Text Rx

Texting, Texting 1, 2, 3! A new system for follow up may improve outcomes **SEE PAGE 8**

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MYTHS IN EMERGENCY MEDICINE: PART 2

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CHRONIC PAIN

THE OPIOID-SEEKING PATIENT

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Respectful communication is the key to reducing barriers to care

TRANSGENDER PATIENTS IN THE ED

by GRETCHEN HENKEL

Nine months ago, Wesly Heney, near collapse from viral pneumonia, was taken by ambulance to a large teaching hospital near his home in London, Ontario. Paramedics asked whether he took any medications, so Heney disclosed that as a transgender person (female-to-male, or FTM) he was taking injectable testosterone. While he was waiting in the hospital hallway on a gurney, a nurse came over to put on his patient ID bracelet. "She must have heard the paramedics' report," Heney surmises, "because she referred to me as 'it.'" Later, Heney heard two nurses arguing about who would do his blood draw because "neither of them wanted to touch me."

CONTINUED *on page 12*

EM IN THE WHITE HOUSE

A conversation with the National Security Council Staff director for medical preparedness policy, Richard Hunt, MD, FACEP

by RICARDO MARTINEZ, MD, FACEP

Emergency medicine's rigorous training and focus on patients' needs has produced many leaders, both within and outside of the specialty—including the current director for medical preparedness policy for the White House's National Security Council Staff, Richard Hunt, MD, FACEP. Former federal administrator of the National Highway Traffic Safety Administration and mentor Ricardo Martinez, MD, FACEP, now chief medical officer and vice president of North Highland Worldwide Consulting in Atlanta, recently sat down with Dr. Hunt to discuss the value of emergency medicine training—both in the emergency department and on the national stage. Here are some highlights from their discussion.

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THE PROBLEM OF SEX TRAFFICKING

EDs must remain vigilant. Miss a clue, someone loses a daughter.

SEE PAGE 9

ACEP Council Speaks Out

ACEP Councillors were surveyed about the College recently opening a comment period on the Clinical Policy: Use of Intravenous tPA to Manage Acute Ischemic Stroke in the ED. A total of 170 Council members responded about their expected results.

1 Do you want the clinical policy to be completely rescinded?

	RESPONSE PERCENT
No	50.9%
Other	6.6%
Yes	42.5%

2 If so, do you think that will happen?

	RESPONSE PERCENT
No	76%
Other	5.8%
Yes	18.2%

3 Are you comfortable with the same evidence being reviewed by the same process under which the policy was initially drafted and approved?

	RESPONSE PERCENT
No	64.5%
Other	7%
Yes	28.5%

4 If not, which changes would you like to see? (choose all that apply)

	RESPONSE PERCENT
1. New evidence being considered	28.8%
2. New reviewers selected	27%
3. A different evidence grading system utilized.	9.4%
4. Content experts (i.e. stroke researchers, etc.) to be consulted for their input but the final recommendations made by intellectually respected members without specific research or career interest in stroke management.	34.9%

5 Do you want the clinical policy to remain unchanged?

	RESPONSE PERCENT
No	70.1%
Other	7.2%
Yes	22.8%

6 Would you like the current recommendations to remain in place, but the level of recommendations downgraded?

	RESPONSE PERCENT
No	52.1%
Other	13%
Yes	34.9%

7 If not, would you be comfortable with this as a compromise?

	RESPONSE PERCENT
No	34.4%
Other	7.6%
Yes	58%

8 Are you concerned that the policy may have negative medical legal implications?

	RESPONSE PERCENT
No	19.6%
Other	1.8%
Yes	78.6%

9 Do you feel the policy, as written, reflects the clinical practice of most emergency physicians?

	RESPONSE PERCENT
No	58.7%
Other	9%
Yes	32.3%

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SEND YOUR THOUGHTS AND COMMENTS TO ACEPNOW@ACEP.ORG

THE BREAK ROOM

tPA Policy Reconsidered

This ("Up for Reconsideration: Clinical Policy on IV tPA for Ischemic Stroke," February *ACEP Now*, p. 2) is actually, really, a very important issue. Revisiting the issue of the use of thrombolytics in ischemic stroke has the potential of setting the EM industry on its head as regards stroke networks. The Joint Commission now requires that hospitals that are "stroke centers" treat 50% of eligible candidates with ischemic stroke within one hour of arrival!! This is policy set in place across the nation.

How odd, then, will it be if, when we revisit this, we end up reversing a policy that is accepted nationally and drives a vast amount of commerce in this country and around the world? This is going to be a very hot topic, one that we will all be attuned to with bended ear.

Thus, this is a very important subject, and exceedingly timely. I respectfully suggest that you do an updated mail-out to the membership of ACEP which provides the link (http://tinyurl.com/aceptpa). There are thousands of us across the nation with the "need to know."

Again, thank you for your time.

—Raymond L. Fowler, MD, FACEP, DABEMS
Dallas, Texas

EM and the ACA

Just read your first and last editor's column ("At Your Service," January *ACEP Now*, p. 5), and congratulations on taking this path. Your commentary has always been worthwhile, and I expect more of the same in whatever form from you.

A comment on the ACA roundtable you led for *ACEP Now* (January, p. 1). The comments coming from EM MDs were very worthwhile. I understand the need to discuss what we have to deal with and how we can react. It strikes me that, to some, the ACA is not a reality as individual governors may choose to ignore the infrastructure required and delay or hope to cripple the act, that members of Congress still believe that they can blackmail it away.

When you asked, "... is this model sustainable?" the answers were interesting but did not really speak to political realities. In this regard, I enjoyed Dr. Cirillo's comments about the missed opportunity to discuss this when "'the Greatest Generation,' who understood the concept of self-sacrifice for the greater good" was in power.

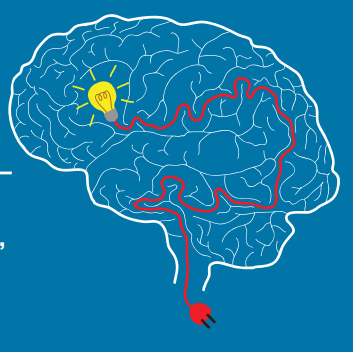
I would reflect on the oft-used phrase that we (EM) are the safety net. We are universal coverage as required and enforced by EMTALA and *our* willingness to accept it. Our voice as the actual practitioners of universal coverage should be at the forefront of any and all discussions of what the "right" of healthcare coverage is all about. We should be the ones flatly stating that the ultimate question of health care as a right or as a privilege has not been addressed.

The ACA seems to me to have been an effort to provide coverage to more Americans as an attempt to co-opt insurers and those supporting big business, rather than the focus of the real debate. I sometimes cynically wondered if this was a strategy aimed at the outcome of an unsuccessful effort to then be able to focus our attention on the real issue, or the "necessity" of a single-payer system. I am adamantly in favor of universal coverage.

In any case, thanks for listening and all the best in the future.

—Stewart Greisman, DO, FACEP
Vail, Co.

WHAT ARE YOU THINKING?



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UPDATES AND ALERTS FROM ACEP

NEWS FROM THE COLLEGE

2014 ACEP Research Forum Abstracts Due Next Month

ACEP will accept abstracts for the 2014 *Research Forum* until 4 p.m. (CST) on April 25.

Abstracts will be peer-reviewed for presentation at the two-day event on October 27–28, held in conjunction with ACEP's annual conference, ACEP14, in Chicago. Abstracts will be accepted that are judged scientifically valid and that yield important information that will ultimately affect patient care. Abstracts submitted or the resultant manuscripts must not appear in a referenced journal before publication of the meeting abstracts in the October 2014 issue of *Annals of Emergency Medicine* and must not have been presented at a national meeting.

New this year, all abstracts will be presented electronically. The top 20 will be selected for oral presentation in plenary-type sessions. Other accepted abstracts will be presented in topic specific small group sessions.

The Research Committee will review abstracts blinded to authors. Notification letters will be sent on or before July 1. The committee cannot give notification information by telephone.

The Emergency Medicine Foundation (EMF) will present an award at the *Research Forum* to the outstanding established researcher and a special award to an outstanding young investigator. An annual Excellence in Research Award (Best Paper) will be presented to an investigator based on the abstract, presentation, discussion, and subsequent of research manuscript. An annual Best Presentation by a Young Investigator Award will also be chosen. Investigators at the assistant professor level or below with fewer than five years of faculty appointment may request that their abstracts be considered for review in the young investigator category.

The Research Committee will also present awards for best medical student paper and best resident paper. The Best Medical Student Paper Award will be given to a medical student who is the primary investigator of an outstanding abstract presentation. The Best Resident Paper Award will be given to a resident who is the primary investigator of an outstanding abstract presentation. All four awards will be presented at the *Research Forum*. Note that presentation at an ACEP *Scientific Assembly* by EMF grant recipients does not constitute previous presentation at a national meeting.

Visit www.acep.org/rf for more information.

Comment Period for tPA Clinical Policy Closing Soon

The 60-day comment period for the clinical policy "Use of Intravenous tPA for the Management of Acute Ischemic Stroke in the Emergency Department" closes March 24.

Comments received, along with supporting evidence and any new evidence, will be carefully reviewed and the evidence graded. References should accompany comments so the evidence can be carefully considered and graded. Findings will be reported to the ACEP Board. Also, future clinical policy developments will include a 60-day comment period before finalization.

To read the policy and to comment, visit www.acep.org/commentform/IVtPA-Stroke/.

Faculty Teaching Awards Deadline Coming in April

Each year, ACEP sponsors a national Faculty Teaching Award and a national Junior Faculty Teaching Award to honor outstanding educators in emergency medicine. These awards are designed to support emergency-medicine faculty in their efforts to achieve academic advancement as well as support the continued academic development of the specialty. The deadline to submit a nomination form and required material is April 14.

The awards recognize superior teaching activities including didactic lectures, clinical instruction, the development of innovative educational programs, as well as the endorsement by faculty, residents, and students. While the documentation required is extensive, the process is designed to mimic the procedure used by university promotion and tenure committees in their tenure deliberations. Recipients receive national recognition that can be used to document their teaching excellence. Award winners will be recognized with a plaque during ACEP14 in Chicago and by publication of their names in *ACEP Now* or other College publications. Applications can be e-mailed to academicaffairs@acep.org.

To get details about submission deadlines and to see past winners, go to www.acep.org/teachingaward.

ICD-9 to ICD-10: The Coding Migration

You can't understand where you're going if you don't know where you've been.

BY PAM BENSEN, MD, MS, FACEP

ICD-9-CM and its related documentation have been around since 1979. It is the only subject that applies to every patient encounter, but the prevailing dogma in US medical schools, where this topic should be taught, is that the students "don't need it."

If I am successful educating emergency physicians, at least four physicians at every hospital in the nation will "get it." But, I must admit, I will seriously miss the most satisfying part of face-to-face teaching, that of watching the sudden change in expression that accompanies the transition from unawareness to understanding as physicians realize why their diagnostic terminology is so important.

In order to appreciate ICD-10-CM, it is necessary to have a working knowledge of the system in which it plays such a crucial part. Unfortunately, every non-physician hospital administrator, office staff, and billing-service personnel functions under the misconception that medical-school curricula include Medical Finances 101. Non-physicians are incredulous when I explain that the 28,000 pages of medicine learned in four years of medical school do not include a single page of Current Procedural Training, ICD-9-CM, or the 110,000 pages of Centers for Medicare & Medicaid Services (CMS) regulations that physicians are supposed to master before seeing their first Medicare patient. Most people do not believe that the most common question I am asked by doctors is, "What is ICD-9?"

To those who know the history of ICD-9, please accept my apologies for this crash course. It's for the majority of physicians who have never had the pleasure of learning it.

