From the ED to the Campus
Dr. Maureen Olson, FACEP
Medical Director, Georgia Tech
Student Health Services

- Pediatric Apparent Life Threatening Events (CME Available)
- Consulting Physician Interaction (Risk Management)
- Emergency Airway Management (A New Series)
- “I Need My Meth” (Ethics)
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Greetings Fellow Emergency Physicians!

Robert J. Cox, MD, FAAEM, FACEP, President, GCEP

By the time you read this, we will have already voted during the mid-term elections. At the time of this writing, pundits are predicting the Republicans will take back the House and may have a chance at the Senate. What will this mean for those in power who are actively seeking to change the structure of American society as we know it? On a local level, the Deal/Barnes battle has been fierce and Amendment 2 on the ballot dealing the car tag fee for trauma will have been decided. We’ll analyze the results for the next issue of the magazine.

Kudos go to your councilors for excellent work and representation of GCEP at the 2010 Scientific Assembly. I don’t recall any decision passing the council that we were not in the majority. Congratulations to Drs. Rogers, Olson and Mattke for their extra work in reference committees and as tellers! Many thanks to Pettigrew Medical Business Services for sponsoring our board dinner and to Dr. Bourland and EmergiNet for sponsoring our very popular GCEP Cocktail reception. Seen in the room at various times were the past president, president and president-elect of national ACEP as well as national board members and of course old friends and colleagues.

In this column, I usually review what’s happening with Medicare and the SGR. Congressional leaders have been warned that the series of short-term measures they passed earlier this year to block Medicare payment cuts were too disruptive to medical practices and to keep doctors from bailing out of the program, Congress should pass a longer-term fix that lasts through 2011. This habit of short term fixes promises to be hard to break as they must find billions of dollars in offsets elsewhere in the federal budget to cover the costs of future payment patches and the longer they take to fix the problem, the more astronomically the costs climb.

Lawmakers are scheduled to return to Capitol Hill the week of Nov. 15 for just one week and return after Thanksgiving. The talk among committees on the Hill is that Congress will pass a 31-day fix before Thanksgiving and a subsequent one of 6 – 13 months when lawmakers wind up the lame duck session in December. This second extension is thought to allow Congress and the physician community to develop a long term solution.

Recall that the current payment patch expires Nov. 30 and if Congress doesn’t act, Medicare payments to doctors are scheduled to be cut by 23% on Dec. 1 and by another 6.5% on Jan. 1.

In the EMS news, The American Board of Medical Specialties (ABMS) has approved Emergency Medical Services (EMS) as a subspecialty of the American Board of Emergency Medicine (ABEM). Details are being worked out as the examination and maintenance of certification program are developed with the anticipation of the first exam to be given in the fall of 2013. At the state level, the EMS Medical Director’s Advisory Council has approved a version of the National EMS Scope of Practice for Georgia.

During our GCEP Board meeting December 9, we will firm up our legislative agenda for 2011. If there are issues you’d like us to attack, please let us know ASAP. Even though the legislators are actually in session for a short time, Georgia politics is a year-round business. The best time to get to know your local legislator is to attend a fund-raiser or town hall back in their district before the session even starts. Let us know if you need any help in these endeavors.

See you at Legislative Day in early 2011 if not before!
The Privilege of a Lifetime

Angela Gardner, MD, Immediate Past President ACEP

I was cleaning out my (paper) file cabinet last week and came across my plastic name badge from ACEP’s Scientific Assembly in Boston 2003, the year I was elected to the Board. Tucked behind the paper name insert were three small pieces of paper. The first piece of paper is a list of the issues facing emergency medicine and ACEP at the time. I had used the list to prepare for the Candidate’s Forum. Interestingly, many of those issues continue to challenge us now:

- Malpractice crisis (now renamed “professional liability”)
- Overcrowding
- Reimbursement
- Election of the President by the Council (incidentally, I was for it)
- Associate membership (incidentally, I was for this, as well)

The second slip of paper is titled “Lessons I’ve Learned From Mountain Climbing.” It was the basis of my 2-minute candidate speech to the Council. Here is what I said then, followed by what I have learned since:

1. **Always know your goal.** For many, reaching the summit of a mountain is the ultimate goal. I maintained both then and now that coming home alive after making the summit is still the ultimate goal. I still believe that no matter what we do, delivering the best possible emergency care to our patients is the ultimate goal.

2. **Be sure you start at the right trailhead.** You cannot climb Everest if you start at the base of Annapurna.

3. **Keep your gear in good shape.** I think that ACEP has taken great care to stay abreast of evolving member needs—through new communication vehicles, through new resources for practicing, through new educational offerings, through new technology. ACEP continues to support wellness for emergency physicians so that they can train for the climb.

4. **Know how to use a compass and a map (GPS doesn’t always work in the wilderness).** Given the growing size and sophistication of the College, and in spite of advances in technology, it is important to maintain basic skills—communicating with the members, representing ACEP and the specialty well, being accountable for the decisions that are made.

5. **Never rope up with people you wouldn’t trust your life to or give your life for, because on any mountain, it may come to that.**

The third, and last, piece of paper stands alone. I wouldn’t change a word, even now.

- I believe that a leader of the College should have vision, compassion, commitment, and courage.
- I believe in the power of the human spirit.
- I believe that failure to understand each other is the greatest source of conflict in the world.
- I believe in the ability of rational, intelligent human beings to come up with solutions to their problems.

It was an incredible moment for me when I took off the string of ribbons that hung from my plastic badge as a candidate and replaced it with the single blue ribbon that read “Board of Directors.” It has been the opportunity and the privilege of a lifetime to serve on your Board and to serve as your President. Thank you for allowing me that honor.

*Article reprinted from ACEP News, September 2010, with permission.*
The old Chinese curse, “May you live in interesting time,” certainly applies to this next year. Regardless of the outcome of the next election, it is clear that our practices, and health care in general, will be changing. Our challenge this year, and for several years to come, is to make health care reform work for us and for our patients. Without a doubt, the changes proposed in the new law will be the most significant challenge facing our specialty in my lifetime.

During the past year, the battle over health care reform largely centered in the Congress. Now we must work with the regulatory agencies and HHS to assure our voice is heard. To do that will require increased resources in Washington. Already the Board has approved adding two new individuals in the regulatory arm of ACEP’s Washington office. In addition we will be adding some resources to work with consultants. This year we were able to find the money to cover this, thanks to some serious budget cutting and the most successful Scientific Assembly ever. However going forward we may need to consider other options to pay for these services. This may include a modest dues increase, dipping into member equity, and/or the establishment of a National Advocacy Fund. While we are still discussing the funding of this effort, there is no doubt that this is the right thing to do.

One of the challenges facing us is to prove our value. In the near future, reimbursement for health care services will radically change. We will be reimbursed based on value and quality, not quantity. Proving our worth, our value to the health of an individual or community will be difficult, but essential. We will be contracting with a consultant to work with an ACEP task force of experts to devise tools to measure our value to the health care system.

ACEP faces other challenges. We have an aging workforce that sooner or later will retire. This will lead to a decrease in the number of experienced emergency physicians, especially in the mid west and rural areas of our country. In July, 2009 a summit was held to discuss this workforce shortage. At that summit, all of the EM organizations agreed there would not be a fully board certified, EM residency trained workforce for decades. We were left with the conundrum – continuing to support EM residency training as THE standard for entering the practice of EM today and our obligation to assure the quality of care given in all emergency rooms. Therefore a second summit will be held this January where once again these organizations will meet and try to solve this problem.

Most of you know I have been outspoken about the dangers of boarding inpatients in our emergency rooms. I and many others have written articles and performed research demonstrating the adverse effect boarding has on our patients. This year we will be partnering with the American Society of Hospital Risk Managers to develop an educational program for their members. As many of you know the Residency Review Committee for Emergency Medicine has taken a hard stand against prolonged lengths of stays in the ER (primarily due to boarding) and ambulance diversion. In addition throughput measure will become part of our Pay for Reporting in the near future. I am hopeful we will see progress in this area this next year.

Finally, liability reform remains one of our goals. However in the current political atmosphere, tort reform is unlikely on a national level. We will continue to support our chapters that have some hope of passing tort reform. In addition the Research Committee will examine possible ways to demonstrate the cost of malpractice concerns. This is a difficult task, as the extra testing and admissions have become part of our normal daily practice. Nonetheless, this is a very smart group and I am hopeful they will come up with a framework to start providing the data we will need once the political climate changes.
So this year will be about health care reform, workforce, boarding and liability reform. But it will also be about increased transparency, increased communication, and increased member involvement. There has never been a better time to get involved – at the chapter or national level. I urge you all to attend the Leadership and Advocacy meeting in May in Washington DC. Join the 911 network. It’s free and a great way to keep abreast of the changes that are coming. Attend your annual chapter meeting and volunteer to help ACEP, and your specialty. With all of us working together, we will lead health care reform and make it work for us.

Thank you for the opportunity to serve as your president this year.
ACEP member physicians Sabina Braithwaite, Vivek Tayal and Gina Piazza have participated in a 1-year health policy fellowship in the Emergency Care Coordination Center (ECCC) at the U.S. Department of Health and Human Services’ Office of the Assistant Secretary for Preparedness and Response (ASPR) in Washington, D.C., which engages in collaborative emergency care and preparedness policy analysis and development.

As fellows they participated in discussions for emergency care health care policy development at the federal level. Issues of daily emergency care are emphasized within APR’s Emergency Care Coordination Center, while the larger issues of the Emergency Care enterprise are addressed dynamically in concert with other federal entities. The fellowship was a unique and exciting endeavor with potentially lasting effects.

The fellowship provided opportunities to interact with various ASPR programs, such as Hospital Preparedness Program, the National Disaster Medical System, Biomedical Advanced Research and Development Authority, interagency planning committees, and other preparedness and response groups.

The fellows also interacted with other HHS divisions, including the Centers for Medicare and Medicaid Services, the Food and Drug Administration, the National Institutes of Health, the Health Resources and Services Administration, and the Indian Health Service. As key partners in the Emergency Care enterprise these divisions share joint projects with ASPR’s ECCC.

Outside of HHS, the fellows met and interacted with the Department of Transportation’s National Highway Traffic Safety Administration Office of EMS, the Department of Homeland Security, the Veteran’s Administration, the Department of Defense, and other agencies that have a nexus with emergency care issues.

Fellows participated in meetings of federal interagency workgroups such as the Federal Interagency Education and Training Group and the Federal Interagency Committee on EMS.

Meetings in the DC area were common and meetings outside the DC area were considered for funding by ACEP on an individual basis, including ACEP Legislative and Advocacy Conference, ACEP’s Scientific Assembly, and other EMS and disaster medicine conferences. Fellows were also able to present research papers and participate on federal panels on behalf of ECCC.

The fellowship was made possible through a partnership between ACEP and ASPR, which began in 2009. Requirements for participation in the fellowship required being full-time, mid-level faculty in academic institutions, board certified by the American Board of Emergency Medicine or the American Board of Osteopathic Emergency Medicine and supported by their sponsoring institutions.

Housing, transportation and other costs associated with living and working between the DC area and their sponsoring academic institutions were not covered by the fellowship stipend. The clinical requirements as well as the remainder of the salary and benefits package were determined by the fellows’ sponsoring institutions.
Conjure up an image of a college health center and what do you see? A quiet, calm environment with a few students coming in with a runny nose, stubbed toe, abrasions, sore throat or flu, right? The doctor would yawn and say “Next.”

What do you envision when you hear new onset of lung cancer in a 22-year-old male, acute overdose, anaphylactic shock or acute MI? Most of us are thinking typical emergency department, right? Now add to this list scalping of a student from a laboratory machine, new onset diabetes, thyroid storm, Guillain-Barre, and malaria and you will have a glimpse of my first eight weeks as Medical Director for a university student health center. This health center has six specialty clinics consisting of primary care, women’s clinic, psychiatry, dental, travel clinic, allergy and immunization clinic, and health promotion with annual patient visits in excess of 40,000. Laboratory and digital x-ray are available on site.

