

EPIC



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From the President

Out of Network Balance Billing Update

Matt Keadey, MD, MHA, FACEP

As I am sitting at my desk writing this letter, I have to reflect on the state of emergency medicine in Georgia for last six months. We have had tremendous success as a state medical society as our own John Rogers, from Macon no less, was elected president-elect of the American College of Emergency Physicians. Sitting on the council floor listening to John's speech gave me goose bumps. It was at that point that everyone who was in attendance knew that his election was inevitable. I am proud to work with John and know the college will be in great hands the next couple of years.

We also have had some challenges. We cancelled our rural emergency medicine course due to the hurricane that wasn't. However, the make-up conference just a couple weeks ago in February was one of the best attended. As we rotate sites every year, the rural course will be in Augusta featuring a cadaver lab for high risk procedures and high-fidelity simulators.

However, our biggest challenge the last three years, has been out of network balance billing (OONBB). Emergency medicine is often the "canary in the coal mine." We sit on the front lines every day and understand the real issues affecting medicine and our patients. Georgia patients increasingly receive surprise medical bills for emergency care they thought was covered by insurance when they needed it most. On top of record-high premiums, this coverage gap shifts even more costs to patients, through surprise bills. Through narrow network plans, Georgia health insurance companies are leaving patients without choices often requiring patients to leave their communities for care. A 2017 study found that nearly 50% of the Georgia marketplace plans offer narrow networks, which was one of the highest percentages in the country. In emergency situations, patients have very few, if any, in-network options to provide care and exposes them to potential surprise bills. Despite repeated efforts by physicians to negotiate for in-network status, narrow network insurers often refuse to negotiate leaving providers with take it or else deals that often leave the patients with very little of their bill covered. Georgia patients can't continue to bear this cost as more than 22% of Georgia residents have some medical debt in collections, and healthcare costs are the number one reason people file for bankruptcy. While the status quo is easier and more profitable for insurers, our patients need a comprehensive solution that will protect them and ensure they have access to needed medical care. In addition to OONBB, Georgia's largest health insurance company is refusing to cover emergency visits by retroactively denying claims. This practice, which sets a troubling precedent and is already becoming more prevalent across the country, increases costs and health risks for patients. Nearly one in four Americans reported their medical conditions got worse because they didn't go to the ER out of fear their insurance company wouldn't cover the visit.

After two years of defending Georgia patients against flawed solutions, GCEP, MAG and the Georgia Collation to End the Surprise Insurance Gap decided to take matters into our own hands by finding a sponsor and crafting model legislation. Senate Bill 359 (SB359) sponsored by Chuck Hufstetler (District 52, Republican) takes patients out of the middle, boost transparency, and end surprise billing, while ensuring long-term access to quality care. The bill incentivizes insurers to negotiate in good faith with physicians and would result in adequate healthcare networks for patients. SB 359 establishes an appropriate and fair reimbursement standard for emergency services that creates pricing transparency by leveraging an independently recognized and robust charge-based database. For out-of-network, non-emergency care that results in a surprise bill to a patient, a transparent and appropriate dispute resolution process is created. Furthermore, enhanced transparency is required of both providers and insurers to ensure that patients have the adequate information they need to make medical decisions.



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From the Chair's Corner

Medical Directors' Section Report

John L. Sy, DO, FACEP



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Dr. Sy is partner, Georgia Emergency Physician Specialist and medical director, Effingham Health Systems.

It is with great pleasure that we present our inaugural Medical Directors' Section Newsletter. Personally, I would like to extend my greatest gratitude to your leadership team over the past year: Mark Rosenberg, DO, MBA, FACEP; Ryan Kealy, MD, FACEP; Anne Zink, MD, FACEP; and Leslie Mukau, MD, FACEP. They have been an invaluable resource for me and I cannot begin to describe the work and dedication that each one has provided over the past year to bring this section to fruition.

If you are already a member of the Medical Directors' Section, then I thank you for your support and contribution over the past year. If you are not a member, I personally invite you to join at the ground floor level to help develop this section going forward. In concert with the 50th anniversary of ACEP, I firmly believe this is a wonderful opportunity for the growth of the Medical Directors' Section. The future of emergency medicine is vitally dependent on the current leaders in our respective Emergency Departments.

The redesign of ACEP's website should give us significant potential for growth, but more importantly meet a critical need for Emergency Department medical directors. The website will contain resources for directors in all stages of their career, from new director status to seasoned director status. Our vision of the section website will include quick-links to high-yield podcasts, pitfalls in our department, departmental protocols, and hospital clinical/operational trends. The ever-changing healthcare field is in a dynamic state currently and the lifeline of the future of emergency medicine is the next set of young leaders in our specialty. We need to have a forum to foster mentoring opportunities and development of the young emergency physician leaders.

Please reach out to any of the section officers with any recommendations or suggestions. I sincerely look forward to seeing everyone at our next meeting at the 2018 Scientific Assembly in San Diego.

President's Message continued

Realizing that momentum is building, insurers are opposing our comprehensive solution. Despite pressure from patient advocacy groups such as Georgians for a Healthy Future and Georgia Watch, insurers push for the status quo which does very little for patients and further

inflates their bottom lines. Instead of a comprehensive solution, insurers are pursuing Band-Aid actions that will do little to solve the real problems facing patients. Insurers and their lobbying group support House Bill 678 (HB 678) which would improve transparency, but does not address surprise medical bills. As crossover Day came SB 359 passed the Senate and moved over to the House but as of this date has not been heard by the House.

GCEP leadership can always meet with any legislator, but it often means much more coming from one of their constituents. If you do not already know your state legislator, it is time you found out (https://openstates.org/find_your_legislator/). Hopefully by the end of this legislative session with your help, we can finally protect our patients, so they do not have to decide between their health or their financial well-being.