ICD-9 is the ninth version of the International Classification of Diseases (ICD) published by the World Health Organization (WHO) in 1977. This ICD dates back to a systematic classification of diseases causing death, the *Nosologia methodica*, created in the 1700s by French physician François Bossier de Lacroix Sauvages to track epidemics and pandemics.

In the intervening 300 years, classification of death diseases enjoyed a continuous stream of proponents and "experts" who improved on the structure, nomenclature, and standardization of the system, sometimes creating competing classifications, sometimes combining their ideas. First cities, then states and nations adopted classifications to describe and track the cause of death within their borders.

In 1853, in recognition of the need for a uniform classification, the First International Statistical Congress asked William Farr of Scotland and Marc d'Espine of Geneva to prepare an internationally applicable, uniform classification of causes of death. Neither of the two classifications was ever universally accepted, and in 1893, the International Statistical Institute adopted the Bertillon Classification of Causes of Death developed by Jacques Bertillon, chief of statistical services of Paris. The classification, a distillation of English, German, and Swiss classifications, was based on Farr's principle of distinguishing between general diseases and those localized to a particular organ or anatomical site.

In 1898, the American Public Health Association recommended the adoption of the Bertillon Classification by registrars of Canada, Mexico, and the U.S. and that it be revised every 10 years. In 1899, the International Statistical Institute recommended the adoption of the system of nomenclature by all the statistical institutions of Europe. And, in 1900, this detailed classification of causes of death was adopted, with Bertillon as the guiding force promoting and supervising revisions of the International List of Causes of Death every 10 years until his death in 1922.

Parallel to the continued evolution of the International List of Causes of Death, a similar list of diseases dates back to Farr, who also recognized that it was desirable "to extend the same system of nomenclature to diseases which, though not fatal, cause disability in the population." Even Florence Nightingale, in 1860, urged the adoption of Farr's classification of diseases for the tabulation of hospital morbidity, but it wasn't until 1900 that a classification of diseases for statistics of sickness was adopted.

The categories for nonfatal diseases were formed by subdivision of certain rubrics of the cause-of-death classification. Because this international classification of illnesses was a limited expansion of the causes of death, it failed to gain international acceptance. Absent a uniform classification of diseases of illness, many countries prepared their own lists. An English translation of the Second Decennial Revision of the International List of Causes of Death entitled *International Classification of Causes of Sickness and Death* was published by the US Department of Commerce and Labor in 1910.

In 1928, the Health Organization of the League of Nations Commission of Statistical Experts studied both the classification of diseases and the causes of death. Participant E. Roesle, chief of the Medical Statistical Service of the German Health Bureau, expanded the rubrics of the 1920 International List of Causes of Death and detailed what would be required if the classification was to be used for morbidity as well as mortality statistics. To coordinate the work of the International Statistical Institute and the Health Organization of the League of Nations, an international commission was formed with representatives from both organizations. This com-

CONTINUED *on page 7*

EM IN THE WHITE HOUSE

CONTINUED FROM PAGE 1

RM: Dr. Hunt and I go back decades based on our common interest in emergency medicine and in EMS and injury prevention. It's been a real joy to watch him not only grow as a professional but really contribute to how we practice today and—based on his latest appointment—how we'll practice in the future. With that, Rick, tell us about your new job.

RH: The title that I currently have is director for medical preparedness policy for the National Security Council Staff at the White House. The National Security Council Staff supports the National Security Council. In this domain, I work with a team of people that spans the whole spectrum of preparedness and response, addressing all hazards, both manmade and natural. We have an opportunity to interact with all federal departments and agencies as well as organizations and individuals outside of government. It's really humbling when you walk down the steps of the Eisenhower Executive Office Building where I work and you're 30 steps away from the West Wing.

RM: It's important that there's been recognition that emergency physicians should be involved in this process—and, in fact, leading parts of it. Are you finding that there's a cadre of emergency physicians that you can work with to develop policy, identify problems, and find workable solutions?

RH: One thing our specialty should be proud of is that the chair I sit in is the same seat that two other emergency physicians have sat in: Drs. Kathy Brinsfield and David Marcozzi. Dr. Marcozzi was here for four years. Beyond that, we have extraordinary leadership, both past and present, in the federal government, such as Drs. Martinez, Jeff Runge, and John Krohmer, and Past Presidents of ACEP who have held federal roles, as well. There are also leaders in emergency medicine who hold positions on the state and community level. It's a magical thing for any of us to call any emergency department in the nation at 3 in the morning and say, "I'm an emergency physician from X, and I need your help with this." People in our discipline really take care of each other. The ability to reach back and have thoughtful problem solvers thinking through hard things with you—every day I'm grateful to be an emergency physician to be able to do that.

RM: How does emergency medicine, both training and experience, help prepare you for this role? Being in emergency medicine residency training is different than some of the past experiences you've had, so how does that come to bear for you?

RH: The irony is that it's some of the stuff you actually taught me, like the ability to triage, that is really important. Figuring out what's important and what's not important—we do that really well. Our interface with multiple disciplines is a huge training ground for people who want to expand their horizons beyond emergency medicine. Trying to bring three different specialties together at the bedside and being able to come up with a solution to a difficult patient problem is a very useful skill set. Those skills have served anyone in our discipline well when they've gone outside the walls of a hospital. The other one is multitasking. It feels like we're the founding fathers of multitasking, in some respects. We were doing it a long time before people were talking about it in the news every day. If you don't gain it quickly, you're not going to make it taking care of people in emergency departments. There's also the ability to know when to act. It's not something you learn in medical school; it's a skill gained over time. My emergency-medicine experience has also taught me a foundational principle that I bring to this job: our emergency-care system has to work well every day to be able to respond well when disaster strikes.

ILLUSTRATION/PAUL JUESTRICH; PHOTOS SHUTTERSTOCK.COM

RM: You make great points because that is one of the outcomes of experience in high-stress and critical settings. You learn how to prioritize, you learn how to look at the system, and you know how to tell sick from not sick without having to order a bunch of tests because something's "gotta be done."

RH: Absolutely. It's as if it's a constant iterative process when you're practicing emergency medicine. Outside the discipline, that skill set is a pretty rare thing to find. Another thing that I bring to this job is that we have, in emergency medicine, an amazing snapshot of society. In bed eight, there might be the mayor of the city, and in bed 12, there might be somebody who's been out of work for 20 months, and everything in between. That really helps us have a snapshot of the world in profound ways. The skill that is probably the most paramount is the commitment to a singular mission: to save lives and decrease suffering. Almost anybody in our career has said, on multiple occasions, "Well, let's do what's in the best interest of the patient here." That has carried me personally and professionally.

One thing our specialty should be proud of is that the chair I sit in is the same seat that two other emergency physicians have sat in: Drs. Kathy Brinsfield and David Marcozzi.

–Richard Hunt, MD, FACEP

RM: Over time, we find that emergency medicine really prepares you for a lot of different journeys. What advice do you give to emergency physicians out there who are looking to expand their horizons? What sorts of experiences do you think they should have, or in which areas do you see great need for their talents?

RH: One area that I certainly think about is mentorship. The word "mentor" is tossed around in academic medicine and in other disciplines, too. I've never found that to be extraordinarily useful unless there is an absolutely strong bond created by a give-and-take with someone who has vast experience beyond what you have.

I've been blessed in that regard: Past Presidents of ACEP Dr. Jack Allison, Dr. John McCabe, and Dr. Dick Aghababian; executive directors of ACEP Colin Rorrie and Dean Wilkerson; Dr. Bob Bass; Dr. John Krohmer; [Dr. Martinez]; Dr. Jeff Runge certainly with his roles with DOT and the Department of Homeland Security; and my predecessors in my current role. If you can have more than one mentor, all the better.

We pride ourselves on having short attention spans in order to multitask, but it's important to stretch into some long-term problem solving. To give you the greatest breadth, start to go to hospital committee meetings, where it's not like you have to make a decision in five minutes. People have talked to me about doing the federal government thing, and quite honestly, building a strong foundation in your primary discipline of emergency medicine is really important. You don't build all those skill sets in a few years; it takes a while to get to some of them.

Over time, we find that emergency medicine really prepares you for a lot of different journeys. What advice do you give to emergency physicians out there who are looking to expand their horizons?

–Ricardo Martinez, MD, FACEP

RM: To reflect on what you're saying, a lot of this is experienced based, and as you mentioned earlier, that actually can be used to train very important and strong judgment that can be applied to other things besides just emergency medicine.

RH: Absolutely! It's translating that skill set to many different kinds of not just disciplines but private, nongovernment, government positions—the whole spectrum. Engagement outside of the emergency department is not just leadership; it's learning how to be a good member of hospital committees, your local community organizations like the Red Cross, EMS, fire, police, schools, and nonprofits in your local community. It doesn't even have to be medicine related. Get to know your congressional staff. Providing a local-level perspective to congressional staffers is important for giving them a bigger picture of what's going on in the universe, and that will help the discipline take care of patients better. Certainly at the state level, there are multiple opportunities within the discipline with ACEP state chapters and health care coalitions, and then on the national level, our conferences within the College are just extraordinary.

I have watched a lot of people in our specialty shift after shift after shift. What I've observed is that there comes a branch point where you continue to do what you do for the rest of your career or there's something that says to you, "You know? I'm tired of seeing some of the horror here, and there might be a way of approaching this beyond taking care of an individual patient at a time." I think that's a healthy thing for an emergency physician to realize—that there may be some other ways of doing what's in the best interest of the patient.

RM: So in summary, after you've really understood the clinical skills of taking care of the people in front of you in emergency medicine, you begin to look at greater societal issues at large to find out why these people are coming in and what they can do about it. Your encouragement is to follow that desire by getting involved at local, state, and national levels because that skill is needed, and we're one of the physician specialties that teaches it.

RH: Dr. Martinez, you just wrote a great speech.

DR. MARTINEZ is chief medical officer and vice president of North Highland Worldwide Consulting in Atlanta.

ICD-9 TO ICD-10: THE CODING MIGRATION

CONTINUED FROM PAGE 5

mission drafted proposals for the Fourth (1929) and the Fifth (1938) Revisions of the International List of Causes of Death.

In 1936, the Dominion Council of Health of Canada published a Standard Morbidity Code with 18 chapters of the 1929 Revision of the International List of Causes of Death subdivided into 380 specific disease categories. A modification of this list was introduced at the Fifth International Conference in 1938 as the basis for an international list of causes of illness, but no action was taken.

Although neither the Fourth nor Fifth Revision contained many changes, the Fifth International Revision Conference did recognize the increasing need for a list of diseases to meet the statistical requirements of widely differing organizations. The conference recommended a second joint committee of the two organizations to prepare an international list of diseases.

In 1944 (the year I came on the scene just to give you some perspective), the United Kingdom and the U.S. published their own classifications of diseases and injuries for tabulation of morbidity statistics. More extensive than the Canadian list, both lists followed the general order of diseases in the International List of Causes of Death.

The 1946 International Health Conference entrusted the Interim Commission of the World Health Organization with the responsibility of the Sixth Revision and with the establishment of International Lists of Causes of Morbidity. Taking into account prevailing opinion concerning morbidity and mortality classification, WHO revised the classification prepared by the United States, combined it with the revised International Lists of Causes of Death, and published the resulting classification as the Sixth Revision of the International Classification of Diseases, Injuries, and Causes of Death.

In 1948 (the year I made my first diagnosis, "pendicitis," and declared to my family that I would become a doctor), the First World Health Assembly adopted the WHO International Form of Medical Certificate of Cause of Death and the special lists for tabulation of morbidity and mortality data. This Sixth Revision, shortened to the International Classification of Diseases (ICD-6), heralded a new era in international vital and health statistics. The conference approved a comprehensive list for both mortality and morbidity, agreed on international rules for selecting the underlying cause of death, recommended a comprehensive program of international cooperation in the field of vital and health statistics, and suggested that governments establish national committees on vital and health statistics to coordinate statistical activities and serve as a link between the national statistical institutions and WHO to study statistical problems of public-health importance.

