OF THE AMERICAN ACADEMY OF EMERGENCY MEDICINE

COMMONSENSE

VOLUME 22, ISSUE 3 MAY/JUNE **2015**



MEMC-GREAT 2015 JOINT CONGRESSES



ITALIAN GREAT NETWORK CONGRESS

FOCUS ON INNOVATIONS AND TRANSLATIONAL RESEARCH IN EMERGENCY MEDICINE

SEPTEMBER 5-9, 2015 ROME, ITALY

INSIDE

State of the Academy — 3

Is MOC a RPITA? — 4

Permanent Doc Fix Signed Into Law — 6

Board Certification &
Quality of Care: Statistically
Significant — 12

Register Today & Join Us in Rome for MEMC-GREAT 2015 — **14**

Virginia Medicaid PEND Program Eliminated — **16**

Basic Priciples of Investing for Retirement — 18

From Resident to Attending — 27

Register Today! www.emcongress.org #MEMC15

AAEM PEARLS of WISDOM

ORAL BOARD REVIEW COURSE

Sept 26-27, Sept 30-Oct 1, Oct 2-4 2015



Officers

President

Mark Reiter, MD MBA

Vice President

Kevin Rodgers, MD

Secretary-Treasurer

Joel Schofer, MD MBA CPE RDMS

Immediate Past President

William T. Durkin, Jr., MD MBA

Past Presidents Council Representative

Larry Weiss, MD JD

Board Of Directors

John Christensen, MD David Farcy, MD FCCM David Lawhorn, MD Joseph Lex, MD Andrew Mayer, MD Lisa Moreno-Walton, MD MSCR

Robert Suter, DO Leslie Zun, MD MBA

YPS Director

Jonathan S. Jones, MD

AAEM/RSA President

Victoria Weston, MD

Editor, *JEM*Ex-Officio Board Member

Stephen R. Hayden, MD

Executive Director

Kay Whalen, MBA CAE

Associate Executive Director

Janet Wilson, CAE

Editor, *Common Sense*Ex-Officio Board Member

Andy Walker, MD

Common Sense Editors

Jonathan S. Jones, MD, Assistant Editor Andrew Phillips, MD MEd, Resident Editor Laura Burns, MA, Managing Editor

Articles appearing in *Common Sense* are intended for the individual use of AAEM members. Opinions expressed are those of the authors and do not necessarily represent the official views of AAEM or AAEM/RSA. Articles may not be duplicated or distributed without the explicit permission of AAEM. Permission is granted in some instances in the interest of public education. Requests for reprints should be directed 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.

COMMONSENSE

Table of Contents

Regular Features

President's Message: State of the Academy	3
From the Editor's Desk: Is MOC a RPITA?	
Washington Watch: Permanent Doc Fix Signed Into Law	6
Foundation Donations	
PAC Donations	g
Upcoming Conferences	10
Dollars & Sense: Basic Investing for Retirement Principles	18
Young Physicians Section: Does this Sound Familiar?	25
RSA President's Message: From Resident to Attending	27
Editor's Message: Improving Your Survey Response Rates	28
Resident Journal Review: Acute Decompensated Heart Failure: What is the Current Evidence for Intravenous Diuretic Therapy?	31
Medical Student Council President's Message: Wilderness Medici An Interview with Grant S. Lipman, MD	
AAEM Job Bank Service	
Special Articles	
Board Certification & Quality of Care: Statistically Significant	12
The Value of Emergency Medicine	13
Register Today & Join us in Rome for MEMC-GREAT 2015	14
MEMC Pre-Congress Courses	
Updates & Announcements	
Virginia Medicaid PEND Program Eliminated	16
Committee Report: Chapter Division	
Committee Report: Practice Fairness Council	21
Committee Update: Practice Management Committee Changes its	

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.
- 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.
- 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.
- 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.
- 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: \$425 (Must be ABEM or AOBEM certified, or have recertified for 25 years or more in EM or Pediatric EM)

Affiliate Member: \$365 (Non-voting status; must have been, but is no longer ABEM or AOBEM certified in EM)

Associate Member: \$250 (Limited to graduates of an ACGME or AOA approved Emergency Medicine Program)

*Fellows-in-Training Member: \$75 (Must be graduates of an ACGME or AOA approved EM Program and be enrolled in a fellowship) Emeritus Member: \$250 (Must be 65 years old and a full voting member in good standing for 3 years)

International Member: \$150 (Non-voting status)

Resident Member: \$60 (voting in AAEM/RSA elections only)

Transitional Member: \$60 (voting in AAEM/RSA elections only)

International Resident Member: \$30 (voting in AAEM/RSA elections only)

Student Member: \$30 or \$60 (voting in AAEM/RSA elections only)

International Student Member: \$30 (voting in AAEM/RSA elections only)
*Fellows-in-Training membership includes Young Physicians Section (YPS) membership.

Pay dues online at www.aaem.org or send check or money order to:

AAEM, 555 East Wells Street, Suite 1100, Milwaukee, WI 53202 Tel: (800) 884-2236, Fax (414) 276-3349, Email: info@aaem.org.



President's Message

State of the Academy

Mark Reiter, MD MBA FAAEM

At the recent AAEM Scientific Assembly in Austin I presented the "State of the Academy" address, outlining AAEM's accomplishments over the past year. Here's a quick recap.

AAEM President

Membership: AAEM membership is soaring — currently 16% ahead of 2014 at this time.

Advocacy:

- The AAEM board responded to over 100 calls for assistance from members in the past year.
- Members lobbied dozens of members of Congress during Capitol Hill Advocacy Day, and so did the board of directors during its own Capitol Hill Fly-In.
- AAEM board members had several meetings with CMS leadership regarding improving due process provisions for emergency physicians.
- Aggressive advocacy against Tenet Health's plan to put its emergency medicine, hospitalist, and anesthesiology contracts at 11 California hospitals out for bid to a single contract management group — Tenet ultimately rescinded its plan.
- Aggressive advocacy against hospital-contract management group joint ventures, in which the joint venture owns the contract and splits emergency physician professional fees between the hospital and CMG.
- Ongoing dialogue with ABEM and AOBEM about making the maintenance of certification process more valuable, less burdensome, and less costly to emergency physicians.
- Support for efforts to ban restrictive covenants in physician contracts in Washington State.
- Participation by several AAEM members in our new Advocacy Rotation in Senator Raul Ruiz's office (Dr. Ruiz is an emergency physician).
- Published eight new position statements: www.aaem.org/emresources/position-statements.

Visibility: The Academy has been ramping up our national visibility.

- AAEM was quoted in over 50 media interviews in the past year, including major outlets such as CNN, The New York Times, The Wall Street Journal, ABC, and WebMD.
- We made 30 residency visits in 2014, and we are always looking to do more — contact AAEM if your residency would like a visit: www. aaemrsa.org/events/aaem-residency-visits.
- Our social media efforts have been very successful. In the past year we've had 159,259 website visits, 1,905 Facebook followers, 2,313 Twitter followers.
- Over 30,000 downloads of AAEM podcasts.

Benefits: AAEM has introduced several new members-only benefits.

- Online Members Center easily consolidates members-only benefits on our website.
- AAEM Insurance Program AAEM, through its partnership with Hays, now offers professional liability, health, dental, disability, and

- life insurance options.
- Canopy Medical Translator App free to members.
- ShiftGen scheduling software 20% discount to members.
- EMResource.org discounts and free educational materials.

Education: AAEM's educational offerings continue to grow.

- AAEM organized 23 directly-provided and 66 jointly-provided educational offerings in 2014.
- Broke attendance records at the 2014 AAEM Scientific Assembly in New York City.
- Broke attendance records again at the 2015 AAEM Scientific Assembly in Austin.
- Online Learning Library educational content, including FREE online access to AAEM Scientific Assembly lectures. CME is also available at a discount for members.
- Online Written Board Review Course new online option for those who prefer online content to our in-person course.
- Register today! Mediterranean Emergency Medicine Congress (MEMC-GREAT 2015) is September 5-9, 2015 in Rome: www. emcongress.org.
- Save the date the next AAEM Scientific Assembly is February 17-21, 2016 in Las Vegas: www.aaem.org/AAEM16.

New AAEM Interest Groups: Learn more at: www.aaem.org/about-aaem/leadership/committees.

- Women's Interest Group
- Freestanding Emergency Departments
- · Wilderness Medicine

AAEM Physician Group (in development): AAEM is working to create a new paradigm for local emergency physician groups that want to become part of a national collaboration, offering access to additional services and economies of scale while maintaining local ownership and control. More to come!

Thank You to Departing AAEM Board Members:

- · Kevin Beier, MD FAAEM
- Mark Foppe, DO FAAEM
- Robert McNamara, MD FAAEM
- Meaghan Mercer, DO
- Andy Walker, MD FAAEM
- Michael Ybarra, MD FAAEM

Welcome to New AAEM Board Members:

- David Farcy, MD FCCM FAAEM
- Jonathan Jones, MD FAAEM
- Joseph Lex, MD MAAEM FAAEM
- Lisa Moreno-Walton, MD MSCR FAAEM
- Larry Weiss, MD JD MAAEM FAAEM
- Victoria Weston, MD

Is MOC a RPITA?

Andy Walker, MD FAAEM Editor, *Common Sense*



Board certification in emergency medicine (ABEM and AOBEM) has no older or more steadfast and reliable friend than the American Academy of Emergency Medicine. If you doubt that you should go back and read "Legitimate" in the Jan/Feb 2014 issue of *Common Sense* (http://www.aaem.org/UserFiles/January-February14CommonSense.pdf). Other professional societies for emergency physicians have been far less consistent (ACEP), and some

even exist specifically to undermine legitimate board certification in our specialty. And neither I nor any emergency physician I know believes that board certification should be for life. In a constantly changing medical world some form of regular recertification or maintenance of certification (MOC) is necessary. That's why, from the beginning, ABEM and AOBEM have required retesting every ten years. I never objected to that or even questioned it. It seems perfectly reasonable.

Over the last several years, however, I have come to regard ABEM's MOC program more and more as a royal pain in the ass (RPITA, pronounced ar-peet'-a). I began to feel this way when ABEM added a small annual test (the LLSA) to its big test every ten years (the ConCert exam). Now, I don't really care if I take a small test every year or a big test every decade, but why both? Why not fold the ConCert into the LLSA and drop the big test every ten years, or make sure the critical literature of the last decade is covered in the ConCert and drop the LLSA? Doing both strikes me as a redundant and unnecessary waste of my time and money.

I am not alone in feeling this way. ABEM usually sends a representative to AAEM's annual Scientific Assembly, to update the Academy's membership on ABEM requirements and answer questions. Shortly after the LLSA appeared, I made the argument above during the ABEM representative's question period and asked something like, "Since board-certified emergency physicians are professionals who already keep up with the literature, does adding this new LLSA test accomplish anything beyond bringing in more money for ABEM?" I was actually looking forward to hearing his answer, thinking perhaps there was something about the LLSA I didn't understand, but others in the room were less curious. My question unleashed such a flood of anger from so many in the audience that the poor ABEM guy had to beat a hasty retreat from the meeting. More quantitatively, a survey AAEM did of its members a few years ago also showed tremendous dissatisfaction with MOC. The Academy forwarded the results of that survey to ABEM at the time.

Since then, things have only gotten worse — much, much worse. Now ABEM, like the other member boards of the American Board of Medical Specialties (ABMS), requires an Assessment of Practice Performance (APP) as part of MOC, on top of both the Concert and LLSA tests. And the APP includes both a Practice Improvement (PI) activity and a Communications/Professionalism (CP) activity, both of which must be done every five years. So, over each ten year period between ConCert

exams, an ABEM diplomate must pass eight LLSAs (four in each five year period between ConCerts), perform two PI projects and two CP projects, and then pass the ConCert. Hopefully we can squeeze in a few patients in the meantime!

"Is MOC a worthwhile process or a RPITA, and what — if anything — should the Academy do about it?"

If you haven't yet gone through the whole ten-year recertification cycle, I encourage you to go to the ABEM website (https://www.abem.org/public/ abem-maintenance-of-certification-(moc)/moc-assessment-of-practiceperformance/moc-assessment-of-practice-performance) and take a look at what you are facing if you want to remain board certified. Then go to www.guidestar.org and set up a free account. Guidestar's mission is "To revolutionize philanthropy by providing information that advances transparency, enables users to make better decisions, and encourages charitable giving." There you can review the IRS Form 990 from every nonprofit corporation in the country, including ABEM and ABMS (and AAEM and ACEP, for that matter). In 2013 ABEM took in over \$13 million, for a profit of just under \$3 million, and reported net assets of almost \$27 million. I'll let you look up the compensation of its executive director, directors, and staff for yourself. ABMS took in over \$18 million for a profit of just under \$2 million, and is sitting on net assets of over \$16 million. Its CEO earned almost \$800,000.

Submit a "Letter to the Editor" at www.aaem.org/publications/common-sense/letters-to-the-editor.

Recently the American Board of Internal Medicine (ABIM) decided to suspend its APP component of MOC. You may have read about that on Medscape (http://www.medscape.com/viewcollection/33312). ABIM did this because of vigorous protests from its diplomates — and the recent creation of an alternative internal medicine board may have contributed too. AAEM wrote to ABEM requesting similar action. Because ABEM thought our old survey showing high levels of dissatisfaction was obsolete, the Academy completed a new survey on MOC just before the Scientific Assembly in Austin. The results were shocking, even to me.

Surveys were emailed to 3816 full voting members of AAEM and 1443 people completed the survey, for a response rate of 38%. That is an amazingly high response rate for such a survey, and shows how angry Academy members are about this. At the end of the survey respondents

were given the chance to leave additional comments, and 615 did just that, again reflecting the level of anger among board-certified emergency physicians over MOC. Many of these comments are surprisingly lengthy and nearly all are highly critical. Some suggest doing away with the LLSA, even more suggest doing away with the ConCert, and practically all recommend doing away with the entire APP — both the PI and CP components. I read every single comment, and what comes through loud and clear is frustration and anger too great for any word other than rage.

The Academy has passed the results of this new survey, including the comments, on to ABEM. AAEM continues to engage in dialogue with ABEM in an attempt to make sure its MOC requirements are evidence-based, cost-effective, not excessively burdensome to emergency physicians, and of proven benefit to patients. Based on the responses of our members who are certified by AOBEM, AAEM will be doing the same with that board.

In the meantime, what do you think of MOC? Is it too much trouble? Is it too expensive? Do the new APP components add anything of value to patients? Especially if you are residency trained in emergency medicine, will you let your board certification lapse even before you retire? Please write me and tell your fellow AAEM members what you think. Is MOC a worthwhile process or an RPITA, and what — if anything — should the Academy do about it?

We're listening, send us your thoughts!







AAEM Antitrust Compliance Plan:

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



Permanent Doc Fix Signed Into Law

Williams & Jensen, PLLC

Medicare Access and CHIP Reauthorization Act

On April 16, President Obama signed into law the Medicare Access and CHIP Reauthorization Act (H.R. 2). The legislation was the most significant health care bill approved by Congress since the passage of the Affordable Care Act (ACA) more than five years ago which at that time was controlled by Democrats.



The final product was praised by bipartisan leaders of the House and Senate, including Speaker John Boehner (R-OH), Minority Leader Nancy Pelosi (D-CA), and Senate Majority Leader Mitch McConnell (R-KY). Congressional leaders even attended a joint ceremony following the approval of the legislation by the Senate, and President Obama lauded the bill as a "bipartisan effort." The carefully negotiated legislation came together in a matter of weeks, and ultimately won the approval of more than 90 Senators and nearly 400 House Members.