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Emergency Physicians Expose Anthem's Harmful Emergency Care Policy with New Video

The American College of Emergency Physicians (ACEP) today launched a new video (<https://youtu.be/ddiQwA4aUi0>) to push back on a dangerous policy by Anthem Blue Cross Blue Shield (BCBS) to deny coverage for emergency patients. If the insurance giant decides your visit to the ER was not an emergency, based on their undisclosed lists of diagnoses, they'll leave patients with the entire bill.

"Anthem's policy has deadly serious implications for patients," said Paul Kivela, MD, FACEP, president of ACEP. "Anthem is risking patients' lives by forcing them to second guess their medical symptoms before they get to the ER, and some may not go when they need to. As the video explains, people may have identical symptoms but have different diagnoses — one life threatening, one non-urgent. Insurers can't reasonably expect patients to know the difference."

There is nearly a 90-percent overlap in symptoms between emergencies and non-emergencies, according to a 2013 study in the *Journal of the American Medical Association*.

"Anthem's policy is also unlawful," said Dr. Kivela. "The 'prudent layperson standard' is federal law and requires health insurance companies to cover emergency visits based on the patient's symptoms, not the final diagnoses. No insurance policy is affordable if it abandons you in an emergency."

The company is using secret lists of pre-determined diagnoses — which Anthem BCBS considers to be "non-urgent" — that may not be covered if the patient goes to the emergency department. In Missouri, the original list of nearly 2,000 diagnoses included "influenza," — which has killed several people this season — "ovarian cyst" and "blood in the urine," which can be symptoms of medical emergencies.



Last month, Sen. Claire McCaskill, D-Mo, representing a state where Anthem implemented this policy, sent a letter to Anthem's CEO requesting answers and internal documents from the company.

"Patients are not physicians," said Sen. McCaskill in the letter. "I'm concerned that Anthem is requiring its patients to act as medical professionals when they are experiencing urgent medical events."

Along with Missouri, Anthem BCBS has already implemented the policy in Georgia, Kentucky, Indiana, New Hampshire and Ohio. Unless stopped, this could be go into effect in more states, with additional health insurance companies following with policies of their own.

"Anthem, and others insurance companies have a long history of not paying for emergency care," said Dr. Kivela. "Emergency physicians successfully fought back against these outrageous policies. Now, as the future of health care is debated again, insurance companies are trying to reintroduce the harmful practice."

The video cast features real doctors from the American College of Emergency Physicians. Learn more and watch the video by visiting www.faircoverage.org.

Pearls in PEM: The Pediatric Appendicitis Score

Carmen Sulton, MD



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Abdominal pain is a common chief complaint in the pediatric emergency department. While many cases of abdominal pain are self-limited, more serious surgical emergencies must always be considered. These include—but are not limited to—appendicitis, intussusception, trauma and incarcerated hernias. Abdominal pain can be elicited by three common neural pathways. Visceral pain is usually dull and achy. It is usually stimulated by local nerve fibers responding to distention of a hollow viscus (i.e. bowel). Somatic pain is usually well localized and sharp in quality. This can be triggered by a localized inflammatory process within an affected area. Referred pain is felt at a location distant from the affected area. It can be described as sharp, achy or localized. Referred pain is usually triggered by nerve fibers that share a common central pathway.

Appendicitis is a surgical emergency that should be recognized promptly. It is the most common pediatric surgical emergency, accounting for ~88,000 hospitalizations annually. Appendicitis occurs more commonly in children over five years of age, however, it is not exclusive to this age group. While this diagnosis can be seen in younger patients, it may be more difficult to isolate. Additionally, younger patients have a higher rate of perforation, especially at initial presentation. For patients of all ages, the diagnosis can be challenging. There are many non-surgical emergencies that have characteristics similar to appendicitis. Laboratory work, imaging and surgical consultation are often required. Standardizing care with common clinical guidelines and pathways helps to facilitate appropriate care. Standard order sets for laboratory work and imaging has become the mainstay in many children’s hospitals and emergency departments.

The use of risk stratification tools has become increasingly popular in early identification of patients with suspected appendicitis. Additionally, these tools place a clinical weight on each component of the patient history, physical exam and laboratory values. Two commonly used tools are the Alvarado Score and the Pediatric Appendicitis Score (PAS). While initially developed to identify patients at high risk for appendicitis, these scores have been used to aid in determining the need for operative care, in hospital observation or imaging needs. Delay in appendicitis diagnosis can lead to complications including perforation or abscess formation. Rushing too quickly to the operating room is associated with an increased negative appendectomy rate. The Pediatric Appendicitis Score (PAS) was developed to improve decision-making in patients with suspected appendicitis. Research has documented a sensitivity of ~95% and specificity of ~84%. An individual weight is given to each score. A score of 1-3 has been associated with a very low risk of appendicitis. A score of 4-6 likely will require further imaging. A score of 7-10 necessitates evaluation by Pediatric Surgery, possibly without imaging needed.

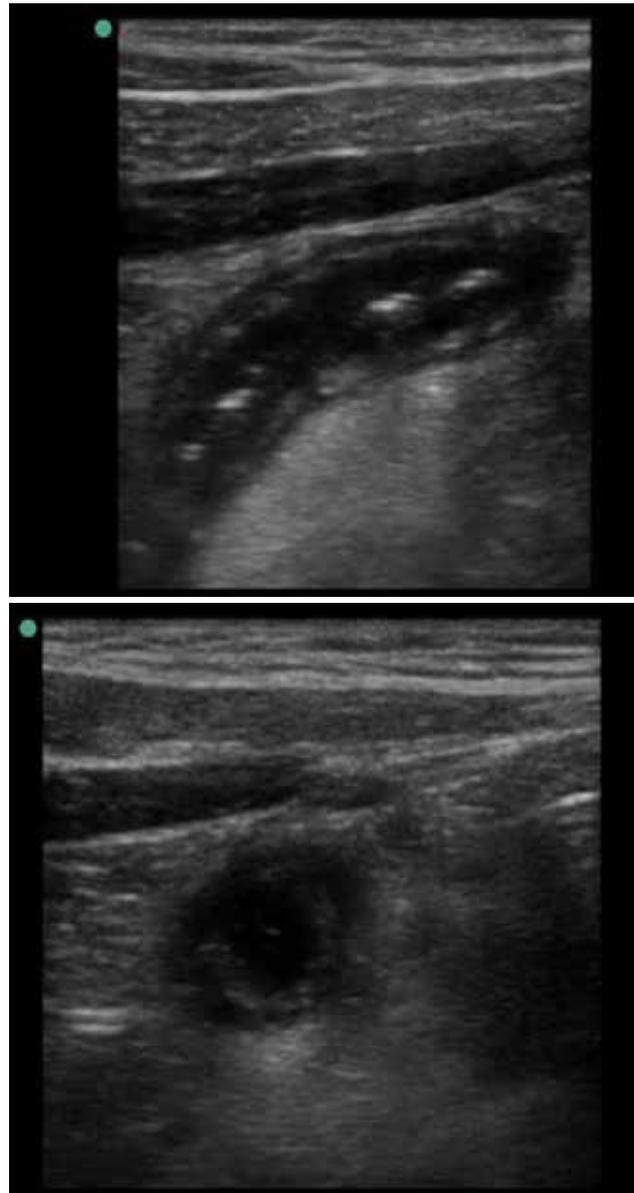
Pediatric Appendicitis Score (PAS)