A practicing emergency medicine physician learns how to quickly assess, evaluate, and take decisive action, generally with great accuracy. ED physicians hone their leadership skills by multi-tasking, constantly triaging and re-triaging, managing varied patient loads and multiple levels of acuity all at the same time. They become proficient at negotiating with consultants and problem solving with nursing and other ancillary personnel. Emergency medicine training is ideal for managing disasters, a public health crisis such epidemics or other catastrophic events and often by necessity, creative and innovative in the approach to problem solving.

Residency training in emergency medicine can prepare physicians for a variety of practice alternatives, including event medicine, urgent care and college health to name a few. So when night shifts and circadian shifts begin to take their toll, many ED physicians envision other practice models.

This year, the time had come for me to investigate practice alternatives, and I accepted the position of Medical Director for Georgia Institute of Technology’s student health services. All the skills honed as a practicing emergency medicine physician are put to use in this new role. Much to my surprise, rather than a low acuity first aid clinic, I have found this to be an extremely interesting and challenging environment. In addition to emergent and urgent health care needs of the student body, this position allows me the opportunity to focus on health promotion and wellness, a perfect blend of clinical acuity and preventive medicine, and a “sweet spot” for an emergency physician cast in a new role.
I’m so impressed with our members this year. Everyone is allocating $100 on their ACEP dues statements to GEMPAC. They may skimp on other areas but it seems universal that if you are paying your dues you are checking the GEMPAC box. GCEP has 650 members so if we get continued support we will easily reach $60,000 this year. If you somehow don’t receive an ACEP statement or your company pays for your dues, please take time now to send a separate check. We work for all EM docs, so please all donate.

In my last column I was pleading to give recognition to groups with 100% participation in GEMPAC, similar to the GCEP 100% club that has been so successful in growing our membership base. Unfortunately, we have no way of knowing which groups everyone belongs too. So please inform the GCEP office when your group qualifies. We have moved the fiscal year for GEM PAC to coincide with the GCEP fiscal year so I will announce these groups in upcoming issues and at year-end during the summer meeting 2011.

GEMPAC continues to support candidates in the Georgia Legislative races who support the issues that our members feel are important to their practices, their patients and their hospitals. Every time I come to work I am thankful for the Tort Reform bill supporting my practice. The gross negligence standard for Georgia emergency physicians allows me to practice good bedside care with compassion, not emphasizing defensive tactics that so often overburden our ED systems. I thank GEMPAC and other medicine PACs in our state for this relief. We have it tough enough without this extra burden.

As I write this column I’m getting ready to attend the ACEP Scientific Assembly in Las Vegas. I hope to see many of you there. As you exchange stories with your friends from other states I think you will take pride in what we have accomplished in Georgia emergency medicine. It takes hard work and progress is often slow and steady. We have made this a state where emergency medicine is still fun and thriving. Other states don’t have such luxury. I thank all the hard workers on the GCEP board for much of this leadership and I encourage all the members of our state college to help in any way they can, outside of their own ED. Please get active with your local Georgia legislators and come down to the capitol next year.

Thanks again for encouraging your partners to support GEMPAC. Please ask your company for corporate matching donations, and remember to let us know when your group qualifies for recognition in the GEMPAC 100% club. Our goal is still $100,000.
Get to Know Your Board of Directors

Dr. Angela Mattke

EPIC: Where did you grow up (home-town)?

AM: Mainly in Georgia. I bounced between Adel, GA, Knoxville, TN, and Atlanta until high school. Then I went to Rome for three years to attend Darlington School.

EPIC: After high school what did you do?

AM: Well like most everyone I went to college. My undergraduate is from Georgia State University, though that is a deceptively simple answer. The real answer is that I took a year off of undergraduate to do singing telegrams and work in local theater until I was ready to return to college. When I returned to school, I doubled up on my classes and graduated only six months late with a BA in English. I hadn’t taken any “hard sciences” that constitute the pre-med requirements, so when I decided to go to medical school I found the Post-Baccalaureate Pre-Med program in the School of General Studies at Columbia University in New York. I did the equivalent of a second degree there.

EPIC: Singing telegrams? Local theatre? That is certainly not the traditional path into medicine. But then again you do seem to gravitate to the strange and unusual.

AM: Play nice or I’ll send you to your room.

EPIC: Well alright then, where did you go to medical school?

AM: Since my undergraduate and pre-med path was so circuitous, there was no way medical school would be simple. I started first at St. George’s University School of Medicine in Grenada, West Indies. While I was on maternity leave between first and second years, I applied to local Georgia schools and was accepted at the Medical College of Georgia. I interviewed while 37 weeks pregnant. I’ll never forget the look on my interviewer’s face when I came waddling around the corner to his office (I was never the nimble pregnant woman you see in the commercials; I lumbered and waddled). His first question was, “So YOU want to go to medical school?” My answer came easily, “I am already in medical school. I want to go here.” So they let me.

EPIC: “I’m already in medical school.” Ha ha ha ha. Bet your interviewer was embarrassed by missing the obvious.

AM: Yeah, I love bringing them to tears with my wit, intelligence and the sheer magnitude of my personality. Pity the fool who messes with me.

EPIC: Well in all honesty, I am already sweating bullets. By the way, where did you complete your residency?

AM: Yet again, nothing has been simple for a non-traditional student. I did my internship in General Surgery at Allegheny General Hospital in Pittsburgh, PA and Emergency Medicine at Beaumont Hospital in Royal Oak, MI.

EPIC: What a non-conformist. To avoid personal injury, I won’t even ask you about religion, alternate healers and the carnivore vs. herbivore controversy. So, what attracted you to EM?

AM: I realized during my year of General Surgery that my weaknesses in Surgery, attention span chief among them, would be strengths for Emergency Medicine. Also, when I was in pre-med, I had volunteered at the Emergency Department at St. Luke’s Roosevelt Hospital in New York City, and everything else had to compare with the excitement of that.

EPIC: If you hadn’t become a doctor, what would you have done? Singing telegrams?

AM: I would have been an astrophysicist or a princess. Tough to say.

EPIC: You are all over the map here, and I am at loss to understand the common ground between an astrophysicist, singer, actor, princess, surgeon and emergency physician. Then again I have no clue how I
ended up here either. Tell me about your family: spouse, children etc.

**AM:** I have a very patient and tolerant husband and two brilliant and wonderful children. Mark helps manage the Teachers Pension Fund for the State of Georgia. We met via telephone personal ads (this was before the internet was so popular). We were married five months later.

**EPIC:** Any animals in your family, not including in-laws?

**AM:** Love my in-laws so lay off or you will find an extra appendage in your posterior. Yes I love animals. Our ancient diabetic cat and our ancient arthritic dog both died this year. We filled their absence with two mischievous kittens that are beautiful, silly, but generally useless. The mouse under the stove lived an absurdly long time before they played with it too much, when it went to be with the diabetic cat and arthritic dog.

**EPIC:** Our readers are dying to know, what was your best experience in the ED?

**AM:** After a year of General Surgery I had a mild case of PTSD. Not long into my first month of Emergency Medicine I was finishing my charts in an area that had been closed to new patients. Our area was still taking overflow from the other part of the department and so they brought other patients back to my area. My attention was piqued when I heard the nurses talking about a patient they had just brought back whose blood pressure was low. The pale, elderly lady with a GI bleed was hypotensive and slightly tachycardic and the nurses couldn’t get an IV. I told the clerk to call the other area for a critical care bed and to tell the Attending that I was going to put in a central line. Given that he was unaware of my prior surgery training, how quickly do you think he appeared when he heard a third week intern was putting in a central line? He wanted her transported before we even got started, then, once we got her to the critical care bed, none of us could get a line. I gave it a try and hit it first time. We started blood, fluids, and she began to improve rapidly. I left work two hours late, but walking on air. That was the first moment in over a year that I was happy with my career choice.

**EPIC:** As an ex-surgeon myself, I can confirm that surviving a surgical internship definitely qualifies one for PTSD. My wife says I am still suffering from the brain damage it inflicted. So, what was your worst experience in the ED?

**AM:** When I had to tell a man his six-year-old daughter had died in a car accident. He had been driving the car.
Pre-hospital care, where it can be had, is non-uniform and inconsistent. Emergency physicians are bound by EMTALA (and ethics) to care for all-comers, but still bear the same burden of liability. My vision would rectify these problems.

1. Enact a constitutional amendment to cap non-economic damages.

2. Expand 911 services to un-served or underserved areas.

3. Examine other states with fewer specialty shortages to help develop plans for retention of specialists and nurses.

4. Promote evidence-based medicine among EMS. As on and offline medical directors, we are responsible for the ultimate outcome of our patients.

EPIC: You sound like my parents – “You can do better than a C minus, you just aren’t trying.” What is the most important issue for GCEP this year?

AM: Passing the referendum to fund a statewide trauma system. Every year we have problems with holding psychiatric patients. Those are both priorities.

EPIC: As a kid I loved watching Superman on TV and reading comic books about him, the Green Lantern and Batman. In addition to the unique powers you now hold, if you had a Superpower, what would it be?

AM: Flight. Although being able to instantly correct spelling and grammar errors on the internet is a tempting second.

EPIC: Oh yeah, I’d pick spelling and grammar over being able to fly any day. Still trying to impress your high school English teacher obviously. Is there anyone who is your role model?

AM: GI Jane, Auntie Mame, Jessica Rabbit, and my mother (come to think of it, she is a lot like all of them) are the strongest female role models for me. Richard Feynman is my favorite polymath with wide-ranging interests whose works I greatly admire. I pick the best of each of them and try to emulate that.

EPIC: Jessica Rabbit is one hot rodent, if you ask me. Regret I had to go look up the definition of polymath to know what you were saying. Vocabulary is not my strong suit. So what is your favorite movie? There will be a penalty if you say something inane like “Gone with the Wind” or any of those Twilight movies.

AM: “Auntie Mame,” the original with Rosalind Russell.

EPIC: What was your worst dating experience?

AM: I cooked dinner for my boyfriend but accidentally had dropped the whole bottle of Scorned Woman Hot Sauce in the water instead of just a drop or two. I didn’t know how much actually made it into the water until we were eating dinner. It was so hot that my boyfriend couldn’t eat it and thought I was trying to break up with him. He married my anyway.

EPIC: And if you were a man – boxers or briefs?

AM: You want me to say “commando,” don’t you? Anyway, who said women can’t wear them, too?

EPIC: You know me too well. And finally the question everyone is dying to ask. What is the one dessert you cannot resist?

AM: Anything with peanut butter. Bonus points if ice cream is involved.

EPIC: Pleasure doing business with you. Dying to know the limerick, Asimov wrote about you.

AM: I’ll never tell, it’s a secret between Isaac and me. Enjoyed talking with you.

Get involved and Make a Difference
GCEP is here to serve the emergency physicians and emergency patients of Georgia. All of our meetings are open. If you are interested in being more involved, please visit the GCEP website at www.gcep.org
Resident Life: The Big Payoff

Massimo Federico, MD

Private jets. Personal assistants. Offshore bank accounts. Too many days off to remember the last time you had a shift. This is the typical life of an attending emergency physician, right? It may seem that way to a resident slogging through a mountain of shifts every month for a bit less than a fortune. Regardless of the reality or the perception of it, the end of residency presents itself as a big payoff - a big payoff for more than a decade of study, trivial fact regurgitation, sleep deprivation, and the occasional belittlement by a cantankerous attending.

In informal discussions with our most recent class of graduating residents, a common theme arose regarding how they defined “the big payoff.” There was no surprise - most wanted a balance of competitive pay with reasonable working conditions in a place they wanted to live. These working conditions included appropriate provider coverage for the number of patients and acuity, specialty back up, and support staffing. Few, if any, were going into partnership tracks. Most were going to be hospital employees/independent contractors for the physician group, which is consistent with national trends. Academics called to one graduate, who remained in Georgia for fellowship.