ICD Revisions Seven (1955) and Eight (1965) (during which time I was busy applying to medical school) made only limited, essential changes and amendments to correct errors and inconsistencies in the ICD. During these years, many countries made national adaptations to the ICD to provide additional detail for indexing hospital medical records.

Then, in 1975 (my second year in EM practice), the WHO International Conference for the Ninth Revision of ICD determined that areas of the classification were inappropriately arranged, more detail was needed, and it should be redesigned to be used for evaluating medical care. The conference retained the basic structure of the ICD; added significant detail; and incorporated an alternative method of classifying diagnostic statements, including information about both the etiology (marked with a "dagger" [+]) and manifestations (marked with an "asterisk" [*]) of a disease, which is the system used in ICD-10. ICD-9 innovations were included to increase its flexibility, coding rules were amended, and rules for the selection of a single cause of morbidity were introduced.

However, prior to the Ninth Revision Conference, WHO was preparing for the 10th Revision. Increasing uses of ICD highlighted the need for a stable and flexible structure to eliminate frequent revision. The WHO Collaborating Centres for Classification of Diseases experimented with alternative structures for ICD-10 and determined that the 10-year interval between revisions was too short to evaluate current use and identify needed revisions. So the 10th Revision Conference, scheduled for 1985, was delayed.

Beginning in October 2014, the migration must be completed, as ICD-9 fades to black and ICD-10 will be the required system to code and bill a chart. In the upcoming months, I'll provide practical updates, making certain every emergency physician has a strong foundation for practicing in this new era.

Dr. BENSEN is president of Medical Education Programs in Buffalo Junction, Va. She is an AHIMA approved ICD-10-CM/PCS Trainer, a senior medical associate at MedAcess in Roxbo, N.C., and Councillor for VACEP. She is a former member of the ACEP Board of Directors.

References

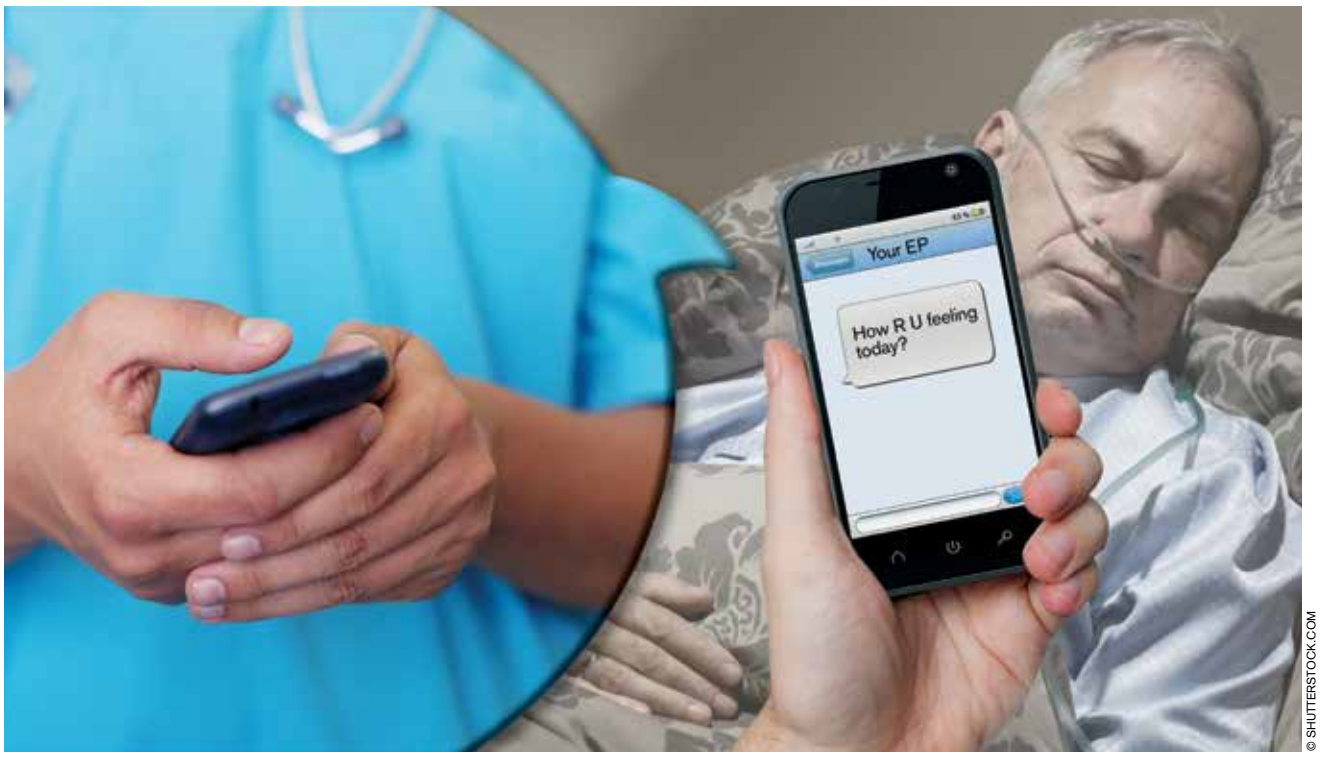
1. www.who.int/classifications/icd/en/HistoryOfICD.pdf
2. www.cdc.gov/nchs/icd/icd9.htm
3. www.ncbi.nlm.nih.gov/pmc/articles/PMC2916773/
4. www.meditec.com/resourcestools/icd-codes/
5. www.cms.gov/Medicare/Medicare-Contracting/ContractorLearningResources/downloads/ICD-10_Overview_Presentation.pdf

Next: Practical ICD-10 Updates for Emergency Physicians

Text Rx

A new system for follow up may improve outcomes

BY SANJAY ARORA, MD



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Diabetes has grown into a public-health epidemic affecting just more than 11 percent of adults in the United States. Healthy eating, regular exercise, and medication adherence can improve glycemic control and health outcomes in patients with diabetes. Traditionally, diabetes teaching and support occurs in an outpatient setting; however, in systems where barriers to establishing a regular medical home exist, patients utilize emergency departments for both acute and chronic diabetes management. But emergency physicians do not have the time or training to provide these patients with the preventive care they so desperately need. Innovative approaches are needed to reach, engage, and activate at-risk populations to bridge the gap between urgent visits to the ED and follow-up care.

A Tech Solution

At the Los Angeles County Hospital (LAC) + USC Medical Center, we recently conducted a randomized controlled trial using mobile health (mHealth) via a text message–based program. It demonstrated the potential for medical professionals to extend their support in a very personal, engaging, and cost-efficient way to patients exiting the ED, reducing their likelihood of returning. A multidisciplinary team at USC involving emergency physicians, endocrinologists, and certified diabetes educators developed a program called TExT-MED (Trial to Examine Text Message–based mHealth in ED Patients with Diabetes) in Spanish and English. TExT-MED was specifically designed to empower patients with diabetes by helping them successfully adapt to the changes in lifestyle and self-care behaviors required to establish a true personal foundation for glycemic control.

The program was developed in response to the mounting community-health issue created by insufficient diabetes care. Emergency physicians see many patients with diabetes cycling through the ED who are clearly challenged by their condition—both physically and emotionally—but just haven't been able to acquire the knowledge and skills to deal with the complex medical regimens, use of testing devices, frequent data assessment, and clinician interaction required to effectively care for themselves.

The TExT-MED curriculum was based on National Diabetes Education Program (NDEP) content areas, including blood glucose control, blood pressure, cholesterol, controlling diabetes, foot care, healthy eating, heart disease, physical activity, recipes, and social support. Message types included education, motivations, medication reminders, healthy-living challenges, and diabetes trivia.

In our study, we conducted a six-month randomized controlled trial in the ED at LAC+USC, the flagship safety-net hospital of the public-care system in Los Angeles County, which serves more than 170,000 lower-income, resource-poor, and ethnically diverse patients annually.[1] We enrolled 128 adult patients with poorly controlled diabetes who knew how to send and receive text messages in either English or Spanish. The average age of those in the intervention group was 50.3, and the average length of time diagnosed with diabetes was 10.5 years. The primary objective of the study was to produce a difference ≥1.0 in HbA1C reduction between the intervention and control group at six months. Other secondary measures included improvement in medication adherence and other relevant diabetes behaviors, including blood glucose monitoring, diet, and exercise, as well as overall quality of life as perceived by each study participant.

The Results

While the study failed to produce the targeted HbA1C outcome with statistical significance, it did demonstrate a significant improvement in medication adherence as measured by the Morisky Medication Adherence Scale, increasing from 4.5 to 5.4 in the intervention group compared with a net decrease of -0.1 in the control group (a difference [D] of 1.1 [95 percent confidence interval (CI) 0.1 to 2.1], [p=.032]). Also, the outcomes at six months for HbA1C reduction (-1.05 percent in the intervention group) and for improving blood glucose monitoring, diet, exercise, and quality of life were very promising in terms of magnitude, direction, and differential when compared to the control group, as well as their trend toward statistical significance.

The study did produce a statistically significant reduction in HbA1C in the Spanish-speaking cohort (-1.2 percent in the intervention group compared with -0.4 percent in the control group, D of 0.8 percent, [p=.025]). The Spanish cohort also maintained the significant differences in medication adherence and improvements to other secondary outcomes observed in the overall population. Additionally, the participants in the intervention group were 30.3 percent less likely to return to the ED than those in the control group (35.9 percent versus 51.6 percent, D of 15.7 percent [95 percent CI 9.4 percent to 22 percent], [p=0.073]).

Overall, 93.6 percent of the participants interviewed in follow-up enjoyed the TExT-MED program, and 100 percent would recommend it to family and friends. Notable quotes from patients include:

- "I am living well with this program. It has helped me enormously, enormously ... I come because it's worked for me. It has worked for me. A lot." (translated from Spanish)
- "They remind us not to forget to take the medicine and talk to the doctor. Be on time with your medicines. Do not wait to the last minute until we run out. We see all of this in those ... in the messages."
- "It has been a very good program for all the people with diabetes, and with this program we are better controlling our lives, our way of living." (translated from Spanish)

The next generation of the program is now available from Agile Health, which acquired commercial rights for TExT-MED from USC. The enhanced program, called MyAgileLife, has been expanded to include three messages per day. With a larger library of motivational and behavioral mastery messages, quizzes, and challenges, the messaging helps encourage and empower individuals to establish and maintain a productive primary-care relationship and to rationally utilize the broader health-care system to avoid the debilitating and costly complications that accompany poor glycemic control. New in this version is interactive, keyword-driven functionality, allowing participants to request and receive additional support 24-7 to help with mood or motivation, deal with slipups, or provide healthy tips when dining out or shopping for groceries. Program participants can specify the times of day they want to receive the messages and add personal daily reminders to take specific medications, check blood glucose, eat, and/or exercise at certain times of the day—or just walk the dog.

TExT-MED adds to the growing body of literature supporting mHealth as an innovative public-health solution for EDs that is effective, pragmatic, highly scalable, low cost, and widely accessible as well as may reduce ED visits while improving community health.

DR. ARORA is associate professor of clinical emergency medicine at the Keck School of Medicine at the University of Southern California in Los Angeles.

Reference

1. Arora S, Peters AL, Burner E, et al. Trial to examine text message-based mHealth in emergency department patients with diabetes (TExT-MED): a randomized controlled trial. *Ann Emerg Med.* 2013 Nov 5. pii: S0196-0644(13)01486-8. [Epub ahead of print]

THE PROBLEM OF SEX TRAFFICKING

BY JESSICA MUNOZ, RN, BSN, MSN, APRN-RX, FNP-BC

EDs must remain vigilant. Miss a clue, someone loses a daughter.