Nausea/Vomiting	1
Anorexia	1
Migration of pain to RLQ	1
Fever	1
Tenderness with cough/hopping	2
RLQ tenderness	2
Leukocytosis (WBC >10k)	1
Neutrophilia (ANC>7500)	1

***Total score less than 4, low risk. Total score greater than or equal to 7, high risk.*

The combination of PAS with ultrasound imaging for appendicitis has several benefits. For patients with PAS of 4-6, the use of both tools may decrease the odds of a missed appendicitis or negative appendectomy, while also decreasing utilization of computed tomography (CT) scans. The combination of PAS and ultrasound may decrease the rate of CT scans for appendicitis to well below 25%. Overall, the use of ultrasound as a diagnostic modality has increased significantly within the emergency department. There are often concerns about radiation exposure when abdominal CT scans are used for the diagnosis of appendicitis, namely, an increased risk of radiation induced malignancies. In many institutions, CT is utilized only for non-diagnostic or equivocal ultrasounds. The main drawback with using ultrasound first line is that it is highly operator dependent and accuracy is affected by the experience of the examiner. Also, availability is often limited to advanced ultrasound programs and during certain hours. Lastly, ultrasound of the appendix namely, can be challenging in overweight or obese patients. However, there are several benefits to ultrasound. There is no ionizing radiation exposure. Little to no sedation is required. It is noninvasive, fast and inexpensive. Further, the American College of Radiology and American College of Emergency Physicians recommends that abdominal CT scans not be performed in children in suspected appendicitis until an ultrasound is obtained first. The diagnostic accuracy of ultrasound in appendicitis can be as high as 96% and sensitivities as high as 97% in children. Accuracy improves with increased use of ultrasound in emergency practice and increased training.

Clinical scoring systems such as the PAS score offer significant benefit in the work up of the pediatric patient with suspected appendicitis. They help to standardize initial work up as well as provide guidance for imaging. The adjunct of ultrasound in pediatric patients will also improve overall accuracy. While these scores were initially intended to identify only high risk patients, they carefully incorporate elements of the history, physical exam and routine laboratory results. Current research continues to show that PAS correlates highly with the likelihood of appendicitis. When used as a measure of clinical suspicion, the PAS can be better adjusted with ultrasound result. Despite its limitations, ultrasound has become the preferred initial imaging modality for evaluation of appendicitis to minimize radiation exposure in children. When combined, PAS and ultrasound are helpful and accurate diagnostic tools for the pediatric patient with abdominal pain.



Positive ultrasound Images of appendicitis in a) long axis and b) short axis

Images compliments of Stephanie G. Cohen, MD, Emory University School of Medicine, Atlanta, GA, USA

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Emergency Medicine Residency Update: Medical College of GA at Augusta University

Daniel McCollum, MD, Associate Program Director, Augusta University



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Dan graduated from the Georgia Regents University Emergency Medicine Residency Program in 2013. He is currently serving as an associate program director in the Department of Emergency Medicine at the Augusta University at Medical College of Georgia.

As the weather slowly warms, the emergency medicine residency at the Medical College of Georgia is wrapping up another fantastic year. We have just finished interviewing civilian applicants to our program. Receiving over 1000 applications in the civilian match alone, this is the most impressive crop of applicants ever to apply to our program. As an example, the average Step score for our applicants this year was over 240. We continue to recruit some of the best and brightest from across the country as well as from our home institution. Seeing such talented applicants makes me very glad that I got into emergency medicine when I did, as the competition is fierce!

Our residents continue to make us proud with their accomplishments. Our resident MedWar team successfully defended their national title winning the 2017 national MedWar competition. A recent presentation by Evan Baines (EM2) in Seattle placed 2nd in the conference short lecture competition. Victoria Migdal (EM2 resident) recently travelled to Hong Kong China to give a lecture

on Advanced Disaster Life Support. Residents also continue to actively serve local law enforcement by providing medical support to the Columbia County SWAT team.

We have recently rolled out new and expanded simulation and ultrasound curriculums. These have been a very exciting improvement to our curriculum. Our simulation center is comprised of a 40,000 sq ft training area with 10 simulation rooms and 30 clinical skills rooms. It is awesome. Our new US curriculum includes weekly hands-on US with Emergency Medicine trained US faculty throughout the hospital. This has been a fantastic opportunity to learn ultrasound in a more controlled environment.

As the academic year begins to wrap up, we eagerly look forward to our future interns. We also will say a bittersweet goodbye to our graduating seniors. We know without a doubt that they will serve their patients admirably and move the practice of emergency medicine forward.