As the vast majority of our residents are native southeasterners, most remained in this corner of our country. Graduates scattered to Alabama, Tennessee, Texas, Florida, Missouri, and, of course, Georgia. One resident was hired by the hospital where he had worked as a nurse prior to medical school. Another became a full time employee at a hospital where he had done a significant amount of moonlighting while a resident. A graduate even found a lucrative job through a mutual friend from a prior non-medical career! All were very happy with the opportunity afforded them by these contacts. The important lesson for current and future residents, of course, is to play well with others no matter what the situation - you never know where that “big payoff” might come from.

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The big events this fall at Emory are the residents’ retreat and the historic Grady EPIC go-live. We had a great transition of new residents this summer and the EDs have settled back into the usual, crowded routine. Every year the students come out of medical school better prepared for day one of residency and more knowledgeable about the practical aspects of emergency medicine. Each year the trauma of losing the well-functioning third year residents and moving everyone up a class becomes easier and easier to manage.

As per Emory tradition, the entire intern class assembled on July 4th at Piedmont Park to staff the finish line medical tent for the Peachtree Road Race. Some genius decided to stage the world’s largest 10K race (55,000 registered runners, and plenty without numbers) on one of the hot days of the year in HotLanta. Fortunately this is an unparalleled opportunity to learn everything you ever needed to know about heat illness from cramps, tetany, heat exhaustion through heat stroke. The Emory interns have staffed the medical tent every year since Cory Slovis started the tradition in 1982. This year was the coolest on record in the last 15 years, and we had a relatively calm and fun day.

The last weekend in September marks another Emory tradition – this year being the 15th annual resident retreat. A tradition imported from California by faculty member Douglas Lowery-North in 1995; all three Emory ERs (Grady, Emory, Midtown – formerly Crawford Long) are staffed solely by the faculty and all 56 residents gather for education, camaraderie, reflection and team-building. This year the event was held at Lake Lanier. Saturday morning was a team competition in sports medicine – five teams of residents circulated through a course of five stations which included shoulder reductions, knee exams, helmet remove, concussion screening, joint injections and joint tapping, organized by our new faculty member Joel Moll. The evening featured a banquet with skits by the residents and a keynote address by alumni Matt Tincher. And Sunday morning was for recuperation, reflection and program evaluation. Sheryl Heron led the residents through a diversity exercise to close the program.

And now we are all energized for the EPIC go-live. Grady is moving from a paper-based system to the institution-wide EPIC EMR. The Grady ED started in March with EPIC tracking and discharge planning. On October 31 at midnight, the full system goes live for the entire hospital, including provider documentation and CPOE. On November 1 Grady will either be fully electronic, or there will be a big sucking hole where the internet used to be – we are optimistic, but you might want to back up everything you own on a spare hard drive! More news to come.

Medicine (SAEM) meeting in Phoenix received recognition for numerous organizational leadership roles. Deb Houry, MD, MPH, associate professor, vice chair for research, and director of the Center for Injury Control, has been elected president-elect of the Society for Academic Emergency Medicine. Douglas Ander, MD, associate professor and assistant dean for medical education, has been elected chair of the SAEM Academy of Clerkship Directors in Emergency Medicine (CDEM). And I have been elected to the position of president, Council of Emergency Medicine Residency Directors (CORD).

“These are three outstanding examples of national emergency medicine leadership,” says Katherine Heilpern, MD, chair of the Department of Emergency Medicine and past SAEM president. “The incredible thing about this is that three Emory faculty now sit at the helm of the premier research and education society for academic emergency medicine – SAEM, the premier organization representing all emergency medicine residency programs – CORD, and the premier organization representing all School of Medicine emergency medicine clerkships and medical student education initiatives – CDEM,” says Heilpern. “No other program in the country has so commanded its specialty at the same point in time – this is historical.”
Medical College of Georgia Emergency Medicine Residency Update

Stephen A. Shiver, M.D., Residency Director

“The Times They Are A-Changin”

There is no better way to describe graduate medical education in 2010, especially regarding resident work hour regulations. As any of us with even a hint of gray hair will recall, no such duty hour restrictions existed until 2003. Prior to that time, we had to walk uphill in the snow to get to the hospital, work our customary 30 plus hour shift, and then walk uphill back home in a sleep deprived stupor. All joking aside, most of us who trained prior to 2003 would hardly recognize the training landscape as it exists today.

The original duty hour restrictions caused a modest uproar in 2003 and now we have a set of newly proposed guidelines set to take effect in 2011. The movement towards new restrictions began in 2008 with an Institute of Medicine (IOM) report entitled “Resident Duty Hours: Enhancing Sleep, Supervision, and Safety.” Subsequently, the Accreditation Council for Graduate Medical Education (ACGME) commissioned a task force, which developed its own set of recommendations based on the IOM report. Key aspects of the current and proposed duty hour language may be seen in the accompanying table.

The main area of additional impact appears to be centered on the decision to further restrict the “maximum length of duty period,” specifically for the interns. Needless to say, these proposals have generated immense discussion in academic circles and a flurry of activity on the part of hospitals that will be affected. The Association of American Medical Colleges recently sent a letter to the ACGME requesting a delay in implementation or a “phasing in” of the implementation.

Amid all the uncertainty, it is certain that graduate medical education is in a period of intense change. Academic hospitals will no longer be able to rely on the resident work force, as they have for decades, and additional non-physician providers, such as nurse practitioners and physician assistants, will become increasingly important. Such changes are roiling post-graduate medical education. Fortunately, emergency medicine education will be affected to a much lesser extent given the nature of our work schedules. As the chaos unfolds, I look on with a keen interest and continue to thank God daily that I am an emergency physician!

And regarding all those years we spent in residency walking uphill through the snow and toiling through 100-hour weeks, don’t fret about it. Rather, embrace the fact that we were privileged enough to train as true “House Officers.” It will provide great fodder for bragging to the grandchildren one day.

We welcome any questions or comments you may have concerning our residency program. Our Program Coordinator, Courtney Buckner, may be reached at (706) 721-2613.

<table>
<thead>
<tr>
<th>ACGME 2003 Requirements</th>
<th>Proposed ACGME 2010 Requirements</th>
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<tr>
<td>Max Hrs/wk</td>
<td>80 (averaged over 4 weeks)</td>
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<td>80 (averaged over 4 weeks)</td>
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<tr>
<td>Mandatory Off Time</td>
<td>24 hours off per 7 day period (averaged over 4 weeks)</td>
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<tr>
<td>Call Frequency</td>
<td>No more than every 3rd night (on average)</td>
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<td>No more than every 3rd night (no averaging)</td>
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<tr>
<td>Max Length of Duty Period</td>
<td>• Must not exceed 24 consecutive hours.</td>
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<td>• Residents may stay up to an additional 6 hours to participate in didactics, transfer of patients, etc.</td>
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<td>• Residents in PGY-1 must not exceed 16 hours of continuous duty.</td>
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<td>• PGY-2 and higher residents may work up to 24 consecutive hours.</td>
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<td>• Residents may stay on site for an additional 4 hours for the transfer of patients, etc.</td>
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Dr. Shiver is Associate Professor of Emergency Medicine and Residency Program Director at the Medical College of Georgia. Clinical and research interests include resident education, emergency ultrasound, airway, and trauma. In addition to his emergency medicine training, he completed a general surgery residency at Wake Forest University Baptist Medical Center and is board certified by the American Board of Surgery.
Consulting Physician Interactions and Liability for Decision-making in the ED

Michael J. Bono, MD, FACEP and Peter Steckl, MD, FACEP

Patient is a 50ish female who fell injuring her right knee. She is in substantial discomfort with evidence of moderate swelling and deformity of the distal femur/knee. X-ray shows a comminuted, posterolaterally displaced, distal femur fracture. Pulses are intact distally. She is treated for pain successfully. A call is placed to the on call orthopedist who directs the physician to place the patient in a splint and he will see her in two days. The ED physician, though surprised and somewhat uncomfortable with the disposition recommendation, surmises that he has no real alternative but to follow instructions and discharge the patient. “Besides,” he thinks, “I consulted the on call expert, explained my findings and by doing so I should be covered medicolegally.”

Consultations are utilized frequently in the ED. They function in a variety of ways to improve patient care, both by facilitating continuity of care and by accessing specialist expertise to aid us in decision making. This can be invaluable in decreasing our day-to-day risk in the ED.

Conversely, consultations, when used inappropriately, can increase our risk. This typically occurs when we either depend on the consultant to do our decision making for us or allow ourselves to be pressured into making decisions against our better judgment. The misguided sense that we are shielded from legal liability through these conversations with consultants can sometimes encourage us to follow down that dangerous path of least resistance.

Physicians are not legal experts and much misinformation regarding liability abounds on both sides of these interactions. From the ED physician perspective, there is a popular misconception that a physician-patient relationship is established between patient and consultant once phone contact is achieved with the on call physician. Thus, in his mind it follows that, upon speaking with the consultant, liability for decision making is successfully transferred. Nothing could be further from the truth.

Similarly, there may be substantial misunderstanding on the part of the attending physician regarding his liability when consulted. He may believe himself to be responsible once contacted and thus take a strong stance based on what he believes are the prevailing circumstances. He may even verbally assure you that he will take responsibility for his decisions in the event of an untoward outcome. Unfortunately, history reflects that consultant memory becomes hazy once a complication occurs and the patient seeks compensation. At that time, it is common for all involved parties to scatter to their respective safe havens. Often, when confronted with the ED physician’s “just following consultant instructions” defense, the consultant may argue that the fault lies instead with a flawed, overly benign description of patient condition at the time of consultation. If pressed further he will counter with “If I had only known how serious this case was, I would have most certainly agreed to admit/come in to see the patient immediately.” As these consultant conversations are, more often than not, underdocumented it can be difficult at the time of litigation to refute these allegations. Regardless of advice received or the degree of documentation performed, let there be no doubt that you, the ED physician, retain an independent duty to skillfully and professionally care for the patient at all times while the patient is in your ED. Thus, when the dust settles you will retain most, if not all, ultimate responsibility for patient outcome.

Getting back to the original case, the ED physician, when confronted with that nagging sense of discomfort with the orthopedist’s suggested disposition should have:

1. Verified accurate communication of the x-ray finding.
2. Registered his discomfort with the consultant’s plan for disposition with explanation of his rationale for alternate plan.
3. Request the attending come in for a personal evaluation of the patient in case of inability to come to agreement over the phone.

4. If all else fails, request involvement of a neutral third party (Orthopedic department chief or ED medical director) to help arbitrate the dispute.

There is a lot of art involved in successfully interfacing with consultants in the ED. The variety of personalities and egos involved makes it difficult at times to successfully navigate. It is important for us to have a plan of action prior to discussions with our consultant colleagues and ensure that follow through occurs. In accomplishing this it can be equally essential to exhibit a sturdy backbone when necessary and stand up to ill advised attending pressure as we advocate for our patients.

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Not too long ago, the Georgia legislature amended a statute which allows for the apportionment of damages among those who may be at fault for a particular plaintiff’s claimed injuries. The interpretation and applicability of this statute has become a hotly contested issue. When put into practice, this law allows a jury to determine the amount of fault of a person that was not even named in a lawsuit. Thus, a defendant who was sued because of his or her deep pockets can now “point the finger” at other nonparties to the lawsuit who may bear some fault for the alleged injuries, and a jury can assess percentages of fault among those persons. This means that the deep-pocket defendant’s liability to pay for those damages might be reduced by whatever percentage a jury determines that the nonparty was at fault for the claimed injuries. It is readily apparent that the implications of this are incredibly beneficial to those who are consistently looked to as deep pockets, such as physicians and hospitals. However, these implications are also vehemently fought by plaintiffs and their attorneys.