A 19-year-old female presents to the ED with complaints of cough; rhinorrhea; sinus pressure; nausea; body aches; and mild, intermittent cramping abdominal pain. Her vital signs: T 100.1, HR 99, RR 18. She appears tired and thin and has a blunted affect. She is wearing open-toed pumps, leggings, and a tank top. It is winter and very cold outside. Accompanying her is a man who appears to be in his late 20s and is introduced by the patient as her boyfriend. He gives the registrar the patient's identification.

The boyfriend insists upon accompanying the patient into the room. The patient is guarded during history and gives short, abrupt answers. She avoids eye contact with the examiner and keeps looking at her boyfriend. He interjects that he just wants her to get some antibiotics so they can get out of there.

Chart review reveals the patient was seen in the ED about two months ago for an arm injury. Today's history is brief and focuses on the patient's URI symptoms. No questions relating to social history and very few questions relating to past medical history are asked. The physical exam is performed quickly and is unrevealing.

The provider is pulled away to address another patient's needs. The patient is given ibuprofen. Her boyfriend becomes agitated and tells the nurse they need to leave. The patient is discharged with a prescription for ibuprofen and for guaifenesin. She is instructed to call the referral line for PCP follow-up.

Four days later, the patient returns to the ED with severe abdominal pain and is pale, hypotensive, and tachycardic. She is septic. A girl claiming to be her cousin brought her in. The patient disrobes, and a thorough examination reveals several scars from cutting

CONTINUED *on page 10*

on her forearms, cigarette burns around her breasts and upper thighs, and the name "King Daddy" tattooed on her lower back. The patient has several healing bruises on her chest and abdomen. The pelvic exam reveals a large volume of pus and a retained "baby wipe" in the vagina. The patient is diagnosed with pelvic inflammatory disease and sepsis.

Case Commentary

The patient was actually a 15-year-old girl with counterfeit identification. The boyfriend was her "pimp," or sex trafficker. The girl was reported as a runaway six months earlier. She left home to escape sexual abuse by her stepfather, a businessman in the community who was also having his "friends" come over to have sex with her for money. She was approached after school by a young man who told her he could get her away from her situation and help her become a model.

Two weeks later, the girl's image was in a back-page online ad, and she was being sold for sex from an apartment complex while being abused into submission by the young man who was now her pimp. Three days before her last visit to the ED, the patient was brutally raped by three clients, or "johns." Some of the bruises and burn marks were from this assault. The baby wipe found in the girl's vagina had been inserted to hide the patient's copious vaginal discharge to allow her to continue working.

Had a more detailed history been taken of this patient's background, social history, and home situation, and a more thorough exam performed, some of the signs of abuse may have been noted.

A Crime We Must Learn to Recognize

Sadly, this case is an all-too-common occurrence in EDs just like yours. Domestic minor sex trafficking (DMST) is the commercial sexual exploitation of American children within US borders. Sex trafficking is also called sex slavery or often mislabeled as prostitution. An estimated 100,000 children under age 18 become entrapped in the sex-slave market every year in the U.S. The average age of entry into the sex-trade industry in the U.S. is 12–14, according to a 2009 report by the National Center for Missing and Exploited Children.[1]

Victims come from all socioeconomic and racial backgrounds and may be male, female, or transgender. This article focuses on underage female victims, but there is no doubt that women, boys, and men experience this scourge in significant numbers as well.

Despite being well-educated about child abuse, elder abuse, and domestic violence, most providers lack the training and ability to recognize victims of the sex-slave industry. Most victims of sexual exploitation never report "sexual assault." DMST victims frequently present to EDs, but are rarely detected as such.

Supply and Demand

Children who experience violence and/or lack of support at home are at increased risk of becoming victims of sex slavery. Once indoctrinated, victims may be found in strip clubs, 24-hour massage parlors, and escort services. They may be walking the street ("track") but often are bought online and directed via cell phone to meet johns at hotel rooms.[2,3]

We live in a world that demands women and children be sold for sex. From movies to music to clothing lines, the sexualization of girls and women is rampant. The "pimp and ho" and "porn star" culture is commonly referenced and portrayed as either humorous or admirable. The abusive nature of prostitution is ignored or disguised.

Pornography, a multimillion-dollar industry, is viewed as an acceptable outlet for sexual gratification, yet it creates victims (50 percent of sex-trafficking victims have been involved in pornography) and buyers/johns who may turn to the sex trade when watching provocative films no longer satisfies their desires.[4]

When a girl is sold, the money almost always goes entirely to her pimp. The profits of this illegal business are enormous because girls may be sold many times per night and many nights per week.

Recognition and Treatment

Victims of sexual trafficking undergo immeasurable physical and emotional abuse. Traffickers (pimps) go to great lengths to ensure their victims continue to service as many buyers as possible. Pimps may use the "lover boy" approach of promising love, marriage, or a brighter future to victims—or may physically and psychologically coerce victims. Victims are given a false sense of "love" from professional con artists in one of the oldest con schemes in history. Basic human needs, including food, shelter, and clothing, are withheld from victims for not reaching their quota (a minimum daily earnings expectation determined by pimps). Victims are threatened, beaten, and raped into staying with traffickers and often feel they have nowhere else to turn. Ironically, even when fearful, victims will appear to enjoy themselves during their transactions. The appearance of enjoyment by the victims helps johns ignore that what they're doing is a heinous crime.

DMST victims commonly have experience with authority figures who fail to protect them, including their parents, foster parents, teachers, and case managers. They are often purchased (i.e., raped for profit) by clergy members, physicians, police officers, and other professionals. They have been taught not to trust. This, along with the fact that victims often do not consider themselves victims or in need of rescue, makes it difficult to emancipate these girls. They may have Stockholm Syndrome and

relate to their abusers/pimps. Sex-trafficking victims may present in the ED as "difficult patients": rebellious and disrespectful.

As an emergency medicine provider, you will need keen interviewing skills and the ability to convey openness and kindness to a victim. It is crucial to aggressively pursue any opportunity to interview the patient while separated from the individual who may have brought her in for evaluation. This may display to the victim that you recognize something is amiss and you are willing to intervene. She is fearful and will not ask to speak with you alone. You must take on the burden of attempting separation for her safety. A realistic goal for the visit is to convey to the victim that you are trustworthy and nonjudgmental and that your ED is a safe, accepting place for her. A major breakthrough/rescue within one encounter is unusual but, nevertheless, worth the effort.

A REALISTIC GOAL for a visit with a sex-trafficking victim is to convey that you are trustworthy and nonjudgmental and that your ED is a safe, accepting place for her. A major breakthrough/rescue within one encounter is unusual but, nevertheless, worth the effort.

Victims often have psychological problems such as anxiety, depression, and PTSD. Be vigilant to notice characteristics commonly found in victims, such as a history of running away multiple times or having been placed in many foster homes. Sex slavery victims may use street slang or present with an older "boyfriend." They may be missing school.[5]

Providers may detect sex-trafficking victims by noticing inappropriate attire or the presence of a "branding" tattoo of a pimp's name. Victims often use illicit drugs. Pimps will get their victims addicted to drugs to have more power over them, and trafficking victims may use drugs as a coping mechanism. Victims may have a history of many ED visits.

Victims may have a wide range of physical ailments including STIs/pelvic pain, traumatic injuries/bruises, malnutrition, and poor hygiene. They may appear hypervigilant or, alternatively, exhausted.[6] They may answer many calls or texts during their visit.

Calm, open-ended questioning is key at the start of the social-history interview and will help build rapport with a patient. Her response will depend on the your attitude toward her. Avoid questions starting with "Have you ever ... " because the answer will be "no," and you will have lost an opportunity. You may ask the patient where she lives and who takes care of her, how she met her "boyfriend," or whether she must contribute money to her family. You may suggest, "Tell me about your tattoo." Later in the interview, it may be appropriate to ask her if her body has been used for money, whether anyone has posted photos of her on the Internet, or if she is forced to have sex with men she doesn't want to have sex with.[5]

When it comes to offering services to the patient, having a plan/protocol in place specific to the needs and safety of this population within your ED is essential. A multidisciplinary approach employing law enforcement, social work, nursing, and hospital administration is needed.[7] Identifying best practices and developing efficient, user-friendly protocols and comprehensive aftercare options are desperately needed.

MS. MUNOZ is a practicing lead nurse practitioner with EMP on Oahu. She has spent the past five years working in the arena of human trafficking. She is currently the volunteer director for the Courage House Hawaii project, whose goal is to build a long-term residential home for underage victims of sex trafficking in Hawaii. Contact Ms. Munoz at j.munoz@courageworldwide.org.

References

1. National Center for Missing and Exploited Children. Missing children statistics. 2009. Available at: www.missingkids.com.
2. Polaris Project. Human trafficking resources for the service provider. 2012. Available at: www.polarisproject.org. Accessed April 4, 2012.
3. Shared Hope International. Human trafficking–demand. 2009. Available at: www.sharedhope.org.
4. Farley M. Human trafficking and prostitution. 2013. Available at: www.prostitutionresearch.com.
5. Cooper S, Estes R, Giardino A, Kellogg N, Vieth V. *Child Sexual Exploitation Quick Reference*. St. Louis, Mo: GW Medical Publishing Inc.; 2007.
6. Zimmerman C, Yun K, Watts C, et al. The health risks and consequences of trafficking in women and adolescents: findings from a European study. London School of Hygiene & Tropical Medicine and the Daphne Program of the European Commission: London. 2003.
7. Hodge D. Sexual trafficking in the United States: a domestic problem with transnational dimensions. *Soc Work*. 2008;53:143-152.

Wesly Heney, a transgender person, cites discrimination from health care professionals as a reason that he avoids visiting the doctor.

TRANSGENDER PATIENTS IN THE ED

CONTINUED FROM PAGE 1

Experiences like these illustrate why Heney and many other trans people are often reluctant to access health care. A survey of emergency department use, avoidance, and experiences conducted by Trans PULSE, a community-based research project investigating the impact of social exclusion and discrimination on the health of trans people, was recently published in *Annals of Emergency Medicine*.[1] The analysis of the respondent-driven sampling survey of 433 transgender participants found that 21 percent had avoided going to the ED because they feared negative experiences. Greta R. Bauer, PhD, MPH, associate professor in the department of epidemiology and biostatistics at Schulich School of Medicine & Dentistry at Western University in London, Canada, is coprincipal investigator of Trans PULSE and was lead author on the paper. The survey documents that there are unmet needs for emergency care among transgender persons. Heney believes that the numbers in the Trans PULSE project are low and that avoidance of care is underreported. By his own account, Heney often encounters a wide range of inappropriate and biased reactions from health care providers. As a result, "nine times out of 10, I delay going to the doctor," he says.

Emergency physician Madeline B. Deutsch, MD, clinical assistant professor in the department of family and community medicine at the University of California, San Francisco, and clinical lead at the Center of Excellence for Transgender Health, was a coauthor of the survey analysis. Despite differences in health care delivery systems between Canada and the United States, Dr. Deutsch says the take-home messages from the Ontario survey are very relevant to her US colleagues. And, Dr. Bauer points out, in a country with universal access to primary care, the finding that 21 percent of transgender people avoid going to the ED is even more significant.

ASK THE PATIENT

Providers who have not treated transgender patients may be uncomfortable about the

Transgender Health Issues Worth Special Consideration

According to the Center of Excellence for Transgender Health at University of California, San Francisco, the most common reasons for a transgender person to present to an emergency department are similar to those seen in the general population and not secondary to cross-sex hormone use. The following can be areas of special consideration, however, when transgender patients present.

Cardiovascular: Most data demonstrate negligible impact of both estrogen and testosterone therapy on cardiovascular risk. Depending on the route and type of estrogen being used, risk of venous thromboembolism in patients receiving estrogen therapy may or may not be increased. When risk is increased (smoking, use of oral estrogens, use of oral contraceptives as estrogen source), it is minimal and reduced after the first year.