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Pediatric Emergency Medicine Updates: Medical College of Georgia

Natalie E. Lane, MD, FAAP

By the time you read this entry to the newsletter, we will have hopefully survived a record-breaking influenza season. Via shared communication, the flu seemed to hit the pediatric population disproportionately but thankfully not in acuity. Reports from the five children's hospitals across the state, indicated that volumes were up two to three times over normal with a stable admission rate. I would like to say that we were creative at the Children's Hospital of Georgia, but other than adding hallway evaluation areas, we really have a lot to learn regarding surge.

Despite the focus on clinical care, managing the increase in documentation and trying not to contract the flu, the fellowship and program here at the Medical College of Georgia continue to thrive. We had another successful Match in 2017, and we maintain up to six fellows with two per year. All fellows are presently from a pediatric training background but we do accept and did have several emergency medicine graduates interview. Our new fellows include Dr. Christa Root, who completed a Master's in Public Health at Emory and completed her residency at University of South Florida. Dr. Wajeeha Saeed is coming to us from the wintry north at Lincoln Medical and Mental Health Center. We are excited about their interests and what they will bring to the program.

Our present fellows continue to serve as great mentors to younger learners, they remain actively engaged in research and teaching. Areas of focus for our fellows include ketamine use outside the realm of sedation and its application in asthma management and sickle cell disease. The population is robust for both of these entities. Unique to training in our program is a month of burn and critical care at the Joseph M. Still Burn Center here in Augusta, two weeks on an obstetrical rotation and online didactics and hands on ultrasound in our Ultrasound Education Center on campus (www.augusta.edu/mcg/ultrasound-education/ultrasoudflyer.pdf), as well as during clinical care.

Our first-year fellows will attend the Annual National Pediatric Emergency Medicine Conference, this year in Arlington, Virginia at the end of February. This is a requirement and paid by the department. Our senior fellows made it to the AAP National Conference and Exhibition in Chicago in October 2017 and participated in the debut of the AAP Sonogames. They did not come out winners but vowed to win next year.

We continue to encourage and allow our fellows to develop their interests as they decide the trajectory of their careers. Dr. George Hsu, one of our senior fellows was just awarded an Innovation Award for his catheter-related innovation by Georgia Bio (GaBio) a non-profit, membership-based organization that promotes the interests and growth of the life sciences industry. One of our second-year fellows, Dr. Julie Jacobs is venturing out on the high seas and evaluating the quality of urgent and emergency care provided to children on board cruise ships. Packed with fun, long hours and revelations regarding the lack of standardization and quality for children's care, her experience on this elective may influence her future career choice.

The Children's Hospital of Georgia is held in high esteem for its peer ranking in quality as number one over the last year. Here in the emergency department, we have tried to engage with the greater national community in improving care for children. We were one of over 100 sites involved in the quality collaborative known as REVISE (Reducing Excessive Variability in Infant Sepsis Evaluation). We are now one of two hospitals in the state of Georgia (the other is Columbus Regional) who will be engaged with 16 other children's hospitals nationally in the Pediatric Readiness Quality Collaborative through the national EMS-Children's federally funded program. Augusta University will serve as a training hospital to smaller affiliate emergency departments to make them better prepared for the daily



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emergency care of children and in times of a disaster. The Section of Pediatric Emergency Medicine, in conjunction with the regional Emergency Medical Services for Children Committee will host the 9th Annual EMS-C Conference. The topic this year will be Pediatric Mental Health Care at a Breaking Point, May 23, 2018 at the J. Harold Harrison Education Commons on the Augusta University Health Sciences campus. We also introduced our first Community Clinical Care Connections newslet-

ter where disease entities that cross the continuum of primary care, urgent and emergent care are at a crossroads. We hope to reach out and influence the approach to treatment and use of resources through this joint hospitalist and emergency medicine newsletter to be published quarterly. Medical College of Georgia is a great place to be part of the community of pediatric emergency medicine. We are excited to see what the next year holds.



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Reflections on MCEP Observation Conference

Kahra Nix, MD

The scope of practice of Emergency Medicine continues to appropriately increase its boundaries for the benefit of both health care systems and patients. Observation Medicine is one such area that Emergency Medicine providers are succeeding in. Leaders in the field, like Dr. Ross, have shown healthcare administrators, on both local and national levels, the million-plus dollars in cost savings and improved care received by observation patients throughout hospital settings. Type 1 Observation Units are dedicated units with defined protocols that have the most evidence of shorter length of stays and lower admission rates. As hospitals continue to discover the value of Type 1 Observation Units, EM providers will continue to be pressed upon to lead.

This can be intimidating for Emergency Providers who have focused their knowledge base on the initial phase of treatment and disposition in favor of what can be perceived as inpatient management. This was my motivation for attending the 2017 MCEP Observation Medicine conference in Nashville. I quickly discovered that for the most part, folks in the Observation Medicine world, like Dr. Osborne, are eager to share the evidence-based how-tos. Check out his website, www.obsprotocols.org, and his podcast, POBScast.

The conference in Nashville was an assorted mix of Observation experts and novices. Conference attendees represented people in all phases of developing and/or management of Observation Units from around the United States. There was representation of community and academic medicine from both rural and urban hospitals. Therefore, there were tracks to differentiate for conference attendees. Depending on which sections you decided to attend you could walk away with anything from understanding how to start an Observation Unit from scratch, with innovative ideas for advanced management, or simply with knowledge about appropriate use. The lectures were done by both physicians and advanced practice providers to provide a diversity of perspective. It was impressive to see such a spectrum of learners all walking away served by the conference. One of the most freeing parts of the conference was to realize that the how-to work has already been done.

I recently completed interview season, as I will soon graduate from residency. So, I have had the opportunity to ask quite a few community physicians their perspective on having an Observation Unit in their Department. I was surprised to hear a lack of openness and a lack of interest. If I hadn't been on my "best interview behavior," I would have loved to share with them the myriad benefits, not least of those financial. On the other hand, Insurance companies and hospitals alike have discovered that this is better for both patient care and cost. Why shouldn't Emergency Medicine providers gain this piece of the financial pie? I will be intrigued to continue to watch the evolution of Observation Medicine as led by Emergency Providers.