Like many other states across this nation, the Georgia legislature made a policy determination that joint and several liability in tort cases was a concept of the past, and, as a matter of fairness, defendants should only be found liable for the percentage of fault that they actually caused. The legislature codified this policy determination with Senate Bill 3, which was enacted as the revised O.C.G.A. § 51-12-33 in 2005 by the Georgia General Assembly. Gone are the days where a defendant who only minimally contributed to a plaintiff’s alleged damages must pay for such damages simply because they are perceived to have deep pockets. An overview of Code section 51-12-33 is helpful to illustrate the legislature’s intent behind this statute, and further, how this statute provides a fair, reasonable, and constitutional means of apportioning fault.

O.C.G.A. § 51-12-33 establishes a framework for the fact finder in a case to follow and provides a step-by-step procedure on how to assign liability against named defendants and non-parties in a case. In subpart (a) after the trier of fact determines the plaintiffs’ percentage of fault (if any), the judge must reduce the amount of damages available to plaintiffs by that percentage. Next, subsection (b) instructs that once the judge reduces the total amount of damages to be awarded by the plaintiffs’ damages pursuant to subsection (a), if any, the fact finder “shall...apportion its award of damages among the persons who are liable according to the percentage of fault of each person. Damages apportioned by the trier of fact as provided in this Code section shall be the liability of each person against whom they are awarded, shall not be a joint liability among the persons liable, and shall not be subject to any right of contribution.” O.C.G.A. § 51-12-33(b) (emphasis supplied). Thus, the Georgia legislature states that each defendant in an action can only be liable for the percentage of fault which that defendant actually committed. Id.

Subsections (c), (d), and (f) provide further specific procedural instructions to the fact finder on how to assess “percentages of fault.” “In assessing percentages of fault, the trier of fact shall consider the fault of all persons or entities who contributed to the alleged injury or damages, regardless of whether the person or entity was, or could have been, named as a party to the suit.” O.C.G.A. § 51-12-33(c) (emphasis supplied). This section further evidences the legislature’s intent to only find named defendants liable for their actual share of damages. The fault of non-parties must be considered by the fact finder in order to determine the named defendants’ actual percentage of fault and resulting ultimate share of liability. However, the fact finder’s consideration of fault of non-parties in no way subjects a non-party to liability. This is evidenced by subsection (f) which directly states that assessments of fault of non-parties is only used in determining the percent-
age of fault of named parties, and such finding of fault “shall not subject any nonparty to liability in any action ....” O.C.G.A. § 51-12-33(f)(1)-(2).

Subsection (d) again affirmatively states that the “trier of fact shall consider” the percentages of fault of non-parties, and then goes on to specify the two scenarios where such consideration is mandatory: 1) if the plaintiff entered into a settlement agreement with a non-party or 2) if proper notice of fault of the non-party is given. The notice requirement contained in subparagraph (d)(2) eliminates the element of surprise and comport with the concept of fairness and justice by requiring the parties and the finder of fact to consider those who are actually responsible for the plaintiffs’ injuries.

One result of this manner of apportioning damages is that plaintiffs will now be faced with strategic decisions in deciding who to sue for their claimed injuries. If a plaintiff does not name every person or entity which may bear some fault for his or her claimed injuries, they run the risk of not recovering all damages awarded by a jury because the jury in that case might have allocated a large percentage of the damages to the individual not named in the lawsuit. This apparent detriment to plaintiffs is one of many attacks plaintiffs and their attorneys make on this statute. However, there is nothing to stop a plaintiff from naming each person who may bear some fault. In fact, plaintiffs are afforded the ability to name unknown parties in their original complaint.

O.C.G.A. § 9-11-10(a) provides in pertinent part that “[a] party whose name is not known may be designated by any name; and, when his true name is discovered, the pleading may be amended accordingly.” O.C.G.A. § 9-11-10 (2010). Nothing precludes plaintiffs from pursuing an unknown individual who may bear some fault for plaintiff’s claimed injuries as a John Doe defendant.

As a parallel, O.C.G.A. § 51-12-33(d)(2) sets out the requirements of a notice of fault of a non-party and can be broken down into its pertinent sections. This notice is the vehicle that a defendant can use to “point the finger” at another person. The party filing the notice must identify the nonparty in one of two ways by 1) “setting forth the nonparty’s name and last known address, or [2]) the best identification of the nonparty which is possible under the circumstances.” Id. Lastly, the party filing the notice must provide “a brief statement of the basis for believing the nonparty to be at fault.” Id. Thus, a defendant is afforded a wide ability to point the finger at others that bear fault for claimed injuries, even if the person is not completely known.

Lengthy debates and arguments exist over the constitutionality of this statute, but thus far it has not been declared unconstitutional and is not expected to be declared so. One of the fiercely debated issues was actually one of semantics in the revision of the statute. Previously, damages could only be apportioned if the plaintiff was to some degree at fault. Plaintiffs maintain that this is the case, and thus if plaintiff bears no fault, then a jury cannot consider the fault of nonparties in assessing damages. However, recently the Court of Appeals decision in Cavalier Convenience, Inc. v. Sarvis, et al., 2010 Ga. App. LEXIS 680, became the controlling authority in its analysis of the applicability of O.C.G.A. §51-12-33. The issue decided in that case may be appealed to the Georgia Supreme Court, and the case is pending while the Supreme Court of Georgia determines if it will grant certiorari and review the decision. Without reproducing the entire analysis in Cavalier Convenience, the Court held that there is no threshold requirement that the plaintiff bear some fault before a fact finder shall apportion damages in accordance with O.C.G.A § 51-12-33. Id.

The importance of a defendant exercising this right cannot be overstated. In mid-August 2010, a premises liability case was tried in a metro-Atlanta county which involved a shooting death at an apartment complex. Plaintiffs filed suit against the apartment complex owners, but did not name the criminal assailants as defendants. Of note, the judge in that case allowed the criminal assailants to be placed on the verdict form for the jury to apportion damages. That jury apportioned 95% of the damages awarded to the criminal assailants and only 5% to the named defendant apartment community. This resulted in a relatively low damages payout by the named defendant apartment community, and it is easily seen that the statute operates as it should. While there are many legal complexities behind it, the jury seemingly decided that the criminal assailants who shot and killed the plaintiff’s decedent bore the majority of the fault for that death. This is certainly a logical result.

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Financial Junk: Variable Annuities

Setu Mazumdar, MD, President and Wealth Manager, Lotus Wealth Solutions

One trend I’ve noticed over the past few years is that pharmaceutical companies are rehashing some long time antibiotics into different formulations. For example it used to be that amoxicillin was written three times a day and now we’ve got once a day dosing. The same goes with the plethora of over the counter drugs which really don’t seem to do anything except fatten the drug companies’ wallets. I’m skeptical of all this, and I think a lot of this is just plain junk that we don’t need.

Similarly there are a lot of financial products that you can live without. One of them is a variable annuity. If your advisor has sold you a variable annuity, he probably told you all the upsides, but didn’t mention the downsides. In my book variable annuities are financial junk.

What is an annuity?

Simply put, an annuity is a stream of periodic payments. If you’re a salaried physician, your income is an annuity, or if you’ve won the lottery, you have the option of a fixed annual payment for a certain number of years. You can purchase a commercial annuity from an insurance company for two purposes—so that you will not outlive your retirement assets, and to accumulate more assets. Over the past two decades variable annuities, which allow you to accumulate assets, have become very popular, with annual sales in the hundreds of billions of dollars. Essentially a variable annuity is a contract between you and an insurance company whereby you usually invest periodic sums of money during the accumulation phase (early years) and then receive a stream of payments in the payout phase (retirement years).

The pitch

Commonly sold by insurance agents and commission-based financial planners, variable annuities are marketed as tax deferred savings vehicles for retirement. Much like a mutual fund, in a variable annuity you can invest in various subaccounts which consist of different types of mutual funds, from money market funds to stock and bond funds. Unlike a mutual fund in a taxable account, dividends and earnings on the investment grow without current taxation. Also, if you sell any investments for a gain within a variable annuity contract, the gain will also be tax deferred. Much like a life insurance contract, variable annuities typically have a death benefit (usually at least equal to your investment) to beneficiaries so that essentially variable annuities are investment products with an insurance wrapper. Also, unlike most other retirement vehicles, there is no income restriction or total dollar amount restriction on variable annuities, making them seemingly attractive to high income physicians in order to stash away potentially large amounts of tax deferred savings. For example, the 2010 limitation on SEP-IRA contributions (for EPs who are independent contractors) is $49,000, whereas there is no such limitation for contributions to a variable annuity.

The reality

While we all want tax breaks, most physicians make the mistake of equating tax deferral with tax avoidance. Unlike contributions to a retirement plan, you do not receive an income tax deduction for contributions to a variable annuity. While the earnings on your investment grow tax
deferred, during the payout phase, the earnings are taxed at your highest income tax rate rather than the more favorable capital gains tax rate when you sell taxable mutual funds. Currently the highest federal income tax bracket is 35% versus 15% for capital gains. Furthermore, much like retirement plans, if you withdraw money from a variable annuity before age 59 1/2, you will have to pay income tax on the earnings as well as a 10% penalty.

Fees for VAs are even uglier, and they come in a variety of flavors. Total annual fees on VAs can easily run 2-3% or more due to annual mutual fund fees, mortality and expense charges (to cover the death benefit), and administrative fees. Compare that to a taxable mutual, the Fidelity Spartan 500 Index Fund (tracks the S&P 500 index), which has an annual expense ratio of just 0.10%.

Finally, while the guaranteed death benefit provides some insurance to your survivors, it also results in unfortunate tax consequences to your heirs. For example, if you bought a VA for $100,000 and upon your death it was worth $200,000, it is transferred to your survivors as if they had bought it for $100,000. If they subsequently sell the investment for $250,000, they are taxed at regular tax rates on $150,000 of gain. For a taxable mutual fund in a brokerage account, only $50,000 of the gain would be taxed at the more favorable capital gains rates.

**The exit**

So, what are your options if you’ve bought a variable annuity and want out? The first is to liquidate it, but this option entails three adverse consequences: you pay income tax on the earnings, you pay a 10% penalty (assuming you are under age 59 1/2), and you will pay surrender charges to the insurer of between 5-10%. Surrender charges are like commissions but they are paid upon selling. It’s almost like switching ER jobs and paying a tail for malpractice insurance. The second option is to exchange the annuity into a low load or low cost annuity with annual fees less than 1%. While this still entails surrender charges, it preserves the tax deferral. Finally, you can stop contributing to an existing VA. With this option, any future investment avoids the pitfalls of VAs. Instead invest more money into your employer sponsored retirement plan, or if you’ve maxed that out then simply invest in a taxable brokerage account. Since we’re already masters at managing medical and professional risk in our careers, doesn’t it make sense to manage investment risk? So the next time you look at your portfolio, ask yourself how much risk you really need to take, how able you are to take it, and how well you can sleep at night with it.

**The financial pain scale**

On a pain scale, I rate variable annuities an 8 out of 10. While tax deferral is enticing, the annual fees, surrender charges, potential penalties, and limited investment options make them an investment that belongs in the junk pile.

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As physicians, you and your hospitals are invariably looked at as deep pockets. Thus, this statute is invaluable in defending claims. One hypothetical situation demonstrates how effective this could be for physicians and hospitals. Suppose a patient death where the attending physician and hospital are named as defendants in a lawsuit. However, in this hypothetical the cause of the death can be traced to an EMT, an ambulance driver, or nurse who does not have the same deep pockets as a physician and a hospital. Thus, they are not named in the lawsuit. In the past, those named might have been found liable and paid the entire damages award alone. Now, however, the attending physician and the hospital can ask the court to allow a jury to assess a particular percentage of fault to the unnamed persons. If proven at trial and the jury determines that the EMT, ambulance driver, or nurse were largely at fault for the death, then instead of the deep pockets paying the entire award of damages they only pay their fair and equitable share of the damages assessed by the jury, if any.

