common SENSE

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FALL 2011

THE NEWSLETTER OF THE AMERICAN ACADEMY OF EMERGENCY MEDICINE

FAAEM
always means
board certified

PRESIDENT'S MESSAGE

Howard Blumstein, MD FAAEM

I recently took a trip in a time machine. It took me back into the 1970's. Maybe not literally, but I did go to a place where my hosts told me, frankly, that the state of emergency medicine is just like it was across the entire nation in the `70s. And the story they told me serves as a warning for all but the oldest of our colleagues.

Let me set the stage. The city is large and exotic. It is populated by numerous cultures, each with its characteristic food, music and arts. The metropolitan area is among the largest in the nation. The weather attracts many people, and this city is situated in one of the most populous states.

Yet conditions there create a nearly perfect storm, stunting the advancement of emergency medicine and putting much of the population of the region at risk of inferior care. Here's the skinny:

Start with the contract holders. The region is rotten with them. My hosts told me they couldn't name a single private group in the area. Hospital administrators in the area do not even seem to understand that their emergency departments (EDs) can function without the involvement of a staffing company.

These same administrators do not understand the importance of a functional ED. There is little expectation that an average patient be seen and treated expeditiously. One board certified doc told me that a (non-board certified) co-worker told him to stop seeing patients so fast; it was making others look bad. Emergency departments are, apparently, looked upon as simply a conduit for admissions, with little expectation that quality care is either necessary or provided.

Working conditions are correspondingly bad. Income for the doctors in the region is well below average. The doctors I spoke with just accept this as part of the price they must pay to live and work in a highly desirable area. I was told that they expect to be fired from one hospital and hired at another on a periodic basis. One told me he had not spent more than a few years at any single hospital.

While I was visiting, one of my hosts was scrambling to provide coverage for one of his partners who was summarily fired at the insistence of a surgeon, who wielded a great deal of power and took exception to something the partner had done. "What had he done?" I asked. "He dared to practice modern medicine," was the response.

If the hospitals or the general public placed some importance on having board certified and properly qualified doctors working in their EDs, then perhaps there might be a modicum of protection for the physicians. But apparently there is no such emphasis. Being a popular region, there is no shortage of other docs willing to staff the EDs in the area. They travel in from hundreds of miles away. Further, the state medical board has shown no concern for board certification or appropriate training. Given the apparent lack of emphasis on quality care, anyone is welcome to come down and fill vacant positions.

Perhaps one factor in this mess is the relative lack of qualified emergency docs. Other states of comparable size have more EM residencies and graduate more residents each year. Further, one of the training programs in the state is run by one of the big contract groups, which has an established track history of employing non-trained and non-boarded docs. Surely this is not helping the state of EM in that area.

But things are looking up. I met a number of young EM residents training at one of the local hospitals, and they seemed as enthusiastic and qualified as any I have met (note: shame on the local university hospital which has failed, apparently repeatedly, to establish an EM training program). Perhaps the growing number of properly trained and certified EM physicians will raise expectations at the local hospitals. Perhaps area citizens will begin to ask "How come big, high quality hospitals elsewhere in the country have their EDs staffed entirely by board certified docs, but not around here."

Maybe some bright hospital administrator will recognize that high quality care begins in the emergency department. That half or more of his patients come in through the ED and that what happens there can make a big difference both to hospital operations and to the bottom line. That helping establish an independent EM group is the best way to bypass the money sucking contract holder and thus support a group of high quality physicians.

Perhaps someday the hospitals in this city will learn that good ED care brings rewards. Once that light bulb turns on, they will have taken the first step toward quality acute care. Heck, right now they are thirty or forty years behind the rest of the nation; they have to smarten up sometime. Don't they?

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EDITOR'S Letter

EDITOR'S LETTER
A Quality Article

David D. Vega, MD FAAEM

Quality. It's easy to say that we want it. It's easy to complain when we don't get it. Every hospital and every physician wants to deliver the best quality of care. But how do we define quality? What are the specific traits of health care that tell us that the care being delivered is the best it can be? As providers, we have a strong sense of what overall quality is. We know when various aspects of care need to be improved. But my version of quality may not mesh up completely with your definition. And there can certainly be some variation in the specifics of what quality means between providers, patients, hospital administrators, third-party payers and government agencies.

The Institute of Medicine (IOM) has defined quality of care as "the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge."[1] Okay, this seems reasonable to me. Most physicians could find this at least tolerable as a definition of quality. But in the details is where the problem lies. How do we know if any particular aspect of care is improving health outcomes? For that matter, what is the right health outcome?

Everyone would like to have some easy measure or rating system that gives us the answers. Our current measurements of quality, though, are not at all adequate. Sure, we already have a number of different measures by which our care of patients is being measured. Organizations, often with the right intentions, are continuously trying to develop additional measures of quality. The Joint Commission, which accredits about 82% of the nation's hospitals,[2] has many measures of quality and even makes certain quality-related data available on the web.[3] But these measures represent such a small portion of health care that one can hardly call them an accurate assessment of the quality of care delivered by a hospital. With some of these widely accepted measures, it is even difficult to see the association with health outcomes. With others we must question the evidence, or lack thereof, that supports

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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
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)
*Associate membership is limited to graduates of an ACGME or AOA approved Emergency Medicine Program.

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.

3rd Party Has No Right to Bring EMTALA Action against Hospital

Kathleen Ream, Director of Government Affairs

On May 11, 2011, the U.S. District Court for the Northern District of California granted a hospital a motion to dismiss, thus refusing to approve a parent's standing in bringing her own cause of action under EMTALA for her daughter who allegedly was improperly discharged from the hospital (Pauly v. Stanford Hospital, N.D. Cal., No. 5:10-cv-5582, 5/11/11).

The Facts

On November 7, 2008, Makenzie Pauly underwent exploratory laparoscopic surgery and an appendectomy for abdominal pain at Sutter Memorial Hospital. Following surgery, Mackenzie experienced pain around the site of the incision, and the medical staff at Sutter administered pain management medications. Believing that they could not provide adequate care for Makenzie, the Sutter physicians contacted Stanford Hospital "to inquire if Makenzie's case was appropriate for follow up." Makenzie was discharged from Sutter with instructions to schedule outpatient care at Stanford.

On November 14, 2008, Faiza Pauly ("Pauly") took her daughter Makenzie to Stanford's ED because Makenzie was experiencing pain. The ED staff conducted a medical screening, initiated pain management procedures, and attempted to determine the cause of the pain. The patient obtained temporary relief, but the ED staff was unable to diagnose the source of the pain. Stanford discharged Makenzie, "providing her with new pain medications and instructing her to wait until her scheduled outpatient clinic appointment in January."

However, three weeks later Makenzie began experiencing "unbearable pain" and was admitted to the Sutter's ED. The next day, on December 5, 2008, she was treated with Bupivacaine, which caused a "severe reaction and unmanageable pain." Sutter physicians concluded that they "could not provide adequate treatment for Makenzie." They informed Pauly that her daughter needed treatment from a specialized facility, so two days later, Sutter contacted Stanford, requesting that Makenzie be transferred. Stanford allegedly indicated that "they would accept Makenzie in transfer but did not currently have a bed available."

Pauly claimed that on December 10, 2008, someone at Stanford contacted the attending physician at Sutter, suggesting "that the issue was not really the lack of a bed but that Stanford had a policy not to admit anyone to inpatient pain management until they had `failed outpatient clinic.'" Learning of this policy, Pauly agreed to Makenzie's discharge from Sutter. Pauly immediately took her daughter to Stanford's ED in hopes of receiving "stabilizing treatment."

At Stanford, Makenzie received an initial examination documenting her vital signs, assessing her pain level, and administering morphine. The attending resident, however, refused to administer further treatment or to admit Makenzie to inpatient treatment owing to the Stanford "outpatient failure" policy. Pauly attempted to communicate her belief that Makenzie's condition was a chronic pain condition, but was some type of post-surgical reaction. The Stanford physicians rejected Pauly's continued requests to have her daughter admitted. Pauly removed Makenzie from the hospital in a wheel chair. "Makenzie was later diagnosed and treated for a myotoxic drug reaction to the surgical anesthesia Bupivacaine, of which she received a second dose at Sutter Hospital on December 5, 2008."

Pauly sued Stanford claiming an EMTALA violation. Stanford moved to dismiss the claim on the basis that Plaintiff Pauly, as a non-patient third party, lacked standing to bring a direct EMTALA claim related to the treatment of her minor daughter.

The Ruling

Pauly argued that the EMTALA statute and authoritative precedent supported non-patient third-party standing. To back her claim, plaintiff relied on the Sixth Circuit's decision of Moses v. Providence Hospital and Medical Center Inc. Moses involved claims brought by the estate of a woman who was murdered by her spouse after he was discharged from a hospital and following a psychotic episode. Among its rulings, the federal sixth circuit decided in Moses that non-patient third parties – such as an estate on behalf of a deceased patient harmed as a direct result of an EMTALA violation – possessed standing under EMTALA's civil cause of action to sue hospital for alleged violations. Specifically, the appellate court wrote that the "plain language of the civil enforcement provision of EMTALA contains very broad language regarding who may bring a claim: 'any individual who suffers personal harm as a direct result' of a hospital's EMTALA violation may sue." In the Moses opinion, the court concluded that "Congress did not intend for EMTALA's statutory scheme to apply to the same 'individual' in all parts of the statute." [The Moses case was first reported in the article "Estate of Murdered Woman Allowed to Pursue EMTALA Claims," the July/August 2009 issue of *Common Sense*, available at http://www.aaem.org/commonsense/commonsense0709.pdf.]

In the Pauly case, the district court determined not to follow Moses, stating that "the statutory analysis in Moses was unnecessary to the holding. Because Congress did limit expressly the persons to whom a hospital owes its EMTALA obligations, it was unnecessary for it to limit expressly the private right of action for enforcing these obligations." Instead the court found Stanford's argument more persuasive in its reliance on two federal district court decisions, Ziegler v. Elmore County Health Care Authority, (M.D. Ala. 1990), and Sastre v. Hospital Doctor's Center Inc., 93 F. Supp. 2d 105 (D.P.R. 2000). The court concluded that extending "a private right of action to a third party when the individual patient is still living would result in a significant expansion of liability for hospitals subject to EMTALA's provisions. Because the language of the statute as a whole is inconsistent with such a result, this Court adopts the narrower reading upheld in Zeigler and Sastre." Both Ziegler and Sastre opinions relied heavily upon EMTALA's legislative history.

While Stanford Hospital's motion to dismiss was granted, the court noted that plaintiff could still bring an EMTALA claim on behalf of her daughter, or assert a direct state law claim for negligent infliction of emotional distress.

The Pauly decision can be accessed at http://docs.justia.com/cases/federal/district-courts/california/candce/5:2010cv05582/234997/33/.

Summary Judgment on Stabilization Claim Denied to Ambulance-Owning Hospital

On June 17, 2011, the U.S. District Court for the Southern District of Indiana denied a hospital's motion for summary judgment on a claim that it violated EMTALA by failing to stabilize patients presenting to the hospital's ambulance prior to transfer to another hospital (Beller v. Health & Hospital Corp. of Marion County, S.D. Ind., No. 1:03-cv-889, 6/17/11).

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The Facts

On June 14, 2001, 34-weeks pregnant Melissa Welch woke around 5:25 a.m., feeling a gush of water and "the umbilical cord protruding between her legs." Welch telephoned her physician's office, and spoke with an obstetrics (OB) nurse who instructed Welch to call 9-1-1 immediately. Welch phoned the Health and Hospital Corporation of Marion County's Wishard Ambulance Service, which arrived at the scene at 5:31a.m.

Wishard employees Paramedic Lisa Warren and Emergency Medical Technician Scott Wilbur treated Welch by following the Marion County Prolapsed Cord Protocol. While doing this, Warren spoke with the OB nurse. "The OB nurse asked Warren if she knew what she was doing, to which Warren responded that she did. The nurse told Warren that Ms. Welch needed to go to the closest appropriate hospital and asked Warren where the closest hospital was located. Warren stated that the nearest hospital was St. Francis Beech Grove, which was around the corner." The ambulance operated under the Marion County Emergency Medical Services Protocols, which allowed the ambulance to transport individuals to several different area hospitals.

During transport, Warren phoned St. Francis Beech Grove and spoke with Monica Stone, MD, to advise the staff that the ambulance was transporting Welch to the hospital. Stone informed Warren "the hospital did not have obstetrical facilities but gave Warren the 'okay' to bring Welch to St. Francis Beech Grove. After speaking with Warren, Stone called the St. Francis-South Campus in Indianapolis to make sure that a physician would be at the facility because they had a patient who may need to be transferred. The South Campus had a state-of-the-art obstetrical facility and a Neonatal Intensive Care Unit. Following the St. Francis's protocol, Stone also called the in-house family practice resident Stephanie Kirts-Johnson."

Johnson met the ambulance team at the South Campus ED. While Welch was taken into the building, "Johnson climbed up on the gurney to perform an examination, which revealed that Welch only was dilated enough to allow a loop of the umbilical cord to protrude. To relieve pressure from the cord, Johnson used her fingers to split the vaginal sidewalls. The examination also revealed that Welch was not in labor and delivery was not imminent. Johnson determined it was necessary to transfer Welch to the South Campus for an emergency cesarean section where OB/GYN physician Scott Miles was standing by."

Explaining the severity of the situation, Johnson told Welch that she needed to be transferred and told Welch the risks associated with transfer. According to Johnson, Welch verbally consented to the transfer. Welch and Johnson, who still was on the gurney attempting to relieve pressure on the umbilical cord, were then loaded back into the ambulance for transfer to the South Campus. "They arrived at the South Campus at 6:08 a.m. and were taken directly to the operating room. Miles performed the cesarean section and Joshua Beller was delivered at 6:16 a.m. where he was immediately handed off to the neonatal resuscitation team. Beller suffered severe brain damage due to a lack of oxygen."

On behalf of her son, Welch filed suit alleging that Wishard violated EMTALA by failing to stabilize Beller's emergency medical condition before he and his mother were transferred. Wishard filed a motion for summary judgment contending, "1) Plaintiffs did not 'come to' Wishard's emergency department within the meaning of the EMTALA; 2) Wishard provided an appropriate medical screening; and 3) Wishard did not transfer Plaintiffs so it had no duty to stabilize either Welch or Beller."

The Ruling

Under EMTALA, Plaintiffs must show that they came to Wishard's ED. While EMTALA does not define the term "comes to the emergency department," the Department of Health and Human Services (HHS) clarified the term to mean "with respect to an individual requesting examination or treatment, that the individual is on the hospital property." The regulation continued to define property as including "ambulances owned and operated by the hospital even if the ambulance is not on hospital grounds."