The final agreement permanently repealed the Medicare Sustainable Growth Rate (SGR) formula, which Congress had temporarily fixed 17 times since 2003. The bill replaces the SGR with a five year period of positive payment updates before transitioning to a new Merit-Based Incentive Payment System (MIPS) beginning in 2019. The new system will attempt to measure quality of care, resource use, and other factors to determine payment incentives and penalties. The legislation calls for input from physician specialty societies and other stakeholders on appropriate measures for quality and resource use. Additionally, the legislation extended the Children's Health Insurance Program (CHIP) for two years.

The President indicated his support for the bill because it would "reform the flawed Medicare physician payment system to incentivize quality and value," includes other reforms to help slow the growth of health care costs, and would "extend other important programs such as health care coverage for children."

Despite the final vote overwhelmingly in favor of the legislation, elements of the bill faced opposition from conservative and liberal leaning groups alike. Following passage in the House, some groups urged for a longer extension of CHIP, while others noted that less than 40 percent of the overall cost of the bill was paid for and urged Congress to offset the entire cost of the legislation. Some Senators voiced support for various additional changes, including the elimination of Medicare therapy caps. Supporters of permanent SGR repeal, including AAEM and many other provider groups, strongly urged the Senate to reject last ditch efforts to change the bill, which could have delayed passage of the bill or worse — endanger passage of the overall agreement by forcing the bill to go back to the House for further consideration.

In the end, Senate leaders agreed to hold a vote on six amendments, which all failed, ensuring that the bill went straight to the President's desk following final approval. The passage of the bill was lauded by physicians, who have long supported the permanent repeal of the flawed Medicare payment policy and have touted the fix as a sustainable way to save money in the long-term.

House and Senate Clear Budget Resolutions with Broad Health Care Reforms; Congress Continues Focus on ACA Legislation

In March, the House approved a budget resolution for Fiscal Year 2016 authored by House Budget Committee Chairman Tom Price (R-GA). The budget would balance cut spending by \$5.5 trillion and be balanced over the next 10 years. The budget fully repeals the ACA, and includes a number of other concepts from former Chairman Paul Ryan's (R-WI) budgets, including transition to a premium support model for Medicare, and additional flexibility for state Medicaid programs.

"The passage of the bill was lauded by physicians, who have long supported the permanent repeal of the flawed Medicare payment policy and have touted the fix as a sustainable way to save money in the long-term."

The Senate, after holding votes on nearly 30 amendments, also narrowly approved a budget resolution introduced by Senate Budget Committee Chairman Mike Enzi (R-WY). Among the amendments receiving a vote was one by Senate Finance Committee Ranking Member Ron Wyden (D-OR) to eliminate over \$1 trillion in Medicaid cuts included in the Senate budget. This amendment was defeated by a vote of 47-53, mostly along party lines. Several health care amendments were adopted, including an amendment requiring Members of Congress and high-level Administration officials to participate in the ACA exchanges.

Similar to the House budget, many of the savings included in Chairman Enzi's budget are from the health care sector, and the budget would also balance within the 10 year budget window. It repeals the ACA, and tasks Congressional Committees to work with stakeholders to identify reforms that achieve the net level of Medicare savings included in the President's budget request. Similar to the House budget, it would provide states with additional flexibility to administer Medicaid funds.

In early May, the House and Senate were on the verge of reconciling their budgets, which will set the stage for Congress to use reconciliation, a procedural maneuver that allows legislation to pass with only 51 votes in the Senate. It is widely expected that there will be a health care component to reconciliation, such as repeal of all or part of the Affordable Care Act, or a response to the *King v. Burwell* case if the U.S. Supreme Court decides to strike down the ACA subsidies.

The Senate has still yet to consider several ACA changes that were approved by the House in 2015, including legislation that changes the law's definition of full-time work for purposes of calculating employer requirements from 30 hours to 40 hours weekly. Another measure sent to the Senate, which is expected to be signed into law, is a bill to exempt employees receiving medical care through the Department of Veterans Affairs (VA) or the Department of Defense (DOD) from counting towards the number of employees in a business for determining the employer mandate under the ACA.

Other legislation has been introduced to make changes to the ACA, such as a bill supported by many Democrats that would repeal the ACA's

"Cadillac Tax" on high cost health plans that is set to take effect in 2018, and bipartisan legislation to repeal the ACA's 2.3 percent excise tax on medical devices.

The Supreme Court's decision in King v. Burwell may pose the most serious threat to the ACA until the next President is sworn into office. If the challenge is successful, subsidies to purchase health insurance and the individual mandate to purchase health insurance could be overturned in the 34 states that have a federal exchange. If the Supreme Court strikes down the subsidies, it would instantly create uncertainty for the insured population, as Centers for Medicare and Medicaid Services (CMS) officials have remained tight-lipped on their contingency plans. The response from Congressional Republicans is also unclear. A working group of key Republican policymakers has been formed to consider this issue, and many expect Republicans would seek to promote a plan to replace the ACA with legislation that contains no employer or individual health insurance mandate and which would provide tax credits for low-income Americans to purchase private health care plans. The plan would retain certain popular provisions that were enacted as part of the ACA, such as the requirement that health plans offer dependent coverage until age 26, and prevents denial of coverage based on a pre-existing condition.

www.aaem.org/publications

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





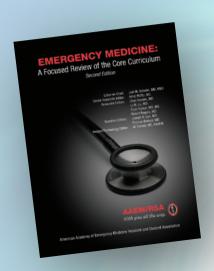
The Next Generation of Board Review — AAEM Resident and Student Association's:

Emergency Medicine: A Focused Review of the Core Curriculum



Order today: www.aaem.org/bookstore

Editor-in-Chief:



Joel M. Schofer, MD FAAEM
Senior Associate Editor:
Amal Mattu, MD FAAEM
Associate Editors:
Chad Kessler, MD MHPE
Le N. Lu, MD FAAEM
Todd Parker, MD MS FAAEM FACEP
Robert Rogers, MD FACEP
Question Editors:
Joseph R. Lex, MD MAAEM FAAEM

Question Editors:
Joseph R. Lex, MD MAAEM FAAEM
Thomas Bottoni, MD FAAEM
Images/Technology Editor:
Ali Farzad, MD FAAEM

This 24 chapter text will prepare you for the:

- Emergency medicine qualifying exam (formerly the "written boards")
- Emergency medicine annual resident in-service exam
- ConCert Exam
 - over 200 color images
 - 225 question practice in-service examination
 - 24 chapters written by experts in the field

This text also serves as a comprehensive review of emergency medicine for the motivated medical student.



Recognition Given to Foundation Donors



Levels of recognition to those who donate to the AAEM Foundation have been established. The information below includes a list of the different levels of contributions. The Foundation would like to thank the individuals below who contributed from 11-20-14 to 4-29-15.

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

Member

Contributions \$1,000-\$2,499 Crystal Cassidy, MD FAAEM

Donor

Contributions \$500-\$999

Eric S. Csortan, MD FAAEM William T. Durkin, Jr., MD MBA CPE FAAEM Mark Reiter, MD MBA FAAEM

Contributor

Contributions up to \$499

Juan F. Acosta, DO MS FAAEM Sameer M. Alhamid, MD FRCPC FAAEM Kevin Allen, MD FAAEM Leonardo L. Alonso, DO FAAEM Terence J. Alost, MD MBA FAAEM Todd Alter, MD FAAEM Justin P. Anderson, MD FAAEM Andrea N. Apple, DO Carmelito Arkangel, Jr., MD FAAEM Matthew R. Astin, MD MPH FAAEM W. Lynn Augenstein, MD FAAEM Sharon Kaye Bajwa, MD FAAEM Jennifer L. Baker, MD FAAEM Garo Balkian, MD FAAEM Lydia L. Baltarowich, MD FAAEM Sean P. Barbabella, DO FAAEM Bradley E. Barth, MD FAAEM Charles R. Bauer, MD FAAEM Dale S. Birenbaum, MD FAAEM Thomas D. Black, MD FAAEM Michelle Blanda, MD FAAEM Vincent M. Blum, MD FAAEM Erem Emmanuel Bobrakov, MD FAAEM Mark Avery Boney, MD FAAEM Eric W. Brader, MD FAAEM Antonio L. Brandt, MD FAAEM Richard D. Brantner, MD FAAEM Peter D. Braun, MD FAAEM David P. Bryant, DO FAAEM Michael R. Burton, MD FAAEM Anthony J. Callisto, MD FAAEM Thomas J. Calvert, MD FAAEM Rebecca K. Carney-Calisch, MD FAAEM Anthony D. Carter, DO PC FAAEM John W. Cartier, MD FAAEM Jeannie M. Charnas. MD FAAEM Christopher B. Chisholm, MD MS FAAEM William B. Chung, MD FAAEM Garrett Clanton, II, MD FAAEM Robert Lee Clodfelter, Jr., MD FAAEM David T. Coffin, MD FAAEM Domenic F. Coletta, Jr., MD FAAEM

Manuel J. Colon, MD MPH FAAEM Gaston A. Costa, MD Steven K. Costalas, DO FAAEM Robert Cox, MD PhD FAAEM John L. Coyner, MD FAAEM Matthew B. Curnutte, MD FAAEM Patrick W. Daly, MD FAAEM Lara J. De Nonno, MD FAAEM Francis X. Del Vecchio, MD FAAEM Gerald T. Delk, MD FAAEM Yagnesh K. Desai, MD FAAEM Pierre G. Detiege, MD FAAEM Robert L. Dickson, MD FAAEM Damon Dietrich, MD FAAEM John Timothy DiPasquale, MD FAAEM Walter D. Dixon, MD FAAEM Denis J. Dollard, MD FAAEM Doug M. Douglass, MD FAAEM David M. Ebbitt, MD FAAEM Eustace L. Edwards, III, MD FAAEM Sundeep Jayant Ekbote, MD FAAEM Evan A. English, MD FAAEM EPCHA, PC Eric Fajardo, MD FAAEM Richard G. Faller, MD FAAEM David A. Farcy, MD FAAEM FCCM Neal N. Faux, MD FAAEM Deborah M. Fernon, DO FAAEM Eric D. Ferraris, MD Mark J. Filley, MD FAAEM David M. Fisher, MD FAAEM Taylor G. Fletcher, MD FAAEM Mark A. Foppe, DO FAAEM Bennie F. Fore, III. MD FAAEM Denise N. Fraga, MD William T. Freeman, MD FAAEM Robert A. Frolichstein, MD FAAEM Ron S. Fuerst, MD FAAEM Jamie L. Gagan, MD FAAEM Gus M. Garmel, MD FAAEM FACEP Steven H. Gartzman. MD FAAEM Jessica A. Gedraitis. MD FAAEM Ronald T. Genova, MD FAAEM Adam J. Geroff, MD FAAEM Kathryn Getzewich, MD FAAEM Richard Russell Gill, MD FAAEM Daniel V. Girzadas, Jr., MD RDMS FAAEM Gregory P. Gleim, MD FAAEM Christopher R. Grieves, MD FAAEM Robert E. Gruner, MD FAAEM Michael N. Habibe, MD FAAEM Brian T. Hall, MD FAAEM Paul Howard Hamilton, MD FAAEM

James L. Hancock, MD FAAEM Neal Handly, MD FAAEM Dennis P. Hanlon, MD FAAEM Mark J. Harrell, MD FAAEM John C. Haughey, MB BCH BAO FAAEM Jerris R. Hedges, MD FAAEM Antonia Helbling, MD Mel E. Herbert, MD FAAEM Virgle O. Herrin, Jr., MD FAAEM Victor S. Ho, MD FAAEM Robert S. Hockberger, MD FAAEM James D. Hogue, DO FAAEM Robert A. Hoogstra, MD FACP FAAEM John Hopkins, DO FAAEM David R. Hoyer, Jr., MD FAAEM Melinda G. Huang, MD Irving P. Huber, MD FAAEM Elizabeth J. Hull. MD FAAEM Sahibzadah M. Ihsanullah, MD FAAEM Lisandro Irizarry, MD FAAEM Leland J. Irwin, MD FAAEM Ronny Lynn Jackson, MD FAAEM Dominic W. Jenkins, MD Andrew S. Johnson, MD MPH FAAEM Carroll Don Johnson, MD FAAEM Heath A. Jolliff, DO FAAEM Ellen C. Jones, MD Jonathan S. Jones, MD FAAEM Stacey L. Kaciuban, MD FAAEM Jerry L. Karr, DO FAAEM Shammi R. Kataria, MD FAAEM Ziad N. Kazzi, MD FAAEM Kathleen P. Kelly. MD FAAEM John H. Kelsev. MD FAAEM Lenard M. Kerr. DO FAAEM Scott K. C. King, MD FAAEM Robert L. Kinner, MD FAAEM Christopher L. Klingenberg, MD FAAEM Thomas R. Konjoyan, DO FAAEM Marc Kranz, MD FAAEM Lance Kreplick, MD MMM FAAEM Keith J. Kuhfahl, DO FAAEM Kenneth Kumamoto, MD FAAEM Susan Laidlaw, MD Liza Le, MD FAAEM R. Sean Lenahan, MD FAAEM Sun Lin. MD FAAEM Bruce Lobitz. MD FAAEM Eric Lubliner, MD FAAEM Zachary N. Malachias, MD FAAEM Jason Manuell, DO FAAEM Cynthia Martinez-Capolino, MD FAAEM

David Mason, MD FAAEM FACEP

John R. Matjucha, MD FAAEM Jason D. May, MD FAAEM Andrew P. Mayer, MD FAAEM Michael V. Mazzaferro, MD FAAEM Gregory S. McCarty, MD FAAEM Rick A. McPheeters, DO FAAEM David E. Meacher, MD FAAEM Andrew Meister, MD FAAEM Adrian Miclea, DO Wendi S. Miller, MD FAAEM Lisa D. Mills, MD FAAEM Trevor Mills, MD MPH FAAEM Abulmajeed M. Mobrad, MD James P. Moises, MD FAAEM Joseph P. Monastero, MD FAAEM Samuel Gregory Morale, MD FAAEM Teresita Morales-Yurik, MD FACEP FAAEM Lisa A. Moreno-Walton, MD MS MSCR FAAFM Jennifer Muniz, MD FAAEM Christian Mustill, MD Deborah R. Natale, MD FAAEM David Nguyen, MD Long Nguyen, MD FAAEM Karl A. Nibbelink, MD FAAEM Juan M. Nieto, MD FAAEM Vicki Norton, MD FAAEM Isaac A. Odudu, MD FAAEM Robert C. Oelhaf, Jr., MD FAAEM Travis Omura, MD Ashley Panicker, MD Chris M. Paschall, MD FAAEM Hector L. Peniston-Feliciano. MD FAAEM James A. Pfaff, MD FAAEM Camiron L. Pfennig-Bass. MD FAAEM Patricia Phan. MD FAAEM Jeffery M. Pinnow, MD FAAEM Barry Poplaw, MD FAAEM Matthew W. Porter, MD FAAEM Brian R. Potts, MD MBA FAAEM John T. Powell, MD FAAEM Ronald T. Rakowski, MD FAAEM Frank A. Reiser, MD FAAEM Marc C. Restuccia, MD FAAEM Jeffrey A. Rey, MD FAAEM Phillip L. Rice, Jr., MD FAAEM Howard M. Rigg, III, MD FAAEM John R. Ringquist, MD FAAEM David S. Rosen, MD MPH FAAFM Peter Rosen, MD FACS FACEP FAAEM Steven B. Rosenbaum, MD FAAEM Marc Roy, MD FAAEM Continued on next page

Q

Recognition Given to PAC Donors



AAEM PAC is the political action committee of the American Academy of Emergency Medicine. Through AAEM PAC, the Academy is able to support legislation and effect change on behalf of its members and with consideration to their unique concerns. Your support of AAEM PAC is essential to its success

Levels of recognition to those who donate to the AAEM PAC have been established. The information below includes a list of the different levels of contributions. The PAC would like to thank the individuals below who contributed from 11-20-14 to 4-29-15.