Cross-sex hormone use: Cancer, cardiovascular, and diabetes mellitus screening protocols for trans women (male-to-female) currently taking estrogen and trans men (female-to-male) currently taking testosterone are available at www.transhealth.ucsf.edu/trans?page=protocol-screening.

Postoperative (male-to-female): Transgender women may present with postoperative wound complaints. Vaginoplasty involves the use of penile, scrotal, and urethral tissue to create a vulva and neovagina. Complaints may include bleeding, infection, or graft/flap necrosis, as well as urinary issues. ED care should be supportive, and attempts should be made to refer patients back to the performing surgeon or another local surgeon with expertise in this area. Wound care centers may also be of value. Examination of the neovagina is best performed using an anoscope, inserting and then slowly withdrawing while looking for fistulae or lesions. Granulation tissue and retained lubricant are more common sources of discharge than bacterial vaginosis, and true vaginal candidiasis is very uncommon.

Gynecologic (female-to-male): Transgender men who retain their uterus and ovaries may experience pain or bleeding similar to that experienced by women. ED management of such complaints is similar to that of women, with a beta-human chorionic gonadotropin test followed by examination and/or imaging as indicated. Patients may be especially sensitive about examinations and may have an atrophic vagina that requires a smaller speculum. In some cases, a pelvic exam or endovaginal ultrasound may not be possible.

> Depending on the route and type of estrogen being used, risk of VTE in patients receiving estrogen therapy may or may not be increased.

Sexual health: As with any patient who discloses engaging in potentially risky sex practices, some transgender patients may be at risk of HIV/STDs and may be vulnerable to abuse and/or exploitation. Avoid making assumptions about sexual behaviors or partners; regardless of their gender identity, transgender people may be sexually active with men, women, or both and may use their natal genitals during sexual activity.

Mental health: Rates of attempting suicide in LGBT youth are two to three times that of the general population. Substance abuse, including tobacco, alcohol, and other drugs, may also be a concern. All are fueled by the increased stress experienced by LGBT persons due to discrimination.

Social factors: Homelessness, lack of health insurance, and poor social support can affect transgender patients' access to health care as they can for the general population.

encounter due to lack of training and/or reliance on social stereotypes. Delivering competent care for transgender patients begins with how patients are addressed, notes Dr. Bauer. "It's important for physicians to be aware that when trans patients do come in, they may have had negative experiences and that doctors [and allied health professionals] should treat them with respect. For trans people that means making sure you use the name and pronoun that they use in their daily lives," she says. Providers should avoid making assumptions about people's gender based on their appearance or behavior. For example, a male-to-female transgender individual could be in the ED due to a car accident. If that person is dressed as a female but has not yet fully transitioned from male, the physician may be unsure about how the person self-identifies. In such a case, the physician need only ask for clarification: "How do you identify yourself, and how do you want me to refer to you while we are working together here?"

"We can become desensitized in the ED. We've seen so much that everything becomes 'open season.' Sometimes it's important to remember to keep personal boundaries."

–Madeline B. Deutsch, MD

"If the preferred name and pronoun are not used, that immediately begins to color the patient's experience," notes Dr. Deutsch. A simple question such as the one above, says Heney, can open the door to establishing the trust that is necessary for the health care encounter. "The number-one message I often tell people is to ask permission to ask questions," he says. "If you tell me, 'I've not encountered this before, so I need to ask some clarifying questions to give you the best care I can,' I will be a lot more open." This rule of thumb works in any ED situation, notes Dr. Deutsch, who draws a parallel with the Russian patients she encounters in the San Francisco ED where she practices. "Walking in and totally mispronouncing their last name is not the way to do it," she says. "After hello, I ask, 'Can I ask you how to correctly pronounce your name?'"

FOCUS ON THE CARE

Accurately capturing the percentage of people who identify as lesbian, gay, bisexual, or transgender (LGBT) is challenging due to the very factors that act as barriers to health care: negative experiences, poverty, and lack of social support services. An amalgamation of several health and epidemiological surveys in the past decade by The Williams Institute at the University of California, Los Angeles, estimates that 3.5 percent of the US population identifies as LGB people and 0.3 percent identify as transgender. There are, the institute estimates, approximately 9 million LGBT Americans.

As an educator for Regional HIV/AIDS Connection in London, Ontario, Heney knows that some providers may never have encountered transgender patients. They may be unsure about how to approach the transaction or what special concerns they should be addressing. In some acute care situations, questions about biological sex and/or hormone levels may be important for assessing risk or drug interactions. But in other cases (a broken ankle, for instance), gender identity may be irrelevant. (See "Transgender Health Issues of Special Consideration" for more on the medical needs of transgender patients in the ED.) Al Killen-Harvey, LCSW, is cofounder of The Harvey Institute, a San Diego-based training and consultation company dealing with issues of sexual health. He notes that providers should resist the impulse to ask irrelevant questions out of personal or intellectual curiosity: "No matter what we're doing, we must ask ourselves, 'How does what I'm doing or saying relate to the job I have at hand? Does it relate to what I need to know?' And if it doesn't, then it shouldn't be part of the conversation." Dr. Deutsch agrees and also observes that emergency physicians should not succumb to myths about trans patients. "Do not assume that a trans person with leg cramps must have blood clots due to being on a hormone regimen," she says. "Maintain a broad differential diagnosis, remember that there may be no risk of blood clots for a trans person on hormones, and remember that the patient may be there for something unrelated to being trans.

"We can become desensitized in the ED," Dr. Deutsch continues. "We've seen so much that everything becomes 'open season.' Sometimes it's important to remember to keep personal boundaries."

Emergency physicians can set the example, but it is important, our sources note, for all personnel to acquire some understanding and sensitivity to gender fluidity and the ways in which gender expresses itself. "All of your good intentions may fall by the wayside if the patient has already had several negative encounters with other people in the ER system," said Killen-Harvey. Dr. Deutsch has done research on incorporating trans-specific terminology into the electronic health record and is lead author on the recently published World Professional Association for Transgender Health EMR Working Group recommendations on electronic medical records and transgender patients.[2]

Emergency physicians have the opportunity to be leaders in their institutions. As noted in the Trans PULSE survey, they tend to be more comfortable with novel situations than their colleagues in other specialties. The survey researchers concluded, "... emergency physicians are poised to be on the forefront of enhancing and improving care access and quality for trans patients.

Learn More: Resources on Transgender Health

The majority of trans ED patients in the *Annals of Emergency Medicine* survey noted that they often were the ones providing education to their physicians about trans issues.[1] Dr. Deutsch advises emergency physicians to acquire more education and to "choose resources wisely." Trans people are very diverse, and it is not appropriate to base one's perception on the reality-show model, she says.

The following sites offer validated, evidence-based guidelines for transgender health:

- Educational publications, learning modules, and on-demand webinars from The Fenway Institute: **www.lgbthealtheducation.org/**
- The Joint Commission Field Guide for the LGBT Community: **www.jointcommission.org/lgbt/**
- Fact sheets, reports, and recommendations on transgender health at the Center of Excellence for Transgender Health: **transhealth.ucsf.edu**
- Standards of care, resources, and FAQs from the World Professional Association for Transgender Health: **www.wpath.org**

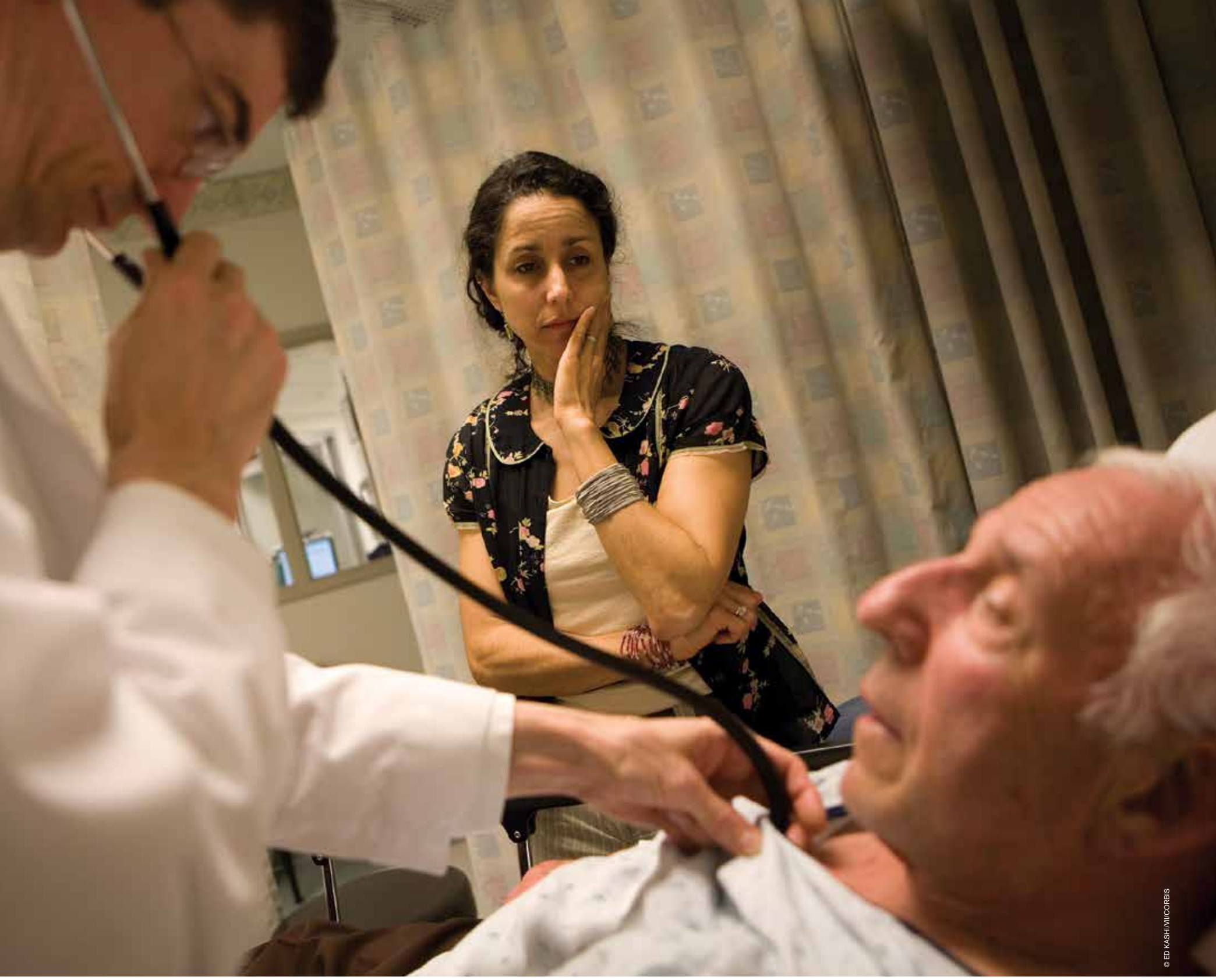
"It's important for physicians to be aware that when trans patients do come in, they may have had negative experiences."

–Greta R. Bauer, PhD, MPH

GRETCHEN HENKEL is a medical journalist based in California.

References

1. Bauer GR, Scheim AI, Deutsch MB, et al. Reported emergency department avoidance, use, and experiences of transgender persons in Ontario, Canada: results from a respondent-driven sampling survey. *Ann Emerg Med.* 2013 Oct 23. [Epub ahead of print]
2. Deutsch MB, Green J, Keatley J, et al. Electronic medical records and the transgender patient: recommendations from the World Professional Association for Transgender Health EMR Working Group. *J Am Med Inform Assoc.* 2013;20:700-703.