Wishard argued that two exceptions to the definition apply so that Plaintiffs did not "come to" Wishard's ED on June 14, 2001. The exceptions read as follow: "[A]n ambulance owned and operated by the hospital is not considered to have come to the hospital's emergency department' if (i) [t]he ambulance is operated under community-wide emergency medical services (EMS) protocols that direct it to transport the individual to a hospital other than the hospital that owns the ambulance; for example, to the closest appropriate facility . . . (ii) [t]he ambulance is operated at the direction of a physician who is not employed or otherwise affiliated with the hospital that owns the ambulance."

The Court ruled that at the time of the incident the exceptions did not exist. "The exceptions were among a number of amendments to Section 489.24 that took effect September 9, 2003, two years after the events giving rise to this lawsuit." Defendant Wishard acknowledged that Section 489.24 did not address the exceptions and that Section 489.24 indicated that hospital-owned ambulances are an extension of the hospital's ED. However, Wishard argued that the standard practice at the time was to "sidestep" this interpretation to avoid applying the definition of "comes to emergency department" to hospital-owned ambulances that served as community-wide emergency response vehicles. The federal district court wrote that "[w]hile this may have been the standard practice, it nonetheless creates a genuine dispute as to the material fact of whether Plaintiffs had 'come to the emergency department' on June 14, 2001 that makes granting summary judgment inappropriate."

The court also noted that if Wishard's ambulance is considered an extension of its ED, "then a potential transfer occurred when the ambulance arrived at St. Francis Beech Grove's emergency department . . . Any subsequent direction by Dr. Johnson from St. Francis Beech Grove to the South Campus is potentially a second transfer that is not at issue in this Motion . . . The evidence creates a genuine dispute of material fact as to whether Warren, an employee of Wishard, directed the ambulance to St. Francis Beech Grove, thereby transferring Plaintiffs as defined by the EMTALA. If Wishard transferred the Plaintiffs, it had a duty to first stabilize them." For these reasons, the court denied Defendant's Motion for Summary Judgment.

The court's decision can be read at http://docs.justia.com/cases/federal/district-courts/indiana/insdce/1:2003cv00889/2739/128/.

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

Increase in ED Visits for Drug-Related Suicide Attempts

According to two recent reports from the Substance Abuse and Mental Health Services Administration (SAMHSA), the number of ED visits for drug-related suicide attempts from 2005 to 2009 (the most recent year with available figures) increased substantially. The reports, broken down by gender and age group, show a 49% increase in such visits by women ages 50 and older – from 11,235 visits in 2005 to 16,757 visits

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in 2009 – and a 55% increase in such visits by men ages 21 to 34 – from 19,024 visits in 2005 to 29,407 visits in 2009. Based on data from the 2005-2009 Drug Abuse Warning Network (DAWN) reports, both SAMHSA reports include statistics for other age groups with respect to the misuse of specific drugs. The studies for both reports focused on cases where a determination was made by hospital ED staff that the admission was an intentional drug-related suicide attempt, rather than an unintentional overdose.

The DAWN Report: Trends in Emergency Department Visits for Drug-Related Suicide Attempts among Females: 2005 and 2009, notes that the 49% increase cited above reflects the overall population growth of women in that age group. The report also shows that, while overall rates for such ED visits by women of all ages remained relatively stable throughout the 2005-2009 period, visits for particular pharmaceuticals increased. For example, ED visits by women of all ages for suicide attempts involving drugs to treat anxiety and insomnia increased 56% during this period – from 32,425 in 2005 to 50,548 in 2009 – and the number of ED visits by women of all ages for suicide attempts involving pain relievers rose more than 30% from 36,563 in 2005 to 47,838 in 2009. Moreover, the rise in the number of ED visits for drug related suicide attempts involving the misuse of two specific narcotic pain relievers, hydrocodone and oxycodone, was particularly steep. The number of cases involving hydrocodone increased by 67%—from 4,613 in 2005 to 7,7l5 in 2009 – and the number of cases involving oxycodone increased by 210% – from 1,895 in 2005 to 5,895 in 2009.

The corresponding report on men, ***The DAWN Report: Trends in Emergency Department Visits for Drug-Related Suicide Attempts among Males: 2005 and 2009***, notes that the total number of ED visits by men of all ages for drug-related suicide attempts in 2009 was 77,971. With respect to such visits involving particular pharmaceuticals, the period 2005-2009 saw considerable increases. The number of ED visits by men ages 21 to 34 for suicide attempts involving antidepressants increased by 155% – from 1,519 in 2005 to 3,876 in 2009 – and the number of such visits involving anti-anxiety and insomnia medications increased by 93.4%. Furthermore, the number of such visits by men ages 35 to 49 involving narcotic pain relievers nearly doubled and, for men ages 50 and older, the number almost tripled.

Referring to the women's report, SAMHSA Administrator Pamela Hyde said, "The steep rise in abuse of narcotic pain relievers by women is extremely dangerous and we are now seeing the result of this public health crisis in our emergency rooms. Emergency rooms should not be the frontline in our efforts to intervene. Friends, family and all members of the community must do everything possible to help identify women who may be in crisis and do everything possible to reach out and get them needed help." As for the men's report, Director of SAMHSA's Center for Behavioral Health Statistics and Quality Peter Delaney said it highlights the growing problem of prescription drug abuse of painkillers, antidepressants, anti-anxiety drugs, and sleep aids. He added, "These drugs are effective, important treatments for pain, insomnia, and/or depression, so we don't want to throw the baby out with the bath water. Instead, to prevent the medications from falling into the wrong hands, he said, "We need to restrict access to prescription drugs, and keep them in safe, restricted places in homes."

The two reports are available at http://www.oas.samhsa.gov/.

Research Abstracts at the Sixth Mediterranean Emergency Medicine Congress (MEMC VI) in Kos, Greece

Gary Gaddis, MD PhD FAAEM

The presentation of research abstracts at the Sixth Mediterranean Emergency Medicine Congress, held September 11-14, 2011, in Kos, Greece, added new medical knowledge to another very memorable Mediterranean Emergency Medicine Congress. Those who attended had a truly a special opportunity to be able to share new ideas and concepts on the same island on which Hippocrates lived centuries ago. Those of us who viewed the staging of the reading of the Oath of Hippocrates at the ancient *Asklepion* (the reading, of course, was done in Greek) will always carry a special memory. The contrast between cutting edge modern emergency medicine, as represented by the research abstracts, and the knowledge of the ancients, was quite profound. Did you know that in Hippocrates' time, patients with certain illnesses were instructed by their physician to try to have specific dreams? If patients failed to improve, they were instructed by their physicians that they would have to dream again, but to try to dream as instructed!

Under the leadership of Research Abstract co-chairs Gary Gaddis (AAEM/United States), Eddy Lang (International/Canada), and Marc Sabbe (European Society of Emergency Medicine/Belgium), over 800 English language written abstract submissions were received and judged by an international panel of abstract reviewers.

Drs. Gaddis, Lang, and Sabbe thank all of those who reviewed the written abstracts submitted for consideration as a possible oral abstract presentation by the mid-May deadline; please see below for of a list of these reviewers. The research abstract review process included reviews by one content expert from each of the three categories of attendees (European, International and United States).

From these reviews, three abstracts emerged with the highest scores, and these were presented at the Plenary Research Abstract Session just before the opening reception on the 11th. Presenters included:

- Dr. Carlo Locatelli from Italy, who presented "Acute Pneumonia after Accidental Fuel Ingestion in Adults: A Prospective Study"
- Dr. Ramakrishnan Venkatakrishnan from India, who presented "Comparison of Propofol/Fentanyl Vs Ketamine/Midazolam for Procedural Sedation & Analgesia in Emergency Department"
- Dr. Scott Weiner from the United States, who presented "Single-Operator Ultrasound-Guided IV Placement by Emergency Nurses"

The winner, as judged after these three presentations were completed, was Dr. Locatelli. The winner and the finalists were awarded plaques and financial prizes, presented by Stephen R. Hayden, MD; editor-in-chief of the *Journal of Emergency Medicine (JEM)*, AAEM's official journal. On my behalf, and on behalf of the other co-chairs, we thank Dr. Hayden for the continued support of the *Journal of Emergency Medicine* which is represented by these awards.

In addition, Dr. Marcus Ong from Singapore received the Falck Foundation Sophus Falck Abstract Award for Pre-Hospital/Emergency Medical Services research, for "Nationwide Study To Improve Door-To-Balloon Times In Patients With Acute ST Elevation Myocardial Infarction Requiring Primary Percutaneous Coronary Intervention Using Prehospital ECG Transmission." The Academy of Emergency Medicine and Care in Italy received the Falck Foundation Sophus Falck Abstract Award for Best Overall Abstract for "New Synthetic Cannabinoids Intoxications in Italy: Clinical Identification and Analytical Confirmation of the Cases."

Over 300 English language abstracts were selected for oral presentation, based upon the scoring of the written abstracts. The numerous Oral Abstract Research Session moderators (see page 7) kept these oral abstract presentation sessions on time and on track. In addition, nearly 500 poster abstracts were presented.

Richelle Cooper, MD, of the University of California at Los Angeles, again provided a supremely valuable service by screening each of the abstracts, reviewing and editing the grammar on those submissions made by non-native English speaking authors.

On behalf of the chairs, I also wish to thank all who asked questions of the presenters at the meeting. Such questions help the abstract authors to prepare better drafts of papers for submission. One can think of a meeting abstract presentation as an opportunity for a free "peer review."

Looking forward to the Seventh Mediterranean Emergency Medicine Congress (MEMC VII), to be held in Marseilles, France, please consider serving as an abstract reviewer for the next Congress! Once again, non-case report abstracts will be scored by the abstract reviewers in May and June of 2013. You may self-nominate by forwarding your name, country of residence, email address, and four areas of greatest expertise to Gary Gaddis at ggaddis@saint-lukes.org. Please send an abbreviated one-page curriculum vitae excerpt, listing your publications and presentations over the past three or four years with your self-nomination.

Finally, it would be remiss of me to not mention the invaluable role of Amy Kuhl toward the planning and logistics of the Congress. She was quite literally the wind beneath my wings, making my role in the planning and preparations proceed much more smoothly. I cannot thank her enough for her dedicated and supremely effective efforts!

Research Abstract Reviewers:

Marc Afilalo
John Allegra
Helen Askitopoulou
Michel Baer
Heatherlee Bailey
Laurie-Ann Baker
Abdel Bellou
Cory Brulotte
Brian Burgess
Francesco Della Corte
Erwin Dhondt
Christopher Dodt
Nathalie Flacke
Jeff Freeman
Gary Gaddis
Lee Garvey
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Ziad Kazzi
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Chris Lee
Carlo Locatelli
Anoop Manocha
Andrew McRae
Angela Mills
Brent Morgan
Terry Mulligan
Ana Navio
Eric Piette
Antonia Quinn
Ewa Raniszewska
Kevin Rodgers
Marc Sabbe
Erik Saude
Jana Seblova
Luis Serrano
Fernando Soto
Ingrid Vicas
Salvador Villanueva
Joe Vipond
Millie Willy

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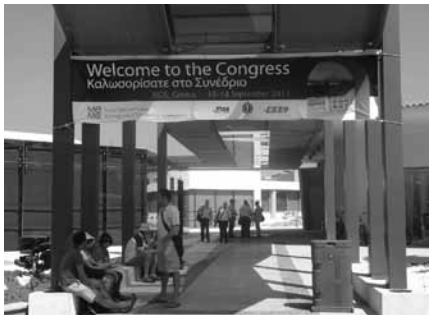
Photos from the Sixth Mediterranean Emergency Medicine Congress (MEMC VI) in Kos, Greece



Welcoming delegates to MEMC VI!

Attendees explore the poster hall during a break

A full house for the general session

A bustling exhibit hall

Greek dancers entertained guests at the Opening Reception

MEMC VI attendees at the ruins of the Asklepion

Scientific presentation by Dr. Anantharaman

Dr. Carlo Locatelli receives first place in the *JEM* Abstract Competition

MEMC founders Francesco Della Corte, Antoine Kazzi and Roberta Petrino along with EuSEM President, Abdel Bellou (center)

Opening address by AAEM president, Dr. Howard Blumstein

Research Abstracts at the Sixth Mediterranean Emergency Medicine Congress (MEMC VI) in Kos, Greece - continued from page 6

Oral Research Abstract Session Moderators:

Arif Alper
Kurt Anseeuw
Raed Arafat
Jeffrey Arnold
Ridvan Atilla
Paul Barach
Thomas Beattie
Matthias Brachmann
Diane Calello
Maaret Castren
Michael Christ
Tudor Codreanu
Herman Delooz
Deborah Diercks
Polat Durukan
Murat Ersel
Jeffrey Freeman
Ioannis Galatas
Luis Garcia Castrillo
Carlos Garcia Rosas
Beatrice Hoffmann
Judd Hollander
Said Idrissi
Alan Jones
Antoine Kazzi
Gerald Kierzek
Eddy Lang
Mark Langdorf
Luan Lawson
Lisa Mills
Lisa Moreno-Walton
Stephen Morris
Ana Navio
Cem Oktay
Marcus Ong
Nicola Parenti
Steve Photiou
Paul Porter
Kevin Reed
Eric Revue
Kevin Rodgers
Marc Sabbe
Nikolas Sbyrakis
Michael Silverman
Scott Silvers
Melanie Stander
David Talan
David Thorisson
VuKiet Tran
Arif Tyebally
Franck Verschuren
Brian Walsh
Marvin Wayne
Scott Weiner
Joanne Williams
Millie Willy
Ozlem Yigit
Kum Ying Tham
Aslihan Yuruktumen

Definition of Emergency Physician

The American Academy of Emergency Medicine (AAEM) board of directors recently approved its definition of "emergency physician." AAEM defines an emergency physician as someone who has either completed an accredited training program in emergency medicine, or is certified in emergency medicine by a recognized certifying body.

In the U.S., legitimate emergency medicine training is accredited by the ACGME RRC-EM, or the AOA COPT-EM. The only recognized emergency medicine certifying bodies in the U.S. are ABEM or AOBEM. In the case of pediatric emergency medicine, the ABP is also included.

Countries other than the U.S. should define the legitimate training approval and certification process for their nation. Further, nothing in this definition is intended to exclude those pioneering physicians around the world who have or are advancing the specialty of emergency in their countries by starting practice in a reasonable establishment phase during which formal training is not widely available. This establishment phase ended long ago in the U.S.

AAEM firmly opposes referring to any physician who works in the Emergency Department as an "emergency physician." Emergency medicine has consistently maintained that it is defined by its unique body of knowledge, not the site of practice. Referring to any physician who has not been formally educated in the unique body of knowledge that is emergency medicine as an emergency physician is a misrepresentation of their credentials.

There is a significant shortage of emergency physicians in the U.S. This workforce problem can only be solved by correctly categorizing the ED workforce into emergency physicians and non-emergency physicians. If a physician of another specialty background is practicing in an ED, they should represent themselves, and be represented, to the public as "(other specialty physician) providing emergency care."