Kahra Nix, MD

Dr. Nix attended medical school at University of North Carolina at Chapel Hill, NC. She will start her US Fellowship at Emory University in the coming months.



Wilderness Medicine

Do you like the outdoors? Do you like adventures? Have you ever been outdoors or in a remote environment and needed medical attention? This is something that happens far more often than you may think. Usually, however, only after you have been in that situation yourself do you tend to keep that aspect of outdoor adventuring in mind. At the Medical College of Georgia (MCG) at Augusta University, Drs. Taylor Haston and Michael Caudell have been busy not only in the southeast, but all around the world teaching and practicing wilderness medicine (WM). This specialty has grown and continues to flourish.

For those of you who may not know what has been going on in Augusta's backyard, we will take a walk down memory "trail" and catch you up on this past year in the Section of Wilderness & Survival Medicine, and also give you a peek into what is planned for 2018.

Here's what they did between busy shifts in the ED:

In January 2017, they began another successful MCG Wilderness Medicine Student Lecture Series. Dr. Haston is the course director for this elective opportunity to introduce first year medical students to a few of the basic wilderness medicine topics, including but not limited to heat and cold illness, altitude illness, dive medicine, marine envenomations, lightning, improvisational splinting, and bites and stings. The elective ended with a rappelling event at a local park. This course has been a huge success with the students and has sparked interest in both wilderness and emergency medicine and opened their eyes to potential career paths in medicine they had not previously considered.

In February of 2017, they headed to Park City, UT where they were both faculty at the Wilderness Medical Society (WMS) winter conference, teaching a 2-day

Advanced Wilderness Life Support (AWLS) course. Dr. Caudell has been the course director and Dr. Haston an instructor since winter 2016. This is a very exciting course for participants, covering the basics of wilderness medicine and is geared for medical students, residents, physicians (in emergency medicine and other fields), emergency response providers, ski patrol and SAR (search and rescue) teams, as well non-medical adventurers. Dr. Caudell and Dr. Haston are very involved with the Wilderness Medical Society and both are active members of the Education Committee and the Graduate Medical Education (GME) Fellowship Committee. Dr. Caudell serves on the Board of Directors and is the sub-committee chair for AWLS. In addition, Dr. Haston gave a 'Wilderness Mythbusters' lecture where she debunked over 30 myths related to wilderness medicine as part of the first annual GME Fellowship Lecture Series. She is now the sub-committee chair for this lecture series and has worked to further develop the event into a rewarding platform for current and past WM fellows to speak at a national conference. The second annual showcase was held at the WMS winter 2018 conference in South Lake Tahoe this past month and was again, very successful.

On April 22, 2017, the 17th annual Southeast MedWAR was held in Augusta, GA at Fort Gordon, and was won by the team of MCG EM residents. MedWAR (Medical Wilderness Adventure Race) has been a continued success; it originated at MCG in 2001 and has grown from the initial local race to multiple races all over the United States. EMRA (Emergency Medicine Residents' Association) began hosting an annual race for their resident members in 2016 in conjunction with the American College of Emergency Physicians (ACEP) Scientific Assembly. The 2016 inaugural event was held in Red Rock Canyon National Conservation Area in NV and in 2017, the 2nd annual race was held in Seneca Creek State park, MD. Both EMRA events were also won by the team of residents from MCG! Plans are in the works for the 3rd annual EMRA MedWAR to be held in San Diego in October 2018 and is open only to teams of emergency medicine residents. The 18th annual Southeast race will be held April 14, 2018 and is open to everyone. Please visit www.medwar.org for more details on all MedWAR events.





In late April, 2017, they traveled to Namibia as part of the medical support team for the Racing the Planet's 4 Deserts Sahara race. This is one of a series of grueling self-supported 250-kilometer ultramarathon races which take place over a 7-day span, each with more than 100 participants from all over the world. This was an opportunity to practice wilderness and austere medicine in a remote corner of the world with limited resources. They plan to participate in more races in the future.



The 3rd annual Dive Medicine Course was held in late May in Cozumel, Mexico, and was attended by our WM fellow, as well as residents, nurses and other EM physicians; it was a huge success. The 2018 course will take place June 17-21, again in Cozumel. This continuing medical education course is directed not only towards EM physicians, but also towards all levels of medical providers, including students and residents as well as advanced practice providers, nurses and EMTs. Prior dive certification is not necessary as PADI Open Water and Advanced Open Water certification can be earned on site, while also learning some marine and dive medicine, as well as earning CME. Prior courses were held in Belize. Look for rotating locations for each coming year and contact vwingrove@augusta.edu for more information.



They graduated their 3rd WM fellow, Dr. Linda Sanders in June 2017, ending her fellowship with a Capstone Expedition to Bend, OR and rafting the Deschutes River. She planned this 4-day expedition of rafting over 40 miles down the river and camping along the way. Dr. Sanders prepped and planned for medical treatment and evacuation if it had been needed, which luckily it was not, despite Class IV rapids and seeing several snakes, both venomous and nonvenomous at various sites on the river and at campsites. This was after a banner year during which Dr. Sanders completed the didactic components necessary for her Diploma in Mountain Medicine, Level 1 Avalanche certification, Advanced Open Water scuba certification and AWLS certification (and is now an AWLS instructor) in addition to attending other WM courses, conferences and austere events including several ultramarathon races for which she provided medical support. Dr. Caudell also traveled to Tacoma, WA where he was faculty for the Military Mountain Medicine Course & Diploma in Mountain Medicine (DiMM) at Madigan Army Center, which he has been contributing to for several years.



In late July, they attended the summer WMS Conference in Breckenridge, CO again as faculty for another rewarding AWLS course at the conference. Dr. Caudell, again served as course director. They were also lucky enough to hike four "14ers" (>14,000 feet mountains) in a loop called the Decalibron Loop, including Mount Democrat, Mount Cameron, Mount Lincoln and Mount Bross, all in a single day with wilderness and emergency medicine colleagues from VT Carilion Clinic. They started the hike before day-

light and although the sky was clear and blue for the majority of the day, a big storm hit just before they completed the hike. WM education and experience has taught them that the side of a mountain is the last place you want to be when a storm appears overhead. They had ominous skies with dark clouds and audible thunder, and it was midafternoon which is historically the most dangerous time of the day with the highest lightning risk. A crucial component of wilderness medicine encompasses prevention and safety, which is easily as important, if not more important than treatment and management itself.