ENHANCING NEW STANDARDS FOR OLD PATIENTS

Introducing the Geriatric Emergency Department Guidelines

BY CHRISTOPHER R. CARPENTER, MD, MSC, FACEP; ULA HWANG, MD, MPH, FACEP; & MARK ROSENBERG, DO, MBA, FACEP

THE GERIATRIC EMERGENCY DEPARTMENT GUIDELINES (GED)

(www.acep.org/geriEDguidelines) were the collaborative effort of members of ACEP, American Geriatrics Society (AGS), Emergency Nurses Association (ENA), and Society for Academic Emergency Medicine (SAEM). The strength of this document is evidenced by the approval of each organization's Board of Directors and copyright of the material in 2013. ACEP states, "the purpose of the Geriatric Emergency Department Guidelines is to provide a standardized set of guidelines that can effectively improve the care of the geriatric population and are feasible to implement in the ED. The guidelines create a template for staffing, equipment, education, policies and procedures, follow-up care, and performance improvement measures."

These guidelines represent *recommendations* for geriatric emergency care. They are not a mandate for every ED to develop a GED or a list of recommendations requiring 100 percent compliance.

The authors, practicing emergency physicians, as well as emergency nurses and geriatricians, wrote the document for local ED leaders to drive quality geriatric emergency care within their institutions. We anticipate many questions related to these recommendations. This introduction is meant to help *ACEP Now* readers understand these new recommendations. Specifically, we hope to inform readers about:

1) The historical context of geriatrics and emergency medicine
2) Why these GED Guidelines are being released now
3) How the GED Guidelines were derived
4) What constitutes the GED Guidelines
5) The present and future plans for the GED Guidelines

GERIATRICS AND EMERGENCY MEDICINE—HISTORICAL CONTEXT

While a constellation of factors precipitated the development of a pediatric emergency medicine infrastructure, the demographic imperative of a rapidly aging baby-boomer society was slower to rouse change in adult emergency medicine. In the 1990s, The John A. Hartford Foundation, led by Donna Regenstrief, decided to focus on improving geriatric health care outcomes at this time. The Hartford Foundation recognized the cross disciplinary role of emergency medicine and approached the University Association of Emergency Medicine (UAEM), the precursor of SAEM, with a challenge to develop a body of expertise in geriatric emergency medical education, research, clinical operations, and policy-making. Art Sanders, MD, the UAEM president, received a small pilot grant from the Hartford Foundation in 1991 and formed the first Geriatric Emergency Medicine Task Force. This task force produced a series of original research manuscripts, essays, and editorials that filled the July 1992 issue of *Annals of Emergency Medicine*. These works described the current state of affairs for geriatric emergency care while outlining an agenda for future research and educational initiatives. The energy and productivity of this first task force led to a larger grant from the Hartford Foundation in 1993, and that ultimately led to the first textbook (1996's *Emergency Care of the Elder Person*, edited by Dr. Sanders), as well as multiple research projects that further defined the epidemiology of geriatric syndromes (falls, delirium, dementia, polypharmacy) in the ED.

WHY THE GUIDELINES ARE BEING RELEASED NOW

In 2000, the Geriatric Interest Group was born at SAEM with Chair Lowell Gerson, PhD. By 2011, the group's accomplishments under leaders Manish Shah, MD, FACEP; Scott Wilber, MD, FACEP; and Ula Hwang, MD, FACEP, led to the transformation of the interest group into the Academy of Geriatric Emergency Medicine (AGEM). The ACEP Board of Directors approved the formation of the Geriatric Section in 2003 after a strong campaign from Jim Espinosa, MD; Kirk Jensen, MD, FACEP; and Marilyn Bromley, RN. Under the leadership of Mark Rosenberg, DO, FACEP, the ACEP Geriatric Section's membership rapidly grew. These geriatric emergency medicine groups continued to expand the peer reviewed and mass media publication portfolio for optimal older adult acute care. For example, Bob Fitzgerald, MD, FACEP, published the ACEP White Paper "The Future of Geriatric Care in Our Nation's Emergency Departments" in 2008. Teresita Hogan, MD, FACEP, worked with the American Medical Association, ACEP, SAEM, American Geriatrics Society, Council of Emergency Medicine Residency Directors, Emergency Medicine Residents' Association, and multiple other stakeholders to develop geriatric core competencies for every emergency medicine resident in 2010. Emergency medicine needed a structured document containing best-practice recommendations from geriatric emergency health care providers, researchers, and advocates. With the support of then ACEP President David Seaberg, MD, FACEP, the process of developing such a document began in early 2011.

The geriatric ED patient represents the "canary in the coal mine" for our health care system. If we can successfully navigate the diagnostic, therapeutic, disposition, and financial challenges that this potentially vulnerable population presents, then all age groups will benefit.

HOW THE GED GUIDELINES WERE DERIVED

In 2011, Dr. Rosenberg then chair of the ACEP Geriatric Section, organized a Geriatric ED Steering Committee. The goal of the steering committee was to establish standards by which to develop and operate GEDs. The committee was composed of members of the ACEP Geriatric Section and AGEM. The committee also included representatives from AGS and ENA. Work on the guidelines progressed via a series of teleconferences during 2011 and 2012. The 14 GED Guidelines coauthors split into two working groups: "structural and staffing" and "clinical/operational." Each group reviewed the literature and provided best-evidence recommendations for essential geriatric emergency care. The entire membership of AGEM and the ACEP Geriatric Section formally reviewed and approved the GED Guideline recommendations in October 2012. Between October 2013 and February 2014, Boards of Directors for ACEP, SAEM, AGS, and ENA officially approved the guidelines.

WHAT CONSTITUTES THE GED GUIDELINES? WHAT THEY ARE AND WHAT THEY ARE NOT

Most health care systems will lack the financial resources, staffing levels, or patient volumes for stand-alone GEDs to be feasible. Instead, these guidelines provide a basis from which EDs can consider ways to improve care for older adults. In 2007, when the first GED paper described the special care needs of geriatric patients, no GEDs existed in the United States. Currently, more than 40 self-designated "Geriatric EDs" or "Senior ERs" exist, and these guidelines provide concrete, feasible, and measureable recommendations to consider should an ED declare itself as having a GED. We cannot overemphasize that the GED Guidelines are not a mandate that every geriatric-friendly ED develop and sustain. Every ED that provides emergency care for geriatric adults, however, should be aware of these guidelines, the rationale for the recommendations, and the resources available to transition from theory to implementation.

The GED Guidelines consist of 40 specific recommendations in six general categories: staffing, transitions of care, education, quality improvement, equipment/supplies, and policies/procedures/protocols. Staffing includes recommendations for the medical director and nurse manager and accessibility to specialist ancillary services. Transitions of care include discharge processes and large-font instructions, as well as appropriate collaboration with home health services and home safety assessments. Nurse and clinical provider education focuses on contemporary, research-based geriatric-specific material. The quality improvement recommendations provide an exemplar spreadsheet of pertinent and prevalent geriatric emergency care indicators to monitor, including the prevalence of injurious falls and documentation of fall risk assessment. The equipment and supplies section describes potential physical structure enhancements like the use of reclining chairs and pressure redistributing foam mattresses to improve comfort and reduce the incidence of pressure ulcers. Finally, a variety of policies, procedures, and protocols are provided to facilitate screening older adults to identify the subset who are at increased risk for post-ED adverse outcomes, as well as validated, ED feasible screening instruments for geriatric syndromes such as delirium, polypharmacy, falls, and dementia. See Table 1 (p. 28) for more details about specific GED recommendations that should provide further clarity about the content of the GED Guidelines.

THE PRESENT AND FUTURE PLANS FOR THE GED GUIDELINES

These guidelines represent a two-year effort from multiple organizations and individuals committed to optimizing the emergency care delivery model for geriatrics. We believe that the geriatric ED patient represents the "canary in the coal mine" for our health care system. If we can successfully navigate the diagnostic, therapeutic, disposition, and financial challenges that this potentially vulnerable population presents to 21st-century medicine, then all age groups will benefit from a reliable, available, compassionate, and efficient emergency care system. We fully recognize that the GED Guidelines are a beginning and not an end. The authors have defined a plan that includes dissemination, implementation, adaptation, and refinement. The empiric basis for the recommendations rests upon minimal research evidence. To move forward, geriatric emergency medicine needs sustain-

CONTINUED *on page 16*

ENHANCING NEW STANDARDS FOR OLD PATIENTS

CONTINUED FROM PAGE 15

able funding opportunities to: 1) enhance the evidentiary basis of these protocols; 2) determine if following these recommendations does, in fact, improve the process and quality of care delivered; 3) determine if the recommendations improve health care outcomes for older adults and their caregivers; and 4) support the growth and evolution of future geriatric emergency medicine leaders.

One immediate next step is to prioritize, in a systematic and transparent way, the 40 recommendations into essential and nonessential domains so hospital administrators, payers, and research funders can develop a systematic approach to local implementation. For example, routinely screening for delirium using validated instruments has profound implications on ED disposition and management decisions as opposed to infrastructural changes to lighting, floor material, and wall colors. The prioritization process will assess the relative potential benefits and potential harms associated with each recommendation in providing a weighted list from most to least important. Another step is to raise GED Guidelines awareness among emergency medicine clinicians, hospital administrators, patient advocacy leaders, and patients. The GED Guidelines group is also developing a "Geriatric Emergency Department Boot Camp" program, in which geriatric emergency medicine leaders will bring the recommendations to those interested, including a toolbox of resources, pragmatic examples from their own institutions, and mentorship. The benefit of the boot camp concept is that hospitals interested in "geriatricizing" their ED need not travel to learn more about these implementation recommendations, and essential interdisciplinary members (i.e., social

CONTINUED *on page 28*

MYTHS

IN EMERGENCY MEDICINE: PART 2

Rooted in culture, based on tradition

by KEVIN M. KLAUER, DO, EJD, FACEP

1. CONTRAST ALLERGIES: STOP THE CRUSTACEAN BASHING

The short message is, "Iodine is not an allergen!"[1]

There are many theories about what causes "allergic-like" reactions from contrast media. However, we can stop asking about shellfish and strawberry allergies as iodine content has nothing to do with these reactions. As a matter of fact, if we are worried about iodine, we're asking the wrong questions. The iodine content of shrimp is 1,000 mcg/kg, but chicken contains a whopping 1,248 mcg/kg. Perhaps we should have been asking about chicken allergies instead of shellfish.

The fact is that those with seafood allergies are at the same low risk for contrast reactions as those with other food allergies and asthma. In addition, only 7 to 17 percent of those with prior contrast reactions are at a risk of recurrence.[1] That's likely much less than most of us would have thought.

A much more plausible explanation for contrast reactions seems obvious when reviewing the evolution of intravenous contrast materials. Data collected from 1985 to 1999 reflected an adverse reaction rate of 6 to 8 percent with ionic (high-osmolar) contrast use, compared with 0.2 percent with exclusive nonionic (low-osmolar) contrast use.[2] It stands to reason that most patients reporting a contrast reaction in the distant past experienced a reaction due to ionic contrast.

2. LACK OF BACKING FOR ANTIBIOTICS AND NASAL PACKING

It's socially unacceptable to *pick* your nose, and it's medically unnecessary to use antibiotics when *packing* one.

Although it's a small study, we probably don't need large numbers to disprove something that never had proof to begin with.

Nasal packing for spontaneous epistaxis, most with Merocel and some with zinc paste and Foley catheters, was utilized. In this prospective observational series, 78 were treated with amoxicillin/clavulanate and 76 without antibiotics. All patients were observed for otitis media, sinusitis, toxic shock syndrome, and any other infectious complication.[3]

No patients in either group developed an infectious complication. Particularly with close follow-up, antibiotics appear to be unnecessary.

3. WOUNDS: THE MAGIC CLEANSER

Tap water—and lots of it—is likely the best irrigation solution. In this meta-analysis of 11 studies, tap water, distilled water, cooled boiled water, and normal saline were evaluated. The studies included wounds in pediatrics and adults. Here is the breakdown:

- open fractures: one trial
- surgical wounds: four trials
- chronic wounds: one trial
- lacerations: five trials

In the laceration trials, tap water was compared to saline, and the relative risk of infection was 0.63.[4] Thus, if tap water was utilized, infection was less likely than with saline irrigation.