Congressional

Contributions \$500-\$999

Michael R. Burton, MD FAAEM Crystal Cassidy, MD FAAEM Eric S. Csortan, MD FAAEM William T. Durkin, Jr., MD MBA CPE FAAEM David A. Farcy, MD FAAEM FCCM Long Nguyen, MD FAAEM

Member

Contributions up to \$499

Senthil Alagarsamy, MD FAAEM Leonardo L. Alonso, DO FAAEM Terence J. Alost, MD MBA FAAEM Justin P. Anderson, MD FAAEM Carmelito Arkangel, Jr., MD FAAEM W. Lynn Augenstein, MD FAAEM Garo Balkian, MD FAAEM Vincent M. Blum, MD FAAEM Erem Emmanuel Bobrakov, MD FAAEM Mark Avery Boney, MD FAAEM Eric W. Brader, MD FAAEM Antonio L. Brandt, MD FAAEM Richard D. Brantner, MD FAAEM Anthony J. Callisto, MD FAAEM Rebecca K. Carney-Calisch, MD FAAEM John W. Cartier, MD FAAEM Jeannie M. Charnas, MD FAAEM Garrett Clanton, II, MD FAAEM Steven K. Costalas, DO FAAEM Robert H. Couch, MD FAAEM Patrick W. Daly, MD FAAEM Lara J. De Nonno, MD FAAEM

Francis X. Del Vecchio, MD FAAEM Pierre G. Detiege, MD FAAEM John Timothy DiPasquale, MD FAAEM Denis J. Dollard, MD FAAEM David M. Ebbitt, MD FAAEM Eustace L. Edwards, III, MD FAAEM Evan A. English, MD FAAEM Mark A. Foppe, DO FAAEM William T. Freeman, MD FAAEM Steven H. Gartzman, MD FAAEM Daniel V. Girzadas, Jr., MD RDMS FAAEM Jeffrey Brian Gordon, MD FAAEM Jav A. Greenstein, MD FAAEM Michael Haas, MD FAAEM Paul Howard Hamilton, MD FAAEM Edward Heneveld, MD FAAEM Mel E. Herbert, MD FAAEM Virgle O. Herrin, Jr., MD FAAEM Victor S. Ho, MD FAAEM James D. Hogue, DO FAAEM Robert A. Hoogstra, MD FACP FAAEM John Hopkins, DO FAAEM David R. Hoyer, Jr., MD FAAEM Irving P. Huber, MD FAAEM Daniel J. Irving, MD FAAEM Leland J. Irwin, MD FAAEM Heath A. Jolliff, DO FAAEM Stacey L. Kaciuban, MD FAAEM Jerry L. Karr, DO FAAEM Shammi R. Kataria, MD FAAEM Kathleen P. Kelly, MD FAAEM Lenard M. Kerr, DO FAAEM Robert L. Kinner, MD FAAEM

Christopher L. Klingenberg, MD FAAEM Thomas R. Konjoyan, DO FAAEM Frederick Kotalik, MD FAAEM Kim M. Landry, MD FAAEM Adrian Doran Langley, MD FAAEM Chaiya Laoteppitaks, MD FAAEM Robert E. Leyrer, MD FAAEM Gregory J. Lopez, MD FACEP FAAEM Eric Lubliner, MD FAAEM Zachary N. Malachias, MD FAAEM Cynthia Martinez-Capolino, MD FAAEM Charles F. Mason, MD FAAEM David Mason, MD FAAEM FACEP Andrew P. Maver, MD FAAEM Gregory S. McCarty, MD FAAEM Adrian Miclea, DO Wendi S. Miller, MD FAAEM Lisa D. Mills, MD FAAEM Trevor Mills, MD MPH FAAEM Christian Mustill, MD Karl A. Nibbelink, MD FAAEM Vicki Norton, MD FAAEM Robert C. Oelhaf, Jr., MD FAAEM Robert Verne Oliver, MD FAAEM Ramon J. Pabalan, MD FAAEM Allan D. Packer, MD FAAEM Hector L. Peniston-Feliciano, MD FAAEM Patricia Phan, MD FAAEM Jeffery M. Pinnow, MD FAAEM Brian R. Potts. MD MBA FAAEM Ronald T. Rakowski, MD FAAEM Frank A. Reiser, MD FAAEM Mark Reiter, MD MBA FAAEM

Marc C. Restuccia, MD FAAEM Jeffrey A. Rey, MD FAAEM Howard M. Rigg, III, MD FAAEM John R. Ringquist, MD FAAEM Steven B. Rosenbaum, MD FAAEM Jay Sharp, MD FAAEM Brendan P. Sheridan, MD FAAEM Michael E. Silverman, MD FAAEM FACP Douglas P. Slabaugh, DO FAAEM Michael Slater, MD FAAEM Donald L. Snyder, MD FAAEM Marc D. Squillante, DO FAAEM Keith D. Stamler, MD FAAEM Douglas D. Stern, DO FAAEM Sean P. Stickles, MD FAAEM B. Richard Stiles, DO FAAEM Gregory J. Sviland, MD FAAEM Jeff Thompson, MD MBA FAAEM Mark D. Thompson, MD FAAEM David Touchstone, MD FAAEM Owen T. Traynor, MD FAAEM Matthew W. Turney, MD FAAEM Christopher P. Visser, MD FAAEM Wm. Bruce Watson, MD FAAEM H. Michael Webb, MD FAAEM Gregory A. West, MD FAAEM Sean Wilkie, MD Joanne Williams, MD FAAEM Michael Robert Williams, MD FAAEM Emily Wolff, MD FAAEM Todd W. Zaayer, MD FAAEM Steven Zimmerman, MD FAAEM

Foundation Donors continued...

Jonathan S. Rubens, MD MHPE FAAEM Nate T. Rudman, MD FAAEM Guneesh Saluja, MD FAAEM Carlos A. Sanchez, DO FAAEM Kristen Sandel, MD FAAEM Tom Scaletta, MD MAAEM FAAEM Timothy J. Schaefer, MD FAAEM Anthony M. Scialdone, MD FAAEM Alexander J. Scumpia, DO MSc Matthew J. Sebens, MD FAAEM Russell D. Sharpswain, DO FAAEM Richard D. Shih, MD FAAEM Robert J. Sigillito, MD FAAEM Michael E. Silverman, MD FAAEM FACP Douglas P. Slabaugh, DO FAAEM Michael Slater, MD FAAEM

Donald L. Snyder, MD FAAEM Jonathan R. Sorini, DO FAAEM Marc D. Squillante, DO FAAEM Robert E. Stambaugh, MD FAAEM Keith D. Stamler, MD FAAEM Douglas D. Stern, DO FAAEM Sean P. Stickles, MD FAAEM B. Richard Stiles, DO FAAEM Robert E. Suter, DO MHA FAAEM Gregory J. Sviland, MD FAAEM William E. Swigart, MD FAAEM Richard J. Tabor, MD FAAEM Jeff Thompson, MD MBA FAAEM Mark D. Thompson, MD FAAEM Douglas E. Todd, MD FAAEM Evan B. Tow, DO FAAEM

Owen T. Traynor, MD FAAEM Alex Troncoso, MD FAAEM John Tseng, MD FAAEM Matthew W. Turney, MD FAAEM Robert E. Vander Leest, MD FAAEM Vance Jeff VanTassell, MD FAAEM Gregoire Versmee, MD Kali R. Veteto, DO Christopher P. Visser, MD FAAEM Roland S. Waguespack, III, MD FAAEM Marsha Wainwright Edwards, MD FAAEM Andy Walker, III, MD FAAEM Wm. Bruce Watson, MD FAAEM Paul Marshal Webber, MD MPH FAAEM Gregory A. West, MD FAAEM Robert V. West, III, MD JD FAAEM

Robert R. Westermeyer, MD FAAEM
Kay Whalen, MBA CAE
Sean Wilkie, MD
Joanne Williams, MD FAAEM
Michael Robert Williams, MD FAAEM
Janet Wilson, CAE
Andrea L. Wolff, MD FAAEM
Emily Wolff, MD FAAEM
Samuel Woo, MD FAAEM
Patrick G. Woods, MD FAAEM
Linda Kay Yates, MD FAAEM
Todd W. Zaayer, MD FAAEM
Jorge M. Zeballos, MD FAAEM
Steven Zimmerman, MD FAAEM



Donate to the AAEM Foundation! Visit www.aaem.org or call 800-884-AAEM to make your donation.

Upcoming Conferences: AAEM Directly & Jointly Provided and Recommended

AAEM is featuring the following upcoming conferences and activities for your consideration. For a complete listing of upcoming conferences and other meetings, please visit: www.aaem.org/education/aaem-recommended-conferences-and-activities.

AAEM CONFERENCES

August 18-21, 2015

 AAEM Written Board Review Course Orlando, FL www.aaem.org/written-board-review

September 26-27, 2015

 Pearls of Wisdom Oral Board Review Course Chicago, Dallas, Orlando www.aaem.org/oral-board-review

September 30-October 1, 2015

 Pearls of Wisdom Oral Board Review Course Las Vegas www.aaem.org/oral-board-review

October 3-4, 2015

 Pearls of Wisdom Oral Board Review Course Los Angeles, Philadelphia www.aaem.org/oral-board-review

February 17-21, 2016

 22nd Annual AAEM Scientific Assembly Las Vegas www.aaem.org/AAEM16

AAEM JOINTLY PROVIDED CONFERENCES

June 13, 2015

Policy Prescriptions® Symposium 2015
 Houston, TX
 www.policyprescriptions.org/
 register-for-2015-policy-prescriptions-symposium/

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

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

September 5-9, 2015

 Mediterranean Emergency Medicine Congress (MEMC-GREAT 2015) Rome, Italy

www.emcongress.org

Pre-Congress Courses

September 5, 2015

Ultrasound for Beginners

September 5 and 6, 2015

- Emergency Department Administration
- Initiating Publishable Research in a Low Resource Environment
- Resuscitation and Emergency Cardiology

September 6, 2015

- Emergency Medicine Residency Director Workshop
- Natural and Technological Disasters Basics
- NAEMSP® EMS Medical Direction Overview Course™
- Ultrasound Advanced www.emcongress.org

AAEM-RECOMMENDED CONFERENCES

June 5-7, 2015

 The Difficult Airway Course: Emergency™ St. Louis, MO www.theairwaysite.com

June 11-13, 2015

 High Risk Emergency Medicine San Francisco, CA http://www.ucsfcme.com/2015/MEM15002/info.htm

October 2-4, 2015

The Difficult Airway Course: Emergency™
Washington, D.C.
www.theairwaysite.com

November 20-22, 2015

 The Difficult Airway Course: Emergency™ San Diego, CA www.theairwaysite.com



Help Us Bridge the Gap

Join the AMA!

Having the support of physicians from many specialties can help us resolve some of EM's most important problems. Currently, AAEM has no seats in the American Medical Association (AMA) House of Delegates (HOD). Help us reach our goal of 50% of AAEM members also holding membership in the AMA so we can add our voice to the deliberations with a seat in the HOD.

Help advocate for the medical profession, your specialty, and your patients by joining the AMA. For membership information, visit www.ama-assn.org.



Exclusive For AAEM -15% off! Use Discount Code AAEM15

NOW ONLINE!

OVER 70 VIDEOS FROM

THE 2015 AAEM

SCIENTIFIC ASSEMBLY



- View Online or Download to Any Mobile Device
- Watch Individual Lectures for CME Credit
- No Internet Connection needed to View once the lecture is downloaded

Sign up and support free access for AAEM residents!

LLSA Article CME Program!

Get the Patient Safety review Module Free

Get 10% off Use Code: LLSA13, LLSA14 or LLSA15 (valid until June 30)

Easily access the articles, key point outlines, and obtain AMA PRA Category 1 CME credits™

www.EMedHome.com

Board Certification and Quality of Care: Statistically Significant



Because it adds to the body of literature showing a relationship between quality of care and board certification in emergency medicine, the publication of this study was noted in the Jan/Feb issue of Common Sense. Several members of AAEM's leadership thought it deserved even more attention, however, because of its unusual statistical power — its data are drawn from thousands of U.S. hospitals and hundreds of thousands of patients. Furthermore, its primary outcome is something of great practical clinical importance: the rate of missed acute MI in elderly patients who come to the ED with chest pain. Therefore, with the permission of Academic Emergency Medicine, the study's abstract is reprinted below. I encourage you to read the entire article, as well as the Academy's white paper on the evidence for a link between clinical quality and board certification. (http://www.aaem.org/UserFiles/file/AAEMboard certificationWP-8.8.11RVSDfrwebpost10.5.11x.pdf).

As I said in the Jan/Feb issue, "Don't let anyone get away with telling you — or your hospital administrator — that the value of board certification in emergency medicine is unproven..."

— The Editor

Hospital and Emergency Department Factors Associated With Variations in Missed Diagnosis and Costs for Patients Age 65 Years and Older With Acute Myocardial Infarction Who Present to Emergency Departments

Michael Wilson, MD PhD; Jonathan Welch, MD MSc; Jeremiah Schuur, MD MHS; Kelli O'Laughlin, MD MPH, and David Cutler, PhD

Abstract

Objectives: The objective was to measure the variation in missed diagnosis and costs of care for older acute myocardial infarction (AMI) patients presenting to emergency departments (EDs) and to identify the hospital and ED characteristics associated with this variation.

Methods: Using 2004–2005 Medicare inpatient and outpatient records, the authors identified a cohort of AMI patients age 65 years and older who presented to the ED for initial care. The primary outcome was missed diagnosis of AMI, i.e., AMI hospital admission within 7 days of an ED discharge for a condition suggestive of cardiac ischemia. Costs were defined as Medicare hospital payments for all services associated with and immediately resulting from the ED evaluation. The effect of ED and hospital characteristics on quality and costs were estimated using multilevel models with hospital random effects.

Results: There were 371,638 AMI patients age 65 and older included in the study, of whom 4,707 were discharged home from their initial ED visits and subsequently admitted to the hospital. The median unadjusted hospital-level missed diagnosis percentage was 0.52% (interquartile range [IQR] = 0 to 3.45%). ED characteristics protective of adverse outcomes include higher ED chest pain acuity (adjusted odds ratio [aOR] =

0.23, 99% confidence interval [CI] = 0.19 to 0.27) and American Board of Emergency Medicine (ABEM) certification (aOR = 0.60, 99% CI = 0.50 to 0.73). Protective hospital characteristics include larger hospital size (aOR = 0.46, 99% CI = 0.37 to 0.57) and academic status (aOR = 0.74, 99% CI = 0.58 to 0.94). All of these characteristics were associated with higher costs as well.

"Don't let anyone get away with telling you — or your hospital administrator — that the value of board certification in emergency medicine is unproven."

Conclusions: The proportion of missed AMI diagnoses and cost of care for patients age 65 years and older presenting to EDs with AMI varies across hospitals. Hospitals with more board-certified emergency physicians (EPs) and higher average acuity are associated with significantly higher quality. All hospital characteristics associated with better ED outcomes are associated with higher costs.

Reprinted with permission from: Academic Emergency Medicine. 2014;21:1101–1108 © 2014 by the Society for Academic Emergency Medicine. ■

The Value of Emergency Medicine

John G. Holstein Director of Development, Zotec Partners

This year's Scientific Assembly in Austin was fantastic. It was my pleasure to present a lecture with David Lawhorn, MD FAAEM, a member of AAEM's board of directors and president of its Tennessee Chapter (TNAAEM). This article serves as a follow up, summarizing the main points of our presentation, "Emergency Medicine and the Affordable Care Act in 2015: Challenges and the Business Response." I firmly believe this is a pivotal time for the specialty, specifically in terms of establishing and promoting the value emergency physicians bring to health care today. The three most important takeaways from the lecture are presented below, along with a challenge.