Dr. Haston is the faculty advisor for the MCG Student WMIG (Wilderness Medicine Interest Group) and both Dr. Caudell and Dr. Haston are regularly active with this group and their introductory education to Wilderness Medicine. They hosted the first official WMIG meeting of the 2017-2018 academic year with a rappelling event at the Augusta Canal and had a big turn-out of over 20 students. Everyone successfully rappelled and also learned about harness and rope safety. Some students even rappelled forward “Aussie style” down the wall, which is no easy feat.

September brought about more opportunities to teach AWLS and wilderness medicine, this time in Roanoke, VA in association with Blue Ridge Adventure Medicine (BRAM) as well as the Appalachian Center for Wilderness Medicine (ACWM). Drs. Caudell and Haston serve on the Board of Directors for the ACWM, which is an organization that promotes wilderness medicine and education not only for medical personnel but also for laypeople in the Appalachian region. Dr. Caudell completed his term as ACWM President in January 2018, while Dr. Haston will continue to serve as Chair of the Advisory Council.

In October, Dr. Haston served as medical support for another ultramarathon race with Racing the Planet, this time in northern Chile in the Atacama desert, the driest desert in the world. In addition to providing medical care for race participants, this adventure included an evacuation from the course during the first stage due to a wind storm; thankfully no one was injured. The WM section also worked in conjunction with the MCG Event Medicine Section and provided medical support locally at the FATS (Forks Area Trail System) Flow Master Mountain Bike Race which took place in Clarks Hill, SC on October 21, 2017.

The end of October they were in Washington DC for an action-packed week serving as WM section representatives at the ACEP Scientific Assembly. Dr. Haston is the current secretary and newsletter editor for the WM Section and Dr. Caudell a past president of the section. They both currently serve on the ACEP WM Fellowship Directors committee, with Dr. Caudell completing his term as Chair in 2017. He was also instrumental in bringing to life an idea for the exhibit hall to illustrate and educate other ACEP members





about wilderness medicine. He organized, and along with Dr. Haston, ran the first annual ACEP “Adventures Outside the ED” Exhibit Hall Experience for the duration of the conference. This event included a climbing wall, multiple sponsors’ tables, book signings, as well as space medicine, snake bite and telemedicine scenarios. There were also various workshops during the day such as splints, litters, carries and hypothermia wraps for attendees. Many attendees achieved education in and certification on massive hemorrhage control via the “Stop the Bleed” program, which was created after the active shooter disaster at Sandy Hook Elementary School in Sandy Hook, Connecticut. The American College of Surgeons and The Committee on Trauma, in

collaboration with several other federal and local organizations, created the Hartford Consensus, a national policy to enhance survivability from intentional mass casualty and active shooter events. This course is being taught around the nation for professionals and laypersons who may be in life threatening situations when bleeding control can decrease mortality. This presence at the exhibit hall showcased ACEP’s support of this endeavor. One of our Chief Residents, Dr. Kevin Lu served as an instructor as did Dr. Haston and Dr. Caudell, while several of our EM residents achieved official certification. All in all, this “adventure” was a great way to get everyone at ACEP educated and excited about what wilderness medicine really is and generated a great deal of interest to everyone in the exhibit hall.

In November, they served as faculty for wilderness medicine instruction in the Sacred Valley of Peru alongside their wilderness medicine/emergency medicine colleagues from Roanoke, VA at Virginia Tech Carilion Clinic. This was an initiative to educate the community health workers in the Sacred Valley region in basic wilderness medicine. It was an exciting week and impressive to see wilderness medicine sprung into motion in such a remote region, in a population that has no formal medical training, with little to no resources, who may be called to help when emergencies arise.

December brought about a WMIG lecture on cold injuries and hypothermia plus a workshop on austere hypothermia care to include making hypothermia wraps out of tarps, sleeping bags and rope. The year closed with Dr. Haston and Dr. Caudell becoming co-directors of the WM fellowship at MCG.

The WM section is planning another great year in 2018. They have their first Nurse Practitioner fellow, Christina Merryman and look forward to bringing someone from another medical discipline into Wilderness Medicine. In addition to those activities and events previously mentioned, they have also already completed another MCG WM Student elective lecture series for 2018. The WM



Section is also very excited to be hosting the 11th Annual Southeastern Student Wilderness Medicine Conference at MCG, with Dr. Haston supervising the students and serving as Conference Director. This is a wilderness medicine conference geared specifically for students, but is open to anyone interested in wilderness medicine. The conference has been held in varying locations the southeast region over the past decade with volunteer faculty from all over the area with an expertise in some area of wilderness medicine. The conference will be held at MCG on March 17-18, 2018. Please see www.blueridgeadventuremed.com/student-conference.html for more information.

Of note, 2017 was the first year in the history of the EM Resident's Wilderness Medicine Day that the event had to be canceled due to inclement weather from the hurricanes that hit the southeastern coast in September. They not only had the effects of the weather and resultant power outages but also hosted many evacuees. Thankfully they did not have to practice any WM during the brunt of the hurricanes but they did have to reschedule the Resident's WM Day for late March 2018. They are excited to finally get to introduce this tradition to the intern class; it is always a fun day of learning outside.

It was certainly a whirlwind year for Dr. Caudell and Dr. Haston. They hope this article successfully piques your interest in wilderness medicine and educates you on what they are doing at MCG. Please feel free to contact either of them if you wish to know more about what they do, or if you want to become involved. Thank you; be safe out there and always be prepared for the worst but expect the best!