Please note that AAEM is not applying this definition to other countries and encourages other countries to define legitimate training approval and certification process for their nation.

Emergency Medical Services in New South Wales, Australia

Brett Rosen, MD

I was fortunate to spend the month of April integrated into arguably one of the best combined EMS and retrieval systems in the world based in New South Wales, Australia. I spent my time with the Ambulance Service of New South Wales in the air and on the ground, including days with the Special Operations Team rapid response vehicle, the urban search and rescue team drill, and in the medical retrieval unit command center. The territory is vast, with many areas not densely populated, and presents the need for a unique approach on how to best serve the tourists and over 5 million people that live in the state. In the retrieval service, a combination of road vehicles, fixed-wing aircraft, state-of-the-art helicopters, specially trained paramedics of the Special Casualty Access Team (SCAT) and physicians bring the hospital to the patient as their primary goal.

Photo Courtesy of Dr. Cliff Reid

Thoracostomies, needle decompressions, intubations and ultrasound are commonly performed in the field by the physicians and paramedics of the retrieval service. They winch off helicopters, engage in water rescue, scale down mountains and cliffs, enter caves, and are trained to enter damaged buildings to stabilize and treat entrapped patients while awaiting extraction. They are called on for the most serious and dangerous cases in the state. These elite units are found in all helicopters and save countless lives, as transport times of many patients can be well over an hour, even by a fixed wing aircraft, to the closest trauma center.

The retrieval unit operations center is directly linked to the state 000 (their 911) center. Unit officers check all call reports to determine the highest priority patients potentially needing the retrieval services. I still recall one case of a 000 call for a neck injury at a beach in the southern part of the state. Within 45 seconds of the 000 call being placed, a helicopter crew was already notified and was ready to take off. Fifteen minutes later, a critical care helicopter crew composed of a physician and a SCAT paramedic was on-scene winching off the helicopter to take this patient to the closest trauma center nearly 150km away.

They are integrated into the urban search and rescue teams of New South Wales and participate in their disaster training exercises. Additionally, the retrieval service has its own personalized ground ambulances specially fitted to its needs for a primary response or a critical inter-hospital transfer. Their jobs last anywhere from a couple of hours to needing two teams for a 36 hour mission, transferring everything from BiPAP patients with high oxygen requirements to head bleeds and STEMIs.

I encourage everyone, students and residents, to do a rotation outside of the country if you can. It is an incredible learning experience to see how other countries practice medicine and to learn from those with different experiences to integrate into your own practice. Coming away from this elective, I have a new set of clinical tools and tricks to add to my clinical knowledge base. Most importantly, it has sparked an interest in an area of emergency medicine that most of us are not exposed to in our own country and has given me a new outlook on ways to improve our own system. Whereas textbook material can be learned anywhere, experiences are an invaluable aspect of our training.

I would like to give a special thank you to Dr. Cliff Reid, Dr. Karel Habig and all of the men and women of the Greater Sydney Area Helicopter EMS Division of the Ambulance Retrieval Service of New South Wales for the incredible opportunity and experience I was able to have under their leadership and commitment to education and patient care.

2012 AAEM Scientific Assembly—Registration Open!

Michael Epter, DO FAAEM
Chair, Education Committee

On behalf of the Education Committee, the American Academy of Emergency Medicine (AAEM) invites you to attend the premier event in emergency medicine for clinicians – the 18th annual Scientific Assembly! The venue for Scientific Assembly is at the timeless Hotel del Coronado in San Diego, CA, from Wednesday, February 8th – Friday, February 10th, 2012.

The 2012 conference will begin with an outstanding plenary session entitled "*Everyday Leadership: Secrets of Great Minds through the Ages*" by Dr. Amal Mattu, MD FAAEM. The membership will have the privilege of hearing one of the premier speakers in emergency medicine discuss those qualities and characteristics of truly extraordinary leaders and the importance that effective leadership skills play in optimizing success in all walks of life – whether one aspires to being a successful emergency physician, spouse and parent or succeeding as a national leader.

Six additional plenary sessions given by preeminent speakers will be featured throughout the conference on the following topics:

- Updates in Toxicology – Richard Shih, MD FAAEM
- Updates in Trauma – Swaminatha Mahadevan, MD FAAEM
- Updates in Critical Care – Peter DeBlieux, MD FAAEM
- Updates in Infectious Disease – David Talan, MD FAAEM
- Updates in Pediatrics – Ghazala Sharieff, MD, FAAEM, FAAP
- Updates in Neurology – Featuring a special joint session led by internationally acclaimed hosts of EM: RAP – Mel Herbert, MD FAAEM and Stuart Swadron, MD FAAEM.

Day 2 will kick off with a brand new session entitled, "Ask the Experts." This unique, innovative session is designed to have session panelists presented a challenging case with an increasing amount of information given. In this way, attendees will be able to witness the thought process of how content experts including Peter DeBlieux, MD FAAEM, Corey Slovis, MD FAAEM and Stuart Swadron, MD FAAEM approach and solve cases in critical care, cardiology and neurology, respectively.

In keeping with the spirit of providing attendees a cutting edge conference, with up to date, results oriented and clinically relevant didactic sessions, the tracks for 2012 include:

- Managing Critical Patients
- Controversies in Emergency Imaging
- Rational Approach to Common Problems
- Keeping Up with the Boomers (Geriatric Emergencies)
- What's Going On with My Little One? (Pediatric Emergencies)
- Where's the Literature to Support This?
- When the Shift Hits the Fan – Cringe Inducing Triage Notes!
- Point – Counterpoint
- Clinical Questions – Answered!
- Nuts and Bolts of Emergency Medicine Practice
- Talks You Can't Miss!

Other highlights for 2012 include:

February 6th & 7th : Preconference Courses

- Resuscitation for Emergency Physicians
- Advanced Obstetrics Simulation Course
- Pediatric Emergencies – Children are Not Little Adults
- This Won't Hurt a Bit! Regional Anesthesia for the ED
- Introductory/Advanced Ultrasound Workshops
- Pediatric Emergency Department Simulation (P.E.D.S.) Procedure Lab
- Practice Management Bootcamp
- 2011 LLSA Review Course
- Wellness for the Emergency Physician
- Medical Student Track
- Update on Humanitarian and Disaster Relief Missions – Bringing Military Experience to You

February 8th

- AAEM/*JEM* Resident and Student Research Competition
- "Unconference It" – Joseph Lex, Jr., MD FAAEM
  - Participants will download an audio (mp3) file PRIOR to the conference about the new antiplatelet and anticoagulant drugs prasugrel, dabigatran, ticagrelor, rivaroxaban, and apixaban. During the session, Dr. Lex will lead a Q&A generated by the talk.

February 9th

- The Best of Morbidity and Mortality
  - Presentation of selected cases by EM faculty with a focus on identifying cognitive errors (biases, failed heuristics, and failures in perception) and improving patient safety.
- Open Mic Session
  - Annual session, sponsored by the Young Physicians Section, to encourage AAEM members the opportunity to expound on a cutting edge topic of their own Assembly by presenting a 25-minute lecture on a topic of their choosing. The top two speakers will be invited to give a formal presentation at the 2013 Scientific Assembly in Las Vegas, NV.
- Emergency Medicine Photo Contest

February 10th

- RSA – YPS Track
- Resident In Service Training Exam Preparatory Course

If you thought it can't get any better than this – IT CAN! If you sign up before January 5th, you get an early registration fee discount for preconference courses! As customary for the conference, there is no registration fee for AAEM members (deposit is refundable). For more information, visit this website now: www.aaem.org and click on the Scientific Assembly icon.

Expect nothing less from your professional organization - the best emergency medicine CME at no charge in a great location presented by top clinician educators in emergency medicine. Catch the wave of Scientific Assembly in San Diego before it's gone…February 8th-10th, 2012.

AAEM Scientific Assembly – perpetually advancing emergency medicine for the clinician, proudly a premier educational conference.

The letter that follows was sent by AAEM to Catholic Healthcare West (CHW).

FAAEM
always means
board certified

October 17, 2011

Mr. Lloyd H. Dean
President & Chief Executive Officer
Catholic Healthcare West
185 Berry Street, Suite 300
San Francisco, CA 94107
via e-mail: lloyd.dean@chw.edu

Dear Mr. Dean,

We have been informed that Catholic Healthcare West (CHW) is considering requiring its medical staff members at Dominican Hospital and potentially at other CHW hospitals to obtain Medical Professional Liability Insurance (MPLI) with minimum coverage limits of $2million/$6million and to contractually agree to indemnify CHW in the event of a claim. The American Academy of Emergency Medicine (AAEM) has significant concerns about this proposal and we urge CHW to reject these strategies.

This increase in minimum policy limits for CHW medial staff members would represent a doubling of the existing $1M/$3M policy limits currently held by most emergency physicians in California. The data from California as outlined in the letter to you from Dustin Corcoran of the California Medical Association do not indicate a need for such an increase in terms of payouts in excess of $1 million.

The potential consequences of instituting minimum policy limits of $2M/$6M include a likely result in a 30 - 40% increases in the average MPLI premium for California physicians. The cost of such an increase would create a hardship for EM physicians who are currently operating in an environment where their care is often inadequately compensated. This will threaten the economic viability of the practice of EM in California. Additionally, this may impact other specialties and force them to limit or close their practices. This decrease in access to care would exacerbate the issue of over crowding in California emergency departments.

CHW may find itself having difficulty retaining or recruiting emergency physicians if other hospitals do not institute raised limits. An emergency physician practicing with required MPLI at double the industry standard limits will see themselves at risk for aggressive pursuit by trial lawyers aware of the increased insurance coverage.

AAEM is also quite troubled by the contractual indemnity clause that CHW has proposed in its contracts with physicians. The CMA has clearly laid out the potential for invalidation of the physician's MPLI coverage if they sign such a contractual indemnity provision. This possibility as well as the obvious shift of burden onto the physician will further decrease the appeal to an emergency physician of a position at a CHW hospital. Indeed, as a professional society, we would be obligated to warn our members of the risks of both of these items if CHW pursues them.

The AAEM respectfully requests that CHW carefully analyze this matter before implementing increased MPLI limits and contractual indemnity clauses.

Sincerely,

Howard Blumstein, MD, FAAEM
President, AAEM

American Academy of Emergency Medicine
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phone: 1-800-884-AAEM • fax: 414-276-3349 • e-mail: info@aaem.org • website: www.aaem.org

The Devil's EM Dictionary

Andy Walker, MD FAAEM
AAEM Board of Directors

I must begin by apologizing to Ambrose Bierce, one of America's finest but least remembered writers and author of *The Devil's Dictionary* (originally titled *The Cynic's Word Book*). Written as a series of newspaper columns from 1881 to 1906 and published in book form in 1911, it remains in print and is a great read. I not only recommend it, I now try to imitate it. Bierce led an interesting life and came by his cynicism honestly, fighting in some of the bloodiest battles of the Civil War. As emergency physicians, we fight our own battles every day, and although we are shot at less often than Bierce, we too have the reputation of being cynics. Most of us, like Bierce, turn that cynicism into humor – although sometimes it is hard to tell the truth from a joke.

It has been said that you can't tell the players without a program, and in the world of emergency medicine there are many players. Some are good, some evil, and some a bit of both. The response to my article "Legitimate" in the summer 2010 issue of *Common Sense* showed just how confusing all the acronyms and players can be, even to emergency physicians. So, in tribute to Ambrose Bierce and cynical emergency physicians everywhere, I offer this first installment of an emergency medicine glossary in the hope that it will be educational, and maybe even funny.

AAEM: the American Academy of Emergency Medicine. The only professional organization for emergency physicians that restricts full membership to board certified specialists in emergency medicine, and in which fellowship ***always*** means legitimate board certification. Every time you see "FAAEM" trailing a doctor's name and degree, it means that physician is a specialist in emergency medicine certified by ABEM or AOBEM (see below), or the Royal College of Physicians and Surgeons of Canada – no exceptions. It is the *summum bonum* of emergency medical organizations.

AAEP: the American Academy of Emergency Physicians (also the American Association of Equine Practitioners and the American Association for Emergency Psychiatry – but those entries are for a different dictionary). Part of AAPS (see below), AAEP exists to grant fellowship to those emergency physicians "board certified" by BCEM (see below), another part of AAPS. This allows them to add more letters after MD or DO at the end of their names. When you see "FAAEP" following the name and degree of a physician, it means that physician is certified by BCEM, not ABEM or AOBEM.

AAPS: the American Association of Physician Specialists. The parent organization of ABPS (see below), which in turn is the parent organization of BCEM, it was founded in 1952 as a way for osteopathic physicians who had completed an allopathic residency to become board certified. In the late 1980s, as ABEM and AOBEM closed the practice track to board certification, it seized the opportunity and allowed MDs as well as DOs to join. Now the majority of its members practice emergency medicine and are certified by BCEM, by far the largest of its specialty boards. Even now BCEM does not require residency training in emergency medicine before it will grant "board certification" in emergency medicine.

ABEM/AOBEM: the American Board of Emergency Medicine and the American Osteopathic Board of Emergency Medicine. The two legitimate certifying boards, which require residency training in emergency medicine, as opposed to "alternative" certifying boards. ABEM is under the authority of the American Board of Medical Specialties and AOBEM is under the American Osteopathic Association.

ABMS: the American Board of Medical Specialties. Formed in 1935, the supervising body for most specialty boards for MDs, including ABEM. Traditionally considered to be the legitimate authorizing body for medical specialty boards, it enjoys a near-monopoly on MD board certification. Strangely, it seems to be intent on destroying its own position by driving even properly trained specialists into the arms of alternative boards, by making board certification more and more painful and expensive to maintain (see also LLSA and MOC).

ABPS: the American Board of Physician Specialists, parent organization for BCEM. See AAPS.

AEP: the Association of Emergency Physicians, formerly the Association of Disenfranchised Emergency Physicians. An organization of physicians who work in emergency departments but are not board certified specialists in emergency medicine. To quote from the AEP vision statement, "The Association of Emergency Physicians' vision is to represent all practitioners of Emergency Medicine independent of economics, politics, geographic location, or training background." Exactly: independent of training. Why they changed the name is unclear, since they still aren't eligible to sit for ABEM or AOBEM exams. Besides, ADEP is easier to say than AEP. Is that pronounced "ape" or "eep"?

BCEM: the Board of Certification in Emergency Medicine. The alternative board in emergency medicine, which will certify a physician as a specialist in emergency medicine even without residency training in emergency medicine. As you might expect, there is a lot of overlap in the membership of BCEM, AAEP, AEP, and ACEP's Section on Certification and EM Workforce.

Board Certified: holding certification from a specialty board under the authority of either ABMS or the American Osteopathic Association. In emergency medicine that means certified by ABEM or AOBEM. BCEM doesn't count, except in Florida.