There is no need to routinely obtain a CT before lumbar puncture.

Photo by ELSBURGH CLARKE, MD

With respect to irrigation additives, such as Betadine, the available data show that 1% solutions probably don't impede wound healing in lacerations but certainly don't reduce infections either. However, 10% (standard) Betadine is tissue toxic.[5-9]

4. CT BEFORE LP: CONTRARY TO POPULAR TEACHING, HEADS WILL NOT EXPLODE

This is an outdated concept without foundation to begin with. **"**Pathological arguments are made for supporting this practice, but no evidence exists to support these concerns."[10] First, herniation following lumbar puncture is very rare. The issue has never been about increased intracranial pressure; the issue is "brain shift" or "elevated CSF pressure."[11] To drive this point home, just consider the number-one treatment for idiopathic intracranial hypertension (pseudotumor cerebri). Not only is it safe to LP these patients without risk of herniation, it's recommended. If you still believe a CT is necessary prior to LP, Joffe further reported that in patients at risk for herniation, the CT is frequently normal, and a normal CT does not ensure the safety of LP.[10]

All of this hysteria began in 1969 when Dr. Duffy was managing 30 patients with end-stage brain tumors and decided to tap them all. One hundred percent herniated, 50 percent immediately and the rest within 12 hours. All of the patients had progressive headache, an altered mental status, and localizing neurological findings.[12] Even on a bad day, I don't see any of us performing LPs on such patients.

A few other articles of interest on the topic:

1. Archer BD. Computed tomography before lumbar puncture in acute meningitis: a review of the risks and benefits. *CMAJ.* 1993;148(6):961-5.
   -No evidence supporting routine CT prior to LP for meningitis.
   -If atypical features (i.e., neuro findings) exist, CT may be indicated.
2. Hasbun R, Abrahams J, Jekel J, et al. Computed tomography of the head before lumbar puncture in adults with suspected meningitis. *N Engl J Med.* 2001;345:1727-33.
   -52 of 56 patients with abnormal CTs had uneventful LPs.
   -Performing CT first basically doubles the length of stay (LOS), approximately six versus three hours. If you need the CT (i.e., SAH evaluation), consider doing the LP first, and reduce the LOS by 50 percent.

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References

1. Schabelman E, Witting M. The relationship of radiocontrast, iodine, and seafood allergies: a medical myth exposed. *J Emerg Med.* 2010;39(5):701-7.
2. Cochran ST, Bomyea K, Sayre JW. Trends in adverse events after IV administration of contrast media. *Am J Roentgenol.* 2001;176:6, 1385-1388.
3. Pepper C, Lo S, Toma A. Prospective study of the risk of not using prophylactic antibiotics in nasal packing for epistaxis. *J Laryngol Otol.* 2012;126(3):257.
4. Cooper D, Seupaul R. Is water effective for wound cleansing? *Ann Emerg Med.* 2012;60(5):626.
5. Goldenheim PD. An appraisal of povidone-iodine and wound healing. *Postgrad Med J.* 1993;69 Suppl 3:S97-105.
6. Roberts AH, Roberts FE, Hall RI, et al. A prospective trial of prophylactic povidone iodine in lacerations of the hand. *J Hand Surg.* 1985;10(B):370-374.
7. Rogers DM, Blovin GS, O'Leary JP. Povidone-iodine wound irrigation and wound sepsis. *Surg Gynecol Obstet.* 1983;157:426-430.
8. Cooper ML, Laxer JA, Hansbrough JF. The cytotoxic effects of commonly used topical antimicrobial agents on human fibroblasts and keratinocytes. *J Trauma.* 1991;31:775-784.
9. Rodeheaver G, Bellamy W, Kody M, et al. Bactericidal activity and toxicity of iodine-containing solutions in wounds. *Arch Surg.* 1982;117(2):181-186.
10. Joffe AR. Lumbar puncture and brain herniation in acute bacterial meningitis: a review. *J Intensive Care Med.* 2007;22(4):194-207.
11. van Crevel H, Hijdra A, de Gans J. Lumbar puncture and the risk of herniation: when should we first perform CT? *J Neurol.* 2002;249(2):129-37.
12. Duffy GP. Lumbar puncture in the presence of raised intracranial pressure. *Br Med J.* 1969;1:407-409.

OBAMACARE UPDATES

Brief news on the implementation of the Affordable Care Act

BY BRYN NELSON, PHD

A Mixed Bag for Ongoing ACA Legal Battles

If you thought the legal wrangling over the Affordable Care Act (ACA) might finally slow down in 2014, think again. In January alone, several major court cases yielded victories for supporters and opponents alike. In one closely watched case, a federal judge blocked a Missouri law that would have required navigators or others providing information about the ACA's health care plans to be licensed by the state.

Meanwhile, a District of Columbia federal judge dismissed a lawsuit brought by a group of business owners and individuals in six Southern states who had sued to prevent IRS tax credits to low- and moderate-income people buying insurance through the federal exchange. The Obama administration successfully argued that a bit of sloppy language left in the law that seemingly applied subsidies only to plans in state exchanges was meant to apply to both state and federal exchanges. The case, *Halbig v. Sebelius,* had been viewed as a significant threat to the ACA, though it's not quite over: The plaintiffs are appealing the decision, and similar lawsuits are pending.

The administration received a setback of its own when the Supreme Court extended an injunction for a Denver-based Catholic charity, Little Sisters of the Poor Home for the Aged. The court decision temporarily exempts the nonprofit organization from several requirements of the ACA, including birth-control coverage, while the case is heard in the 10th Circuit Court of Appeals. The Catholic Church and other groups have vigorously opposed the birth-control coverage mandate on religious grounds.

More States Considering Medicaid Expansion

Few provisions of the ACA have divided states more than the question of whether to expand Medicaid. By the end of 2013, the states were equally split: 25 (plus the District of Columbia) had agreed to expand coverage, while the other half were either undecided or actively opposed.

That dynamic is changing, according to the nonpartisan Pew Charitable Trusts. An additional nine states are now considering expansions of their own, including Utah, where Republican Gov. Gary Herbert announced his support in January. Officials in several other nonexpansion states have fretted over recent reports suggesting that they may lose out on billions of dollars in matching federal funds.

Another driving factor in the recent warming trend toward some form of expansion may be the growing use of waivers to craft state-specific versions of the federal program. Arkansas and Iowa have already used an alternative called the "private option" to enroll beneficiaries in private insurance plans. The Obama administration has given the Department of Health & Human Services leeway to grant these waivers to states wanting to experiment with health-care delivery methods as long as their Medicare modifications meet minimum standards and remain cost neutral.

With the private option now on the table, Kaiser Health News reported that Medicaid expansion is gaining more traction in Utah and other Republican-led states such as New Hampshire, Florida, and Pennsylvania. Arkansas, however, may be poised to go in the opposite direction: The state legislature is locked in a fight over whether to defund its own recent expansion.

Website Blunders Abating?

After the healthcare.gov website's botched rollout last November, the federal government received dismal approval ratings on its performance in several public polls. But after a much-publicized scramble to fix the main health insurance portal, media reports suggested that its performance has improved markedly. Polling numbers are trending upward, and a security scare over potential hacking turned out to be a false alarm.

The Supreme Court extended an injunction for a Denver-based Catholic charity, Little Sisters of the Poor Home for the Aged. The court decision temporarily exempts the nonprofit from several requirements of the ACA.

Will it be enough to make up for lost ground? Despite a recent surge, most analysts doubt whether the government can meet its initial goal of **7** million new enrollees by the end of March. On Feb. 25, President Obama announced that more than 4 million people have signed up for health care through ACA marketplaces. A recent "Avalere Health 2014 Industry Outlook" report, however, suggests that despite rapidly accelerating enrollment, the final tally may reach only about 5 million. Nor have the missteps ended entirely: The website was down for maintenance on National Youth Enrollment Day.

And after so much attention on the federal site, however, the spotlight is being trained more harshly on some of the 14 highly uneven state-run exchanges. States like California and Washington are posting encouraging enrollment numbers. Others have been far less fortunate. The state-run exchanges in Oregon and Maryland are so troubled that officials there are considering switching to the federal health care exchange next year.

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Political Duel Continues over Health Care Reform

Both Democrats and Republicans are honing their health care reform talking points and tactics in the run-up to midterm elections later this year. In his defense of the ACA during January's State of the Union

ACA RAPID FIRE

BY TODD TAYLOR, MD, FACEP, AND KEVIN KLAUER, DO, EJD, FACEP

1. The Congressional Budget Office (CBO) estimates that 2.5 million people will leave the workforce over the next 10 years due to the ACA. They will reduce their work hours or quit altogether.
2. Insurers have been advised that they do not need to cancel policies in 2014.
3. As of Dec. 28, 2013, just 11 percent of people signing up didn't have insurance previously.
4. ACA now requires more comprehensive coverage whether people need it or not (eg, a 60 year old now must carry maternity and pediatric coverage). Fortunately, it also covers mental health, which people may need when they see their new premiums.
5. Most of the low-deductible plans (especially in the silver variety) have sizable co-pays, coinsurance, special fees, and the maximum allowable out-of-pocket costs ($6,350 for an individual).
6. EDs (and most other providers) will find they now must get the majority of their payment directly from patients. So, even though patients are insured, EDs still have to track down payment from individuals–particularly before they've met their deductibles.
7. Most people who do not qualify for a government subsidy will now pay more for health insurance on average.
8. ACA makes health insurance available to everyone with taxpayer-funded subsidies, but due to high first-dollar coverage, the vulnerable group remains functionally uninsured.
9. Patients who cannot find in-network care due to a lack of availability will likely come to the ED.
10. On-call physicians will likely send patients back to the ED when they show up for follow-up and are not in-network or cannot pay their deductible.

address, President Barack Obama signaled his intent to more aggressively paint Republicans as obstructionists by challenging them to specify a viable alternative instead of repeatedly calling for a full repeal. "I know that the American people are not interested in refighting old battles," he said.

Republicans have adapted, too. In January, three Republican senators unveiled a "repeal and replace" alternative called the Patient Choice, Affordability, Responsibility and Empowerment (CARE) Act. The overhaul eliminates or reduces most government mandates while offering tax credits to help lower-income people buy insurance. The proposal limits the tax exclusion for insurance offered by employers and permits insurers to charge more for preexisting conditions if beneficiaries do not maintain continuous coverage.

In February, the Obama administration responded to sustained pressure from the business community by delaying the ACA's insurance mandate for employers with 50 to 99 workers until 2016. The news revived a Republican talking point that the law unfairly postpones rules for businesses but not individuals.

Push to Curb ED Visits by New Medicaid Beneficiaries

Backers of the ACA have argued that improved access to health care might decrease emergency department visits by new Medicaid beneficiaries. Experts, however, have warned of an increase in ED visits—at least initially—and the Centers for Medicaid & Medicare Services recently released guidelines designed to mitigate any uptick in unnecessary visits.

Among the agency's three main strategies: focusing on "super-utilizers" through services like health homes and on-site ambulatory clinics, increasing access to primary care, and using more targeted interventions for patients with behavioral health issues.

Several experts told *Modern Healthcare* they were unimpressed with the guidelines, citing a lack of new ideas and insufficient attention to mental health (Dickson V, Jan. 21, 2014). Meanwhile, a study in the journal *Science* added fuel to the fire by finding that new Medicaid beneficiaries in Oregon significantly increased their visits to the ED and to other care providers during their first 18 months of coverage (2014;343 :263-268).