1. Who Defines the Value Metrics?

In the rapidly changing health care landscape, three parties are positioning themselves to define the metrics by which physician practices will be measured. These parties are the CMS (Centers for Medicare/Medicaid Services), the hospital c-suite (administration), and private insurers.

Bottom line: If you do not define the metrics by which you will be measured, one or all three of these parties will do it for you — and to you.

Components of your value message should include the following, as well as others you define:

- 1. Emergency departments are characteristically defined along predictable visit thresholds.¹
- Emergency departments today account for 68% of hospital admissions. Although hospitals continue to move services to outpatient settings, they still survive on inpatient revenue.
- 3. Emergency physicians are strategically poised on the care continuum, and hold a critically important position as master diagnosticians for the proper disposition of patients.
- 4. Emergency physicians can assist their hospital partners in the struggle with the admission/re-admission problem, for which hospitals are now being fined. Observation services are an option for assessing admission and your master diagnostician skills are vital to evaluating re-admissions, both issues of utmost significance for your hospital's financial success.
- 5. Your position in the care continuum also places you at the hub of both upstream and downstream hospital revenue, and physician sub-specialty revenue.² You are the master play-callers for the appropriate disposition of patients to sub-specialists.
- 6. You have the best handle on both the frequent user and the psychiatric patient populations.
- Do not recreate the wheel. Benchmark data exist and are critical to the success of your practice. Your coding/billing partner should be able to provide you with the practice metrics important to your financial and political success.
- 8. The rest is up to you.

2. Know Your Own Practice and Your Own Data

The landscape is shifting almost daily. It is imperative to monitor all acuity, billing, clinical, and demographic measures of your practice, as well as your individual metrics. The average collection per visit is a vital metric to know, understand, and monitor.

These are days of increasing partnering with insurance companies. Be aware that, although it is definitely a different day, virtually every major insurer has been through a class action settlement for inappropriately denying or bundling claims, with millions of dollars paid back to physicians — although years after the original dates of service. Always, always remember that insurance companies have far more data than you have in a negotiation.

Bottom Line: You must know your own data. You travel at your own risk without that knowledge.

3. The New High-Deductible Patient

Self-pay patients have always been a challenge for emergency medicine. The new high-deductible, insured patient presents both a revenue issue and a potential PR issue if these accounts are not handled well. The use of yesterday's processes, protocols, and technology is hazardous to the health of your practice. Carefully and creatively planned campaigns that use a sophisticated blend of people, processes, and technology are necessary to be successful with these patients.

Bottom Line: Your patient mix is changing, and this is a critical patient type to monitor.

Challenge: You have the data, experience, knowledge, skills, and critical position to be a game-changer in health care and for your own practice. It's now up to you.

Footnotes:

- 1. In my opinion, in addition to every ED practice's billing company which should be able to provide data there are two major benchmarking resources available to emergency physicians: Emergency Excellence (www.emergencyexcellence.com) and the Emergency Department Benchmarking Alliance (www.edbenchmarking.org). The ED Benchmarking Alliance shows that EDs typically stratify into cohorts at threshold increments of 20,000 visits/year. These visit thresholds of 20,000, 40,000, 60,000, etc. bring with them predictable issues of through-put, patient flow, etc.
- 2. "Upstream" revenue is the hospital revenue that results when a patient is admitted, even if only to observation status. "Downstream" revenue refers to the income that flows to other practitioners when a patient is discharged from the ED and referred for further diagnostic work-up or treatment. Emergency physicians are at a critical position in the continuum of care, and their decisions directly impact the revenue of others in both directions. I believe this is a point often overlooked, and should be part of the message when emergency physicians are explaining their value to others in the health care system.

Contact Information:

610-668-6473
jholstein@zotecpartners.com
http://www.linkedin.com/in/johngholstein

Register Today & Join us in Rome for MEMC-GREAT 2015!

Gary Gaddis, MD PhD FAAEM Scientific Co-Chair (AAEM), MEMC-VIII

On behalf of the various committees planning the upcoming 8th Mediterranean Emergency Medicine Congress (MEMC-GREAT 2015 Joint Congress), I would like to invite you to Rome from September 5-9. The MEMC is being developed and presented in partnership with the research society GREAT-Italy (Global Research on Acute Conditions Team Italy) and the Mediterranean Chapter of AAEM,

the Mediterranean Academy of Emergency
Medicine (MAEM).

The MEMC is an opportunity for you and your family to visit the Eternal City while you get CME credits at the same time. Having visited Rome previously, I can unequivocally state that it is one of the most interesting tourist destinations in the world. Not only because of well-known attractions such as the Spanish Steps, the Flavian Amphitheater (Colosseum), the Palatine Hill, and the Vatican — but also because of places like the Villa Borghese, which to my view has some of the most incredible works of sculpture in the world. In Rome you are a two hour train ride from Naples to the southeast and Florence to the north. From Naples it is just a short ride on the Circumvesuviana train line to the ruins of Herculaneum and Pompeii. At the end of the Circumvesuviana line is the lovely village of Sorrento, gateway to the scenic Amalfi coast and the island of Capri. Getting around Italy and visiting places outside of Rome is easy, even if you don't speak Italian.

The Congress will take place at the Ergife Palace Hotel in Rome, about two kilometers west-southwest of Vatican City and just one kilometer from a nearby Metro station. The Rome Metro is easy to negotiate; the system is comprised of two lines that more or less form an "X" across Rome. Rome is a great city for walking, with interest-

ing and historic sites everywhere. You will never forget a visit to Rome, I promise you!

Opening ceremonies will take place on Sunday afternoon, September 6. This will follow a number of pre-congress courses on September 5 and 6. The MEMC then convenes with its didactic content on Monday, September 7. Visit the website today to register! www.emcongress.org.

We plan on an exciting meeting, with many top keynote and plenary session speakers and topics. Visit www.emcongress.org/2015/program/speakers for the latest updates. Amal Mattu and Art Kellermann have already confirmed as a keynote speakers. Dr. Mattu will be directly involved in the pre-congress course "Resuscitation and Cardiovascular"

Emergencies." The Congress will present core content, advanced content, and special topics tracks as well as numerous pecha kucha sessions, which have been so popular at AAEM's Scientific Assembly. In addition, rooms will be devoted to oral abstract presentations, poster abstract presentations, and a toxicology track hosted by the Middle East-



North Africa Toxicology Association.

Please join your colleagues from around the world in Rome this September. Labor Day is September 7, so the MEMC represents a great opportunity to use your CME allowance to travel to Europe at a time when most American tourists have returned home. September is one of the best times to travel in Europe, and especially Italy. I hope to see you in Rome this year!

MEMC-GREAT 2015 Pre-Congress Courses

September 5, 2015

Ultrasound for Beginners

Didactic lectures will provide state of the art audiovisual presentation by veteran faculty, followed by small groups of a maximum of five participants per one instructor allowing each individual participant ample time with their hand on the probe.

September 5 and 6, 2015

Emergency Department Administration

This 1.5-day pre-congress course will focus on basic and advanced topics in EM administration, management, ED staffing, patient safety and quality, patient flow and ED through-put, and ED design and efficiency.

Initiating Publishable Research in a Low Resource Environment

In this course, professors who have successfully designed and published research will guide you through the process of performing unfunded research from defining a testable research hypothesis, choosing a study design, designing a study instrument, implementing an approved study, analyzing data to interpret conclusions, and writing an abstract for presentation at a national meeting.

Resuscitation and Emergency Cardiology

The Resuscitation and Emergency Cardiology pre-congress course is an outstanding resuscitation course for the emergency physician that encompasses a broad spectrum of topics including the critical airway, mechanical ventilation, fluid resuscitation, cardiac arrest, post-cardiac arrest management, sepsis, ultrasound, and recent updates from the critical care and cardiology literature.

September 6, 2015

Natural and Technological Disasters – Basics

Disasters can be due to natural causes like earthquakes and floods or technological causes like nuclear power plant accidents. The size of disasters vary thereby creating challenges in formulating a response. This program will describe challenges presented by disasters using specific examples and provide an overview of response strategies.

Emergency Medicine Residency Director Workshop

The training program for emergency medicine varies internationally but all instructors face similar challenges in providing this specialty education. In this workshop, we present common challenges faced by all residency directors, with practical solutions and an open forum for group discussion.

Ultrasound — Advanced

Didactic lectures will take place on-line at your convenience. The lectures will be available one month prior and one month following the advanced ultrasound course. The hands-on session will have a maximum of five participants per one instructor allowing each individual participant ample time with their hand on the probe.

NAEMSP® — EMS Medical Direction Overview Course™

This interactive course focuses on EMS in the "real world" and serves to enhance physicians' expertise in EMS issues and is an awareness course to provide the student with the scope of components of medical oversight activities, their implications, and incorporation into decision making in EMS systems. The distinguished faculty are recognized as experts in various aspects of pre-hospital and disaster medicine/management.

REGISTER TODAY!



MEMC-GREAT 2015 JOINT CONGRESSES



ITALIAN GREAT NETWORK CONGRESS FOCUS ON INNOVATIONS AND TRANSLATIONAL

SEPTEMBER 5-9, 2015 ROME, ITALY

The VIIIth MEMC is jointly organized by the Mediterranean Academy of Emergency Medicine (MAEM), the Global Research on Acute Conditions Team Italy (GREAT Italy) Network and the American Academy of Emergency Medicine (AAEM). In conjunction with the Italian GREAT Network Congress — organized by GREAT Italy.

www.emcongress.org

Virginia Medicaid PEND Program Eliminated

Todd L. Vanden Hoek, MD MBA FAAEM

On 26 March 2015, Virginia Governor Terry McAuliffe signed the FY2015-2016 budget bill without amendment or line-item veto. This budget included enough funding to eliminate the entire Virginia Medicaid PEND Program, not just the smaller and more limited DMAS (Department of Medical Assistance Services) 99283 portion, as proposed in the original budget amendment.

This is a major victory for Virginia's emergency physicians and the patients they serve, and is the result of years of hard work by the American Academy of Emergency Medicine (AAEM), the AAEM Virginia Chapter Division (VA-AAEM), the Virginia College of Emergency Physicians (VaCEP), and the many emergency physicians who realize that patient advocacy is done outside the emergency department as well as in. Supportive local, state, and even national leaders were important partners in the effort.

Plato said the punishment for the wise who refuse to involve themselves in the affairs of government is to be ruled by unwise policies. This is truer than ever for emergency physicians, as U.S. health care rapidly changes. Timely, efficient, high-quality emergency care requires quality staffing, which requires fair reimbursement and active collaboration with leaders who understand, respect, and support the emergency physician's role as a critical safety net provider. In Virginia such leaders include Governor Terry McAuliffe, Lt. Governor Ralph Northam, Secretary of Health and Human Resources William A. Hazel Jr., Senator Frank Wagner, Senator John Watkins, Delegate Chris Jones, Delegate Chris Stolle, and many others. Emergency physicians in Virginia owe these leaders a debt of gratitude for supporting us and the patients we serve.

As noted in a October 10, 2007 report on the Medicaid PEND Program prepared for VaCEP:

The PEND Program began in the early nineties amid concern about the misuse of emergency rooms by Medicaid recipients and associated costs. To facilitate development of the Program, DMAS requested assistance from the Virginia College of Emergency Physicians ("VaCEP") to compile three lists of diagnosis codes. While VaCEP voiced its concern about DMAS' methodology, it chose to participate in developing these lists which would prove to be the basis of the Program.

The PEND Program financially penalized emergency physicians for EMTALA-mandated care when the ultimate diagnosis turned out to be non-emergent, by paying those claims at a "triage fee" level of just \$22.06. This conflicted with the Prudent Layperson Standard (PLS) established for Medicaid by the Balanced Budget Act of 1997. The PLS defines an emergency and mandates payment based on the prospective experience of a prudent layperson with concerning symptoms, regardless of the eventual diagnosis. Because of the PLS, these same emergency services were being paid in full by Medicare, Tricare, North Carolina Medicaid, and commercial insurers.

At a key meeting on March 12, 2003, between DMAS Director Patrick Finnerty, DMAS Director of Program Operations James Cohen, DMAS Payment Processing Manager Bonnie Winn, and representatives from Chesapeake Emergency Physicians and Atlantic Billing Associates, 23 pended and reduced claims were reviewed — many of them 99284 and 99285 ED visits. At that meeting, Director Finnerty committed to an



L-R: Rusty Hundley, Emergency Physicians of Tidewater; Lt. Gov. Ralph S. Northam, MD FAAP; Todd Vanden Hoek, MD MBA FAAEM, Chesapeake Emergency Physicians (CEP); Tien Vanden Hoek, MD, Pediatric Consultants of Hampton Roads; and David Pitrolo, MD FAAEM, CEP. Mr. Hundley, Dr. Pitrolo, and the Drs. Vanden Hoek met with the Lt. Governor on December 1, 2014 regarding Medicaid PEND Program elimination. Lt. Governor Northam promised to work with Secretary of Health & Human Resources Williams A. Hazel, Jr. toward elimination of the entire Medicaid PEND Program.



Governor Bob McDonnell meets with emergency medicine physicians from Hampton Roads on Dec. 5, 2013. The discussion focused on the elimination of the Medicaid PEND program, which the Governor agreed to support. L-R: Josh Smith, MD, Peninsula Emergency Physicians; Todd Parker, MD, CEP; Todd Vanden Hoek, MD MBA FAAEM, CEP; Bob McDonnell, Governor of Virginia; Joel Schofer, MD MBA CPE RDMS FAAEM, President, VA-AAEM; David Pitrolo, MD FAAEM, CEP; Lewis Sigel, MD, CEP.



L-R: Todd Vanden Hoek, MD MBA FAAEM, CEP; Senator Frank Wagner; David Pitrolo, MD FAAEM, CEP; and Lewis Siegel, MD FAAEM FACEP, CEP. Drs. Vanden Hoek, Pitrolo, and Siegel met with Senator Wagner on October 29, 2014 regarding the Medicaid PEND Program.

automatic full payment of 99284 and 99285 DMAS claims, a policy formalized in a subsequent April 2004 Medicaid Memo.

For years after that first step, AAEM, VaCEP, and individual Virginia emergency physicians continued to work with Virginia senators, delegates, the Governor's office, and DMAS to eliminate not just delayed (pended) and reduced payments for DMAS 99283 claims, but the more costly and problematic Medicaid MCO pended and reduced payments for 99283, 99284, and 99285 claims.

At a private meeting between (now former) Governor McDonnell and local Hampton Roads emergency physicians on December 5, 2013, the Governor committed to including DMAS PEND elimination in his 2014-2016 biennial budget. Unfortunately a fiscal crisis prevented that budget from becoming reality. Nevertheless, it raised awareness of the issue and was the first time PEND elimination was included in a governor's budget.

VaCEP's proposed budget amendment this year called for \$430,000 to fund elimination of the PEND Program only for DMAS 99283 claims, leaving intact the more costly and problematic Medicaid MCO pending and reduction of 99283, 99284, and 99285 claims. Complete elimination of the Medicaid MCO PEND Program might then have required years of additional advocacy. Many Virginia emergency physicians, however, felt strongly that the best solution to the PEND problem was not a series of funding amendments to chip away one part of the program at a time. Rather, they believed the best solution was complete fairness — emergency physicians should be reimbursed at parity with Virginia's other Medicaid providers, meaning total elimination of the PEND Program.

After a breakfast meeting on October 29, 2014 with representatives of Chesapeake Emergency Physicians, Senator Frank Wagner agreed to send a letter to Secretary of Health and Human Resources William A. Hazel Jr., urging elimination of the entire PEND Program. Senator Wagner wrote:

I would advocate a fairness solution that starts with the premise that ER providers should be reimbursed at the same level per RVU of work performed as other specialties with the same timeliness and lack of unnecessary appeals. This would be fair, stays true to Virginia's original Medicaid physician reimbursement methodology, and could be easily accomplished within the context of DMAS' roughly \$9 billion budget to ensure that no one specialty is singled out to receive a level of payment that is disproportionately lower than others.