BOHICA: bend over, here it comes again.

BWOHICA: (pronounced b**WHOA!**hica) bend waaaaay over, here it comes again.

CMG: contract management group, also known as a megagroup. A corporation, usually publicly traded, which after it deducts fees for coding, billing and malpractice insurance then takes away an additional 15-30% of an emergency physician's collected professional fees as payment for giving him or her a job. Note that many individual contract holders would meet this definition if they incorporated and sold stock, as would some medical schools (see Dean's Tax).

CMS: the Center for Medicare/Medicaid Services, also known to physicians as The Feds. See BOHICA above, especially in regard to payment for emergency medical services already rendered.

CPOE: computerized physician order entry. A very sophisticated system for taking emergency physicians away from the bedside and forcing them to do clerical work instead. Accomplishes for patient flow and safety what the Transportation Security Administration has accomplished for air travel.

Direct Admission or direct admit: an archaic term that older emergency physicians are familiar with, but which is unknown to most

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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!

NEW THIS YEAR: MULTI-YEAR MEMBERSHIPS NOW AVAILABLE!

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 a conference or other educational opportunities
- Browse the member's only publications
- Perform a job search with our job bank services
- Participate in AAEM Career Network

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.

The Devil's EM Dictionary - continued from page 11

of those under forty. Once upon a time, many doctors would actually see acutely ill patients in their offices and, upon making a diagnosis that indicated hospital admission, then - here is the amazing part - write their own admission orders and put that patient in the hospital ***without ever involving the emergency department!*** That was known as a direct admission, and they all lived happily ever after.

ED: the answer to every difficult medical question, and some difficult nonmedical questions. See also BWOHICA. Examples:

> Society - "Where can we send all the crazy people we used to put in psychiatric hospitals?"
>
> Police - "Do you want to go to jail or the ER?"
>
> Hospital Administrator - "My 20 story, 600 bed hospital is full. Where can I hold every single newly admitted patient until someone dies or gets discharged?"
>
> The Feds - "Where can we get medical care for everybody without paying for it?"

EMR/EHR: electronic medical record or electronic health record. See CMS and BOHICA above. If there was a cost-effective, safe, easy, and fast EMR/EHR available The Feds wouldn't have to bribe and penalize physicians and hospitals into using it, would they?

Fellow: a physician recognized by a specialty society as ethically sound and an expert in the field. Nearly every specialty society requires board certification as a prerequisite for fellowship. For example, FAAEM (Fellow of the American Academy of Emergency Medicine), FACP (Fellow of the American College of Physicians), FAAP (Fellow of the American Academy of Pediatrics), FACS (Fellow of the American College of Surgeons), etc. In rare cases one can be a Fellow without board certification. For example, FACEP (Fellow of the American College of Emergency Physicians) and FAAEP (Fellow of the American Academy of Emergency Physicians).

Grandfather In: to follow a practice track rather than residency training to become eligible for board exams. All specialties allow this as they are being established, since no residencies were available prior to the creation of the specialty. Emergency medicine closed its practice track in 1988, nine years after that closure was announced. ABEM left the practice track open longer than any other specialty founded since 1950. No specialty has ever reopened its practice track after closure.

Hospital Administrator: in archaic use this was someone (occasionally a physician) who made administrative and business decisions for the hospital, always with the intention of making sure doctors and nurses had everything they needed to take proper care of patients. In its modern usage, someone with no medical training who tells doctors and nurses how to do their jobs, while at the same time depriving them of essential equipment, constantly demanding they do more and more with less and less. See also BOHICA.

Meaningful Use: a requirement of The Feds in regard to EMR/EHR. See BWOHICA.

Primary Care: in current usage, what emergency physicians spend most of their time doing. Performed in locations other than the emergency department by nurse practitioners and physician assistants, as well as pediatricians. No one is paid well for performing it in any location. In its archaic meaning, an activity done by doctors in other specialties, mainly family medicine and internal medicine, in private offices and clinics rather than the ED. As an activity for physicians outside the emergency department, it seems to have disappeared at about the same time as the direct admission.

Physician: according to Bierce himself, "One upon whom we set our hopes when ill and our dogs when well."

Thank You!

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
- Fort Atkinson Emergency Physicians (FAEP) - WI
- Fredericksburg Emergency Medical Alliance, Inc. - VA
- Memorial Medical Center - IL
- Northeast Emergency Associates - MA
- OSF Saint Anthony Medical Center - IL
- Physician Now, LLC - VA
- Providence-Newberg (ESO) - OR
- Salinas Valley Emergency Medicine Group - CA
- Santa Cruz Emergency Physicians (SCEP) - CA
- Southern Colorado Emergency Medical Assoc (SCEMA) - CO
- Space Coast Emergency Physicians - FL
- Temple University - PA
- University of Louisville - KY
- West Jefferson Emergency Physician Group - LA

Editor's Letter - continued from page 2

them. Remember that our IOM definition requires quality to be "consistent with current professional knowledge." In addition, as soon as a core measure is introduced, hospitals tend to increase resources dedicated to improving that metric. Not a bad thing by itself, but the reality of limited resources means that increased efforts towards one cause may have negative, unmeasured effects on other areas of care.

So what is the easy answer? Unfortunately, there is none. This is a tremendously complex issue of which we truly do not have a full understanding. Work needs to continue so that we can continue to understand and improve quality in health care. Whether you think the U.S. health care is the best in the world, the worst, or somewhere in between, there is always room for improvement. We can always get better at fighting disease and improving health. This needs to be the central goal of all efforts at quality improvement. Real world concerns of limited resources and financial considerations cannot be ignored, but they also cannot be the defining feature of quality.

To improve quality, many hospitals are incorporating concepts like Lean and Six Sigma that have proven successful in other industries. While there can be a lot of benefit in using these strategies, they must be tempered with the realization that hospitals (and emergency departments) are not factories. Thus, the often-stated phrase of physician resistance, "Patients are not widgets!" misapplication of these methods along with their ever-increasing lexicons of catch phrases (did you know you can take a Gemba walk or visit an A3 dojo?[4]) has left many physicians leery of being involved with initiatives for quality improvement brought through these techniques. But structured analysis and careful implementation of quality improvement through methods like these have been shown again and again to be effective at inducing lasting improvement. As physicians, we need to be involved with initiatives to improve quality in our hospitals.

A recent study found a very strong association between the ranked quality of a hospital and physician involvement in hospital leadership.[5] Hospitals with physician leaders had, on average, 25% higher quality ratings. The exact reasoning for this correlation is not clear, but there is certainly the suggestion that having physicians in leadership positions is beneficial for hospitals from a quality perspective. It may be that physicians better understand the true business of health care; namely, treating patients and improving health. If you want to improve the design of a car, you don't ask the accountants how to do it; you talk to the engineers. Likewise, physicians better understand the processes through which health care is ultimately delivered, and their proximity to the actual clinical care of patients provides better insight for improvement of these processes. When faced with the realities of limited resources and financial constraints, physicians may be best suited for making difficult choices about patient care initiatives.

As emergency physicians in particular, we need to be actively involved in quality programs in our hospitals. We can't afford not to be. If we are not the leaders in creating quality improvement, we will be the targets. There is no paucity of individuals and groups that are willing to offer their ideas on how emergency physicians should better practice medicine. We must get over the idea that any physician's role in health care should be limited to clinical work. The reality of health care today demands that physicians take a more active role in ensuring that patient care is as good as it can be. We will continue to face challenges of being asked to do more with fewer resources. There will be initiatives that are brought forth under the guise of quality improvement that are not patient-centered. Certainly not everyone has the best motivations. But we cannot be discouraged from continuing to strive to make health care the best it can be for our patients.

(Endnotes)

1 <http://www.iom.edu/Global/News%20Announcements/Crossing-the-Quality-Chasm-The-IOM-Health-Care-Quality-Initiative.aspx>

2 <http://www.jointcommission.org/assets/1/18/Hospital_Accreditation_1_31_11.pdf>

3 <http://www.qualitycheck.org/consumer/searchQCR.aspx>

4 <http://www.lean.org/>

5 Goodall, Amanda H. "Physician-leaders and Hospital Performance: Is There an Association?" *Social Science & Medicine* 73.4 (2011): 535-39.

My Memoirs

Lala Dunbar, MD FAAEM

I am honored that the women of emergency medicine view my life as a source of inspiration. I look upon my experiences as an example of how women's role in the medical community has evolved and the important role that perseverance has played in this evolution, as well as my personal achievements.

Although I grew up in a generation where women were discounted as doing anything scientific or important, I was not dissuaded from having dreams of becoming a physician. Among the things I value is the time I spent with my grandmother, who lived in a Mississippi country community, where I was taught to respect all people, regardless of race. My father earned his Master's and Ph.D in organic chemistry in night school, and my grandfather, recognizing a need in the farm community where we lived in Mississippi, went to medical school at the University of Alabama in Mobile when he was 43, graduating in the class 1904. The example set by these men gave me the realization of the possibility of doing things later in life, than as usual.

Prior to my marriage in 1955, I worked at the NIH as a chemist doing research on aldosterone for which I received thanks for the good work in publications. While I was working at the NIH, I distinctly remember a moment while I was driving home, telling myself "I am just as smart as these doctors. I can be a doctor, too." From that day on (I was 20 years old), I held fast to the thought that someday I could be a doctor as well.

It was my aim to return to school once my children had all entered school. By this time, I was aware of the difficulty of getting into medical school and knew that I would have to upgrade my education to reestablish my academic credentials. The opportunity to do this came when my husband was assigned to duty in Vietnam, and my parents were retired and available to see that my children were off to school and had supervision in the late afternoons. Thus, I moved back to Virginia to attend school in DC, kids in tow. I entered the biochemistry department at GWU, as a Master's degree candidate with discouragement from the chair of the department, regarding the possibility of spending time and money with nothing to show for it. My life changed after the first exam, in which I scored a 98 percent, with a class average of 64. Suddenly, several professors had research interests that I was asked to participate in. I settled with Dr. Bailey doing research on the polyunsaturated fatty acids.

Getting into medical school was another story. I had applied and been turned down, then found out, as expected, that one of the first year medical students had dropped out near Christmas. I was told by the admissions committee that assuming that seat was dependent on approval by chairman of anatomy, Dr. Richard Snell. Through his good graces, I was allowed to begin immediately. Following Christmas break, I was told that I had to take the head/neck/pelvis/perineum exam with my class. At that point, I did not know a fossa from a fascia, so I spent my Christmas studying Dr. Snell's book and lectures. Fortunately I passed the exam, scoring slightly above class average, so I felt I was on my way to becoming a physician.

My mother was the mainstay of care for my family during medical school and residency, as my husband was on tour as a fighter pilot for the Air Force in Vietnam. Emergency medicine was not mentioned as an option for residency in the mid 70s when I finished medical school, so I went into internal medicine and completed a residency at the Washington Hospital Center. At the time that I completed residency, my husband had sufficient years in the Air Force that he was eligible to retire, and did so in 1981. At this point, we moved south to Mississippi. Then, as fate would have it, my first office was in the ER of the local hospital because of a desire by the administrator for me to occupy a suite of offices that were being built. This office space was given to me in return for my watching the ER all day. This prompted my rapid enrollment in ACLS and ATLS classes.

In 1983, my husband and I parted ways, and I began to do ER work exclusively as a matter of preference over internal medicine. I visited New Orleans at a time when Dr. Albert Lauro was looking for a faculty member with ER and internal medicine experience. I subsequently became the director of the medical side of the emergency room at Charity Hospital in New Orleans and held that position until Hurricane Katrina in 2005. It was in this venue that I entered into clinical trials research, my first study being with a new IV antihypertensive called fenoldopan, still in use today. The ER proved to be a fruitful place for the conduct of clinical trials, and I have been involved in clinical research ever since.

Since Katrina, my research associates and I have worked in the convention center, military mash units and local family practice clinics, one of which was on General DeGaulle, a Catholic University. More recently, we are in a beautiful ED setting at the renovated University Hospital. Two and a half years ago, I was diagnosed with stage 4 colon cancer, and until recently have been able to continue work (June, 2011).

My experiences serve as testimony that although faced with adversity and societal restraints, I was able to persevere and accomplish a long held dream. I hope that my experiences in life can serve as an inspiration for other women whose dreams seem daunting.

In honor of Dr. Dunbar, Dr. Peter DeBlieux writes:

Dr. Dunbar, who was larger than life, is recognized as one of Emergency Medicine's national leaders in research, an outstanding bedside clinician, fierce patient advocate, international relief worker, and bon vivant....Her indomitable spirit and substantial academic and community contributions set fine examples for those who choose to stand on the shoulders of one of Medicine's giants. The LSUHSC and Charity Hospital family has benefitted greatly through Dr. Lala Dunbar's commitment to excellence in patient care and research. Our medical family and community are diminished by her passing, but simultaneously exalted by her undying love of medicine and life.

Dr. Dunbar was an early leader in EM and before her time as a woman in EM. She is a role model for all of us and we feel her loss.

Peter DeBlieux, MD FAAEM

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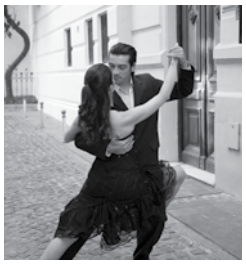

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CRITICAL CARE MEDICINE CERTIFICATION APPROVED FOR EMERGENCY PHYSICIANS

East Lansing, Michigan and Philadelphia, Pennsylvania <October 21, 2011>—Diplomates of the American Board of Emergency Medicine (ABEM) now have the ability to become board certified in Critical Care Medicine (CCM). The number of critically ill patients presenting to emergency departments is increasing nationwide. This opportunity is a natural extension of the practice of Emergency Medicine.

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. By January 1, 2012, ABEM will announce the specific eligibility criteria, the timeline, and the administrative process for emergency physicians to access the critical care certification examination offered by ABIM. ABEM will issue the CCM certificate to its diplomates, but the certificate would indicate that the standards are the same as those of ABIM. Information about the program can be found here.

"We are excited that emergency physicians now have the opportunity to assess their knowledge and skills in critical care medicine and that a formal training pathway exists to build upon their emergency training, and that this will allow them the opportunity to become certified in this important subspecialty," stated Richard N. Nelson, M.D., ABEM President.

IM CCM becomes the seventh subspecialty available to ABEM-certified physicians along with Emergency Medical Services, Hospice and Palliative Medicine, Medical Toxicology, Pediatric Emergency Medicine, Sports Medicine, and Undersea and Hyperbaric Medicine.

###

About ABEM
Founded in 1976, the American Board of Emergency Medicine (ABEM) develops and administers the Emergency Medicine certification examination for physicians who have met the ABEM credentialing requirements. ABEM has nearly 28,000 emergency physicians currently certified. ABEM is not a membership organization, but a non-profit, independent evaluation organization. ABEM is a member of the American Board of Medical Specialties.