Taylor Haston, DO, DiMM, MPH

Dr. Taylor Haston completed her emergency medicine residency training at MCG then went on to complete a Wilderness Medicine Fellowship there as well. She is now an Assistant Professor of Emergency Medicine, as well as Co-Director for the Wilderness Medicine Fellowship. She has earned her Diploma in Mountain Medicine (DiMM) and certifications in Level 1 Swiftwater Rescue, Advanced Open



Water and Rescue Diving; and is currently completing her FAWM (Fellow of the Academy of Wilderness Medicine) through the WMS. She serves on the Board of Directors for the Appalachian Center for Wilderness Medicine and is the secretary of ACEP's WM Section.



Michael Caudell, MD, FACEP, FAWM

Dr. Michael Caudell is a Professor of Emergency Medicine, Co-Director of the Wilderness Medicine Fellowship, and the Medical Director for Wilderness Medicine and Survival Medicine within the Center of Operational Medicine at the Medical College of Georgia. Dr. Caudell is one of the founders of MedWAR (Medical Wilderness

Adventure Race), the Immediate Past Chair of ACEP's Wilderness Medicine Section, a Fellow of the Academy of Wilderness Medicine (FAWM), and has earned the Diploma in Mountain Medicine (DiMM). He serves on the Board of Directors for the Wilderness Medical Society, the Appalachian Center for Wilderness Medicine and North American Educational Adventure Racing.

Posterior MI

Megan Boissonneault, EKG Selective



Megan Boissonneault
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Dr. Boissonneault is a 2018 resident at Emory University Department of Emergency Medicine in Atlanta..

Clinical Scenario:

Patient is a 54-year-old M with a history remarkable for hypertension who presented to the Emergency Department for one day of substernal chest pain that he initially described as heartburn. The patient had just completed a 10 mile bike ride when his symptoms began. Screening EKG illustrated the following: rate 86, sinus rhythm, normal axis, normal intervals, ST depressions in V2-V3 (Image 1), no STE. The patient was brought back to the resuscitation room and a posterior EKG was completed which illustrated ST elevation in V7-9 (Image 2) consistent with a Posterior STEMI. Initial troponin was 0.06. His pain improved with SL nitro.

The cath lab was activated, however prior to leaving the ED he had a v. fib arrest that responded to immediate defibrillation. He was then taken emergently for LHC. The left circumflex artery was 100% occluded requiring thrombectomy and DES. His post-cath course was uneventful, troponin peaked at >70, EKG changes resolved. Echo demonstrated inferolateral and inferior segment hypokinesis. He was discharged home on hospital day two with Aspirin, Plavix, Atorvastatin, Lisinopril and Metoprolol and plan for cardiac rehab.

Posterior STEMI:

Posterior MI is typically seen as an extension of an inferior or lateral infarct, however, it can also be an isolated event. An isolated posterior MI is easy to miss, so the first step in diagnosing it is having a high index of suspicion. Findings suggestive of Posterior MI include the following:

1. ST depressions in V1-V3
2. Upright T waves in V1-V3
3. Development of a dominant R wave (R/S ratio >1) in V1- V3

One can think of these signs as the mirror image of a STEMI. For example, the depressions represent STE, the dominant R wave presents the Q wave. This is due to the orientation of the leads in relation to the posterior myocardium.