Plaintiffs make every effort to fight apportionment, and the issues involved in this statute will continue to be hotly contested and appealed. It is obvious that plaintiffs do so in an attempt to continually stick their hands into the deep pockets of a few defendants to collect for the fault of the many who are never named as defendants. Fortunately, Georgia has moved beyond the days when a defendant who was 10% at fault paid 100% of a plaintiff’s damages simply because they have deep pockets and were the only defendant sued.
Case presentation

A 30-year-old woman, five months pregnant, presented to a clinic on an emergency basis asking to have her methamphetamine (Desoxyn 60 mg daily) prescription refilled. She explained she had been receiving this from a general practitioner who had suddenly retired for health reasons and that no back-up physician had been made available. When asked why she was taking methamphetamine, especially during pregnancy, she stated “I’ve been taking this for years for my attention deficit.” We discussed potential effects on the fetus and the delivery, but she expressed no particular concern for any adverse effects. When told we were not comfortable renewing the prescription she became angry. Because of the lack of other health resources in our area and the lack of clear information on deleterious effects on the fetus with which to establish a risk-to-benefit ratio, we agreed to renew the prescription at a much lower dose (10 mg daily), for one month only. We advised her to use this to taper her use and to discontinue it over the next two months, prior to delivery. She left obviously unhappy and did not return.

Commentary

This case, while not occurring in an EC, is similar to others the authors have been consulted on by emergency physicians. The ethical dilemma we faced centered on the conflict between respect for patient autonomy regarding her request for an addictive medication and the potential for causing harm to the fetus.

The principle of autonomy, as famously expressed by Justice Cardozo, states that “[e]very human being of adult years and sound mind has a right to determine what shall be done with his own body.” (1) This principle, the cornerstone of Western medical ethics, has been applied to decisions made by women regarding their fetuses, even when the mother’s decision would result in harm or death to the fetus. (2) It was the recommendation of the American College of Obstetrics and Gynecology that:

“Pregnant women’s autonomous decisions should be respected. Concerns about the impact of maternal decisions on fetal well-being should be discussed in the context of medical evidence and understood within the context of each woman’s broad social network, cultural beliefs, and values. In the absence of extraordinary circumstances, circumstances that, in fact, the Committee on Ethics cannot currently imagine, judicial authority should not be used to implement treatment regimens aimed at protecting the fetus, for such actions violate the pregnant woman’s authority.”

At the heart of our case was the ethical dilemma of how to balance this right to autonomous decisionmaking by mother who chose to continue methamphetamine during pregnancy despite the advice of her physicians, against the possible risks to the fetus, i.e., how should the principle of autonomy as applied to the mother have been weighed against the principle of non-maleficence (doing no harm) as applied to the fetus? To decide the proper course we needed to consider whether the mother was fully competent to make her decision, and we needed to know more about risks to the fetus from exposure to methamphetamine, withdrawal in utero or after delivery, and alternative courses of action.

Competence, strictly speaking, is a legal determination, usually based on a clinical assessment of the patient’s capacity to understand or appreciate the risks and benefits of a particular decision, as well as the risks and benefits of alternative decisions. In addition to competence, the ability to make an informed decision also requires that the decision be voluntary (we leave aside the fact that Georgia is alone among the 50 states in that it lacks a general doctrine of informed consent based in statutory or case law).

The ACOG Opinion cited earlier (2) also includes the statement that “addiction is now, according to evidence-based medicine, considered a disease – a compulsive disorder.” A compulsion is an irresistible impulse, i.e., an impulse which is not capable of being resisted. According to this
view, the mother’s decision to continue an addictive substance during pregnancy must be seen, at least in part, as the result of a compulsion and is thus not entirely voluntary. The nature of her addiction thus affected her ability to make a voluntary choice and to appreciate, where appreciate means to understand emotionally as well as intellectually, the risks and benefits of taking methamphetamine during pregnancy.

These conclusions argue against the mother’s capacity to make a fully informed decision, but what about the risks and benefits involved? We let less than fully competent patients decide whether to accept many medications and procedures when the risk-to-benefit ratio is favorable, and generally only require a level of informed consent proportional to the risk/benefit ratio involved. Thus riskier decisions usually need a more fully informed consent. What is the risk-to-benefit ratio of taking methamphetamine during pregnancy?

Methamphetamine is approved by the FDA for treatment of attention deficit disorder and the short term treatment of obesity. Our patient claimed to have a diagnosis of attention deficit hyperactivity disorder, but the actual benefits of treatment and the risk to her of not treating the condition during pregnancy were unclear. She was unemployed, and was not engaged in any high risk activities (that we were aware of) that would have compromised her safety if methamphetamine was discontinued.

Methamphetamine is known to cross the placenta freely. Regarding the use of methamphetamine during pregnancy, the manufacturer, Lundbeck, Inc., provided the following information:

Teratogenic effects: Pregnancy Category C. Methamphetamine has been shown to have teratogenic and embryocidal effects in mammals given high multiples of the human dose. There are no adequate and well-controlled studies in pregnant women. Desoxyn tablets should not be used during pregnancy unless the potential benefit justifies the potential risk to the fetus.

Nonteratogenic effects: Infants born to mothers dependent on amphetamines have an increased risk of premature delivery and low birth weight. Also, these infants may experience symptoms of withdrawal as demonstrated by dysphoria, including agitation and significant lassitude.

A recent review of methamphetamine use during pregnancy concluded that “[m]ethamphetamine use in pregnancy is complicated by more morbid maternal and neonatal outcomes when compared with the general obstetric population.” (3) In particular, methamphetamine use was associated with preterm delivery (52% vs. 17%), low Apgar scores (6% vs. 1-2%), cesarean delivery (29% vs. 23%), and neonatal mortality (4% vs. 1%).

These findings were consistent with a report showing evidence of higher rates of prematurity, intrauterine growth retardation, and smaller head circumferences in mothers who used methamphetamine during pregnancy, as well as evidence of neonatal withdrawal after delivery. (4) An imaging study comparing children born to mothers who used methamphetamine, methamphetamine and alcohol, alcohol alone, or neither during pregnancy found evidence that methamphetamine use during pregnancy was associated with damage to the brain, especially the striatum, and was associated with lower intelligence. (5) Regarding risks during delivery, Cox et al. found that, compared with mothers not abusing substances, mothers diagnosed as amphetamine abusers around the time of delivery were at greater risk for hypertensive, placental abruption, placenta previa, premature delivery, and intrauterine death. (6)

Several options were available to us. Alternatives to methamphetamine were discussed, but any medication during pregnancy poses potential risks to the fetus, and the mother was not receptive to such a discussion. We could have refused to continue methamphetamine, risking withdrawal in mother and fetus. We could have continued the dosage she was taking, 60 mg daily, which was considered high.

We considered whether methamphetamine use during pregnancy against the advice of her physicians might constitute an event requiring reporting the DFACS, but the facts that the medication had been prescribed prior to pregnancy, that the risks to the fetus were unclear, and that medical decisions affecting the fetus are generally considered the right of the mother, all argued against reporting. In addition, while there is evidence that methamphetamine use may be harmful to the development of the fetus, there is insufficient evidence from the manufacturer or the scientific literature to conclude that such use has effects severe enough to constitute abuse.

In the end we favored a middle course that attempted to reduce both the level of amphetamine exposure to the fetus by decreasing the dosage to a fraction of the previous dosage, and to reduce the risk of sudden withdrawal in mother and fetus. This choice attempted to preserve some degree of autonomous decisionmaking for the mother while reducing potential harm to the fetus. We did not consider the mother’s choice to be fully competent, based on her addiction, and our decision to act paternalistically by prescribing at a lower dose was based on her inability to make a fully autonomous, informed choice about the effects of methamphetamine use during pregnancy.

We do not know whether the mother went elsewhere to seek additional methamphetamine. The passage of a controlled substance prescription monitoring program...
Patients with first-trimester pregnancy complications may be relatively straightforward encounters during daytime hours. But most sonographers go home at 5pm, and will often times only return for ovarian or testicular torsion. These patients with first-trimester complications frequently present at night, and the length of stay can often times balloon beyond eight hours. However, bedside ultrasound by the emergency physician, especially on overnight shifts, can turn these lengthy encounters into some of your favorite patients.

Evaluation of a patient for pregnancy is a relatively straightforward exam, but can seem rather overwhelming to a new user. The uterus is an easily identified structure in the female pelvis. It represents one of the landmarks in this exam, in addition to the bladder and the vaginal stripe (see Figure 1). Note that this image is taken with the curvilinear probe, with the orientation marker towards the patient’s head. In other words, the physician is imaging the structures in the sagittal plane of the patient.

The first reliable indication on ultrasound of an intrauterine pregnancy is a yolk sac, identified within a gestational sac. Between five and six weeks the yolk sac becomes visible within the gestational sac with transvaginal ultrasound, and a few weeks later by trans-abdominal ultrasound (see Figure 2). Shortly thereafter, an embryo (termed a “fetal pole”) develops adjacent to the yolk sac. At six weeks, the fetal heart rate can be identified by ultrasound, with a normal range of 120-160 beats per minute. The fetal heart rate can be measured by using M-Mode ultrasound, affectionately know as “Mommy-Mode” in this scenario (see Figure 3). Note that most ultrasound machines have a calculation package to determine the fetal heart rate, as seen in this image. The standard in the industry is “two-beat peak-to-peak,” but some machines, especially machines used in the emergency department, will use a single-beat peak-to-peak measurement.

If the patient does not have an intrauterine pregnancy with adequate fetal heart rate, then the diagnosis of “no-definitive intrauterine pregnancy” or “NDIUP” is made. NDIUP represents an amalgam of diagnoses including the following: early intrauterine pregnancy, fetal demise, and ectopic pregnancy. The B-HCG level and the findings on the bedside ultrasound exam help to clarify the diagnosis further. If the B-HCG is less than 1000-2000 mIU/mL, then it is possible that the pregnancy is too early to be seen with trans-vaginal ultrasound. However, it is well known that ectopic pregnancy has occurred with B-HCG of less than 1000 mIU/mL, so use this information carefully.

The ultrasonic findings of an ectopic pregnancy are varied and often times subtle.
Indirect findings of an ectopic pregnancy are more commonly seen such as fluid in the cul-de-sac, fluid anterior to the uterus (see Figure 4), adnexal masses, a pseudo-gestational sac, and failure to detect an intrauterine pregnancy at any B-HCG level. Keep in mind that most ectopic pregnancies will merely have an empty uterus without other pathologic findings. Patients with an empty uterus are five times more likely to have an ectopic pregnancy that those with intrauterine findings.

Most commonly, an ectopic pregnancy implants in the fallopian tubes, but other possibilities include interstitial, ovarian, abdominal and cervical ectopic pregnancies. The interstitial ectopic pregnancies are especially problematic for the emergency physician, as the pregnancy typically develops to 10-12 weeks gestation prior to rupture, resulting in significant mortality rates for these patients. An interstitial ectopic pregnancy (often referred to as a “cornual” pregnancy) occurs in the edge of the uterus adjacent to the fallopian tubes. This location provides the developing embryo some myometrium for additional growth, but the pregnancy cannot sustain in this location. The interstitial ectopic pregnancy often ruptures without warning, and these patients may not make it to the hospital. The key finding on the ultrasound evaluation of the interstitial ectopic pregnancy is the endo-myometrial mantle. If the developing fetus within the gestational sac does not have 8mm or more of myometrium surrounding the sac, then it is concerning for an interstitial ectopic pregnancy (see Figure 5).

Incorporation of these principles of early pregnancy can improve patient safety, improve throughput in your emergency department, and reduce the length-of-stay for your patients. By carefully applying these principles, you will find that first-trimester pregnancy complaints will quickly become some of your favorite patients in the emergency department.

similar to SB 418 introduced into the Georgia General Assembly this past session would go a long way to help in reducing doctor-shopping for controlled substances, but this is material for another column.

We invite comments from readers that might shed more light on managing similar situations.

References


Mr. W. is a 19-year-old who presented to the ED complaining of palpitations. He has no significant past medical history, takes no medications, and states that he was in his usual state of health until approximately four hours ago. While watching television, he developed a fluttering sensation in his chest, which has persisted. He denied any significant chest pain, shortness of breath, dizziness, or syncope. There was no associated nausea/vomiting, diaphoresis, or radiation.