About ABIM
For 75 years, certification by the American Board of Internal Medicine (ABIM) has stood for the highest standard in internal medicine and its 19 subspecialties and has meant that internists have demonstrated – to their peers and to the public – that they have the clinical judgment, skills and attitudes essential for the delivery of excellent patient care. ABIM is not a membership society, but a non-profit, independent evaluation organization. Our accountability is both to the profession of medicine and to the public. ABIM is a member of the American Board of Medical Specialties. For additional updates, follow ABIM on Facebook.

The Value of Board Certification and Residency Training in Emergency Medicine

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Introduction

The 1999 Institute of Medicine (IOM) Report "To Err is Human: Building a Safer Health Care System" focused attention on the quality of medical care in the United States (1). However, concerns regarding patient care in the nation's emergency departments (ED) have existed since the 1950s (2). The data from the Harvard Medical Practice Study, which played a key role in this IOM report, supported these concerns as the ED was the hospital area with the highest rate of adverse events due to negligence (3). Emergency Medicine has existed as a formal specialty since 1979 but the current supply of board-certified emergency physicians meets less than two-thirds of the demand (4). As health system and graduate medical education reform progress it is important to consider the physician needs related to care in the ED. The intent of this paper is to examine the evidence regarding the value of residency training or board-certification in emergency medicine (EM) and how it affects the quality of care in the ED. This matter is of importance to policy makers and others in decisions regarding the future ED physician workforce.

Evidence regarding board-certification in EM and the quality of care

The best evidence that board certification and residency training in EM leads to improved quality of care comes from studies that examine what happens when a hospital emergency department transitions to such physicians from non-board certified physicians. Data comparing the quality of care before and after the addition of board-certified EM physicians or an EM residency demonstrates improvement in several areas including treatment of acute myocardial infarction (AMI), airway management, chest pain, abdominal pain in females, head trauma, headache and extremity lacerations (5-9).

Weaver, et al, showed that the addition of qualified EM faculty resulted in a significant decrease in median time to thrombolytic administration and a significant increase in the percent of patients receiving thrombolytic therapy within 30 minutes of hospital arrival in patients with an AMI. The hospital length of stay was also significantly decreased. There was also a non-significant decrease in mortality noted (5).

Airway management has also been shown to improve with the presence of EM faculty or residents. In a study by Jones, et al, the success rate of first attempt intubation improved from 46% to 62%. Intubation requiring more than six attempts for completion decreased from 2.9% to 1.1% and the overall mean time to intubation improved from 9.2 minutes to 4.6 minutes with EM faculty present (6). Friedman, et al, concluded that the addition of an EM residency reduced the number of patients who were admitted to the hospital without undergoing clinically necessary endotracheal intubation in the ED (7). Chang, et al, reported a decrease in the need for surgical cricothyrotomy, a surrogate marker of improved airway management, in trauma patients after the institution of an EM residency training program at a Level 1 trauma center (8).

Good documentation reflecting the process of care is believed to reflect good medical practice. ED physician documentation was evaluated for patients discharged home with five chief complaints: non-traumatic chest pain, lower abdominal pain in women, head trauma, headache and extremity laceration. These complaints were selected because they are frequently encountered in the ED and represented areas identified as high risk for malpractice claims.

After the addition of EM residents and EM faculty, there were statistically significant improvements in the process of care for all of the complaints (9).

Existing EM residency programs also seem to impact the quality of care. Taylor compared patient outcomes in ten Level 1 trauma centers and found that those with an emergency medicine residency training program present had a significantly lower complication rate, death rate and shorter hospital stays despite seeing an older population (10).

Evidence from malpractice data

The risk of litigation involvement for the EM physician is high due to a lack of a continued physician-patient relationship, frequent interruptions and interactions with patients and their families at stressful or traumatic times. A study by Branney, et al, examined 218 closed insurance claims against "emergency medicine physicians" and found that 61.4% of the claims were against non-certified EM physicians. These claims accounted for 71.5% of money paid. There was on average 1 closed claim for every 30.2 doctor years for non EM trained physicians versus 1 closed claim for every 72 doctor years for EM trained physicians (11).

Press, et al conducted a retrospective analysis of malpractice claims and awards from August 1984 to July 1990 in a pediatric emergency department. In 1987, their ED changed from part-time attending coverage (coverage was provided part of the day by physicians in training without supervision) to full time attending coverage (e.g. 24 hour supervision). Their data showed a 41.7% decrease in the numbers of claims. Prior to attending coverage they averaged 1 claim for every 10,196 visits, and afterwards, 1 claim in 15,296 visits. There was also a 44.3% decrease in the amount of money paid out in claims (12). In a sister study, Press et al looked at the same information for their adult ED. In 1987, they increased their attending coverage from 6000 hours per year to 26,280 hours. This change resulted in an 18.5% decrease in claims filed and a 70.1% decrease in monies paid (13). Although the data from these two studies did not directly examine whether the physician was board certified in

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The Value of Board Certification and Residency Training in Emergency Medicine - continued from page 18

EM they do suggest that the presence of more senior physicians decreases the malpractice risk in the ED.

Discussion

The available literature indicates an improvement in quality of care in the ED with the presence of board-certified emergency physicians or a residency training program in EM. This is not surprising as board certification in other specialties has been shown to improve the quality of care and patient outcomes. This has been shown regarding anesthesia related deaths (14), complications of surgical procedures (15), the inpatient care of acute myocardial infarction (16), prenatal care and birth outcomes (17), and the delivery of preventive services (hemoglobin A1c monitoring, mammography, colon cancer screening, and influenza vaccination) (18).

Conclusion

There is clear evidence in the literature that supports that board certification and residency training in EM improves the quality of care provided to patients in the nation's emergency departments. The public, hospitals and the government should be aware of this fact.

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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.

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The Real World (and Time Management)

Heather Jiménez, YPS Education Chair

Residency is over, and now the "real world" begins. Looking back, how did you accomplish everything on your CV and check all the boxes to get a certificate during residency? Life was supposed to get simpler; so where is all your time going? Whether at work or home, it seems the greatest limiting factor in our fast-paced lives is time. Each person excels at managing this differently (or you would not be where you are today), but below are a few tips that might improve productivity and increase your satisfaction both on the job and with your family.

Utilize your resources.

The emergency department is staffed by numerous different people who can save you small segments of time repeatedly. Early in your career, you should observe your colleagues, converse with the staff, and feel out the department for ways to save time. Whether it is setting up for a pelvic exam, cleaning a wound, or splinting a limb, others can aid in your productivity. Your department may have a tech who can set up for a pelvic exam – or even better, recognize when one will be needed and have the patient in a gown, set up for the exam, and then serve as a chaperone when you enter the room the first time (thus saving you repeated trips). Your nurses may do digital blocks and/or numb and scrub a wound – thus after you have completed your initial exam, everything will be ready when you return to suture. Once the nurses are familiar with your preferences and techniques, you can provide quick direction so all your equipment is available (i.e., gloves, suture/staples, bandage, any ointment). You can then provide your discharge/care instructions while suturing. As a bonus, patient satisfaction will increase, as there will be limited time when they are not engaged in the throughput process of the ED, and their pain will be addressed almost immediately following your exam. Your department's triage system can also be a lifesaver. Urine pregnancy tests, urinalyses and X-rays can be initiated here. Before you see a patient, their injured or painful joint/extremity can be filmed. By viewing the films prior to entering the room, you save yourself and the patient time. An ortho or casting tech can then be ready to splint after you do your exam while you are preparing discharge instructions. With all three of these examples, and any others you find in your emergency department, manage up – let the nursing supervisor know what an awesome job is being done and how helpful this is to you. It will stop any grumbling that "this is not how we do things here," and often increase productivity in your staff as everyone loves to be recognized for a job well done.

Other staff can also be crucial to throughput in your department. Often, you will have a case manager who can assist with placement issues, home care arrangements, and early identification of who qualifies for admission. These godsends, in conjunction with social work, can save you multiple lengthy phone calls and much frustration. Social work can entertain a child while you speak with their parent, address domestic violence, assist with resource management/transportation, and a multitude of other concerns you might have. If necessary, they are a wonderful resource by serving as your liaison with law enforcement and child protective services. Again, frequent recognition of both social work and case management's exemplary service will help ensure they remain in your department and will improve their job satisfaction.

Regardless of the exemplary care you will provide, some patients will be frustrated, dissatisfied or angry. The emergency department is a stressful place where a visit necessitates disruption of plans and events. Learn to recognize warning cues in these patients and families, identifying those who might need an extra few minutes in the encounter to diffuse a situation. This can save you many headaches and scenes as you are trying to mobilize them later – either to the floor or home. Also, know how to contact your administrator if needed. Verbal abuse or physical threats/assault are not acceptable, and often, there will be a third party in the hospital to intervene who can objectively listen to the complaint/concern. This then frees you to care for others more effectively.

As emergency departments become busier and the safety net gets stretched farther, know your "pop-off" valve. Diversion is an often-whispered word that causes groans and grimacing, but it is a reality. Know in advance the procedures for contacting your department and hospital administrators and how to arrange for department decompression if necessary. Patient safety must come first, and an overwhelmed department and hospital cannot provide adequate care. Unfortunately, your first single-covered shift is not the time to gain on-the-job training in this modality. Address this topic early, and also identify the qualifications for resuming regular ambulance traffic.

Plan ahead.

The emergency department is an unpredictable place, as no one plans their emergency. To ensure you are at your best throughout your shift, regardless of duration, plan your sustenance prior to arrival. Quick foods that will keep your energy level high throughout your shift are best. They can be consumed while briefly charting, do not spoil easily, and are often finger foods that you can grab on the run. Anything complex or complicated may sit uneaten while you run from person to person. There will always be days when the best-laid plans falter and you arrive ravenous or forgot your food at home. Talk with your secretary, techs or nurses early about organizing/arranging food delivery. You can even utilize this as a morale booster if you pick up the tab for all. Obviously this cannot be a daily occurrence, but in killing two birds with one stone you have kept your staff happy and fed yourself.

Review your calendar monthly, weekly and daily to ensure you are aware of all responsibilities and obligations. Identify conflicts as early as possible to allow for the greatest chance to remedy a situation. If you have a family, they should participate in the weekly and monthly planning so you can remain an active participant in their lives, too. Plan vacations early, working around school holidays (if you have children) and ask for this time off well in advance. If you do not have children, ask your colleagues about the school holidays,

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AAEM Young Physicians Section

The Real World (and Time Management) - continued from page 23

and steer clear of those dates. Chances improve that your vacation will go forward as planned, and your co-workers will appreciate the coverage while they are on vacation with their families. If you want to attend continuing medical education events, discuss this with both your colleagues and scheduler. There likely is a system in place to ensure the whole group does not try to attend the same conference, leaving the department short on coverage. Ask early how the holiday schedule is created and shifts are divided. Knowledge of what is expected, as well as awareness that EDs are open 24/7 will save you from disappointment. Relay your schedule to loved ones so alternative plans can be created in advance ensuring a good celebration. By planning in advance, you can ensure your scheduling requests are submitted in a timely fashion and give yourself the best chance of attending your desired function or event. This will also help maintain your productivity at work, as there is one less stressor on your mind.

As a side note, just as emergencies happen to your patients, colleagues and co-workers also experience unexpected events. Even during your first weeks, you can lead by example and demonstrate your willingness to help others. Covering unexpected injuries, illness, deaths, etc., will establish you as part of the team. It will also be beneficial if an event occurs limiting your ability to work.

Even if you have left the world of academia, over time, you will likely be ask to serve on hospital or department committees, take a leadership role in EMS, or assume community outreach responsibilities. Before joining or agreeing, identify exactly what is expected of you. Often, these obligations include lectures or meetings. Designate/block out ample time in advance to fulfill these tasks. Just like in residency, creating a lecture takes time. You want to represent yourself and your department well, so plan to have the lecture done well in advance. Small steps over weeks will occupy much less time than 1-2 days of limited productivity just prior to your presentation.

In addition, make yourself a part of your community. Volunteer at community functions, attend the local high school games, and become a positive, recognized role model in the town in which you are living (see below about spreading yourself thin). By immersing yourself in the town (especially a small town), you develop pre-established report with your patients, saving yourself time during the visit.

Learn to say NO.

Early in your career, you may be tempted to spread your wings and agree to complete any task asked of you. This could range from serving on committees within your hospital to volunteer work with local community resources. Unless you are truly interested in the task, feel free to say no. Over the first six months to a year at your new job, you will be trying to study for boards, learn the lay of the land, and adjust to your "real world" experience. This can be a trying time and for most, it will be the first true taste of responsibility in patient care with a great upward climb of systems and knowledge base. Trying to couple this with numerous extra obligations will stretch you thin. Instead of just declining, you might try a counter-offer or give a reason why the task or commitment is not doable at present. Obviously, if interested, feel free to say yes!

Separate home and work.

After four long years of medical school and at least three of post-graduate training, there are many people in your life who have supported you emotionally, financially and physically. Whether they are your spouse and children, your parents, or your friends, they have been witness to your meshing of work and home life. As you advance to the next stages of your professional development, make a concerted effort to separate the two. This will help you manage your time wisely in both worlds. Obviously, this will vary from person to person; but think about how many times you relay a stressful medical situation to your nonmedical spouse. They can provide emotional support, but it will become taxing on them if it is a daily occurrence. You will have no "safe zone" when you get home as you have enmeshed your two worlds. When you go out with friends, recognize the topic of conversation, and unless entirely composed of medical colleagues, make an effort to steer clear of medical jargon/patient care discussions. In reverse, don't bring any stress from home to work with you. Allow your full focus to be on the patients while there.

Recognize emotionally challenging situations both at home and work. If you have a patient death that really touches you or you have had a very challenging day at work, learn to identify these situations and have a plan in place to decompress prior to entering the world of "home." The opposite is also true. Sick family members or deaths within your family can affect your ability to provide the best care possible. Recognize this, and work with your group to ensure adequate coverage of your shifts while you cope/grieve.

Remember your loved ones' birthdays, anniversaries and other special dates. Program these into your calendar with alarms/reminders so you can mail the cards in time, arrange for floral delivery, or have an extra few minutes for phone calls. Remembering to mail a card or make a phone call in advance can potentially save you countless reminders later that will detract from your relationship with that person – or if your spouse – your happiness at home!

Take a vacation. Regardless of whether it is a staycation, trip of a lifetime, or just a few days to refresh, your mind and body will thank you. You will be much more productive when you return. Recognize when you are feeling any effects of overworking, and ensure you have time to unwind and do something for yourself.

After at least seven years of additional education and training, you are finally joining your high school and college friends in the real world. Make the most of this transition by utilizing your time wisely and striving for excellence in all you do. Your career will thrive, your home-life will excel, and your sense of personal well-being will be great. As mentioned before, this is not a complete list or meant for everyone, but if any of these areas are a source of strife, consider the ideas mentioned to better yourself.