CERTIFICATE OF EXCELLENCE IN EMERGENCY DEPARTMENT WORKPLACE FAIRNESS



The American Academy of Emergency Medicine strongly supports fair working practices for emergency physicians. Consequently, it will certify excellence in the ED workplace if ED physician employees are guaranteed the following five workplace conditions: due process, financial transparency, financial equity, political equity and no post-contractual restrictions.

Applicants pending receipt of the Certificate of Workplace Fairness include the following:

Duke Raleigh Hospital

Emergency physicians are encouraged to contact AAEM (anonymously if desired) to report a listed group that they believe is not in compliance along with an explanation. View a complete list of organizations that have already received the Certificate of Workplace Fairness.

Members interested in receiving the Certificate of Workplace Fairness for their group may apply online or print the downloadable form and

forward to: The American Academy of Emergency Medicine

555 East Wells Street, Suite 1100

Milwaukee, WI 53202 FAX: (414) 918-3151

On December 1, 2014, representatives of Emergency Physicians of Tidewater (EPT) and Chesapeake Emergency Physicians then met with Lt. Governor Ralph Northam, who pledged to work with Secretary Hazel toward the complete and total elimination of the PEND Program.

The Lt. Governor kept that promise, and Secretary Hazel subsequently requested funding far beyond the original \$430,000 proposal: \$2.23 million, enough to eliminate the entire PEND Program once and for all.

This is a long and hard-fought victory for Virginia's emergency physicians. AAEM, VaCEP, and the many Virginia emergency physicians who gave their time and energy for the good of the specialty should be proud. The toughest advocacy battles are won through relationship-building, collaboration, education, and perseverance. The ultimate winners are the patients we serve. ■

Basic Principles of Investing for Retirement

Joel M. Schofer, MD MBA CPE FAAEM Secretary-Treasurer, AAEM Commander, Medical Corps, U.S. Navy



In the next few articles we're going to talk about retirement, including how to plan for it and where to save for it. Before we get into specifics, it is probably a good idea to lay the groundwork and review the basic principles of investing for retirement:

• Start saving as early as possible, because to get rich slowly you need to take advantage

of compound interest. Albert Einstein said, "Compound interest is the eighth wonder of the world. He who understands it, earns it ... he who doesn't pays it." Compound interest is earning an investment return not just on your initial investment or principle, but also on your previous return. In other words, if you invest \$1,000 and earn a 10% return yearly, after the first year you'll have \$1,100. The second year you'll earn 10% on your initial \$1,000, plus 10% on the \$100 you earned the first year, leaving you with \$110 of earnings for the second year — instead of \$100 like the first year. Over a long period of time, this phenomenon greatly increases the amount of money you can accumulate with your investments. Because of this, time spent in the market is much more important than trying to time the market by buying and selling at the right times. The long-term return of the stock market is approximately 9.5% per year. Adjusting for 3% inflation, \$1 invested grows to¹:

- \$1.88 in 10 years
- \$3.52 in 20 years
- \$6.61 in 30 years
- \$12.42 in 40 years
- \$23.31 in 50 years
- If you find it difficult to save, set up an automatic investment plan so that the money is automatically removed from your pay and you never get a chance to spend it.
- Investment costs and taxes matter in the long run and will never end, therefore both must be minimized as much as possible. You can minimize both by investing in low-cost stock and bond index funds and maximizing your contributions to tax-preferred retirement accounts.
- Long-term investment in the stock market is the surest way to make your investment grow over time and beat inflation. By owning stocks you own businesses, and the long-term return on these businesses is what will increase your investments and net worth. Trading stocks is not the goal ... owning them is.
- As you progress toward retirement, you will decrease your investment risk by decreasing the amount you invest in stocks and increasing the amount you invest in bonds.
- The optimal allocation of investments depends on your age, financial situation, risk tolerance, and how soon you will need to convert your investment back into cash. If you are young, you have longer to ride out the inevitable swings in the market. The more financially secure you are, the better you can deal with the swings as well. Your asset

- allocation should also reflect your tolerance for risk. My opinion is that you should take as much risk as you can tolerate. If you can't sleep at night because you are worried about your investments, it is time to dial down the risk, but you should take as much risk as you can up to that point. More risk yields a higher return over the long-term.
- You should utilize dollar-cost averaging to decrease your investment risk. Dollar-cost averaging means purchasing the same dollaramount of investments on a regular schedule over a long period of time. For example, you might choose to buy \$250-worth of shares in a Total U.S. Stock Market Index Fund every month. This provides time diversification, ensuring that you don't buy all of the investment during a time of temporarily inflated prices. In volatile markets that are going up and down, it will actually increase your investment return because it ensures that you purchase fewer shares when the investment is expensive, and more when it is cheaper.
- · The market will go down, and when it does you need to resist the



temptation to sell investments or stop investing. The best time to buy an investment is when it is cheap and you can get the best deal. When the market recovers, which it will, you will reap the rewards. Focus on the long-term and keep investing.

- Every time you get a raise, bonus, or income-tax refund, use it to increase the amount you invest for retirement. You should save at least 15% of your gross or pre-tax income for retirement, but if you want to be rich or retire early you'll need to save 20-30%.
- How much money will you need to retire? Most retirement planners state that you'll need approximately 70% of your pre-retirement income to maintain your current standard of living once you retire. This number, though, is heavily dependent on what you consider to be a "good retirement" and what type of a lifestyle you intend to lead. For example, since I save 30% of my gross income for retirement,

I'm already living on only 70%, so I highly doubt I'll need that much when I retire. If you are frugal and pay off your mortgage, you may find that you need as little as 25% of your pre-retirement income to retire comfortably. You won't be staying in the Ritz Carlton, but there's nothing wrong with the Hampton Inn.

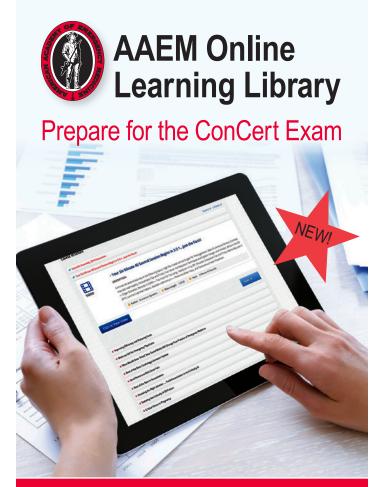
- There is a lot of uncertainty in life, but the 4% rule is a nice rule of thumb to use when assessing how much money you'll need to accumulate before you can retire. The 4% rules says that you can take 4% from your retirement savings annually, adjust for inflation each year, and never run out of money. The devil is in the details, but use the 4% rule and assume that you can get approximately \$40,000 per year of retirement income from every \$1 million you have saved.
- Saving for retirement is your top savings priority, even over funding the college education of your children. You can borrow money to pay for college, but you can't borrow money to retire.
- You must maximize your contributions to tax-preferred retirement accounts, such as 401(k), 403(b), Simplified Employee Pensions (SEPs), or Individual Retirement Accounts (IRAs) every year. The tax benefits of these plans are staggering over the long-term²:
 - If you invest \$5,000 per year over 45 years and earn an 8% annual return, with no taxes paid until withdrawal during retirement, you will have a final portfolio value of over \$2 million. Paying 28% taxes at withdrawal leaves you with almost \$1.5 million.
 - The same pattern of saving and investing, without the benefit of tax deferral, will top out at about \$750,000 (before paying 28% taxes at withdrawal).
- If you work as an independent contractor you have more options
 than a physician who works as an employee, so hire an experienced
 tax or health care attorney, accountant, or fee-only financial planner
 to set up the best options for retirement investments if you are
 uncomfortable doing this on your own.
- NEVER use retirement savings for anything other than retirement unless it is absolutely unavoidable. Again ... you can't borrow money for retirement.

If you have ideas for future columns or have other resources you'd like to share, email me at jschofer@gmail.com.

The views expressed in this article are those of the author and do not necessarily reflect the official policy or position of the Department of the Navy, Department of Defense or the United States Government.

References

- Bogle, John C. The Little Book of Common Sense Investing: The Only Way to Guarantee Your Fair Share of Stock Market Returns. Hoboken: John Wiley & Sons. Inc., 2007.
- Malkiel, Burton and Charles Ellis. The Elements of Investing: Easy Lessons for Every Investor. Hoboken: John Wiley & Sons, Inc., 2013.



Online Written Board Review Course — Only \$499 for AAEM members

- Up to 40 hours of intense EM board review
- Taught by experienced faculty
- Comprehensive review easy online access!
- Ideal for the busy doctor preparing for the exam this year

Superb, AAEM-quality educational content with *AMA PRA Category 1 Credits*™ available.

American Academy of Emergency Medicine



Committee Report: Chapter Division

Brian Potts, MD MBA FAAEM Chair, Chapter Division Committee

Our Chapter Division Committee met in Austin during the Scientific Assembly. We had great representation from virtually all the chapter divisions with each providing their reports to the committee. We also discussed recent activity over the last few months within AAEM. In the last year, AAEM state chapters have been reorganized and converted into divisions within AAEM which will enhance AAEM support of its chapters. Many chapter divisions provide subscriptions to *West*JEM (electronic or print) as a membership benefit, and I encouraged other chapters to consider adding this benefit. In addition, there was discussion promoting a legislative advocacy day within each state, which could be coordinated with other local medical societies.

CHAPTER REPORT: Arizona Chapter Divison

Arizona, our most recently formed chapter division, is focused on membership recruitment and is targeting independent groups in the state. It is sending out a survey to gauge members' interest in educational meetings and advocacy efforts.

CHAPTER REPORT: California Chapter Division

The California Chapter Division worked with Mark Reiter, MD MBA FAAEM, and AAEM national board members in the successful effort to block Tenant's turnover of multiple ED contracts to a single large contract management group. A health care coalition that included CAL/AAEM successfully fought off a ballot proposition that would have drastically increased medical malpractice caps on non-economic damages. In both Northern and Southern California, CAL/AAEM sponsored speaker series as a regular educational and networking event for chapter members and local residencies.

CHAPTER REPORT: Great Lakes Chapter Division (GLAAEM)

Formed just last year, the regional Great Lakes Chapter Division (GLAAEM) is focusing on resident education and plans to create a list of contract management groups active in each state. It is looking for a representative from Minnesota to serve on its board of directors.

CHAPTER REPORT: Florida Chapter Division (FLAAEM)

The Florida Chapter Division (FLAAEM) held its 4th Annual Scientific Assembly in Miami this April.

CHAPTER REPORT: Tennessee Chapter Division (TNAAEM)

The Tennessee Chapter Division (TNAAEM) will have its first educational meeting this year in the fall, and continues its work on tort reform. A new University of Tennessee emergency medicine residency will start in Murfreesboro/Nashville this July. A former AAEM board member and its current president are faculty in that program.

CHAPTER REPORT: The Virginia Chapter Division (VA-AAEM)

The Virginia Chapter Division (VA-AAEM) has been working with a large local emergency medicine group and Virginia ACEP to support better funding of Virginia's Medicaid system and better reimbursement for emergency care. It is looking for Virginia AAEM members who are interested in becoming leaders in the chapter.

CHAPTER REPORT: Texas Chapter Division (TAEM)

In Texas, the chapter (TAEM) is working on a website posting legislative actions affecting emergency medicine.

CHAPTER REPORT: New York Chapter Division (NYAAEM)

The New York Chapter Division (NYAAEM) was reactivated in 2014, and currently offers free membership to AAEM members in the state. It is also looking for New York AAEM members who are interested in becoming state chapter leaders.

The AAEM staff and I are currently working with AAEM members in the state to form an Arkansas Chapter Division, which should be approved in the next month or two. I have also spoken with an AAEM leader in Mississippi who wants to start a chapter there. If you are an AAEM member in one of these states and are interested in being involved in the chapter division, feel free to contact me and I will connect you with the appropriate individuals.

In closing, I encourage all AAEM members to get involved in their chapter divisions. If you live in a state that doesn't have a chapter division, contact me and let's work together to start up one. AAEM will provide you significant support to help you through this process. With two "regional" chapters (Great Lakes and Delaware Valley), we are considering replicating this strategy of pooling membership, resources, and leadership to form regional chapters in other parts of the country where state chapters are lacking. I would especially encourage past AAEM board, YPS, and RSA leaders to get re-engaged with AAEM by joining your chapter division leadership or helping to start up a new chapter. We would also like to find AAEM supporters on faculty who could serve as residency program liaisons with their local chapter. If you are an AAEM member and interested in any of the above, please contact me at brianpottsmd@gmail.com.

Committee Report: Practice Fairness Council

John Christensen, MD FAAEM Chair, Practice Fairness Council AAEM Board of Directors

Probably the most essential rule in social engagement, fairness has shaped human relationships, molded human societies, and directed the course of civilization. It governs virtually all aspects of our society, from economics, politics, education and military organization to sports and entertainment... Furthermore, fairness is the foundation for justice — the most important moral principle in human societies.

- Lixing Sun, award-winning social biologist1

The corporation's legally defined mandate is to pursue relentlessly and without exception its own economic self-interest, regardless of the harmful consequences it might cause to others.

Governments have freed the corporation, despite its flawed character, from legal constraints through deregulation and granted it ever greater authority over society through privatization.

Joel Bakan, Oxford and Harvard-trained legal scholar²

Perhaps more than ever before, fairness matters in the business of emergency medicine (EM), but fairness is under attack by contract management groups (CMGs) and others. Fortunately, AAEM's *Trusted Advocate* of *Fairness in Emergency Medicine™* project is gaining momentum. Google "fairness in emergency medicine" and the Trusted Advocate project will now be either the first or second subject returned by the search engine. The AAEM Practice Fairness Toolkit® (the PF Toolkit) text is coming close to its final edit and publication. In the meantime, interested readers can review the Indexed Table of Contents and Key Concepts section.³

At the heart of the PF Toolkit is the fundamental definition of fair market value (FMV), which cannot be overemphasized. Revenue Ruling 59-60, widely cited by courts and the appraisal community since its publication in 1959, defines FMV as:

"The price at which property [including intangibles] would change hands between a willing buyer and a willing seller when the former is not under any compulsion to buy, and the latter is not under any compulsion to sell, both parties having reasonable knowledge of the common facts." [Italics added].4

I urge emergency physicians to view every business transaction, whether great or small, through the lens of FMV. Simply ask, "Is the valuation decision before me completely transparent, do I have genuine input into the process, and can I walk away if I don't believe the terms are fair?" And, if another party is representing you in a negotiation, "Does the individual functioning as my agent have conflicts of interest that undermine my chances of achieving a fair outcome, whatever the valuation decision might be?"5.6 The failure to ask these critical questions is the reason we have publicly traded CMGs and other entities exploiting large numbers of hospital-based physicians, including emergency physicians. I believe that a thorough understanding of FMV and the art and science of strategy will enable us to reverse the exploitation trend and reclaim fairness in our places of work.

In March at the AAEM Scientific Assembly in Austin, a large number of attendees viewed the *Trusted Advocate of Fairness™* display, and many stopped to talk and learn more. Key Concepts, informed by the carefully chosen texts whose covers appeared on the display, attracted a lot of attention. Several people even stopped to take photos.