On arrival to the ED, the patient was noted to be hemodynamically stable and in no acute distress. Vital signs were significant for HR of 190 and BP of 110/60. Cardiovascular and pulmonary examination revealed a regular, markedly tachycardic rhythm and clear lungs bilaterally. He was immediately placed on a monitor and had intravenous access established. An initial EKG was obtained which showed a narrow complex, regular tachycardia without any obvious p waves. A diagnosis of supraventricular tachycardia (SVT) was made. The patient was subsequently treated with adenosine 6 mg IV with resolution of the tachycardia. EKG following administration of adenosine is shown:

**Discussion:**
The EKG shows a sinus tachycardia with a rate of 83. The classic findings suggestive of Wolff-Parkinson-White Syndrome (WPW) are present:

- Shortened PR interval
- Widened QRS complex
- Delta wave

“Ventricular Pre-excitation” occurs secondary to abnormal connections between the atria and the ventricles. These connections allow electrical activity to be transmitted outside of the normal pathway of the AV node. WPW is the most commonly
encountered of the pre-excitation syndromes, affecting up to 0.2% of the general population.

The most common dysrhythmias encountered in the setting of WPW are termed “Circus Movement Tachycardias.” There are basically two different scenarios: (1) The re-entry circuit conducts in the normal direction, i.e. down the AV Node and up the bypass tract (2) The re-entry circuit conducts in the abnormal direction, i.e. up the AV node and down the bypass tract. Scenarios number 1 and 2 are also referred to as “Orthodromic Conduction” and “Antidromic Conduction,” respectively. An important point is that orthodromic conduction produces a narrow QRS complex whereas antidromic conduction produces a wide QRS complex. Given that the patient in this illustrative case presented with a narrow complex tachycardia, we can assume that the conduction was orthodromic. Of note, orthodromic conduction is estimated to be 10-15 times more common than antidromic conduction.

Adenosine was successfully used in this case and is an excellent choice for stable patients with narrow complex tachycardia presumed to be SVT. However, clinicians must exercise caution in the setting of wide complex tachycardia. The main differential in such a case is ventricular tachycardia and SVT with aberrant conduction. Antidromic conduction in the setting of WPW is one type of SVT with aberrant conduction and adenosine has the potential to be harmful in such situations. Thus, in general, adenosine or other AV nodal blocking agents such as calcium channel blockers and beta-blockers should not be utilized in cases of undifferentiated wide complex tachycardia. Other options, such as cardioversion or certain antiarrythmics agents such as procainamide, may be considered. In such complex cases, early cardiology consultation should also be obtained.

Of note, it was not possible to determine the presence of a bypass tract on the original EKG, but WPW became obvious on the second EKG. Our patient remained stable following chemical cardioversion and his palpitations resolved. The case was discussed with Cardiology and expeditious outpatient follow-up arranged. Clinicians should possess a general understanding of the pathophysiology of WPW, be able to recognize the associated EKG findings, and be aware of the treatment options.
The AVID Airway System

Richard Schwartz, MD, FACEP

Editor’s Note: This is the first in a series dealing with Emergency Airway Management. Future installments will deal with RSI, management of difficult airway, cricothyroidotomy, rescue devices, and other airway devices and systems.

The AVID Airway System is a new video intubation system developed in Georgia.

Endotracheal intubation and airway management remains one of the most important skills for the Emergency Medicine physician. Due to advances in technology and variations in airway anatomy, there has been a shift away from the use of conventional Macintosh and Miller laryngoscopes towards video laryngoscopes. Although multiple devices have emerged, each device has its own advantages and disadvantages, and no single device is suitable for all airways.

Video laryngoscopes represent a major improvement in the ability to visualize the larynx and vocal cords without a direct line of sight to the vocal cords; subsequently, the intubation must also occur “around a corner.” This occasionally leads to the case of ability to visualize but not intubate. Additionally, there are conditions such as severe angioedema where an oral approach for intubation is not possible and nasal intubation must be utilized to secure the airway.

To address these difficulties AI Medical Devices Inc. has developed a unique device system (Advanced Video Intubation Device or AVID Airway System™) that consists of a modular handle with an integrated LCD screen and three working length modules that allow for great flexibility in endotracheal intubation and airway management.

FlexBlade

The FlexBlade is an articulating video-laryngoscope with an endotracheal tube guiding channel. This blade possesses the advantages of video laryngoscopy but also overcomes the problem of intubation “around a corner” by real time articulation of the endotracheal tube within the guide channel. This device offers a very simple solution to both the routine and difficult airway in both the pre-hospital and emergency department setting.

Oral Rigid and Flexing Laryngoscope (RIFL™)

The Oral Rigid and Flexing Laryngoscope (RIFL™) Stylet is an articulating stylet-based video laryngoscope designed for oral use. This device can be utilized with a conventional Macintosh laryngoscope or with the proprietary RIFL Blade™ and has been proven effective for both routine and difficult airways. It can also be utilized for intubation through a variety of supraglottic devices.

Nasal RIFL™ Stylet

The Nasal RIFL™ Stylet has flexible section between the articulating and rigid sections, allowing for easy nasal intubation. This device offers distinct advantages over the use of flexible fiberoptic bronchoscopes such as ease of set up, real time endotracheal tube manipulation, and superior durability and decreased maintenance costs. Also, the long flexible section allows for use through supraglottic devices such as the intubating LMA.

The AVID Airway System™ was introduced at the Scientific Assembly in Las Vegas this year. If you would like more information you can call AI Medical Devices Inc. at 1-800-219-9561 or go to www.aimedicaldevices.com.
Orthopedic Pearls and Pitfalls: Rugby Jersey Injury

Carl Menckhoff, MD, FACEP

25-year-old rugby player c/o finger pain after a tackle.

FDP rupture (“Rugby jersey” injury)

- X-rays often normal, can’t make complete fist
- Ring finger 75% of the time
- All should be considered surgical candidates
  - Avulsed tendon can withdraw all the way to the palm (and anywhere in between)
  - FDP is difficult to repair if tendon retracts into palm for longer than 7 days because tendon becomes swollen
- Splint and follow up within 7 days
  - Splint in 30 degrees of wrist flexion, and 70 degrees of MCP flexion, and 30-45 degrees of IP flexion

Exam of the Flexor Digitorum Profundus & Superficialis tendons (FDP & FDS)

<table>
<thead>
<tr>
<th>FDS</th>
<th>FDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hold all other fingers in extension</td>
<td>Hold PIPJ in extension</td>
</tr>
<tr>
<td>Flex PIPJ of finger to be tested</td>
<td>Flex DIPJ</td>
</tr>
</tbody>
</table>

Dr. Menckhoff was on the faculty in the Department of Emergency Medicine at MCG and served as the Secretary of GCEP prior to relocating to Texas two years ago. You may find his full presentation on Orthopedic Pearls and Pitfalls on the GCEP website.
Focus On: The ED Management of Pediatric Apparent Life Threatening Events

Oren Tavor, MD, and Sanjay Mehta, MD

Learning Objectives

After reading this article, the physician should be able to:

• Have a safe, measured, and consistent approach to the child with suspected apparent life threatening events (ALTE).
• Decide which investigations should be considered for patients presenting with ALTE.
• Identify as early as possible during an emergency department visit which ALTE patients should be selected for admission versus discharge.

Sudden infant death syndrome (SIDS) is the most common cause of mortality for babies between one and 12 months of life. Trying to identify which infants presenting with apparent life threatening events (ALTE) may go on to experience this horrible outcome is a challenge for the emergency physician. This article will highlight some steps to make the choice of investigative options and the disposition decision-making process a bit easier.

Definition

While arguments have been raised recently as to the relevance of ALTE in predicting SIDS, the importance of this controversy remains low for the emergency physician. The fact remains that, until proven otherwise, infants presenting to the emergency department with an ALTE might be experiencing the only event that may enable the health care system to identify and prevent impending SIDS. The term ALTE refers to a condition in which an acute, unexpected event that frightens the caregiver occurs, usually in an infant. The event includes changes in the breathing pattern or color (e.g., pallor or cyanosis), with or without a change in muscle tone. With this definition being so broad, subjective, and all encompassing, emergency physicians face challenges even in identifying these patients.

History

During their first year of life, an estimated 1% of babies will experience an ALTE. The vast majority of these patients present to the emergency department with anxious and frightened caregivers. The emergency physician’s task is to identify patients with the highest risk of recurrence or mortality. This is best defined with a thorough history of the event, previous medical history, risk assessment for SIDS, and family history. Investing the time required for a thorough investigation of the history is clearly worthwhile. The description of the event will influence decision making far more than any other part of the physician-patient interaction (i.e., lab tests, imaging, etc.).

It takes time to establish a good sense of the event. The questions in the history are aimed at determining if a significant apneic episode occurred. Eliciting a detailed description of the event should include these questions:

1. Where did the event take place?
2. How long did it last?
3. If present, did a home monitor go off?
4. Was the infant awake or asleep previously?
5. Was the infant breathing?
6. Was there a color change, and if so, what?
7. Was there a change in tone?
8. What resuscitation efforts were made?
9. When was the last feeding?
10. Did the infant vomit?

When investigating the infant’s history, these questions should be included:

1. Was the infant’s birth premature, and if so, what is the infant’s corrected age?
2. Are there any predisposing medical conditions?
3. Does he suffer from gastroesophageal reflux disease (GERD), and if so, how was it diagnosed?

4. Were there previous similar events?

5. Are there any current illnesses?

The history should also include a detailed assessment of risk factors for SIDS:

1. What was the room temperature?
2. What position was the baby in during the event?
3. How firm is the mattress?
4. Is there any bedsharing with others?
5. Were there soft blankets, pillows, or stuffed toy animals in bed?
6. Did the mother smoke during pregnancy or after?
7. Does the infant use a pacifier?
8. What is the infant’s access to toxins or medications?

Lastly, one should address family history that could be related to SIDS:

1. Did any of the infant’s siblings die an unexplained death in the first year of life?
2. Were there any other deaths in the family at a young age?
3. Are there any metabolic, neurologic, or cardiac conditions that family members suffer from?
4. Is there a risk for nonaccidental injury or Munchausen’s syndrome by proxy?

After completing the history, clinicians in most cases already may have a good idea of the severity of the event. When the history is suggestive of an infant who was physiologically compromised (i.e., significant apnea has occurred), admission for monitoring is warranted.

**Physical Examination**

A child who presents to the emergency department with a significant physical finding would not pose a great disposition dilemma. However, in most patients the physical exam will be unremarkable. Clues for an underlying condition masquerading as apnea should be considered on examination. These include:

1. Dysmorphic features.
2. Maxillofacial anomalies.
3. Signs of viral or bacterial infection.
4. Respiratory distress suggesting lung or metabolic conditions.

5. Cardiovascular assessment to reveal heart failure, shock, or cardiac anomalies.

6. Neurological impairment suggestive of neurological or electrolyte imbalance.

**Investigations**

Much debate surrounds the extent of investigations to be performed for a child with ALTE and whether there should be a standard work-up. Some patients may not require any investigations because of the low probability of a life-threatening condition, as suggested by a good history and physical exam.2

When the patient’s history and physical examination are insufficient to dismiss the possibility of ALTE, the likelihood of admission rises. Therefore, investigations are helpful in elucidating underlying conditions that may explain the ALTE, but not to rule out an ALTE.

The emergency department work-up can be separated based on suspicion of particular etiologies.

An infant with:

1. Viral symptoms may benefit from a nasopharyngeal swab for viruses.
2. Suspected bacterial infection may benefit from a partial or full septic work-up (although a very small proportion of these patients will have positive findings, and are often younger than 60 days3, 4).
3. Suspected seizure may benefit from an extended electrolyte assessment (i.e., sodium, chloride, potassium, ionized calcium, magnesium, and phosphate).
4. Severe cough may benefit from an Auger suction for pertussis.
5. Suspected respiratory or cardiac involvement may warrant a chest radiograph or electrocardiogram.
6. Tachypnea, altered level of consciousness, failure to thrive, or recurrent vomiting may require investigations for an inborn error of metabolism.
7. Potential neurological etiology may benefit from neuroimaging or electroencephalogram.
8. Suspected intentional or unintentional poisoning may warrant a toxic screen and/or skeletal survey.

