sensitivity.
- The current literature shows that the tide may be changing on whether LP should be required in all patients with a negative head CT done on a modern generation multidetector CT scanner within six hours of headache onset.
- Visual inspection of xanthochromia is inherently insensitive, and its absence should not reassure the emergency provider that a SAH is not present.

References:

1. Edlow JA, Panagos PD, Godwin SA, Thomas TL, Decker WW. Clinical policy: critical issues in the evaluation and management of adult patients presenting to the emergency department with acute headache. *Ann Emerg Med.* Oct 2008; 52(4): 407-436.
2. Bederson JB, Connolly ES, Jr., Batjer HH, et al. Guidelines for the management of aneurysmal subarachnoid hemorrhage: a statement for healthcare professionals from a special writing group of the Stroke Council, American Heart Association. *Stroke*. Mar 2009; 40(3): 994-1025.
3. Edlow JA, Bruner KS, Horowitz GL. Xanthochromia. *Arch Pathol Lab Med.* Apr 2002; 126(4): 413-415.

Spotlight on Leaders in Emergency Medicine - continued from page 18

out what issues move you. Educate yourself. Then, get involved in professional societies and advocacy organizations. Organizations both inside and outside of EM are invaluable. Then, when you're ready, get involved with politics. EPs need to start talking with legislators. They are ready and willing to listen to us, and only by talking to people who make the laws are we going to make the national change on a systems level that's really going to make an impact.

We would love to have your feedback on this column. Please send comments and suggest other leaders you would like to see profiled to wen.leana@gmail.com.

STUDENT PRESIDENT'S MESSAGE

Change Is in the Air

Meaghan Mercer
AAEM/RSA Medical Student Council President

As the new year is off to a roaring start, the possibility of what to come is on everyone's mind. For the fourth year students, Match is just around the corner, and what an exciting time! I wish everyone the best of luck. With the new year comes new opportunities to get involved, and I strongly urge each and every one of you to consider running for one of the AAEM/RSA board of director or medical student council positions. Having been on the medical student council for the last three years, I can only try to convey to you what a phenomenal experience this has been. Every person that I have met in this organization is so passionate about the future of the profession and what it means to be an emergency physician that they donate their time and energy to help advance and protect our specialty. Most of the individuals that are a part of this organization were inspired by other members to get involved, and that is what I hope to do for you in some small way. AAEM/RSA does more for students and residents than I am sure I am even aware of.

I want to commend some of the great accomplishments of 2011. Currently, your Advocacy Committee is working on supporting a bill allowing Congress to mandate that drug manufacturers give six months notice or immediate notice (whichever is sooner) for any anticipated shortage of "critical drugs." We now have a representative with the Council of EM Residency Directors (CORD) to help direct the direction of EM education. We hosted two fantastic student symposia; thank you once again to Loyola Stritch University School of Medicine and Georgetown University School of Medicine for all the hard work that went into these symposia. We printed the new *EM Survival Guide* and created and printed the second edition of the *Toxicology Handbook*. We are currently working on the second edition of the *Rules of the Road for Medical Students*, as well as the fantastic bimonthly *Modern Resident* e-newsletter. These are just a few of the numerous things that have been accomplished this year for you. More inspiring though are the actual people who make up this association. AAEM/RSA is a family; I have witnessed so many individuals go out of their way to help a student or resident pursue their goals, and I want to thank all the board members for all the support and inspiration along the way. With elections just around the corner, I highly recommend that you apply for a position on our medical student council. Become a part of the development of emergency medicine and this organization on a greater level; it's an extremely rewarding experience.

Finally, I would like to impart upon you some of the best advice I have gotten in medical school. One of my mentors told me, "Throughout not only medical school but also your career, be a humble student and learn one new thing every day." It sounds simple, but I realize what an impact it has had on my medical education. I entreat you to consciously make the effort to do this, and you will be amazed at what you walk away with. Good luck in the year ahead, and please do not hesitate to contact me at info@aaemrsa.org with any questions or comments that you have!

Now Being Accepted!

2011-2012 AAEM/RSA Membership Applications

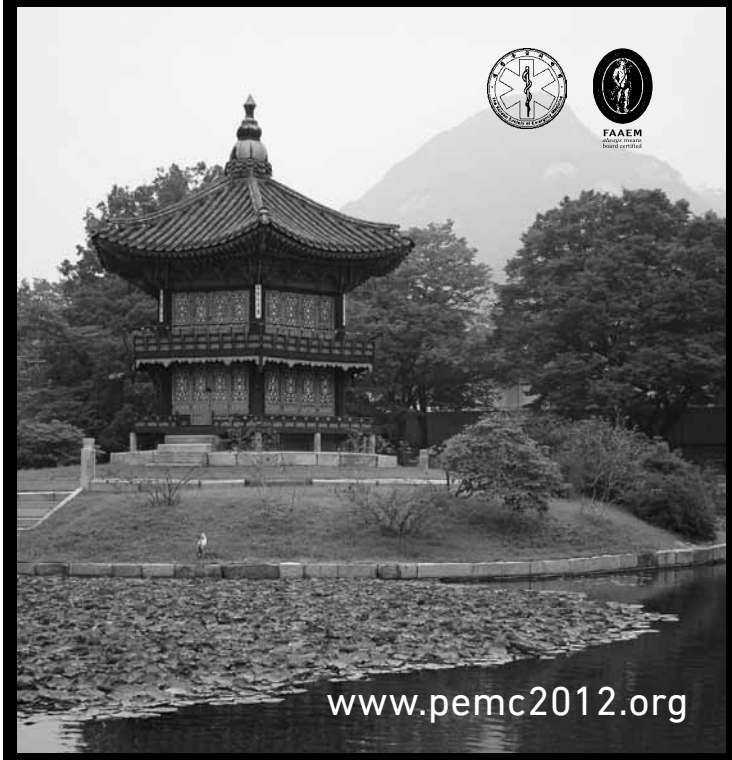
Join or renew your membership online at https://aaemrsa.execinc.com/edibo/Signup or call our office at 800-884-2236 to renew over the phone.

Have You Moved?

If you are a graduating resident or medical student and your email address will be changing, we recommend you use an email address outside of your institution once you've logged into the RSA members only section. You may update your email address on file at any time. This will ensure your member benefits will continue without interruption. Please include any changes to

- Last Name (include maiden name if applicable)
- Mailing Address (including city, state and zip)
- Email Address
- Telephone Number

To update your contact information, please login to your members only account at https://aaemrsa.execinc.com/edibo/Login/Default/call or contact us at info@aaemrsa.org or 800) 884-2236.



Pan-Pacific Emergency Medicine Congress (PEMC)

Seoul

SOUTH KOREA

October 23–26, 2012

THE IV INTER-AMERICAN EMERGENCY MEDICINE CONFERENCE

A bilingual conference with remote simultaneous translation

MAY 2012

Argentina

May 16-18, 2012

SAE
Sociedad Argentina de Emergencias

FAAEM
always means board certified

common SENSE
555 East Wells Street / Suite 1100
Milwaukee, WI 53202-3823

FAAEM
always means
board certified

Pre-Sorted
Standard Mail
US Postage
PAID
Milwaukee, WI
Permit No. 1310