Some fascinating and lively conversations occurred in front of the display, underscoring the need for a deeper understanding of fairness in the business of EM. The *PF Toolkit* demonstrates that, in any organization without fairness and due process, an optimum practice environment cannot be achieved. As the *Trusted Advocate* program advances, a collective understanding of the vital importance of "fair and equitable practice environments" could be the force that counters the trend towards turning physicians into fungible commodities, and restores medical professionalism to its rightful place.⁷

Several events over the past year highlight the importance of having both a rigorous definition of *fairness* and its corollary, *due process*, and a comprehensive understanding of the types of strategies needed to restore these two elements to the business of EM. For instance, an emergency physician in Florida recently filed suit against HCA and EmCare, alleging wrongful termination after drawing attention to dangerous under-staffing at an HCA facility in the Tampa Bay area.⁸ Members of AAEM in Florida indicate that such under-staffing may be widespread. Any individual who has witnessed potentially risky under-staffing or other business practices of public concern should contact the AAEM *Practice Fairness Council* for assistance, with the promise of anonymity. AAEM hopes all physicians with relevant information will come forward in this serious matter.

Envision Healthcare, the parent company of EmCare, recently announced the purchase of several large hospital-based physician practices, comprised mainly of emergency physicians. The eye-popping payments received by a number of senior shareholder physicians in these practices can only be repaid in one way: by saddling future generations of physicians with both the cost of the buyout and the interest payments on those lofty sums. Amortizing the enormous payouts described in the cited article is likely to translate into both lower compensation and higher productivity demands on physicians.

AAEM is concerned that business arrangements such as joint ventures between staffing companies and hospitals may violate corporate practice of medicine laws in a number of states, as well as state and

federal anti-kickback statutes. ¹⁰ AAEM's board of directors, aided by the *Practice Fairness Council*, is working to restore fairness and due process to the physicians potentially harmed by CMGs, joint ventures, and other entities that now dominate a number of areas.

Several AAEM members who attended the Scientific Assembly in Austin expressed interest in joining the Practice Fairness Council. The main requirement is a high level of intellectual curiosity about the organizational and biological science of fairness, and a passionate commitment to advancing Principle Five in AAEM's Mission Statement:

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.

Opportunities include contributing to the development of the AAEM Practice Fairness Toolkit and advancing other goals listed in the introductory article on the Trusted Advocate of Fairness concept.^{3,11} Submit your CV with a request to join the PFC at www.aaem.org/about-aaem/leader-ship/committees. Feel free to contact me at any time with questions or other requests.

John B. Christensen, MD FAAEM
AAEM Director at Large
Chairman, AAEM Practice Valuation Council
Editor, The AAEM Practice Valuation Toolkit
CAL/AAEM President
Email: johncsen@sbcglobal.net

Interested in shaping the future of emergency medicine? Become a mentor! YPS is looking for established AAEM members to serve as volunteers for our virtual mentoring program. YPS membership not required to volunteer. Visit www.ypsaaem.org/mentors or contact info@ypsaaem.org

Footnotes:

- Sun, L. The Fairness Instinct: The Robin Hood Mentality and Our Biological Nature (Amherst, NY: Prometheus Book, 2013), 17-18.
- 2. Bakan, Joel. *The Corporation: The Pathological Pursuit of Profit and Power* (New York: Free Press, 2004), back cover notes.
- 3. http://www.aaem.org/UserFiles/TrustedAdvocateofFairnessToC.pdf
- 4. The Mercer Capital Staff. Revenue Ruling 59-60 at 50: Rediscover Fair Market Value (Memphis: Peabody Publishing, 2009).
- Robert Pindyck and Daniel Rubinfeld. "The Principal-Agent Problem," Microeconomics, 7th Edition (New Jersey: Prentice-Hall, 2009), 630-633.
- 6. http://en.wikipedia.org/wiki/Principal%E2%80%93agent_problem
- Peter M. Senge, The Fifth Discipline: The Art and Practice of the Learning Organization (New York: Currency-Doubleday, 2006)
- http://www.tampabay.com/news/health/doctor-says-she-was-fired-for-reportinglow-staffing-at-brandon-regional/2218497
- http://www.bizjournals.com/denver/news/2015/01/20/envision-healthcaresemcare-to-buy-vista-staffing.html
- 10. http://www.aaem.org/UserFiles/MayJun14PresidentsMessage.pdf
- 11. http://www.aaem.org/UserFiles/TrustedAdvocateofFairness.pdf



The Best of Both Worlds: Independent Emergency Group Large Group Business

Join IEPC - Your ED Group will remain independent, but not be alone.

- Collaboration
- Benchmarking Data
- Shared Innovations
- Group Purchasing
- Business Strength
- Networking

Visit our web site for employment opportunities at locations around the state.



Independent Emergency Physicians Consortium 696 San Ramon Valley Blvd., Ste. #144, Danville, CA 94526 925.855.8505 | www.iepc.org



Strength in Numbers

AAEM 100% ED Groups

■ AAEM 100% ED Group Membership

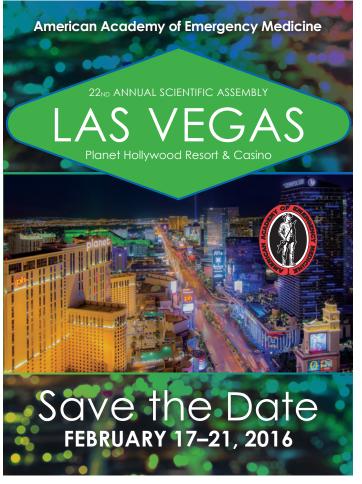
AAEM instituted group memberships to allow hospitals/groups to pay for the memberships of all their EM board certified and board eligible physicians. Each hospital/group that participates in the group program will now have the option of two ED Group Memberships.

- 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. Two-thirds 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.

For a complete listing of 2014 100% ED Group members, go to www.aaem.org/membership/aaem-ed-group-membership.





Committee Update: Practice Management Committee Changes Its Name

At the just-completed AAEM Scientific Assembly in Austin, the Practice Management Committee voted to rename itself to better reflect its mission and give Academy members a better idea of what an important resource the committee can be for independent emergency medicine groups. The Practice Management Committee is now the *Independent Practice Support Committee*. The committee is available and eager to support and lend assistance to both independent groups and those Academy members who want to form an independent group. Whatever problem you face and whatever issue you are struggling with, the committee wants to help. The depth of experience among our members is tremendous and our connections with valuable external resources are extensive.

Most members of our committee have been through an ED group startup as well as the on-going growth and development of a group practice. There is no need for you to reinvent the wheel when challenges arise. Put the collective experience of successful independent groups to work for you.

In addition, for entrepreneurial members of AAEM who want to tackle their first start-up, we recently published a concise but comprehensive

guide to starting your own emergency medicine group practice, Setting Up a New Emergency Medicine Business. It is filled with pearls of wisdom and guidance that will shorten your time to success in a start-up. It is available through the AAEM bookstore. www.aaem.org/publications/ aaem-book-store.

We are also expanding our committee, and welcome anyone with relevant skills who wants to share their knowledge



and support their colleagues in the Academy. This is one of the best and easiest ways for you to take that next step as an AAEM member, and become more actively involved in the Academy. Just go to www.aaem.org/about-aaem/leadership/committees and fill out the simple committee application to join us.

David Lawhorn, MD FAAEM
Chair, Independent Practice Support Committee ■



AAEM PODCASTS TUNE-IN TODAY!

Over 30,000 downloads and growing.

Three series to choose from:

- Critical Care with David Farcy, MD FAAEM FCCM
- Operations Management with Joseph Guarisco, MD FAAEM
- Legal & Policy Issues with Larry Weiss, MD JD MAAEM FAAEM and Cedric Dark, MD FAAEM

www.aaem.org/publications/podcasts

Does This Sound Familiar?

Mimi Lu, MD FAAEM Vice President AAEM Young Physicians Section



A 56-year-old woman appears in your ED with abdominal pain and slight dysuria, saying it feels as if her bladder is pushing on her intestines. She is completing a one-week course of nitrofurantoin for a UTI diagnosed by a local urgent care physician. She has a history of chronic abdominal pain and multiple surgeries related to partial bowel resection for gangre-

nous bowel. She's on methadone, oxycontin, and oxycodone while she's allergic to ibuprofen, ciprofloxacin, tramadol, and naprosyn. She says the pain has been present intermittently over the past three years, and the current flare has worsened over the past week. She denies vomiting and otherwise has a negative ROS. Vital signs and labs are within normal limits; urinalysis is still pending. On exam, there is mild tenderness to the right lower quadrant and suprapubic region without peritoneal signs.

Before I ever entered the room, my bias led to judgments about this patient. Even my eager scribe rolled his eyes. With chronic abdominal pain, multiple narcotics, and normal labs I anticipated she would tell me that, "Only IV Dilaudid, Benadryl, and Phenergan work for me." Or maybe she would inform me that she needed admission because she just didn't feel good. Or perhaps she would claim that no one had ever properly diagnosed her and that she wasn't going to leave until she had answers. After my exam I said something to the effect of:

"Mrs. X, the good news is that your labs are normal. I don't think your bladder is actually pushing on your intestines enough to cause this pain. You are already on high doses of narcotic pain medications and I can't give you more. Ultimately it is important that you see your surgeon and urologist to find out if there is anything they can do, but because you've already had so many CT scans, I don't think it's a good idea to have another and be exposed to more radiation. Is there anything else I can do to help you today?"

I braced myself for a fight about opioid dependence and refusing to prescribe additional narcotics for her chronic abdominal pain. I could always blame the nebulous "they" as the reason I wasn't allowed to give her narcotics and reiterate that she needed to follow up with her surgeon or primary doctor or urologist or anyone besides me. I secretly hoped she would accept my blame-shifting as reason to deny her medications.

Then, she surprised me.

She acknowledged my response, and asked if she could get some IV fluids and acetaminophen. Then, as I left the room, she said, "Oh doc, one more thing..." I rolled my eyes. Here it comes ... but, all she asked was, "Can I have more antibiotics for my urine infection?"

Fast forward about one hour — CT negative and UA reveals likely resolving vs. resistant UTI. Now how do I discharge her? To my surprise, she agreed with our plan for follow up and felt better after IV fluids and acetaminophen.

No way was it going to be that easy.

"Oh doc, by the way..." Here it comes, I thought, a request for refills on

We have the opportunity and obligation to lead by example. It starts with remembering why we chose the privilege of practicing medicine.

her narcotic, a short prescription for something until she could see her doctor, just one shot of Dilaudid before she left... but, instead, she said, "Doc, I've been coming to this hospital for years. My father died here, my husband, and son died here, I've been here myself several times. I've never been treated so kindly and had such a complete exam. Thank you."

This gave me a moment's pause, but then she said, "There's just one more thing..." Ah-ha! She was just trying to butter me up. "Can I have a dose of Tylenol to go before I am discharged so that I don't have to stop at the store before I go home?"

I was then truly humbled. And embarrassed. I had been a biased jerk in my thoughts, even if my actions did not parlay my inner frustration and contempt.

It was a not-so-subtle reminder about the importance of humanism in medicine. The nonverbal cues we exude do not go unnoticed by the rest of the team or medical students. We have the opportunity and obligation to lead by example. It starts with remembering why we chose the privilege of practicing medicine.

I was once asked by a young teen whether I liked my job, and I responded with a hearty "Yes!" When did I allow my biases to penetrate my idealism? I have no right to judge. I do not know the hardships and horrors this or any patient has likely been through. While I am certainly not naïve enough to think I will always be free of bias, this experience was a helpful reminder about humanism and why I wanted to be a doctor in the first place.



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

The PeerCharts Online™ Platform Delivers:

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

Emergency Medicine Documentation Integrated Dictation Bedside Paper Templates

EvolveMed

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

AAEM/RSA President's Message

From Resident to Attending

Meaghan Mercer, DO AAEM/RSA Immediate Past President



As residency comes to an end, I realize that although I feel ready for life as an attending from a clinical standpoint, we are provided little education on life outside of academia. Many questions remain, such as: What tests do I have to take, what do I have to do to get credentialed, how do I stay up to date? As we transition back into the "real world" we have to acclimate to managing our own affairs.

ABEM.org:

If you haven't looked at the website, do it now. Initial application for the board exam (Qualifying Exam per ABEM terminology) lasts from May 1-November 5 and costs \$960. Yes, you can and should apply prior to finishing residency. The qualifying exam will be administered November 16 - 21, 2015. Plan ahead to have ample time to study and have access to your desired date to take your exam. Once you pass your written exam you will then be given a date in the spring or fall of 2016 to take your oral board exam. After you pass the oral board you will be officially board certified for ten years. However, you are not done. To maintain your certification you must participate in maintenance of certification (MOC). Requirements in the first five full years of certification include the following: Passing four ABEM LLSA tests, one of which must be the patient safety LLSA; completing an average of 25 AMA PRA Category 1 Credits[™] or equivalent, with an average of eight of those credits being self-assessment; completing an Assessment of Practice Performance (APP) patient care practice improvement (PI) activity; and completing an APP patient-centered Communication/Professionalism activity. For more information go to www.abem.org.

Staying Up to Date:

If you never open a book again, your current medical knowledge will be obsolete within two years. You have to learn how to read and study when someone isn't making you. After you graduate, all educational content gets more expensive. Decide what has worked best for you and how to best spend your money. Don't forget to stay involved. Maintaining professional society membership is important and should not be neglected, so be sure to allocate funds for membership. Many organizations have reduced membership for young physicians, for example, if you sign up for YPS (www.ypsaaem.org) before you graduate you get 18 months for the price of 12.

The Job:

At this stage most senior residents have likely signed a contract and have set up a job. Remember that state licensing, DEA, and hospital credentialing process can be extensive and prolonged. To make the process easier for this fall: get your CV up to date and have it reviewed for style and errors, decide who you want to ask for letters of recommendation and provide them with you CV and list of accomplishments, log all of

your procedures, and start to research different job opportunities in your desired area. Consider starting to contact potential employers in the late spring or early summer the year prior to graduation to let them know you are interested and to notify you when they are starting their interview process.

I have had the privilege to be a part of the AAEM/RSA for the past six years and I wanted to thank the numerous people who have impacted not only my career, but also my life. Mentors, mentees, and friends have left amazing memories mixed in with the joy of exploring conference cities. I grew up in the world of emergency medicine with RSA, and felt their support all the way. My appreciation for this organization cannot be put into words, but I will simply say, "Thank you RSA!"

Finally, as I graduate into the world, here are some final thoughts. Be kind and patient. You never know how a smile or common courtesy can impact those around you. Make time for yourself. At the Scientific Assembly I was reminded that if we cannot take care of ourselves, we will likely not be able to take care of others. Exercise might seem like an insurmountable hurdle but it is critical for your own wellbeing. Never forget that everyone is struggling. Nurture those around you and teach with encouragement. Find joy in the journey.



Improving Your Survey Response Rates

Andrew W. Phillips, MD MEd



A new benefits package is available, but you're not sure if your group wants to switch. What do you do? A survey.

Your residents are complaining about a conference but it's not clear how to improve it. What do you do? A survey.

Patient satisfaction scores are going down and you're not sure why. What do you do? A survey.

Surveys are ubiquitous, but response rates have been steadily decreasing across the U.S.¹ Why? Consider the last time you received a survey and immediately threw it away or deleted it, and you have your answer.

Although response rate has less of an impact on nonresponse bias than we previously thought, 1,2 it is still important in understanding how well the sample represents the larger population from which it is drawn.3

Here are several evidence-based recommendations to improve survey response rates. The decision to respond (or not) has three components: delivery, acknowledgment, and cooperation.

1. Delivery

Use more than one method to deliver your survey. Even as recently as 2013 postal surveys outperformed email surveys, but using both email and postal surveys can increase the response rate by almost 10%. Think outside the box: phone, text, personally hand out paper surveys, use social media, etc. The more routes of delivery, the more opportunity you have to meet people in their preferred medium — and you reduce the potential for nonresponse bias.

2. Acknowledgment

Make your correspondence clear and professional. Ten percent of postal surveys go completely unrecognized as surveys.⁵ Put simply, you lose 10% of your response rate without even a **chance** of convincing the potential respondent that the survey is worth his time. Send an advance notice (explained in detail below) that looks professional, is hand addressed, and is inviting.