**GERD**

The connection between GERD and ALTE is long debated. It deserves separate discussion, as up to 25% of ALTE admissions can be attributed to it. Whether GERD
can lead to SIDS is not yet determined, but the current level of evidence suggests this to be unlikely. An infant with a history of recurrent vomiting does not yet qualify for the diagnosis of GERD. Nevertheless, if a history of apnea immediately following vomiting or aspiration is suspected, the diagnosis of GERD is not critical for revealing the cause of the apnea. The diagnosis of GERD is more important in predicting the likelihood of recurrence or allowing targeting of potential therapies.

The probability of SIDS following an aspiration, regardless of GERD, is believed by many clinicians to be extremely low. The evidence for that assumption remains vague because of nonspecific findings on autopsy, both for laryngospasm induced by aspiration and for SIDS, itself. An infant who presents to the emergency department with a history of choking accompanied by facial flushing or breath holding, immediately after or during vomiting, has a high likelihood of aspiration-induced laryngospasm. No physiological compromise seems to have occurred. Therefore, in an otherwise healthy infant, discharge of such infants would appear reasonable. Reassuring the caregivers and ensuring appropriate follow-up is the appropriate and usual disposition for those patients.

**Summary**

ALTE occurs in up to 1% of infants. The emergency physician’s role in dealing with this entity is challenging, yet critical. While discharging a patient who may have experienced significant apnea is to be avoided, many of the patients who present to the emergency department with an ALTE likely did not experience apnea. Distinguishing those two populations is achieved mainly by taking a detailed history, followed by a thorough physical examination. At this point, most physicians should be able to disposition patients. Investigations that subsequently occur usually serve more to initiate an inpatient work-up for diagnosis and less as part of the decision-making analysis for the disposition of the patient.

**References**


**Disclosures**

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Oconee Regional Medical Center (ORMC) is located in Milledgeville, the antebellum capital of Georgia. It is near the geographic center of the state and borders on beautiful Lake Sinclair and Lake Oconee. Milledgeville is also home to Georgia College and State University. ORMC provides advanced health care technologies to a service area of 90,000 residents living in Milledgeville and the seven surrounding counties.

ORMC offers a wide range of medical services—from a state of the art cancer treatment facility and wound care center—to advanced imaging technologies that include digital mammography and high-speed CT scanning, same-day surgery, health education programs and more. For inpatient treatment, the hospital is licensed for 140 acute care beds, which include 12 ICU beds, and an additional 15 beds in its Skilled Nursing Unit, which serves patients requiring extended care.

During the past decade significant upgrades to the facility have included the addition of an education center, a medical/surgical unit, cardiopulmonary services, a post-surgical unit, a same day surgery, ambulatory care, outpatient lab, “A Place for Women,” the hospital’s maternity and obstetrics care unit, and a hospitalist program.

The ORMC Emergency Department has a volume of over 30,000 patients per year with an admission rate of ~15%. Almost 90% (yes, almost 90%) of hospital patients are admitted through the Emergency Department.

We have excellent radiology and lab backup and a state-of-the-art PACS system with sophisticated methods to track discrepancies and to ensure appropriate follow up. Our dedication to the continuous improvement of the ED by limiting ED holds and minimizing “left without treatments” (LWOTs) led us several years ago to employ mid-level providers to assist the physicians—with excellent results.

Our Hospital administration has worked with us to make significant improvements and to address issues rapidly as they arise—most recently by forming a task force to address problems with an unexpected and significant psychiatric patient volume increase when Central State Hospital precipitously closed to these types of admissions.

Current projects include the institution of the “Quick registration with 3-5 minute triage” and bedside registration in order to further reduce our “door-to-doc” times, a very comprehensive ED orientation for all new physicians and mid-levels, updated protocols to promote expeditious patient care and minimize turnaround times, extensive education to improve customer service, and much, much more.

The ORMC ED was recently thrilled to be named in a major national survey of hospital emergency departments as being in the top 5% based on Medicare data tracking outcomes of patients admitted for 11 major diagnoses through emergency departments nationally from 2006 through 2008.

The staff of ORMC is dedicated to providing high quality and compassionate emergency care to the middle Georgia community.
“Patient satisfaction” has become the latest catchphrase throughout hospital emergency departments. Many hospital administrators are under pressure from hospital boards to improve patient satisfaction scores and CMS has indicated that patient satisfaction scores will impact reimbursement to hospitals. Given that patient satisfaction is poised to become an integral part of health care delivery in this country, we decided to look at some of the potential drawbacks to relying on patient satisfaction scores.

We chose to review the data collection and reporting methods of Press Ganey Associates, Inc. Press Ganey partners with roughly 40% of hospitals in the U.S. – including more than 10,000 health care facilities – to measure and improve quality of care. Part of Press Ganey’s business model includes sending surveys to patients who have visited a hospital asking them about their impressions of the facilities, the staff, and the physicians. This data is then analyzed and forwarded to participating hospitals. Hospitals use this data to judge not only the quality of care being provided in different hospital departments, but also to compare their hospital to other hospitals within the Press Ganey database. In some cases, hospitals even attempt to compare survey data for specific physicians. Even though the surveys are purported to improve the quality of patient care, there are several things you may not know about the survey calculations and their effects upon patient care.

The sample size may create unacceptable margins of error – but the survey results don’t tell you that.

Press Ganey has stated that a minimum of 30 survey responses is necessary to draw meaningful conclusions from the data it receives and that it will not stand behind statistical analysis when less than 30 responses are received. Despite this statement, comparative data still gets published about hospital departments and about individual physicians when less than 30 responses are received. For example, Dr. Sullivan’s hospital receives approximately 8-10 Press Ganey survey responses per month. Even with this small sample size, Dr. Sullivan’s hospital still receives monthly reports from Press Ganey analyzing the data. During one month, Dr. Sullivan’s emergency department ranked in the first percentile within Press Ganey databases. Two months later, his emergency department ranked in the 99th percentile. How did they do it? Actually, any actions their group took probably made little difference in the subsequent survey data. By the time they were able to take action, some of the data had already been collected for the subsequent month – in which his group received accolades for their excellent satisfaction scores. Which percentiles were representative of their emergency department’s performance? Probably neither. The small sample sizes just created unreliable data upon which the conclusions were based.

The time you spend with critically ill patients may make another department’s satisfaction scores better...while making your’s worse.

Many studies have shown that the time a patient spends waiting for medical care is inversely proportional to that patient’s satisfaction with the visit. Suppose that a patient is brought by ambulance in respiratory distress. After nebulizer treatment and BiPAP fail, you have to intubate the patient. Then the patient’s blood pressure drops. You start inotropic medications, initiate antibiotics, and actively manage the ventilator settings. After an hour and a half of work, the patient is stabilized. You then spend another 30 minutes discussing the patient’s condition with family members, contacting consultants, and writing admission orders. How will the outstanding medical care that you provided affect your satisfaction scores? If anything, your satisfaction scores may drop due to all of the patients who graded you lower because they had an excessive wait while you were busy saving a life.
Patients admitted to the hospital and patients transferred to other hospitals do not receive Press Ganey emergency department satisfaction surveys. While some questions about the emergency department may be included on inpatient surveys, the answers to those questions count toward the inpatient satisfaction scores, not the emergency department satisfaction scores.

The pressures to improve emergency department satisfaction scores may create a significant dilemma with emergency department staff. An online survey of 717 respondents performed by Emergency Physician’s Monthly on its medical blog “WhiteCoat’s Call Room” showed that more than 16% of medical professionals had their employment threatened by low patient satisfaction scores. In addition, 27% of respondents stated that their income was in some way tied to satisfaction scores.

When faced with a decision between improving satisfaction scores and unemployment, a clear – and potentially deadly – conflict of interest occurs. Should emergency physicians and nurses provide appropriate yet time-consuming medical care to high acuity patients or should they provide a minimal amount of medical care to the sickest patients so that they can focus more attention on patients who will be completing satisfaction surveys? Sometimes, especially in single-coverage emergency departments where staffing has been cut due to budget constraints, “doing both” may not be an option.

**Patient satisfaction data is not random.**

Did you know that Hillary Clinton won the Democratic presidential nomination in 2008? Really, she did. A random sample of voters from Pennsylvania showed that she was the clear winner. Failing to fully randomize data can adversely impact even a large survey’s conclusions to the point that those conclusions become invalid. As in the election example used above, Press Ganey’s data are not random and are not representative of an emergency department’s patient population.

We already know that Press Ganey’s satisfaction surveys exclude admitted and transferred patients, which creates a significant bias toward low acuity patients. Emergency departments with a large percentage of admits may have lower satisfaction scores solely due to the decreased survey sample pool and to the increasing wait times encountered by low acuity patients while staff is trying to stabilize higher acuity patients.

Another source of non-randomization in Press Ganey’s patient satisfaction data is that patients who leave without being seen will not receive a satisfaction survey. In addition to decreasing the randomness of the sample size, such a bias could create an incentive for staff to encourage unhappy patients in waiting rooms with non-urgent complaints to leave the hospital emergency department without treatment.

Yet another bias against random samples in Press Ganey’s patient satisfaction surveys is that by default, patients can only receive a satisfaction survey every 90 days. While the intent of this limitation is evident – to keep “frequent flyers” from skewing data – the effect is to decrease the randomness of the data...and to further limit the data’s reliability.

Press Ganey has stated that “external validity requires that you only draw conclusions from the patient population that you are sampling.” However, the reports that Press Ganey generates draw conclusions from a sample of non-admitted patients who have not been treated in 90 days and who have actually been seen by a physician in the emergency department. Instead of limiting the conclusions to this subset of patients, Press Ganey applies its satisfaction scores to “emergency department” as a whole a group much larger and more diverse than the patient population being sampled.

The lack of randomization in Press Ganey data samples was recently highlighted during a press release regarding emergency department wait times. Press Ganey reported that its 2009 data showed Utah emergency department patients had an average length of stay of 8 hours and 17 minutes, noting that the wait was the worst in the country and calling the wait “staggering.”

Utah ACEP then investigated the claims and discovered that Press Ganey had limited access to data from 65% of all the emergency department visits in Utah. When Utah ACEP reviewed data on 80% of emergency department patients from 2009, it found that the average length of stay in Utah was three hours and 29 minutes – far shorter than Press Ganey’s allegations, and actually ranking Utah in the top 15 states for emergency department throughput.

“Response errors” may dramatically affect survey results.

According to the book, Asking Questions: The Definitive Guide to Questionnaire Design (Jossey-Bass, 2004), there are four basic factors related to response error: memory, knowledge, motivation, and communication. Each of these has a significant effect on patient satisfaction survey data.

For example, the time lag between a patient’s emergency department visit and the receipt of a survey in the mail may affect a patient’s memory of occurrences in the emergency department.

Patients who are asked to rate the medical skill and quality of physicians or nurses, who are asked to assess the skill with which phlebotomists take blood, or who judge whether medical personnel “took their problem seriously” often have little knowledge upon which to base their assertions.

Patients who are unhappy due to an excessive wait or because they did not receive requested medications may be motivated to show their unhappiness by grading all
aspects of their care low, even when most aspects of the care they received were exceptional. Dr. Eric Armbrecht, a statistician and assistant professor for St. Louis University’s Center for Outcomes Research echoes this concern, noting that many survey respondents will simply mark the same response throughout all the answers to a survey. He stated that, in general, those who respond to surveys are either very satisfied or are very unsatisfied and want to make a point. These responses tend to cause a “bimodal distribution” with peaks at either end of the scale.