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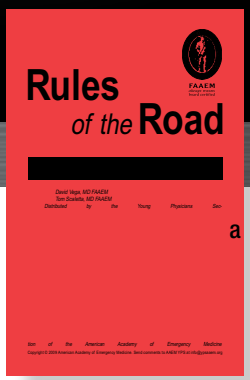

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RESIDENT PRESIDENT'S MESSAGE

RSA President's Message: Hailing a New Year: RSA is With You All the Way!

Teresa M Ross, MD
AAEM/RSA President

Legend has it that the director of my emergency department (ED) asks faculty applicants to name the "Five P's of Professionalism" when interviewing for a job. People struggle with this, especially since several years ago, there were reportedly only "Three P's" to guess at. However, in the end, they are reassured that any answer flies. Why? Because there is no right answer. The question is made to stimulate thought about what drives one's daily practice.

The take home message resonates. Create whatever mnemonic or jingle you want; you should know what you stand for.

That brings us to AAEM/RSA. What are we about? There are plenty of good answers to this, too. In aspiring to a jingle for ourselves, we proposed to say it simply. That RSA is *With you all the way.* Here's how the jingle came about:

June 2011 kicked off another year of RSA leadership and membership. While fourth year medical students celebrated graduation and counted the days to internship (yikes!), your new AAEM/RSA board of directors met in Boston to brainstorm and strategize a roadmap for the new year. We wanted to review our achievements and lay out our long-term vision, too. We closed ourselves in a windowless conference room for eight hours and ideas flew.

What does AAEM/RSA stand for? Who are we? After a couple of hours, we had a wall plastered with colored Post-It notes and interesting doodles. "Nimble." "Practical." "Sincere." "Connected." "Grassroots." "Awesome textbooks!" A scribble of a light bulb and a smiley face were up there, too. It's amazing what hotel coffee will inspire.

Gazing on our wall of fluttering Post-Its, we had a clearer vision of who we are, where we're going, and what YOU are a part of. To simplify a thousand words, you could summarize this feeling as "smiley face."

From books to conferences, from podcasts to advocacy, we realized that AAEM/RSA has created a framework that follows the learner every step of the way.

First off, there's the overarching reason we're here: to help create the best doctors in emergency medicine. By the time the morning bagels were eaten, we'd revised our Vision and Mission statements (http://www.aaemrsa.org/about/mission-and-vision-statement.php). Read them! They sum up to this: We want our patients to HAVE the best emergency physicians and we want YOU to be the best emergency physician you can be. We hope you share these visions with us.

Next, there's our fundamental commitment to your education. After all, we're in this together! As students and residents, we should have all the resources and support possible. On our wall in Boston, the Post-Its for educational value quickly extended beyond the organized lists we'd started. In just five years, AAEM/RSA has developed essential educational tools for your career's journey – and many are FREE. We have level-specific *Rules of the Road* career guides. We distribute the handy *AAEM/RSA Toxicology Handbook*. We partner with EMedHome for free podcasts. We publish the essential AAEM/RSA Written Board Review Book (*Emergency Medicine: A Focused Review of the Core Curriculum*). To top it off, we have our annual AAEM Scientific Assembly – FREE for all paying members. And we're still hard at work. We recently launched our latest and greatest member benefit: The new pocket-sized can't-live-without *EM Survival Guide*.

Finally, beyond the critical elements of education and networking, we are the resident voice of AAEM, our parent organization that supports the independent physician in his/her lifelong profession. This year, we'll strive to bring that sense of social and medico-legal awareness home to residents. This year, we seek to really show you who we are.

Stay tuned! As always, AAEM/RSA is *With you all the way* (http://www.aaemrsa.org/benefits/). Make the most of it!

AAEM/RSA VISION AND MISSION STATEMENT

Vision Statement

AAEM/RSA aspires to a future in which all patients have access to excellent emergency care by an emergency physician. Developing emergency physicians will receive the highest quality training in a supportive practice environment with an emphasis on personal wellness and career mentorship.

Mission Statement

1. Every individual should have unencumbered access to quality emergency care provided by an emergency physician.
2. An emergency physician is one who has achieved, or is eligible for, certification by either the American Board of Emergency Medicine or the American Osteopathic Board of Emergency Medicine.
3. AAEM/RSA is devoted to the personal wellness of developing emergency physicians.
4. AAEM/RSA believes that superior emergency medical education is essential at all levels of training. This education should be provided in an environment that guarantees academic freedom.
5. AAEM/RSA supports emergency medicine residency programs and fellowships, which are essential to the growth of our specialty.
6. AAEM/RSA believes that fair and equitable practice environments are necessary for the emergency physician to deliver the highest quality of patient care. This environment includes provisions for due process and the absence of restrictive covenants.
7. AAEM/RSA is committed to the advancement of emergency medicine worldwide.

RESIDENT EDITOR'S LETTER

How to maximize your time and get the most out your training!

Ali Farzad, MD
AAEM/RSA Publications Chair

The new academic year is in full swing, and all across the nation students, residents and new attendings continue adjusting to their new roles and responsibilities. During emergency medicine (EM) training, we encounter new and exciting challenges on a daily basis and must use this important time to develop our skills and improve the care we deliver to patients. Regardless of your level of training, balancing the long hours and the demanding nature of our job with the time needed for personal wellness can be difficult. We have all become accustomed to working hard, but to avoid neglecting ourselves and our personal lives, we need to also work smart.

Luckily, you are not alone. AAEM/RSA is dedicated to being there for you every step of the way. In writing my Editor's Letter throughout the next year, I will specifically aim to share information that I think will help make your life easier. To that effect, I'd like to share some tips to help you maximize your time and get the most out of your training. Implement any of the following tips into your daily routine to help save time and make you more effective.

Make the most of the people and resources available to you.

Check with your program and make sure you are taking advantage of all the institutional subscriptions and educational resources that are provided for you. Seek appropriate faculty members to serve as mentors. It may not feel like it now, but being in training has its perks. It is unlikely that you will have this level of support available to you later in your career, and everything will cost more once you start making "attending money." Being a part of professional EM organizations like AAEM/RSA gets you free or inexpensive access to tons of information and educational resources that are designed to make life easier. Start using them!

Use technology to make your life easier.

Smartphones and tablets have, and will continue to, revolutionize the way we access and use information. Find a practical way to organize your academic resources so that everything is easily accessible and there for you when you need it. Using free cloud-based products like GoogleDocs can help you access all of your documents and spreadsheets on the net from any computer. You can also use it to collaborate with colleagues by working on a single shared document at the same time.

Consolidate your e-books and favorite journal articles into a format that allows you to refer to them easily. I use a computer program called Papers on my Mac to archive my important articles and effectively rid myself of the stockpiles of journal articles collecting dust from intern year. There is no point in collecting articles that won't be there when you need the information. The program also syncs with the accompanying iPhone and iPad so you can have all of your favorite documents available in an easily searchable format to refer to or to share with colleagues. Be on the lookout for a more comprehensive review and recommendations of EM apps and programs in future *Common Sense* issues. In the meantime, find what works best for you, and stick to it.

Get organized, and plan to be successful.

Having gotten this far in the game, you likely already know which learning methods work best for you. Seek the appropriate resources, and figure a way to fit them into your schedule. This will be the hardest part...but once you become familiar with how to use your resources and work them into your routine, you will have effectively set yourself up to succeed.

If you are a visual learner, you can access countless hours of top-notch EM video lectures at EMedHome.com for free as a paid AAEM/RSA member (including recorded lectures from the AAEM Scientific Assembly). When a clinical question arises during your next shift, take a minute to watch short videos from emrap.tv to supplement your learning, and refer your students to look up videos from the NEJM Videos in Clinical Medicine or from the procedures section of Access Emergency Medicine.

If you are an auditory learner or like to multitask on your commute to work, there are several great podcasts you can listen to by leaders in EM that summarize the latest literature and teach you information that you will use to save lives. Keep a few episodes on a mobile device, and maximize time you would have otherwise wasted. EMCast, EMRAP, EMRAP: Educators Edition, and Critical Care Perspectives in EM are just a few of the good ones to get you started. There are even more EM Blogs like EMCrit, Academic Life in EM or Life in the Fast Lane that get across important information without drowning you in reading. You can even use Facebook and Twitter to deliver daily pearls to your smartphone for quick learning on the go. Start by liking the AAEM/RSA Facebook fan page to get access to the Fact of the Day for free.

If you are still kicking it old school and paper cuts and bookshelves are your thing...make sure you have a copy of the AAEM/RSA and YPS *Rules of the Road* book series specific to your level of training, along with the AAEM/RSA Written Board Review Book (*Emergency Medicine: A Focused Review of the Core Curriculum*) amongst your arsenal when it comes time for inservice exams and boards. Keep your white coat stocked with quick reference guides like the *AAEM/RSA Toxicology Handbook*, the antibiotic reference guide of your choice, and the *AAEM/RSA EM Survival Guide*. Again, all free or discounted member resources waiting to help make your life easier. Check out the member benefits section of the AAEM/RSA website for the latest editions of these great publications and more.

Assume the worst when preparing to be your best.

The emergency department is like an unfamiliar battleground where lives are on the line and you never know for sure what you are up against. Dr. Amal Mattu has taught that "when emergency physicians hear hoof beats, we must expect lions, and tigers, and bears." Unlike other fields of medicine that have the time to seek rare zebras, we in EM are expected to be experts in identifying and treating acute life

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Spotlight on Leaders in Emergency Medicine: Robert McNamara, MD FAAEM

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

Robert McNamara, MD FAAEM

This is a new column in *Common Sense* where Leana S. Wen, AAEM/RSA secretary/treasurer, interviews leaders in emergency medicine about their experiences, perspectives and insights. The inaugural conversation is with Robert McNamara, MD, former president of AAEM and current professor and chair at Temple University.

LW: Take me through your education and training and tell me a bit about what you do now.

RM: I received my MD from Jefferson Medical College in Philadelphia in 1982, and then stayed in the city to complete my residency in EM at The Medical College of Pennsylvania. I'm currently the Professor and Chairman of the Department of EM at Temple University, and also serve as the Chief Medical Officer of Temple University Physicians. I continue to work clinically; I subscribe to the General Patton theory that you have to lead from the front and not from behind. You have to be out there on the ED floor like everyone else seeing patients, and that includes still working nights and weekends.

LW: In addition to leadership and administration at Temple, you're also very involved in AAEM, being on the Board of Directors now and also having served as President. When an EP asks you why they should be involved in leadership, what's your answer?

RM: If you're not at the table, you're missing out. Decisions that are going to affect you are going to be made without you. As an EP, you should be involved with your hospital and the health system. Don't just stay in the fishbowl. I'll tell you what annoys me: all those ads you see in the journals and news publications about how you can go to work for a minimum number of hours and then go surfing. That's clock punching and destructive to the view of EM. We need to be an integral part of the hospital and healthcare system.

LW: Are EPs well-placed to be leaders in our hospitals?

RM: Absolutely. We are one of the few specialties that see everything. We encounter something from every single specialty in the hospital. It's easy for us to be leaders because we see the broader picture. When I first started in EM, it was said you can never be a Dean or hospital leader if you're an EP. Now, a lot of us EPs have become Deans or hospital leaders. A lot of high quality people are going into EM and many of them have what it takes to be leaders in medicine.

LW: You must have seen quite a number of changes in your years in practice.

RM: The last shift I worked, I had a patient who I suspected to have cholecystitis and I did an ultrasound at bedside to figure out the answer. In the old days, you had to fight to get a study after hours. Now, if patients have an acute MI, you can watch their coronaries get opened by thrombolytics or the cath lab. In the old days, you gave them medication and basically watched them infarct in front of you. Our medical advances have been incredible. In terms of changes, I also have to mention that our specialty as a whole has a whole new level of respect. Younger doctors don't have a sense of how far our specialty has come, but we've really come a long way.

LW: Are you excited to be an EP in this current era?

RM: Oh, absolutely. The technology is exciting. The specialty is thriving. To the young doctors, I tell them it's never going to be an easy specialty. If you don't have tolerance, if you get angry at your patients, you're never going to survive. You should feel sad for your patients, empathize with them, and ultimately advocate for them. If we compare what we as physicians have to most of the patients we see it should be clear that we are very fortunate members of society.

LW: There is a lot of rhetoric on the problems facing healthcare in the U.S. What, in your opinion, is the root of these problems?

RM: One thing that's eroded in healthcare today is physicians' ability to advocate for their patients without worrying about hospitals, corporations, and insurance companies. Another problem is defensive medicine and the amount of over testing that it causes. CT scanning is going through the roof. There are all kinds of harms to our patients, yet nobody wants to stop scanning because we fear litigation. Doctors need protection NOT to order a test. And we can't talk about medicine in isolation, either. The context of how expensive medicine is relates to social structure and fundamental problems in our society. Look at obesity. Look at gun violence. It can't just be, let's fix medicine. We have to fix society too. Physicians have taken the lead on these public health issues before with advocating for seat belt use or against drunk driving, and we can take the lead again to fix healthcare.

LW: What advice do you have for becoming a better leader?

RM: Don't stay in the fishbowl. Lead from the front. Those are very important. EPs who seek leadership positions beyond the ED should keep in mind that physicians are your best friends. Administrators will try to divide and conquer. Despite differences among specialties, your biggest supporters are going to be other doctors. A few other tips: sit on something for 48 hours before sending it out. Talk on the phone or in person if you can; an email isn't as easily retrieved. Praise in public, correct in private. Have your principles and stick to them, don't ever yield on them but recognize patience and persistence may be needed to achieve what you want. Vow to outlast the scoundrels! At the end of the day don't let them screw with you or your family's personal well being, and pay attention to your own needs.

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

Resident Journal Review: Post Resuscitation Care

Daniel Boutsikaris, MD; Michael Scott, MD; Samantha Wood, MD; David Wacker, MD; Ali Farzad, MD; Michael Allison, MD
Edited by Chris Doty, MD FAAEM; and Michael C. Bond, MD FAAEM

This edition of Resident Journal Review starts with a brief review of the current guidelines regarding therapeutic strategies and care of the post cardiac arrest patient. From there, the article reviews several recently published studies relating to this topic. The intent of this format is to provide the reader with both the most current guidelines, as outlined by the American Heart Association (AHA), in addition to a literature update since their publication.

Contemporary Reviews in Cardiovascular Medicine. Post Cardiac Arrest Syndrome: A Review of Therapeutic Strategies. Stub D, Bernard S, Duffy S, Kaye D. *Circulation*. 2011; 123:1428-1435.