3. Cooperation

Give cold hard cash up front, without requiring survey completion, and make the amount just high enough to use the guilt factor to get a 15-20% absolute increase in your response rate. 6-8 The sweet spot is somewhere between \$1-2 for the general public and \$2-5 for physicians. Non-monetary incentives like food and trinkets do not perform as well as cash, and neither do lotteries. You may think you're more likely to complete a survey for an iPod than \$2 in your pocket, but the literature is strong on this. Guilt is an extraordinarily powerful tool.

Make it short, but don't divulge the estimated time to completion.

Just say "short." Everyone has a different idea of what "short" means, so by using that word you are more likely to provoke the "okay, I'll take a short survey" decision than if you disclose the amount of time and leave it to the potential respondent as to whether or not that qualifies as short. Say it is short and keep it to your word — less than 10-15 minutes and less than 1,000 words.

Make at least three attempts to get people to take your survey. ¹⁰ Most responders will do so within 24 hours and 90% will within two weeks, so send reminders between two and 14 days after distributing the survey. Change the method by which you send reminders (e.g., paper versus email) and vary the days and times you send reminders (e.g., Sunday afternoon versus Wednesday morning), to reach people when it is most convenient for them. ¹¹

Send an advance notice.¹² This is a **short** letter that introduces you to the potential respondent and establishes that the survey will be quick. Potential respondents are then mentally prepared for the survey and are more likely to respond.

References

- Groves RM. Nonresponse rates and nonresponse bias in household surveys. Public Opinion Quarterly. 2006;70(5):646–675.
- Johnson TP, Wislar JS. Response rates and nonresponse errors in surveys. JAMA. 2012;307(17):1805–1806.
- NRC. Nonresponse in Social Science Surveys:. National Academies Press; 2013.
- 4. Millar MM, Dillman DA. Improving Response To Web and Mixed-Mode Surveys.
- 5. Dillman DA. Mail and internet surveys: The tailored design method. 2000.
- CHURCH AH. Estimating the effect of incentives on mail survey response rates: A meta-analysis. *Public Opinion Quarterly*. 1993;57:62–79.
- Asch DA, Christakis NA, Ubel PA. Conducting physician mail surveys on a limited budget. A randomized trial comparing \$2 bill versus \$5 bill incentives. Medical Care. 1998;36(1):95–99. Available at: http://journals.lww.com/lww-medicalcare/ Abstract/1998/01000/Conducting_Physician_Mail_Surveys_on_a_Limited.11. aspx.
- Singer E. The Use of Incentives to Reduce Nonresponse in Household Surveys.
 In: Groves RM, Dillman DA, Eltinge JL, Little RJ, eds. Survey Nonresponse. 1st ed. 2000. New York: Wiley-Interscience.
- Dijkstra W, Smit J. Persuading reluctant recipients in telephone surveys. In: Groves RM, Dillman DA, Eltinge JL, Little RJ, eds. Survey Nonresponse. 1st ed. New York: John Wiley & Sons, Inc; 2002.
- Lynn P, Clarke P, Martin J, Sturgis P. The Effects of Extended Interviewer Efforts on Nonresponse Bias. In: Groves RM, Dillman DA, Eltinge JL, Little RJ, eds. Survey Nonresponse. Wiley-Interscience.
- 11. Hamilton MB. Online Survey Response Rates and Times. Ipathia, Inc; 2014.
- 12. Edwards P. Increasing response rates to postal questionnaires: systematic review. *BMJ*. 2002;324(7347):1183–1183. doi:10.1136/bmj.324.7347.1183. ■

Renew with AAEM/RSA Today!



Renew Your 2015-2016 AAEM/RSA Membership!

www.aaemrsa.org/renew | 800-884-2236

AAEM/RSA is with you all the way — renew for the 2015-2016 year for continued academic and career planning benefits, outstanding opportunities for involvement, and premier education.

Are You Moving? Keep in Touch!

If you are a graduating resident or medical student and your email address is changing, we recommend you update your address to one outside of your institution to ensure your benefits will continue without interruption. Log in to your members only account at aaemrsa.org/myrsa to list any changes to your name, mailing address, email address or phone number.



Residency Graduates: Invest in Your Future

AAEM/RSA was with you all the way — now as your journey through residency concludes — continue on your path with AAEM. Join today as an associate member.

Invest in your future and join the Young Physicians Section (YPS) and access specially designed resources for your first seven years following residency.

As your journey through residency concludes — continue on your path with AAEM. www.aaem.org/join

Special Offer

Get 18 months of AAEM and YPS membership for the price of 12 months. Act today and become part of the AAEM family.



ByteBloc Software

Scheduling Emergency Providers Since 1989



- √ Highly flexible
- √ Automates scheduling
- √ Saves time and money
- √ Mobile & web support
- √ Trade, split, and give away shifts
- √ Extensive reporting & payroll support
- √ Track requests, vacations, and worked hours
- ✓ And many more...

For a free trial, visit us at www.bytebloc.com

Acute Decompensated Heart Failure: What is the Current Evidence for Intravenous Diuretic Therapy?

Authors: Kaycie Corburn, MD; Lee Grodin, MD; Jackie Shibata, MD; Eli Brown, MD Edited by: Jay Khadpe, MD FAAEM; Michael C. Bond, MD FAAEM

The most common cause of hospitalization in the United States and Europe is acute decompensated heart failure (ADHF). ADHF is associated with high baseline mortality rates that only increase after hospitalization. Unfortunately, there is a paucity of high quality evidence for treating this disease. Both the European Society of Cardiology and the Heart Failure Society of America offer practice guidelines that are mainly based on Class C (consensus opinion) recommendations. The complicated pathophysiology of ADHF adds difficulty to finding treatments with both short and long-term benefits.¹ Currently, over 80% of patients hospitalized for ADHF receive IV diuretic therapy.² This article reviews key existing studies to examine the evidence for using IV diuretic therapy for patients with ADHF.

Fares W. Management of acute decompensated heart failure in an evidence based era: What is the evidence behind the current standard of care? *Heart and Lung.* 2008; 37(3):173-178.

Fares reviews the current evidence that has provided the basis for the use of loop diuretics, inotropes, and vasoactive medications for the treatment of ADHF.

Loop diuretics are the most common class of medications used for ADHF patients. They reduce total body fluid volume by preventing reabsorption of sodium and chloride in the ascending limb of the Loop of Henle. However, there are no randomized controlled trials (RCTs) demonstrating the safety of loop diuretics. In fact, some retrospective studies have shown increased mortality rates with diuretic use. The proposed explanation is that activation of the sympathetic nervous system (SNS) and the reninangiotensin-aldosterone-system (RAAS) promotes vascular and ventricular remodeling.

Fares paper is a meta-analysis of 14 small chronic heart failure trials that showed lower mortality rates and less worsening of heart failure associated with diuretic use. Thus increased diuretic use may be a marker of worsening heart failure as opposed to the cause of the increased mortality.³ Loop diuretics are most commonly administered in bolus doses for ADHF. A recent Cochrane review suggested greater diuresis and safety with continuous diuretic infusions. Finally, there is no data to support adding additional diuretics (such as hydrochlorothiazide or metolazone) to diuretic regimens for ADHF.

Inotropes increase cardiac contractility, increase cardiac output, and are thought to improve end-organ perfusion. However, evidence shows increased morbidity and mortality associated with inotrope use, dobutamine being one of the most common. In the ADHERE trial, inotropes were associated with higher in-hospital mortality rates.^{4,5}

Vasoactive medications such as nesiritide, nitroprusside, and nitroglycerin are used to decrease afterload or preload in an attempt to improve ventricular filling and cardiac output. In nine RCTs using nesiritide, a recombinant form of the human B-natriuretic peptide, only two (the VMAC and

PROACTION studies) were conducted at the dose eventually approved by the FDA.^{6,7} Both trials showed hemodynamic improvements, but a non-statistically significant increase in renal dysfunction and mortality was noted

There is little evidence to support the safety and efficacy of the drugs that are commonly used to manage patients with ADHF. Additional RCTs are needed to help delineate which agents demonstrate clinical benefit in this large patient population.

Cleland J, et al. Practical applications of intravenous diuretic therapy in decompensated heart failure. *The American Journal of Medicine*. 2006 Dec; 119(12A):26-36.

This review by Cleland, et al., discusses prospective RCTs on the treatment of ADHF with IV diuretic therapy and offers suggestions regarding the management of patients with diuretic resistance.

In the first trial reviewed, Verma and associates compared the effects of an IV diuretic (furosemide), a venodilator (isosorbide dinitrate), an arteriolar dilator (hydralazine), and a positive inotropic agent (prenalterol) in 48 male subjects with left ventricular (LV) dysfunction after an acute myocardial infarction (MI).8 Both furosemide and isosorbide dinitrate lowered LV filling pressure without affecting heart rate or cardiac output. Hydralazine and prenalterol increased both heart rate and cardiac output with a lesser effect on the LV pressure. This study concluded that the drugs of choice to decrease LV pressure, in descending order, would be isosorbide dinitrate, furosemide, hydralazine, and finally prenalterol.

In a second trial, Hutton and colleagues compared the effects of IV furosemide (0.5mg/kg) and isosorbide 5-mononitrite (15mg) in patients with LV dysfunction secondary to MI and found conflicting results. ⁹ In contrast to the first trial, these investigators showed that furosemide induced acute vasoconstriction causing increased pulmonary capillary wedge pressure (PCWP) and systolic blood pressure (SBP). Alternatively, Isosorbide 5-mononitrite maintained cardiac output while reducing both PCWP and SBP. This concluded that Isosorbide 5-mononitrite might be more beneficial than furosemide in patients with LV dysfunction following an MI. While both of these studies were RCTs they were too small to assess morbidity or mortality.

A third study by Cotter, et al., looked at the effects of diuretics verse nitrates in patients with pulmonary edema and evidence of ADHF.¹⁰ One hundred four (104) patients were randomly assigned to receive either low dose furosemide and high dose isosorbide dinitrate or high dose furosemide and low dose isosorbide dinitrate. Results revealed a statistically significant higher rate of MI and need for mechanical ventilation in the high dose furosemide group. Additionally, there was a non-significant trend for higher mortality in this same group.

As demonstrated by the review of these three trials, there is minimal and contradictory evidence supporting the use of IV diuretic therapy for the treatment of ADHF.

Finally, Cleland, et al., describe diuretic resistance as one possible explanation for the lack of evidence in support of IV diuretic therapy. Loop diuretics inhibit the Na⁺-K⁺-2Cl⁻ reabsorptive pump in the thick ascending limb of the Loop of Henle. Achieving a sufficient concentration of the loop diuretic in the thick ascending limb is essential for therapeutic efficacy. Heart failure, hypotension, and renal insufficiency can all reduce the amount of blood reaching the Na⁺-K⁺-2Cl⁻ reabsorptive pump, and therefore, inhibit diuresis. In addition, heart failure patients have increased expression of the Na⁺-K⁺-2Cl⁻ pump blunting diuretic effects. Lastly, chronic diuretic therapy causes hypertrophy of the distal convoluted tubule, which causes increased sodium absorption despite the use of loop diuretics in ADHF.

Diuretic resistance occurs when there is an inadequate response to standard doses of diuretics. This is a major issue in the management of patients with advanced heart failure. Improving cardiac output, either pharmacologically or surgically, and restoring glomerular perfusion pressure by treating renovascular disease can help increase the amount of loop diuretic reaching their site of action in the kidney.

Despite very little evidence demonstrating clear benefit, as well as some potential for harm, IV loop diuretics are still considered standard treatment for ADHF. In summary, there is significant need for a well-designed RCT to establish whether IV diuretics have a place in the treatment regimen for patients with ADHF.

Felker GM, et al. Diuretic strategies in patients with acute decompensated heart failure. *New England Journal of Medicine*. 2011 Mar;364:797-805.

The Diuretic Optimization Strategies Evaluation (DOSE) study, a randomized, double blind, prospective trial investigating various doses and frequency of furosemide administration, has provided welcomed information for clinicians regarding loop diuretic therapy in patients with ADHF.

Patients were eligible if they presented within 24 hours of the onset of at least one symptom or sign of ADHF. Additionally, enrollment required a previous diagnosis of heart failure and use of a loop diuretic in the month prior to admission. Exclusion criteria were: hypotension defined as SBP<90 mmHg, creatinine greater than 3 mg/dL, and those requiring intravenous vasodilators or inotropes (other than digoxin). The 308 patients were equally randomized into four groups. The four groups were based on the dose (an equivalent IV dose to their home PO dose versus an IV dose 2.5 times larger than their home PO dose) and frequency of administration (q12 hour bolus dosing verse continuous 24 hour infusion dosing). The two primary endpoints were: the patients' global assessment of symptoms, and the mean change in patient's creatinine levels. There were a myriad of secondary endpoints including biomarker levels, dyspnea, change in body weight, and estimated fluid loss.

Ultimately, there was no significant difference in either primary endpoint. And very little difference among the groups. Group differences in regards to frequency of administration, revealed that the bolus therapy patients were more likely to have their doses increased at 48 hours. This group

also had slightly higher total amounts of furosemide given over 72 hours (592 vs. 480 mg). In regards to the dose of administration, the higher dose patients were more likely to be converted to oral therapy and less likely to have their doses increased after 48 hours. Interestingly, those receiving low dose therapy received more furosemide over 72 hours than the high dose counterpart (773 vs. 358 mg). As far as secondary endpoints that were discussed, high dose furosemide resulted in greater fluid loss, weight loss, and relief from dyspnea but also worsening creatinine. Bolus dose group patients had more incidences of ventricular tachycardia while continuous infusion patients had greater increases in creatinine. This paper concluded that there was neither significant benefit of higher doses versus lower doses.

Given the very high incidence of ADHF, knowing how to effectively use furosemide would be beneficial for patient care. However, this question was not clarified in this study and the most effective dose and dosing regimen are not yet known. Further research is needed in this regard.

Vaduganathan M, et al. Hemoconcentration-guided diuresis in heart failure. *The American Journal of Medicine*. 2014 Dec;127(12),1154-1159.

There are limited practice guidelines to direct inpatient diuresis for patents admitted with ADHF. Vaduganathan, et al., reviewed six post hoc retrospective studies from 2010 to 2013 using hemoconcentration as a marker of fluid loss. The authors concluded that hemoconcentration was consistently associated with markers of aggressive fluid removal and was associated with improved short-term mortality and re-hospitalization rates.

In the ESCAPE trial, Testani, et al., retrospectively evaluated 336 patients admitted for ADHE¹¹ They found hemoconcentration was associated with improvement of 180-day mortality despite being associated with worsening renal function. They also found that those with hemoconcentration received higher doses of diuretics, lost more weight, and had greater reductions in filling pressures.

Davila, et al., looked retrospectively at 295 patients with ADHF and found that hemoconcentration was associated with improved mortality in univariate, but not multivariate analysis. 12 It was also associated with markers of aggressive fluid removal and worsening renal function.

Retrospective analysis of the PROTECT trial, a randomized, placebo controlled study of 1,969 patients admitted for ADHF, found that hemo-concentration independently predicted improved outcomes despite deterioration of renal function.¹³

Another retrospective study evaluated 1,684 patients in the placebo arm of the EVEREST trial. ¹⁴ The authors found that every 5% increase in in-hospital hematocrit was associated with an 18% reduced hazard of all-cause mortality.

Testani, et al., performed another study of 845 patients and found that patients who were hemoconcentrated later in their hospital stay had improved survival in contrast to those patients who achieved early hemoconcentration. This later group of patients was not found to have a mortality benefit. The authors believe that early hemoconcentration does

not accurately reflect compartmental equilibration and euvolemia. The investigators deduced that hemoconcentration status at discharge is the most important variable.