When the problem of secondary motivation and response error was discussed with Press Ganey representatives, they acknowledged that they “heard about this frequently,” but that their surveys would not allow patients with readily apparent ulterior motives (such as those patients seeking narcotics prescriptions) to be excluded from data since it could lead to “cherry picking” patients and could impact the quality of the Press Ganey database. While these sources of error are not unique to patient satisfaction surveys, it is important to recognize the impact that they may have upon the results of patient satisfaction data.

Catering to patient satisfaction scores increases health care costs.

Another question in the survey asked respondents to rate on a 1-10 scale how patient satisfaction scoring affects the amount of testing that they perform. Forty one percent of medical professionals decreased the amount of testing performed while 59% increased the amount of testing they performed due to the effect of patient satisfaction surveys. From a numerical standpoint, with “1” representing a “maximum decrease” in testing performed and “10” representing a “maximum increase” in the amount of testing performed due to effects of survey data, the change in amount of testing performed due to satisfaction data averaged a score of 6.3 – a mild increase. The increase in testing that survey results tend to cause may also set up a conflict of interest with hospitals that strive to improve patient satisfaction data but that also stand to benefit financially from the increased testing that results from attempting to improve satisfaction scores.

The threat of low survey scores frequently results in inappropriate medical care – and sometimes causes poor patient outcomes.

In the survey, 48% of health care providers reported altering medical treatment due to the potential for a negative report on a patient satisfaction survey, with 10% of those who altered treatment making changes were medically unnecessary 100% of the time. Examples of medically unnecessary treatment provided to improve satisfaction scores included performing unnecessary testing, prescribing medications that were not indicated, admitting patients to hospitals when they did not need hospital admission and writing work excuses that were not warranted. More importantly, 14% of survey respondents stated that they were aware of adverse patient outcomes that resulted from treatment rendered solely due to a concern with patient satisfaction surveys. These adverse outcomes included allergic reactions to unnecessary medications, resistant infections and clostridium difficile colitis from unnecessary antibiotic prescriptions, kidney damage from contrast dye, and medication overdoses.

**Hospital liability could increase from the effects of patient satisfaction scores.**

Pressuring medical providers to improve satisfaction scores to the point that they provide medically unnecessary testing or that they admit patients to hospitals inappropriately may become a source of liability for hospitals. If adverse patient outcomes due to unnecessary medical treatment can be tied to pressures that hospitals place on the medical staff to improve patient satisfaction scores, civil liability to the hospital could result. Knowledgeable lawyers could allege that hospitals or physicians cut corners with critically ill patients in order focus attention on patients who will be receiving satisfaction surveys. In addition, as Medicare payments are scrutinized more closely, billing Medicare for treatments or hospitalizations that are provided solely from pressure to improve patient satisfaction scores will likely receive increased attention from Medicare RAC auditors. A pattern of such overutilization, if able to be substantiated, may be sufficient to warrant sanctions against a hospital. Health care providers who are able to prove how pressures to improve patient satisfaction scores unjustifiably increased costs to Medicare or Medicaid may choose to file “whistleblower” lawsuits in hopes of earning up to 30% of the recovered overpayments hospitals receive. Any perceived retaliation against providers who file these qui tam lawsuits subjects hospitals to even further liability under whistleblower statutes.

**Conclusion.**

More than six in seven of the health care professionals responding to the survey believed that patients used the threat of negative satisfaction scores to obtain inappropriate care. While it is unlikely that 86% of patients are obtaining inappropriate medical care, the health care providers’ negative perceptions of how patients are using satisfaction surveys show the significant detriment that satisfaction surveys have had on the physician/patient relationship. Overemphasis on satisfaction data, especially when that data may be unreliable, is likely to increase the likelihood of inappropriate medical care, increase the costs of health care, demoralize health care professionals, and increase liability for hospitals in the future.
How many patient satisfaction surveys are necessary to obtain a statistically reliable look at the performance of hospitals and health care providers? Remember in the first part of our article Press Ganey states that only 30 survey responses are needed to draw meaningful conclusions, although they prefer to have at least 50 responses before analyzing the data. We asked Dr. Eric Armbrecht, a statistician and assistant professor for St. Louis University’s Center for Outcomes Research and Dana Oliver, a biostatistician at St. Louis University if they would help us dig deeper into the world of statistics.

Dr. Armbrecht suggested that analyzing only 30-50 responses would lead to unacceptably wide confidence intervals and would substantially limit the generalizability and use of the data obtained, regardless of whether 3,000 or 10,000 patients were surveyed. Dr. Armbrecht explained that low response rates could create confidence intervals as wide as 50%, which could be similar to just flipping a coin to determine whether the data is representative of an entire population’s perceptions. Breaking down those same 30-50 responses in an attempt to analyze satisfaction scores of individual physicians would create even less reliable results as the number of responses per physician would be even less. Ms. Oliver also disagreed with Press Ganey’s assertion that 30 or 50 responses would result in statistically sound data, noting that those numbers could be “arbitrarily chosen” by some survey methodologists.

How many responses are necessary in order to have statistically reliable data? The answer depends upon the size of the sample population. Assuming a margin of error of 4% (which is double the margin of error that Press Ganey would like to use) and assuming a statistical standard 95% confidence interval, the minimum sample sizes that Dr. Armbrecht recommended for populations of 1000, 2500, 5000, and 7500 would be 375, 484, 536, and 556 respectively. He noted how the response rate tends to flatten out with larger sample sizes and cautioned that these response rates would only apply to “yes/no” questions (such as whether or not a doctor was “very good”). In order to measure the validity of rating scales (such as those from 1-5), the calculations become somewhat more difficult and are dependent upon the standard deviation in the sample population. Dr. Armbrecht gave an example that using a 1-5 scale with a standard deviation of 0.7 and a margin of error of 10% (which is five times higher than Press Ganey seeks), 188 responses would be needed in order to reliably estimate the responses from the general population. Dr. Armbrecht recommended online statistical calculators such as those available at Creative Research Systems (www.surveystem.com/sscalc.htm) to help determine the statistical significance of most data.

Aside from low response rates, Dr. Armbrecht and Ms. Oliver described additional problems that can occur when using a 1-5 scale in satisfaction surveys.

If hospital administrators seek to be at or above the 90th percentile in satisfaction scores, asking patients to grade performance on a 1-5 scale essentially creates a system with one passing grade and four failing grades. If patients are not aware that a score of “4” is a failing grade, the data that they provide may be misinterpreted when being analyzed. In addition, patients may perceive a small relative difference between a grade of “4” and “5” on a survey, but may perceive a larger relative difference between a “3” and a “4” on the same survey, creating a system in which they grade “so-so” care with the same score as “just less than perfect” care. Finally, with small sample sizes, one unhappy customer can turn many “passing” grades into failing grades. Four patient scores of “perfect” fives can be brought down to “failing” fours by one extremely unhappy patient who grades a provider or hospital with scores of all zero.
Our experts noted that a simple way to avoid these analytical problems was to create a dichotomous scoring system with “yes-no” questions. For example, “Did your care meet your expectations?”

**Clarifying Terms**

Press Ganey’s literature contains several other statistical terms that our experts felt it was important to understand when analyzing the utility of patient satisfaction scores.

The “standard error of the mean” is the standard deviation of a sample population’s mean. Ms. Oliver noted that before performing any type of statistical testing, it is a good idea to first plot a histogram of multiple sample responses to determine whether survey data will be distributed in a normal bell curve pattern. If the survey responses are not distributed in a bell curve pattern, conclusions cannot be drawn from the data – unless the variability of the data is low.

Press Ganey literature relies on the “central limit theorem” in justifying a reliance upon sample sizes as low as thirty. Ms. Oliver explained that the central limit theorem holds that the mean and median scores from very large survey samples tend to form a typical bell curve. In most cases, the central limit theorem only applies if there is a similar distribution of variables in each survey. Because patient satisfaction survey samples from specific hospitals are generally not large and because the surveys do not always have a similar distribution of variables, the central limit theorem probably would not apply to satisfaction survey data.

Analysis of survey results depends in part on the “margin of error” of the survey data. Margin of error is used to express the confidence with which survey responses can be relied upon when an entire survey population is incompletely sampled. For example, suppose that five percent of a sample population is surveyed and one question has a mean score of 50. If the margin of error for the question is 30, then the actual value for the response in the sample population could be anywhere between 20 and 80 (the mean score of 50 plus or minus 30). Dr. Armbrecht stated that a good estimate of a margin of error is given by the formula $\frac{1}{\sqrt{n}}$ (Niles, 2006). In other words, for a sample size of 100, the margin of error would be roughly 10% and for a sample size of 9, the margin of error would be roughly 33%. Achieving Press Ganey’s goal margin of error of 2% or less would require a sample size of approximately 2500.

**Understanding Survey Limitations**

So are satisfaction surveys a useful tool for assessing the quality of medical care? Dr. Armbrecht compared analysis of survey data to sampling a pot of soup.

If you want to see how good the soup in a pot tastes, first the ingredients in the pot must be well mixed. The “mixing” of the soup is analogous to obtaining completely random data from a sample population. If you only mix the top layers of the pot, you might not get the beans and pasta on the bottom of the pot, so your sample taste will not be representative of the true flavor of the soup. Similarly, failure to completely randomize data samples by excluding certain segments in a population (such as admitted, transferred or LWOBS patients) significantly increases the likelihood that the results will be inaccurate. If the soup is fully mixed, but you only taste a drop or two of soup, you probably won’t get a good flavor for the soup, either.

Similarly, small sample sizes from a large population are likely to provide misleading data.
Once an appropriate sample is taken, surveys can only be used to determine whether there has been a change in the sample population. Using the soup analogy, you tweak the recipe by adding or changing ingredients and take another sample to see if people like the new recipe better. Surveys can only be used to measure how the soup in a single pot is changing over time. Sometimes survey data can be misused, though. For example, sampling the soup in two different pots can’t tell you whether one soup is better than another soup or whether one ingredient is better than the same ingredient in a different pot. Satisfaction survey statistics likewise should not be used to compare and rank different hospitals or different health care providers. Dr. Armbrecht noted that a 90% ranking at one hospital cannot be deemed better or worse than a 70% ranking at a different hospital. The demographics and variance in patient populations being sampled don’t allow such a comparison as it is more likely that variables independent of the services provided (such as patient literacy, lack of forwarding address, language barriers, payment issues, and population homogeneity) will have an effect on the data being sampled. In other words, taking the staff from a hospital with 90% satisfaction score and placing them into a different hospital would probably not create a 90% satisfaction score in the new hospital. The only information that satisfaction surveys can provide is a determination whether a specific hospital or a specific provider at a hospital is getting better or worse over time. In order for even that determination to be made, the sample sizes must be large enough to be statistically significant.

What are the takeaway points about analysis of satisfaction survey data?

First, small sample sizes can lead to significantly unreliable data. In our first article, we showed how small sample sizes resulted in a 99% change in a hospital’s percentile rank in just two months. Simply put, small response sizes lead to inaccurate results. Second, when sample sizes are large enough, satisfaction surveys can be an important tool to gauge and improve patients’ perception of the medical care they receive. However, using survey data to compare one hospital to another or to compare one provider to another is a misuse of survey data and is likely to create misleading and unreliable results.

Glossary of Statistical Terms

Mean: The average of all the responses.

Median: The middle value in all the responses when those responses are arranged in numerical order. The closer that the mean and the median get to each other, the less variance there is in the data.

Dichotomous data: Contains only two possible choices, such as whether the light was on or off.

Non-dichotomous data: Consists of multiple possible values, such as rating scales used in satisfaction surveys.

Normal or gaussian distribution: Another way of describing a typical bell curve.

Standard deviation: The square root of the variance in a data set. Low standard deviations mean that the data points are close to the mean while high standard deviation values mean that the data points are spread out over a large range of values. When there is a normal distribution of data, about 68% of the data values will fall within one standard deviation of the mean and about 95% of the data values will fall within two standard deviations from the mean.

Confidence interval: A measure of survey reliability. The narrower the confidence interval, the more reliable the survey results. A confidence interval of 95% is the conventional standard in medical and social science research and reflects a high likelihood that the sample data reflects the population from which it was sampled.
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