Cardiac arrest affects approximately 325,000 people each year in the U.S. Approximately 24% of persons with cardiac arrest will survive to hospital admission, but nationally, only about 8% will survive to discharge. The majority of morbidity and mortality in these patients is the result of cerebral and cardiac injury. Following return of spontaneous circulation (ROSC), a complex array of pathophysiologic processes occurs. Collectively, this is referred to as the post-cardiac arrest syndrome (PCAS). This syndrome includes four entities: systemic ischemia/reperfusion response, brain injury, myocardial dysfunction and persistence of the precipitating etiologies of arrest.

Regional Systems of Care:

Recent studies, both nationally and internationally, have demonstrated improved outcomes at institutions capable of optimizing all facets of care for the post cardiac arrest patient. Of particular importance is a center's ability to perform invasive cardiac procedures including, but not limited to, percutaneous coronary intervention (PCI). This data suggests that the development of post cardiac arrest centers, in association with regionalization of care, may provide the best opportunity to maximize survival in these patients. Further, having centers that are well versed in the care of these patients is paramount, especially when considering the acuity of illness and the time sensitivity of needs in this population. For the emergency provider working in systems where they are expected to provide first responders with hospital dispositions, this information may soon weigh heavily in their decisions. A decision that becomes even more difficult when patients may need to endure longer transport times to reach such institutions. Fortunately, recent literature has not found an association between longer transport times and adverse events. Although more work still needs to be done in this area before specific recommendations can be made, it is likely that many systems will resemble those already in place for the stroke, STEMI or trauma patients. Additionally, the majority of study in this area has involved patients who achieved ROSC and not those where CPR remained in progress.

Initial Management:

The treatment of these patients should be viewed as similar to other groups of critically ill patients and requires a comprehensive, goal directed approach. In the setting of post cardiac arrest care, interventions should focus on oxygenation/ventilation, circulatory support, institution of mild therapeutic hypothermia (TH) and strong consideration for cardiac catheterization. In addition, overall optimization of care in the critically ill, including glucose control, seizure monitoring and electrolyte replacement, are all extremely important. If seizures are noted, they should be aggressively managed.

Oxygenation & Ventilation:

Following ROSC, it has been common practice to place all patients on 100% FiO_2. However, there has been mounting evidence to suggest that hyperoxia may be deleterious. Specifically, a recent study by Kilgannon et al. that evaluated more than 6,000 adult patients following ROSC found that hyperoxia was independently associated with worsened outcome when compared to normoxia or hypoxia. Although the data from this study was not available prior to the publication of the AHA guidelines, it does add additional support for the avoidance of hyperoxic exposure in these patients. Therefore, until further data suggests otherwise, it is recommend that supplemental oxygen be titrated as soon as possible to maintain a $SpO_2 \geq 94\%$ but $< 100\%$ with a PaO_2 of approximately 100mm Hg, while maintaining normocarbia.

Hemodynamic Optimization:

Early hemodynamic optimization is an essential part of post-cardiac arrest care and focuses on restoring intravascular volume and maintenance of adequate perfusion pressure. Isotonic crystalloid should be administered to restore volume status and optimize right-heart-filling pressures. Mean arterial pressure (MAP), rather than systolic blood pressure (SBP) should be used as an endpoint, as this provides a better physiologic surrogate of perfusion. The ideal MAP following ROSC is not known; however, based on the current literature a MAP of 65-100mm Hg is considered reasonable. If this cannot be done with fluid alone, vasopressor and inotropic agents should be added. If an adequate perfusion pressure is still not achieved despite fluids, vasopressors and inotropes, an intra-aortic balloon pump or ventricular assist device can be considered.

Neuroprotection: Therapeutic Hypothermia:

At present, knowledge gaps exist regarding the appropriate patient selection for the initiation of TH. This is primarily due to a paucity of literature regarding its effects on outcome in patients presenting with non-shockable rhythms (i.e., PEA or asystole). However, there appears to be the potential for benefit based on the data that is available. Therefore, current guidelines recommend the use of TH on all patients who remain comatose following ROSC. Patients should be cooled to a target temperature of 32-34ºC, though the ideal temperature is still not known. Patients can be cooled in a variety of methods, and no data at present demonstrates a superior technique. This article does cover rewarming, however, given rewarming rarely occurs in the ER it is not discussed further in this review. The complications of TH include bradycardia, increased systemic vascular resistance, decreased cardiac output, induced diuresis resulting electrolyte disturbances, hyperglycemia and coagulopathy.

Management of Acute Coronary Syndrome:

Coronary artery disease is a major cause of out-of-hospital cardiac arrest (OOHCA). Cardiac catheterization provides definitive therapy

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for patients with an acute occlusion and has been independently associated with improved outcome following ROSC. ST-segment elevation on electrocardiogram (ECG) is a poor predictor of acute arterial occlusion in this patient population. Therefore, all patients with a presumed cardiac etiology of arrest should be considered for emergent cardiac catheterization, even in the absence of ST-segment elevation. If PCI is not immediately available and ST-segment elevation is present, thrombolytic therapy should be considered. The potential interaction between thrombolytics and TH has not been established. On the other hand, PCI should not be delayed or withheld because of the use of TH, which has been demonstrated to be safe and effective.

Association Between Arterial Hyperoxia Following Resuscitation From Cardiac Arrest and In-Hospital Mortality. Kilgannon J, Jones A, Shapiro N, et al. *JAMA* 2010; 303:2165-2171.

There has been recent increasing literature to suggest that hyperoxia in the setting of post cardiac arrest care is detrimental. However, to date, the vast majority of this literature has been from animal studies. The notable exception was a human pilot study, which was underpowered to assess survival at hospital discharge. Nonetheless, when all data is taken in its entirety, there appears to be enough evidence to recommend the avoidance of hyperoxia in the setting of ROSC. Therefore, at the time of publication of the 2010 AHA guidelines, the recommendation for rapid titration of the FiO_2 for a goal SpO_2 of less than 100% but ≥ 94% was made. This is felt to be most reasonable as an FiO_2 of 100% can correlate with a PaO_2 of anywhere between ~80 to 500mm Hg. Neither the AHA guidelines nor the International Liaison Committee on Resuscitation (ILCOR) 2008 Consensus Statement make specific recommendations regarding goal PaO_2. Despite the recommendations laid out by the aforementioned committees, it is admittedly with a known knowledge gap regarding the role of post cardiac arrest oxygenation.

This was a large multicenter cohort study that attempted to provide further investigation as to whether exposure to hyperoxia in the setting of ROSC worsens brain injury and ultimately affects patient mortality. The investigators of this study used the data collected from Project IMPACT, a data bank that includes 120 U.S. hospital intensive care units (ICUs) from 2001-2005. This ultimately captured 6,326 patients that met the inclusion criteria. These criteria included age over 17 years old, non-traumatic cardiac arrest with CPR performed and an arterial blood gas analysis performed within 24 hours of ICU arrival. For the purposes of this study, hyperoxia was defined as a PaO_2 of 300mm Hg or greater, hypoxia as a PaO_2 of less than 60mm Hg (or a ratio of a PaO_2 to fraction of inspired oxygen of < 300). Normoxia was defined as neither hyperoxia nor hypoxia. The main outcome measure of this study was in-hospital mortality.

Ultimately, the investigators found that of the 6,326 patients, 18% were found to be hyperoxic, 63% hypoxic and 19% normoxic. The hyperoxia group had a significantly higher in-hospital mortality compared to the normoxic group. In fact, a model that controlled for potential confounders including age, comorbidities, preadmission functional status, vital signs and more, noted that exposure to hyperoxia had an odds ratio for death of 1.8. Based on the data collected in this study, arterial hyperoxia was independently associated with increased mortality when compared to normoxia or hypoxia.

There are several limitations associated with this study. This is an observational cohort, so only an association can be drawn as a conclusion. Further, the authors acknowledge that the arterial blood gas was not precisely time stamped. Therefore, it is not clear as to the length of hyperoxic exposure or when in a patient's course the exposure occurred. It is possible that these factors affect outcome. Additionally, it is unclear whether the use of TH was incorporated into the care of any of these patients, which certainly could have altered mortality. However, given that only 6% of the captured patients had a lowest body temperature under 34ºC within the first 24 hours of ICU arrival, it is unlikely that TH was widely instituted. Further, the data collection period is from 2001-2005, a time when TH had not yet been widely accepted as standard of care. Overall, this study adds additional human evidence that exposure to hyperoxia is likely detrimental in the setting of ROSC. In addition, this continues to support the current recommendations of the AHA and ILCOR current practice guidelines.

Effectiveness of each Target Body Temperature During Therapeutic Hypothermia after Cardiac Arrest. Kim J, Yang H, Lim Y, et al. *The American Journal of Emergency Medicine.* 2011;29:148-154.

In the setting of post-cardiac arrest care, a core body temperature between 32°C and 34°C constitutes mild hypothermia. Increasing literature continues to demonstrate that the use of TH in adults who remain comatose after ROSC from an OOHCA, improves morbidity and mortality. Although ischemic cerebral injury is a major contributor to the morbidity and mortality of these patients, reperfusion injury is believed to add additional neural insult through a complex array of pathophysiology. It is believed that mild TH can positively augment some of these pathophysiologic processes, yet comes with its own inherent risk of complications. As a result, this study attempted to investigate if there is an ideal target temperature (i.e., 32°C, 33°C or 34°C) that continues to provide therapeutic benefit but limits complications.

The study was conducted in an ICU setting at a single tertiary care center in Korea. It prospectively evaluated three target temperatures (32°C, 33°C and 34°C) for adverse events and outcome. A total of 62 patients met the inclusion criteria which were adult non-pregnant patients who were hemodynamically stable and admitted to the ICU with ROSC for > 24 hours. Those that were unstable despite the use of inotropes (SBP < 90), were severely acidemic (pH < 7.1), had a preexisting coagulopathy, or did not have informed consent obtained, were excluded. Basal characteristics of patients, complications, neurological outcomes and mortality were evaluated for each target temperature. The most common rhythm at the time of arrest was asystole, with the most common cause of arrest being cardiac. Patients were cooled to maintain a narrow range target temperature, 32.2 ± 0.65, 33.2 ± 0.5, and 33.7 ± 0.74 (32°C, 33°C and 34°C, respectively). The number of survivors was 38 (61.4%) with 14 (22.6%), having good neurological outcome defined as a cerebral performance category scale (CPC) of 1 or 2. There was no statistically significant difference in mortality or neurologic outcomes across the

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groups. It should be mentioned, however, based on a multiple logistic regression analysis, the target temperature of 32°C was significantly more likely to be associated with hypotension (OR: 6.8, 95% CI: 1.4-32.4). Other complications including bleeding, pneumonia, sepsis and pulmonary edema did not reach statistical significance.

This study had several limitations that should be pointed out. Overall, this was a relatively small study including only 63 patients at a single institution. Further, these patients were not evenly distributed across the groups, with 13, 22, and 28 patients across 32°C, 33°C and 34°C, respectively. Secondly, it is not clear exactly what method of cooling was used, surface versus endovascular or a combination of both. Additionally, the use of a rectal temperature probe introduces the possibility of several errors and unfortunately does not reflect core body or brain temperatures well. One could argue, however, that although not ideal, this was consistent across all groups. Finally, the authors never state how many patients were required to adequately power this study, making the data difficult to analyze.

To our knowledge, this is the first study investigating whether there is an ideal target temperature within the range of 32°C to 34°C, which reflects the range recommended in the 2010 AHA guidelines. The optimal target temperature, which maximizes favorable outcomes while minimizing complications, remains to be determined. Though this work may provide weak evidence that a target temperature of 33°C or 34°C, rather than 32°C, may lower the risk of hypotension, it is clear that further work still needs to be done. It is, however, important to highlight that of the several complications investigated in this study, hypotension was the only one noted to reach statistical significance. This point is important, as previous studies have demonstrated increased morbidity and mortality when even a single episode of hypotension is noted in the post arrest period. It is clear that more work still needs to be done before precise target temperature recommendations can be made.

Is Hypothermia after Cardiac Arrest Effective in Both Shockable and Nonshockable Patients? Insights from a Large Registry. Dumas F, Grimaldi D, Zuber B, et al. *Circulation.* 2011; 123:877-886.

A knowledge gap unfortunately exists regarding the benefits of TH in the setting of non-shockable (asystolic or PEA) cardiac arrest patients who achieve ROSC. To date, there appears to be the potential for benefit. However, the evidence is much less robust as compared to that for shockable rhythms (VT or VF). Shockable versus non-shockable rhythms are defined as the initial presenting rhythm found following cardiac arrest. This study attempts to provide further data regarding the appropriate patient selection when considering implementation of TH.

This was a very large observational cohort that included 1,145 consecutive non-traumatic cardiac arrest patients that achieved ROSC following an OOHCA between 2000 and 2009. In all cases, ROSC was established before arrival to the hospital after treatment by pre-hospital providers and at least one physician trained in emergency medicine. On arrival to the hospital, all patients without a clear non-cardiac etiology were taken directly to the cardiac catheterization lab, then to the ICU. If an obvious non-cardiac cause was noted, they instead went directly to the ICU. Hypothermia (defined as 32-34°C) was initiated immediately on arrival to the ICU by external cooling techniques. Following the hypothermic period, patients were passively rewarmed at a rate of 0.3°C degrees/hour. Sedation was lifted after re-warming, and patients were extubated as soon as neurologic and respiratory status allowed. CPC status was assessed at the time of hospital discharge. A CPC score of 1or 2 defined a good neurologic outcome, and a CPC of 3-5 was poor.

On examination of the data, several factors were evaluated. The effectiveness of TH was assessed for its affects on promoting good neurologic outcomes between those with shockable versus non-shockable rhythms. Additionally, analysis of potentially confounding factors including age, gender, comorbidities, resuscitation time and details of the resuscitation and after-care, were investigated to further delineate their potential affects on TH and outcome. This study included 708 patients who suffered a VT/VF arrest and 437 who experienced a PEA or asystolic arrest. Of the VT/VF patients, 65% underwent TH resulting in a statistically significant increase in good neurological outcomes i.e., CPC 1 or 2 (OR: 1.90, 95% CI: 1.18- 3.06). Conversely, 60% of the non-shockable patients were cooled, and no affect on neurologic outcome was established (OR: 0.71, 95% CI: 0.37-1.36l). Despite this overall trend, cardiac arrest in a public area, where aid could immediately be initiated, was found to be significantly associated with good outcome for both shockable and non-shockable rhythms. Additionally, elevated levels of troponin, creatinine and serum lactate directly correlated with a poorer outcome for all types of arrest. Interestingly, in regards to complications, the recurrence of cardiac arrest or dysrhythmia was associated with the absence of hypothermic treatment. There was no difference between groups for the incidence of pulmonary edema or cardiogenic shock.

Limitations of this study include its restriction to a single large tertiary care center in Paris, France, and therefore, these findings may not generalize to all settings. Further, the system used in Paris is such that none of these patients were treated in the emergency department, again making some of these findings difficult to generalize to the majority of systems used in the U.S. In addition, external-cooling techniques alone have been found to be a less efficient method of cooling as compared to intravascular techniques, and consequently, this study did demonstrate long hypothermic induction times. Finally, this is an observational cohort allowing for only the possibility of an association rather then causation to be concluded.