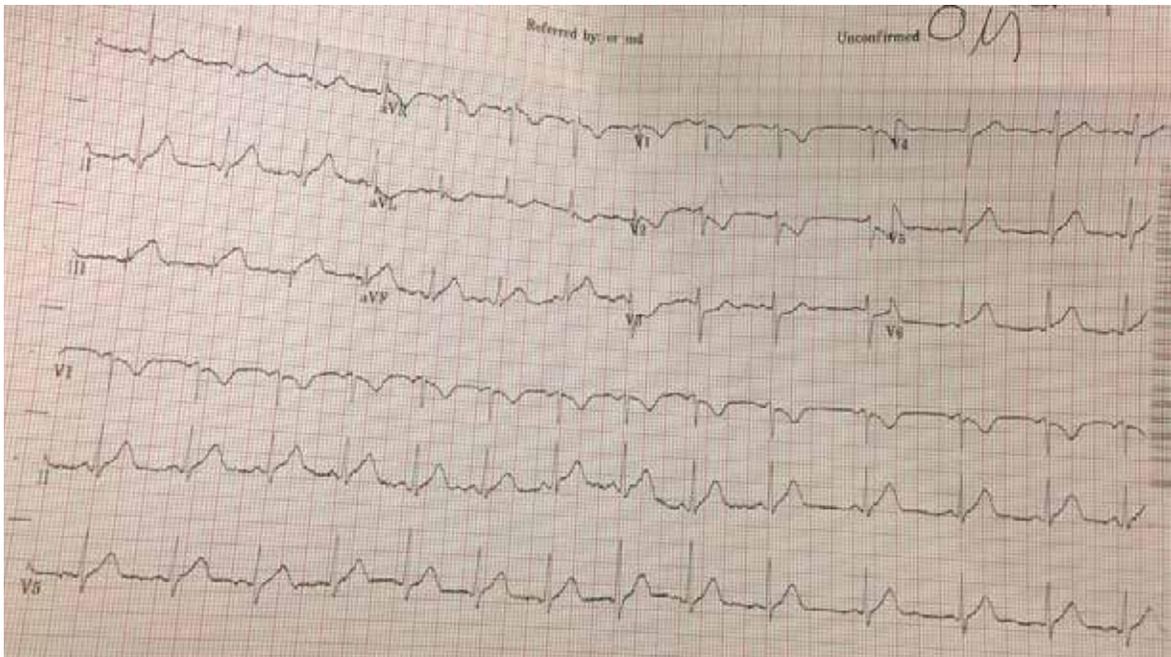


Image 1

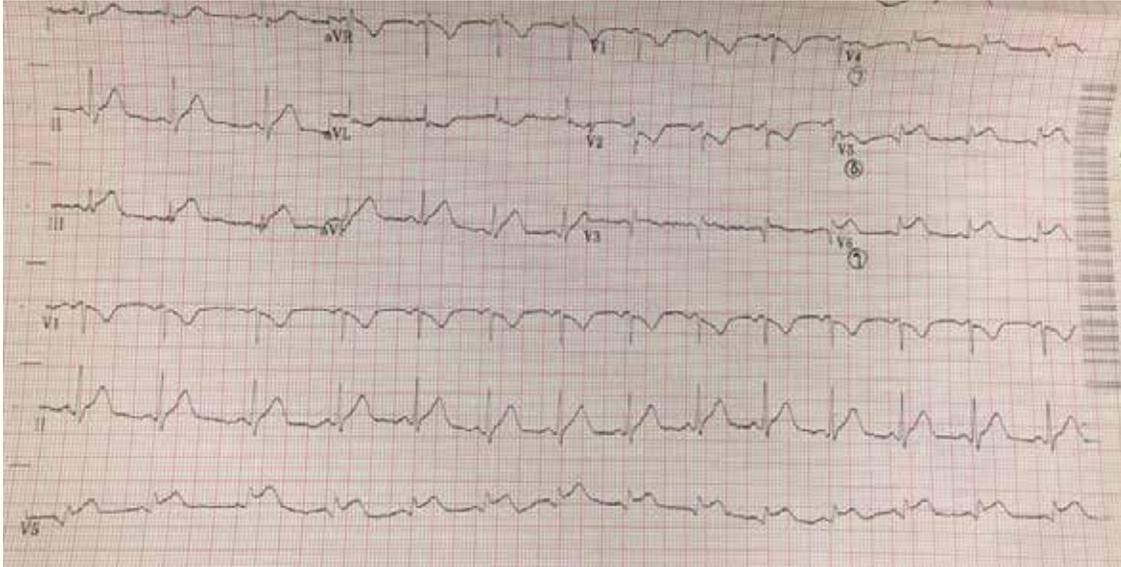


Image 2

Take Home Points:

- Keep posterior MI on your chest pain differential and every time you look at an EKG
- Get the posterior EKG quickly when suspicious
- Posterior MI is an indication for emergent cath; so activate the lab!

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Summary of New Tax Rules in 2018

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Now that we're a few weeks into the new year and you're thinking about filing last year's tax return, it's a good idea to anticipate what's coming this year especially because of major revisions to the tax code passed at the end of 2017.

Below is a summary of some of the new rules that I think are most pertinent to physicians. Realize that due to the convoluted nature of tax laws and many exceptions (and exceptions to exceptions) to the general rules, you'll need to sit down with your accountant and run the numbers to determine how these rules may or may not benefit you.

1. Tax brackets

Seven different tax brackets remain but the tax rates for each bracket and the thresholds to meet each bracket are different: 10%, 12%, 22%, 24%, 32%, 35% and 37%. You will likely see your tax bracket down a few points, but don't get too excited -- read below.

2. Standard Deduction and Personal Exemptions

If you do not itemize your deductions, the standard deduction has doubled to \$12,000 (single) or \$24,000 (joint). Personal exemptions (another way of reducing your taxable income) have been eliminated completely.

What this means for many taxpayers is that unless you have a large amount of itemized deductions (see further comments below), you'll likely end up using the standard deduction. And the fact that the personal exemptions have been effectively "rolled in" to the standard deduction means that some taxpayers may get a smaller deduction than before.

3. Itemized Deductions

The biggest change here is that previously you could deduct your entire state income taxes and real estate taxes (though some of those were phased out as your income went up); now you're capped at a \$10,000 deduction. This can be especially problematic if you live in high state income tax states such as California, New Jersey, or New York. It is possible that while you may be in a lower tax bracket than before, the cap on the deduction of state income and real estate taxes could negate the benefit of the lower tax brackets.

You can continue to deduct mortgage interest on your home, though that is capped based on first \$750,000 of mortgage debt.

Charitable contributions can still be deducted, and that has expanded to 60% of your income up from 50%.

If you're an employee, you can no longer deduct unreimbursed employee expenses.



And also if you've hired a financial advisor, you cannot deduct financial advisors fees anymore. However you should talk to your advisor about deducting some of the advisory fee from tax deferred accounts to get a tax benefit -- that is still allowed.

4. Capital gains and dividend tax rates

Unfortunately the new tax law did not change the taxation of dividends and capital gains. So if you have a taxable brokerage account and you sell a security for a long term gain or if you receive qualified dividends, then you'll either be taxed at 0%, 15%, or 20% depending on your income level. The investment tax which was passed under the Obama administration also remains if you have high enough income -- that tax is 3.8%.

5. Estate taxes

The new law doubles the estate tax exemption to \$11.2 million (single) or \$22.4 million for couples. In other words your estate would need to be valued at those amounts or higher when you die to be subject to estate taxes. It's unlikely many physicians will get there. This doesn't mean you should not have an estate plan. Rather it just means that the focus of your estate plan may no longer be to reduce estate taxes.

6. Pass Through Entities

If you're an independent contractor, you might benefit from a new 20% deduction on your tax return for "qualified business income." Essentially this is income that is passed through to you after paying yourself a salary or "reasonable compensation." This particular part of the law has created a large amount of confusion. So before you go out and switch jobs from being an employee to being an independent contractor, realize that there are restrictions placed on certain types of service businesses (such as physicians) from getting this deduction.

If you're an independent contractor, you might benefit from forming your own corporation and being taxed at the corporate level because the corporate tax rate has been reduced.

7. 529 College Savings Plans

If you send your kids to private school, you can now withdraw money from 529 plans to pay for that up to a limit of \$10,000 annually per student. Personally I don't think this is a very good idea because of the much larger financial obligation for college in the future, but it does give some more flexibility to 529 plan withdrawals.

Finally realize that a number of these provisions are due to "sunset" after the year 2025, at which point many of these rules will revert back to pre-2018.

Thank you to all who contributed to our legislative advocacy fund this year. Without this help we would not have had the resources to fight very bad legislation in the state legislature. We need your continued support the "Stop the Insurance Gap" campaign.

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