Vaduganathan, et al., concluded that hemoconcentration is a practical, cheap, non-invasive, and available tool to direct diuresis and monitor congestion in patients admitted with ADHF. The authors designed an algorithm for using delta hemoglobin as a guide to increase or decrease aggression of diuresis depending on renal function. However, this tool is theoretical and has not been prospectively tested.

This review had several drawbacks that warrant attention. The authors did not share how they identified the studies included in the discussion, so it is not clear what studies and data may be missing. Additionally, they did not share demographic data from the studies, so it is not clear if all patient populations would benefit from hemoconcentration. Lastly, like all retrospective analyses, there are many confounders. For example, hemoconcentration may be a marker of effective diuresis or healthier patients may hemoconcentrate more effectively and have better outcomes. While hemoconcentration is a cheap and attractive measure of fluid status, Vaduganathan, et al., note that none of these retrospective studies actually evaluated the utility of hemoconcentration to guide clinical decision-making. Thus, prospective, RCTs looking at hemoconcentration-directed care versus usual care are needed to truly draw conclusions about using this measure to guide therapy.

Even with this review, the optimum treatment for patients with ADHF remains unknown. There is not good evidence to show that loop diuretics, inotropes, or vasoactive medications improve outcomes. Regardless, most current national guidelines for ADHF management recommend loop diuretics and so the majority of ADHF patients will receive a loop diuretic as part of their treatment. In is also important to remember there is risk of harm with loop diuretics, mainly renal toxicity. When using diuretics, there is no clear benefit of bolus versus continuous infusion administration nor significant benefit of higher doses verses lower doses. One new area of interest for research is using other objective data, such as hemoconcentration, to aid in identifying effective treatments. Overall, high quality prospective research is needed to determine the best treatments for ADHF in an effort to decrease hospitalizations, prevent re-hospitalizations, and decrease mortality.

References:

- Fares W. Management of acute decompensated heart failure in an evidence based era: What is the evidence behind the current standard of care? Heart and Lung. 2008;37(3):173-178.
- Cleland J, et al. Practical applications of intravenous diuretic therapy in decompensated heart failure. The American Journal of Medicine. 2006 Dec;

- 119(12A):26-36.
- Faris R, Flather MD, Purcell H, Poole-Wilson PA, Coats AJS.Diuretics for heart failure. The Cochrane Database of Systemic Reviews. 2006(1). Art. No.: CD003838. DOI:10.1002/14651858.CD003838.pub2.
- Abraham WT, Adams KF, Fonarow GC, et al. ADHERE Scientific Advisory Committee and Investigators; ADHERE Study Group. In-hospital mortality in patients with acute decompensated heart failure requiring intravenous vasoactive medications: An analysis from the Acute Decompensated Heart Failure National Registry (ADHERE). J Am Coll Cardiol. 2005;46:57-64.
- Fonarow GC, Yancy CW, Heywood JT, for the ADHERE Scientific Advisory Committee, Study group, and Investigators. Adherence to heart failure quality-ofcare indicators in U.S. hospitals: Analysis of the ADHERE registry. *Arch Intern Med.* 2005;165:1469-77.
- Publication Committee for the VMAC Investigators (Vasodilation in the Management of Acute CHF). Intravenous nesiritide vs nitroglycerin for treatment of decompensated congestive heart failure: a randomized controlled trial. *JAMA*. 2002;287:1531-40.
- Peacock WF, Emerman CL, Silver MA, on behalf of the PROACTION Study Group. Am J Emerg Med. 2005;23:327-31.
- Verma SP, Silke B, Hussain M, et al. First-line treatment of left ventricular failure complicating acute myocardial infarction: A randomised evaluation of immediate effects of diuretic, venodilator, arteriodilator, and positive inotropic drugs on left ventricular function. J Cardiovasc Pharmacol. 1987;10:38-46.
- Hutton I, McGhie AI, Martin W, Tweddel AC. A comparison of intravenous elantan and frusemide in patients with chronic cardiac failure. *Cardiology*. 1987;74(suppl 1):65-68.
- Cotter G, Metzkor E, Kaluski E, et al. Randomised trial of high-dose isosorbide dinitrate plus low-dose furosemide versus high-dose furosemide plus low-dose isosorbide dinitrate in severe pulmonary edema. *Lancet.* 1998;351:389-393.
- Testani JM, Chen J, McCauley BD, et al. Potential effects of aggressive decongestion during the treatment of decompensated heart failure on renal function and survival. Circulation. 2010;122:265-272.
- Davila C, Reyentovich A, Katz SD. Clinical correlates of hemoconcentration during hospitalization for acute decompensated heart failure. *J Card Fail*. 2011;17:1018-1022.
- Van der Meer P, Postmus D, Ponikowski P, et al. The predictive value of shortterm changes in hemoglobin concentration in patients presenting with acute decompensated heart failure. J Am Coll Cardiol. 2013;61:1973-1981.
- Greene SJ, Gheorghiade M, Vaduganathan M, et al. Haemoconcentration, renal function, and post-discharge outcomes among patients hospitalized for heart failure with reduced ejection fraction: Insights from the EVEREST trial. Eur J Heart Fail. 2013;15:1401-1411.
- Testani JM, Brisco MA, Chen J, et al. Timing of hemoconcentration during treatment of acute decompensated heart failure and subsequent survival: importance of sustained decongestion. J Am Coll Cardiol. 2013;62:516-524.

Medical Student Council President's Message

Wilderness Medicine: An Interview with Grant S. Lipman, MD

Mike Wilk, MS3



"Ouch!" I yelled as I looked down at the sight of fresh blood and a fishing hook I accidentally yanked into my right calf. As an avid fisherman growing up, this incident was my third trip to the local emergency department to have a fishhook removed before I was 13 years old. While I cannot remember my parents being all that happy to once again take me to the hospital, it was always an available

resource. However, what happens when these resources are not available for those in the outdoors in rugged terrain such as backpackers, skiers, campers or even those playing extreme sports? As more and more people are participating in outdoor experiences, it became inevitable for a medical field to develop to support it outside of a basic first aid kit. Given this demand, wilderness medicine (WM) was born.

The first WM fellowship was established in 2003, and WM fellowships are now offered at 13 places across the country. In fact, the AAEM Scientific Assembly held its first WM session this year, so keep that in mind for next year. Today I had the pleasure of speaking with a leading expert in the field, Dr. Grant S. Lipman. He is currently Associate Professor of Emergency Medicine and codirector of the WM fellowship at Stanford University, and is author of the *Wilderness First Aid Handbook* (www.wildernessaid.com).

Mike Wilk: What is your background and how did you get involved in WM? **Dr. Lipman:** Like most of us involved in WM, it grew out of a love of the outdoors and wanting to combine our career with our recreation of choice. I grew up in the Pacific Northwest and was into climbing, skiing, and backpacking and got involved in WM after a back-country ski accident in New Zealand left me with a blown knee and having to self-evacuate. The experience left me with a desire to know more about safety for myself and how to care for others in arduous or resource-limited conditions. This led me to get involved with a local search and rescue group, join the Wilderness Medical Society, go to medical school, and after residency (in emergency medicine) do a fellowship in WM at the Stanford University School of Medicine. I basically pursued medicine as an avenue to do WM. If not, I would likely have done ski patrol /climbing guide. More powder days, but less outreach and knowledge.

Mike Wilk: What exactly does WM entail?

Dr. Lipman: WM involves the practice of medicine, injury prevention, and treatment in resource limited environments. Whether this is in the backcountry, front country, or a disaster area, having to improvise and do more with less incorporates the ethos of WM.

Mike Wilk: What has been the most memorable experience in WM for you personally?

Dr. Lipman: A recent story that comes to mind is last year in Iceland, on day five of a six-stage ultra-marathon, an Irish runner was a 10k run away from getting a medal. However, she had one of the gnarliest infected heel blisters I'd ever seen. It was a 5cm ulcer with surrounding cellulitis.

I put her on a whopping dose of antibiotics since she was exhibiting early systemic signs of sepsis and kept a close eye on her, and the next day her infection had improved, she was no longer flushed, and could bear weight. I taped up her foot and she ran on to finish in first place. The finish line hug and the "I couldn't have completed this without you" was great, and made the suffer-fest of the coldest and wettest summer in



Iceland in 30 years worthwhile. WM has been a sustainable side of my career, as it incorporates both the amazing natural settings that I love and stories of the people I've had the opportunity to assist in reaching their personal goals, combined into a gratifying experience.

Mike Wilk: Have there been any recent major advancements with the WM field? What about technological advancements?

Dr. Lipman: Major advancements are occurring in prevention of injury as well as treatments. Look at avalanche prevention in the past 10 years, from the AvaLung to the Airbag systems, technology is taking big steps to avoid asphyxiation deaths. Recent studies are finding new preventative medications for acute mountain sickness (AMS) and possible frostbite. With the increase of WM fellowships and interested practitioners, we are at an exciting growth point of the specialty.

I published a paper in *Annals of Emergency Medicine* two years ago that showed ibuprofen works to prevent AMS. It was the largest study done in the U.S., and as 15-40% of the 22 million annual travelers to Summit County, Colorado get AMS, I thought it an easy way to get more people safely into the mountains without being debilitated during the first 24-36 hours by "hangover" symptoms of altitude illness. The study made a splash in the news, and within 24 hours was picked up by CNN, *Time*, *NY Times*, and *USA Today*, to name a few. One article had two million Facebook "likes." It was so cool to see the target population getting the message.

Mike Wilk: How can students get more involved in WM, especially if their school does not have a strong WM presence?

Dr. Lipman: I hear from a lot of medical students who are interested in WM and want to join. It starts with medicine, you're on the right track. Get Wilderness First Responder training, join a local search and rescue group and go to their training sessions. Join the Wilderness Medical Society to connect with like-minded students. Find local community clubs who are doing outdoor programs and see if you can teach them basic wilderness first aid. It starts small.

Mike Wilk: What does the WM Fellowship entail and what can residents expect to learn from it? What kinds of research opportunities exist? **Dr. Lipman:** Consider a residency that has skills translatable to WM.

Emergency medicine I think is ideal, but certainly family practice or orthopedics are great options. If you are at a program that has a post-residency fellowship (currently all EM) there should be ample opportunities for residents to be involved.

At Stanford the fellows spend the year learning a didactic curriculum, having educational opportunities to lecture residents and local search and rescue groups, travel to join the medical team of wilderness ultramarathons around the world, and be involved in scholarship that contributes to our understanding and practice of WM.

The last few years have seen fellowship projects (that residents have participated in) that included: novel methods of cooling hyperthermia, observational studies on acute incidence and risk factors of kidney injury (using point-of-care iSTATs) in multistage ultra-marathon racers, randomized blister prevention studies in ultra-marathons, and a novel acute mountain sickness prevention study. These are taking place in Nepal, deserts in Chile, Jordan, Egypt, the Gobi, etc., to name a few locations.

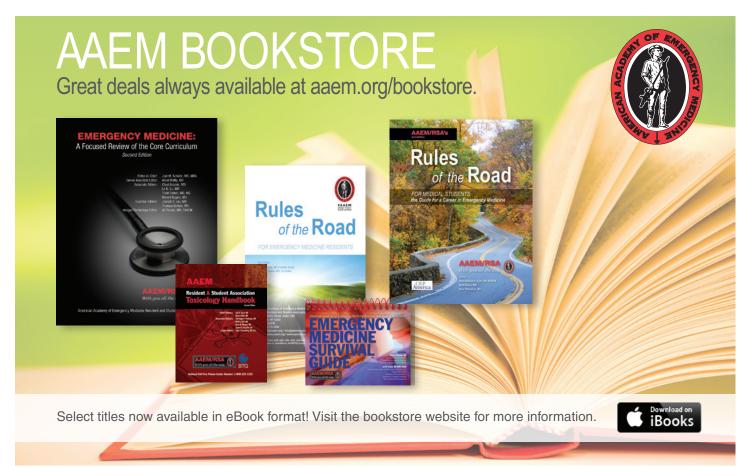
Does camping out for a week in the Sahara desert and running a randomized controlled trial that examines the safety of ibuprofen on renal function in ultra-marathons sound like fun? That's one of the 2015 projects that our fellows and one of our residents will be doing. I'm excited to work with fellows and residents at different programs to cross-pollinate and get lots of different people involved.

Mike Wilk: What kinds of careers exist for those specializing in WM? **Dr. Lipman:** A lot of people move to towns near their favorite wilderness environment to be involved with local WM groups. Others move to academic centers and promote WM through training and research. Others go on a couple expeditions a year between ED shifts. At the end of the day you've got to find a medical specialty you love, as that will be your day job and pay your bills.

Mike Wilk: Where do you see WM progressing in the future?

Dr. Lipman: I'm particularly excited about the state of WM fellowships.

They are increasing in number, the directors know each other and get along well, and there are more opportunities to progress the specialty through collaborative projects. I look forward to seeing better-powered clinical trials question some of the axioms of WM and get answers based on evidence rather than anecdote. While people are excited about technological advances like ultrasound in WM, I prefer the low-tech footprint in the low-tech environment, and low-fidelity answers to problems allow greater generalizability and ease of reproducibility. There are a lot of questions still out there and all it takes is a little imagination and motivation to get them. ■



NEW! Hands-On Simulation Practice!



AMERICAN ACADEMY OF EMERGENCY MEDICINE

PEARLS of WISDOM

ORAL BOARD REVIEW COURSE



SEPTEMBER 26-27, 2015

Saturday & Sunday

Orlando, FL

Dallas, TX

Chicago, IL

SEPTERMBER 30 – OCTOBER 1, 2015

Wednesday & Thursday

Las Vegas, NV

OCTOBER 3-4, 2015

Saturday & Sunday

Philadelphia, PA

Los Angeles, CA

REGISTER TODAY!

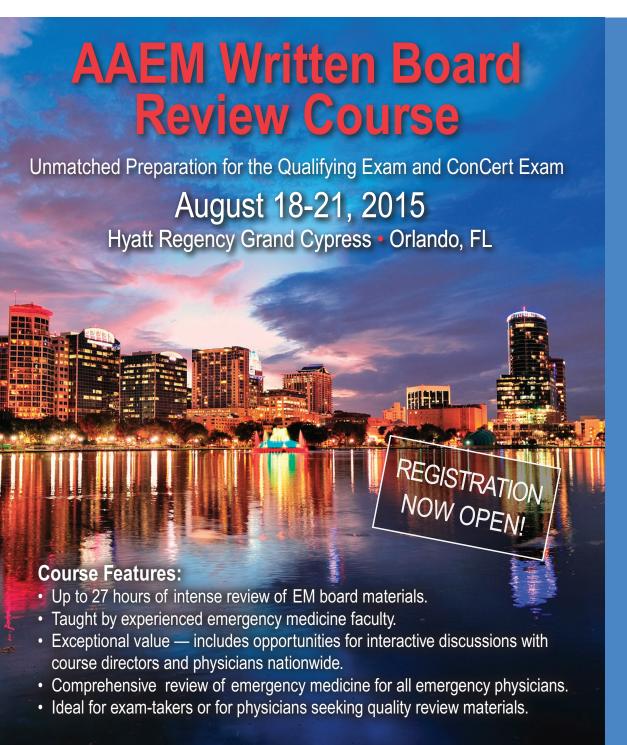
Prepare for the new simulation format with hands-on experience

"Innovative, interactive experience with monitor display that is very life-like""

"I liked it overall. Easy to use.
Fun. Interactive""

"The real-time patient changes are excellent"

555 East Wells Street / Suite 1100 Milwaukee, WI 53202-3823 Pre-Sorted Standard Mail US Postage PAID Milwaukee, WI Permit No. 1310





View pearls from the course on Twitter! #aaemWB15

For more information and to register, visit www.aaem.org/ education/written-board-review-course or call 800-884-2236