Overall, it is not clear why treatment with TH did not lead to improved outcome in non-shockable patients. It may be related to the fact that 55% of shockable arrests were deemed to be due to a cardiac etiology, where as only 12% of non-shockable arrests were due to a cardiac cause. Further, certain etiologies generally associated with non-shockable rhythms tend to result from severe hypoxic insults that culminate in complete cardiovascular collapse. This alone may result in additional ischemic injury not present in most shockable rhythms and may alter the effectiveness of TH post arrest. Finally, although no improvement in outcome was noted in non-shockable arrest patients in this study, it is clear further research is warranted. Therefore, this should not dissuade providers from initiating TH when caring for those with ROSC from a non-shockable rhythm, until further research indicates otherwise.

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Predictive Factors for Positive Coronary Angiography in Out-of-Hospital Cardiac Arrest Patients. Aurore A, Jabre P, Liot P, Margenet A, Lecarpentier E, Combes X. *European Journal of Emergency Medicine*. 2011; 18:73-6.

Emergent coronary angiography is an important component of post cardiac arrest care, and according to the 2010 AHA guidelines, is "reasonable even in the absence of STEMI." However, there is little data to help predict which cardiac arrest patients will have a significant lesion or require PCI on coronary angiography.

This retrospective study was conducted at a French university hospital and sought to identify predictive factors for positive findings on coronary angiography in OOHCA patients. Data were evaluated on 4,621 OOHCA patients who were cared for by the hospital's mobile ICU between January 2000 and December 2006. Of these, 1,792 patients died at the scene before ACLS was started, 2,384 died despite attempts at resuscitation, and 445 were resuscitated and transported to the hospital. Of those, only 133 went immediately for coronary angiography. These patients either had findings of STEMI on their EKG or were thought to be at high likelihood of having a cardiac event based on circumstances of arrest, past medical history or other findings on EKG. Patients were categorized as having positive coronary angiography if they had a >50% reduction in luminal diameter or if there was a coronary artery thrombus present.

The overall survival rate was 23% in patients who underwent coronary angiography versus 9.6% in patients who did not. The authors noted that the survival rate was lower than that shown in other studies investigating post-cardiac arrest catheterization and speculate that this discrepancy is related to a low rate of bystander CPR. Of the patients who underwent coronary angiography, 71% had at least one significant lesion, and 53% underwent PCI.

The study authors performed a multivariate analysis to determine predictive factors for positive coronary angiography. Predictive factors included history of diabetes, ST segment depression on the out-of-hospital EKG, history of coronary disease, cardiac arrest in a public place (as opposed to home or workplace), and initial rhythm of ventricular fibrillation or ventricular tachycardia. Interestingly, ST segment elevation on out-of-hospital EKG was not found to be a significant predictor for positive findings on coronary angiography.

Limitations of this study include its retrospective nature, relatively small sample size, and lack of standardization regarding which patients went to coronary angiography. However, despite these limitations, the authors have determined several factors that appear to correlate with positive findings on angiography in the OOHCA patient. Perhaps most significant is the failure of ST elevation to predict positive cardiac catheterization findings, suggesting that the absence of ST elevations should not deter emergency physicians from sending post-cardiac arrest patients to the catherization lab.

The next two articles discussed investigate the timing of the induction phase of Therapeutic Hypothermia.

The 2010 American Heart Association Guidelines state "The impact of the timing of initiating hypothermia after cardiac arrest is not completely understood." Currently, initiation of TH in appropriately selected patients, as soon as possible, is favored. Two recent studies sought to further investigate the optimal timing of the initiation of TH and its effects on both ROSC as well as for its potential benefit on neurologic outcome.

Induction of Therapeutic Hypothermia by Paramedics after Resuscitation from Out-of-Hospital Ventricular Fibrillation Cardiac Arrest. A Randomized Controlled Trial. Bernard S, Cooper J, Kelly A, Silvester W. *Circulation*, 2010; 122:737-742.

This prospective, randomized controlled trial sought to examine the optimal timing for the initiation of TH and included 234 patients. Those eligible suffered an OOHCA with an initial rhythm of VF with subsequent ROSC, had a SBP > 90, arrest time > 10 minutes, were age ≥ 15 and had IV access. Exclusion criteria included patients that were unable to be intubated, already dependent on others for activities of daily living, already hypothermic, or were obviously pregnant. All patients were ventilated with 100% FiO_2 with a target end-tidal CO_2 of 35-40. If SBP was < 90 they were given epinephrine for a target SBP of 100mm Hg. Eligible patients were subsequently randomized to "Usual Care" (i.e., hospital cooling) or "Paramedic Cooling." The paramedic cooled group received IV midazolam and pancuronium to suppress shivering. Hypothermia was induced via infusion of "ice cold" (< 8˚C) lactated ringers (LR) at 100mL/min during transport by pressure bag at 300mmHg for up to 2 liters. If pulmonary edema developed, patients were given Furosemide 40mg IV, followed by an additional infusion of 10-20mL/kg of ice cold LR on hospital arrival. In contrast, the hospital cooling group received midazolam en route only if needed for ventilation, with pancuronium if midazolam was insufficient. On arrival to the ED, they underwent rapid infusion of 40mL/kg ice cold LR. Finally, patients in both groups received surface cooling on arrival to the ED to a temperature of 33˚C, which was maintained for 24 hours, with re-warming at 0.25˚C/hour thereafter.

The primary outcome was percentage of patients with favorable neurologic status at hospital discharge (i.e., to home or rehab facility) vs. unfavorable neurologic status (death or discharge to long-term nursing facility). Secondary outcomes included patient's temperature on arrival to the ED, recurrent prehospital cardiac arrest after enrollment, and development of prehospital pulmonary edema. While the treatment group did have a significantly lower temperature on hospital arrival (34.4 C vs. 35.2 C, p= 0.001) the rate of favorable outcome was 47.5% in the paramedic-cooled group versus 52.6% in the hospital cooled group and was not statistically significant (p - 0.43). In addition, there were no differences in the two groups for other secondary outcomes.

There are several limitations to this study. Though this was a randomized controlled study, it was not possible to blind the treating paramedics, generating the potential for bias. However, overall it is unlikely that this had a significant impact on the outcomes. Further, the authors excluded those presenting in VT. Current guidelines support the use of TH in all patients presenting in shockable rhythms (i.e. VT or VF), making it difficult to generalize these results to current practices. Additionally, this study was done in an urban setting with overall short transport times, which limited the amount of ice-cold fluid infused and thus only provided a "modest" reduction in temperature. Therefore, it is unclear if similar findings would occur in areas where patients undergo

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extended transport times. Finally, this study was terminated prior to enrolling the estimated required sample size to ensure an adequately powered study. It is possible that this also altered the final results. Interestingly, the authors suggest that it would be beneficial to further study the idea of paramedic-initiated TH via intra-CPR infusion of ice-cold saline. Which brings us to:

The Association Between Intra-Arrest Therapeutic Hypothermia and Return of Spontaneous Circulation among Individuals Experiencing Out of Hospital Cardiac Arrest. Garrett J, Studnek J, Blackwell T, Vandeventer S, Pearson D, Heffner A, Reades R. *Resuscitation.* 2011; 82: 21-25.

This retrospective trial sought to investigate the effect of intra-arrest initiation of TH by paramedics and its affects on ROSC, survival to admission and discharge, as well as final neurologic status. After six months of collecting data to serve as the control group, all patients experiencing non-traumatic OOHCA received 4˚C normal saline immediately following IV/IO line placement up to a maximum of 2 liters. Overall, 542 patients were included in the study. Inclusion criteria were intended to capture patients who suffered a non-traumatic OOHCA and were ≥ 18 years of age. Patients were excluded if they were pregnant, suffered arrest secondary to drowning, were found to have an active DNR status, or were noted to have obvious signs of death on arrival. The intra-arrest therapeutic hypothermia (IATH) group included any patient that received any amount of chilled saline.

The IATH group had a statistically significant higher rate of ROSC (36.5% vs. 26.9%, p = 0.018). Further, this group also had higher rates of survival to admission and discharge (including survival with good neurological outcome) yet these differences did not reach statistical significance. On secondary analysis, there was a linear association between the amount of cold saline infused and the likelihood of ROSC.

This study has several limitations. This was a retrospective study, which is inherently open to a number of biases. Additionally, by changing the protocol at the study's midpoint, further bias due to a Hawthorne effect can easily occur. For example, paramedics may have improved the quality of chest compressions or other aspects of cardiac arrest care that have also demonstrated improved outcomes and are known to enhance ROSC. Also, on examination of the secondary analysis, the authors admit that no threshold effect was noted. Further, according to the regression analysis, patients who received just 10ml of 4˚C normal saline were more likely to have ROSC as compared to their cohorts. This seems very unlikely and is believed to be due to confounding measurement errors.

In summary, these two studies investigate the possible benefit of prehospital initiation of TH. Unfortunately, no definitive conclusion can be made at this point despite this additional data. Although, both studies do provide some further evidence that both early, and even intra-arrest, induction of TH is both safe and feasible, it is not clearly evident if it positively augments neurologic outcome and mortality. Further, intra-arrest initiation of cooling may enhance the chances of ROSC, but again, this requires further investigation. Even with these two there is no conclusive evidence available to support the specific timing of initiation of TH, and a continued knowledge gap exists. At present, it seems reasonable to continue a "the earlier the better" mentality when implementing this therapeutic modality.

Adverse Effects and Their Relation to Mortality in Out-Of-Hospital Cardiac Arrest Patients Treated with Therapeutic Hypothermia. Nielsen N, et al. *Crit Care Med* 2011; 39:57-64.

The investigators of this study investigated the spectrum of adverse events following induction of TH, their incidence and their impact on mortality and neurologic outcome. This study was a prospective, observational, registry-based study, which included 765 patients in twenty-two hospitals across Sweden and the U.S. Patients were included if they were ≥ 18 years old, had ROSC following an OOHCA, and were subsequently treated with TH. The participating centers recorded all adverse events at any time during the patient's critical care stay. Adverse events included bleeding, arrhythmias, metabolic/electrolyte disorders, seizures, sepsis or other infections, and use of anticonvulsants or antibiotics. The primary outcome was mortality at six months after the initial hospital admission.

Using multivariate analysis, only two complications during the critical care stay predicted a higher likelihood of mortality at six months. These were sustained hyperglycemia and seizures requiring treatment with anticonvulsants. Hyperglycemia was found to be present in 37% of all patients undergoing TH in this study. The definition of hyperglycemia used in this investigation was > 8mmol/L or > 144mg/dL for greater than four hours. Seizures were reported in 24% of patients. Infections and bleeding were found to be more common in patients after invasive coronary procedures but were not predictive of a worsened six-month mortality. Electrolyte abnormalities and arrhythmias, though also common, were not found to be predictors of increased mortality.

Limitations of this investigation include the use of a registry-based design. Therefore, the noted association of TH complicated by seizures and/or hyperglycemia does not indicate causation. Each center was able to manage TH patients according to their own local protocol, so there was no standardization of patient management. However, one could argue that this actually enhances the generalizability of this study. Finally, the study was not powered enough to determine if there were center-specific effects on complications and outcomes stemming from the differences in site protocols.

In clinical practice, we should be mindful that hyperglycemia and seizure activity may portend worse outcomes and are perhaps more common then initially recognized. Though the effects on outcome are not known, it is prudent for clinicians to identify and treat these derangements. Further studies will be helpful in identifying the optimal strategies in treating patients that do develop either of these complications.

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threatening conditions. Assuming the worst not only allows us to effectively rule out the most dangerous diagnoses, but it can also be used as an effective teaching tool.

It doesn't matter if you are working at a busy trauma center or a quiet urgent care, any chief complaint can be morphed into a potential clinical disaster for teaching purposes. The patient with "reflux" and epigastric discomfort could have an MI, PE or aortic dissection. The "virgin" teenager with abdominal pain could have a ruptured ectopic pregnancy, and her pressure is dropping. The person with a headache probably has meningitis, SAH or stroke. What do you do when the seemingly stable patient takes a turn for the worst and is crashing in front of you? What happens when you are working overnight in a rural community ED and you're alone as the only available doctor? Asking these questions and assuming the worst is a great way to prepare yourself and your students to be ready when disaster strikes. Try this the next time you are working, and I bet you will have a more exciting shift and walk away having learned and taught more.

Remember that you are making a difference in the lives of your patients.

Together we have the enormous privilege and responsibility of caring for people who place their lives in our hands and count on us to do what is best for them. While it can be easy to get bogged down by the stress and difficult nature of our jobs, let's not forget to recognize the importance of our line of work and focus more on the joyful and exciting moments of our time spent working at the front lines of medicine. Make the most of the people and resources available to you, and use technology to maximize the time you spend learning and teaching others. There is no better time than the present to get organized and get involved. Congratulations to you for all you've accomplished thus far!

(I welcome your comments or suggestions at alifarzadmd@gmail.com).

I have no financial disclosures to make, and get no financial compensation for any of the products discussed in this article. The views expressed and recommendations made in the article are solely those of the author, shared in hopes of making the reader's life a little easier.

STUDENT PRESIDENT'S MESSAGE

Enjoy the Journey

Meaghan Mercer

Being in medical school is like being a kid, always wanting to be a little bit older, a little bit further along. During the last few months of fourth year I keep hearing my fellow classmates echo the same sentiment of "I can't wait to be done". Don't forget to experience today, though. Although it is a simple message, it is an important one that I feel many forget in the foray of classes or rotations. As the new academic year begins I want to leave you with a few tips on how to get the most out of these last few months or years of medical school.

During the third year of medical school you have the opportunity to see every aspect of medicine. It is so important to go into each rotation thinking, "I might want to do this". If you decide that emergency medicine is really right for you then you will need the skills that each specialty gives you and you will learn invaluable lessons on how to communicate with each group (which helps when you are trying to admit that patient to medicine at 3am).

During fourth year you get to start acting like an intern but with that safety net that we are sometimes afraid to test. After an intense shift, I asked my preceptor what I could do to improve as a medical student and he said, "It is important to start thinking like a physician". When you present a patient to your attending or resident start formulating an assessment and plan. It allows you to display your thinking process and it will help you see where your strengths and weakness are with your diagnostic process. Don't be afraid to try and take advantage of every opportunity you are given to shine and remember that everyone is there to support your growth.

Lastly, always take some time for yourself. In emergency medicine we always say, "we work hard and play harder", so make sure to give yourself a good balance of both. I want to wish all of our members the best of luck in the year ahead. Do not forget to take advantage of all the wonderful benefits AAEM/RSA has to offer including EM Select, our unique residency application-tracking program to help organize your applications in one central location.

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