Why? Economists told *The New York Times* that patients may be accessing ED services more often as Medicaid reduces their upfront costs (Tavernise. Jan 2. 2014). Experts have hotly debated whether this higher usage will persist and whether it also reflects a lack of primary care access. The heightened demand could put more strain on the nation's emergency physicians, though the overall financial impact may be more limited. In 2010, a government report found, total ED visits represented only 4 percent of total U.S. health care spending.

BRYN NELSON is a freelance medical journalist based in Seattle.

The Not-So-Sustainable Growth Rate

The only thing sustainable was the predictability of its failure

BY L. ANTHONY CIRILLO, MD, FACEP

Even before its passage into law in 1997, the Sustainable Growth Rate (SGR) Medicare physician-payment formula was inherently flawed and doomed to worsen the problem it was intended to fix. By artificially, and unfairly, linking physician payments under Medicare to changes in the gross domestic product (GDP), the Balanced Budget Act of 1997 established a system of payment that has actually worsened spiraling spending in the Medicare program. Since 2002, the SGR has likely led to higher Medicare spending by encouraging physicians to increase the volume of services provided to compensate for negative or negligible updates in reimbursement. Because everyone in the universe agrees that the SGR system is broken, physician advocacy groups, like the American Medical Association (AMA) and ACEP, annually parade to Capitol Hill to beg, plead, and demand that Congress fix the problem and replace the flawed formula. Unfortunately, more political posturing and a lack of true leadership in Congress will likely have us parading up to Capitol Hill again this year. How we ended up with a broken formula is easy to understand, but how to fix is not.

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The History of Medicare Physician-Payment Reform and the SGR

Close your eyes, and imagine you are a "GP" back in the early 1970s. In many cases, after a claim for services was submitted, the check that arrived was actually for the full amount you billed, assuming the Medicare carrier felt the charge was reasonable under the "customary, prevailing, and reasonable" (CPR) system. There were no hard limits on payment per service. Now, I know many of you have opened your eyes and have screamed, "No way!" Better yet, if Medicare didn't pay you the full amount billed, you could legally balance-bill your patient. Well, to no one's surprise, Medicare expenditures began to rise under this system as more people enrolled in Medicare and more services were provided. Since the mid-'70s, Congress has failed to limit the amount of spending for Medicare Part B payments to physicians.

"Those who cannot remember the past are condemned to repeat it." —*George Santayana*

Starting in 1975, Congress has attempted to reduce Medicare spending on physician services through a series of equally ineffective spending-control systems (eg, Medicare Economic Index [MEI], Medicare Fee Schedule [MFS], Resource-Based Relative Value Scale [RBRVS], and Medicare Volume Performance Standards [MVPS]). None of them worked.

Finally, with the passage of the Balanced Budget Act of 1997, Congress replaced the MVPS with the SGR. Rather than trying to control costs by reducing payment amounts for specific services, the SGR attempts to control spending by setting yearly and cumulative spending targets. If actual spending for a given year exceeds the spending target for that year, reimbursement rates for the following year are adjusted downward by decreasing the conversion factor (CF) for RBRVS relative value units (RVUs).

> The SGR formula uses 1996 spending levels as the basis for projected spending targets, which artificially links medical care today to what medical care spending was 18 years ago.

Under the SGR system from 1997 through 2001, the physician updates were positive and ranged from a modest 0.6 percent in 1997 to a high of 5.5 percent in 2000. However, payment rates were cut for the first time in 2002 by 4.8 percent. The uproar from the provider community was predictable, loud, and at least partially effective. Since 2002, Congress has prevented any further negative updates to physician payments by passing legislation that temporarily prevents the scheduled SGR reductions from going into effect. Although there haven't been any more negative updates, the highest update has only been 1.7 percent, with a whopping 0 percent update in three of the past 10 years. Without any negative updates, the amount owed under these temporary delays continued to increase as long as Medicare expenditures exceeded targets.

Where are the warts? First, the SGR limits spending by setting a spending target linked to the nation's GDP. Historically, spending on health care has had no direct correlation to the growth in the overall economy. Second, the SGR formula uses 1996 spending levels as the basis for projected spending targets, which artificially links medical care today to what medical care spending was 18 years ago. Lastly, by reducing or providing negligible positive updates, all the SGR did was encourage physicians to do more services and create more spending. Thus, the ironic paradox of the SGR: in order to make the same amount of total money, physicians provided more "services" because the payment per service was less.

Hopes for a Fix in 2014 … And What About the IPAB?

As the proverbial can got kicked farther and farther down the road, the overall price tag on a permanent fix got bigger and bigger and has been more than $300 billion in recent years. However, due to a recent unexplained decrease in Medicare expenditures, the Congressional Budget Office (CBO) has estimated that the cost for a one-time permanent fix would now be "only" $120 billion over 10 years. This reduction has provided an impetus for Congress to act to create a permanent fix. At the end of 2013, Congress passed a budget agreement that included yet another temporary three-month patch, which will expire at the end of March 2014. Even before the passage of this last patch, three key committees in Congress, the House Energy & Commerce, House Ways and Means, and Senate Finance committees, all had voted to support proposals that would eliminate the SGR permanently and replace it with fixed annual updates and changes to quality-based incentive programs. On Feb. 6, Rep. Michael Burgess (R-TX) introduced H.R. 4015, and Sen. Max Baucus (D-MT) introduced S. 2000: The SGR Repeal and Medicare Provider Payment Modernization Act of 2014. These companion bills would give providers 0.5 percent updates for 2014–2018 and 0 percent updates for 2019–2023 as well as create a new quality-incentive program titled the Merit-based Incentive Payment System (MIPS). MIPS would be a roll-up of the three systems currently utilized to incentivize physician payment: Electronic Health Records (EHR) Meaningful Use, the Physician Quality Reporting System (PQRS), and Value-Based Modifiers. These bills were actually crafted and overwhelmingly passed (at the committee level) with bipartisan support. There was agreement on the need to replace the SGR, create a more stable payment model, and incorporate quality incentives into Medicare reimbursement. This was the most comprehensive and most supported plan to replace the SGR since its creation in 1997. So will this bill ever become law? It probably won't in 2014. The committees did great work on how to reimburse physicians under Medicare, but they failed to address how to pay for it. The bill contains no fiscal offsets or other new revenue to make up for the $120 billion that physicians still "owe" the federal government. The chief supporter of the bill in the Senate, Finance Committee Chairman Baucus, left the Senate to serve as US ambassador to China, making passage in 2014 much less likely.

So what happens to physician reimbursement and the SGR now? By the end of March, Congress will likely do what Congress seems to do best: push the problem off until next year. In the spirit of election-year politics, neither the Republicans and certainly not the Democrats will want to be seen as giving doctors a "raise," especially if it's not paid for by some other budgeting gymnastics. When the three-month patch expires at the end of March, we're likely to see another nine-month patch, with an extension of the current 0.5 percent update through the rest of 2014. Santayana will be shaking his head and smiling as this most recent exercise of futility will find history repeating once again.

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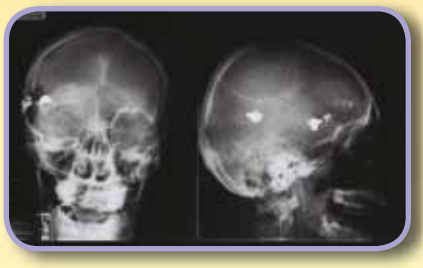
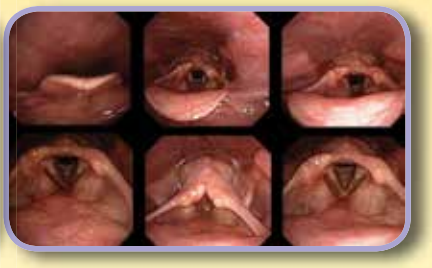


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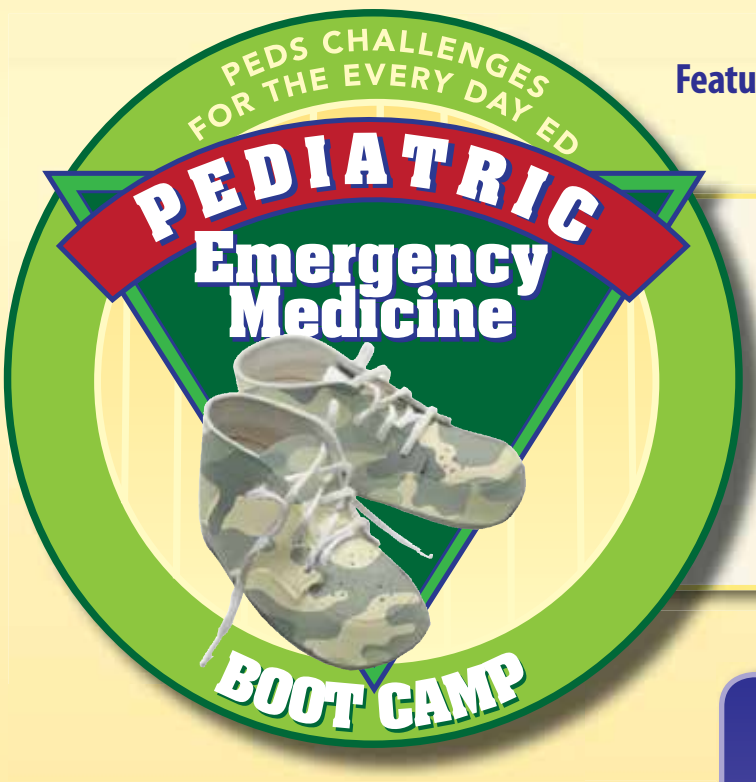

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CHRONIC PAIN: THEIR PAIN OR YOURS?

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A Rational Approach to the Opioid-Seeking Patient

by JIM DUCHARME, MD, CM, FRCP

Drug Diversion and Abuse Is a Major Societal Problem

In 2012, an estimated 23.9 million Americans age 12 or older—or 9.2 percent of the population—had used an illicit drug or abused a psychotherapeutic medication (such as a pain reliever, stimulant, or tranquilizer) *in the past month* (www.drugabuse.gov/publications/drugfacts/nationwide-trends). Marijuana is the gateway drug. Despite being declared by many to be a benign recreational drug, the odds of going on to addictive drugs such as opioids or methamphetamine are 140 times greater for those having used marijuana than having not used it. Despite the publicity of the rise in misuse of prescription opioids, the 25 percent increase in marijuana use since 2007 is the largest increase for any category of drugs of abuse. Nevertheless, prescription opioids are now fourth behind marijuana, alcohol, and cigarettes in prevalence of abuse among adolescents. They rank second behind marijuana in terms of rate of abuse in society. Given their much greater risk of morbidity and mortality, as well as the association with organized crime, the growing misuse of prescription opioids has created ever-increasing concern.

Chronic Non-Cancer Pain Management Is Failing Miserably

It is the complex disease state with the highest prevalence in society, has the highest economic impact on the workforce, and results in poverty-level existence for the average family that has someone suffering from it. Unable to pay for the multidisciplinary care required, more than 90 percent of patients with chronic non-cancer pain (CNCP) receive inadequate care for their pain. Lacking any other resource, many CNCP patients turn to the ED. This specific issue was addressed in the previous article, "Why Us? The Role of Emergency Physicians in the Care of Chronic Pain" (*ACEP Now*, January 2014, p. 9).

> Emergency physicians believe we can identify people coming to the ED for addiction or diversion, but *this is not true.*

Oligoanalgesia Rampant Across Health Care

Education in medical schools about pain management is less than one-third of similar training in veterinary schools. There is even less education about addiction and how to interact with people suffering from personality disorders. The average physician enters practice undereducated and ill-equipped to deal with any of the very difficult situations described above. The natural reaction to this lack of preparation is to be defensive and overly suspicious and find encounters with patients seeking opioids to be emotional and stressful. It's hoped this article can provide some suggestions about a rational approach to such patients to minimize that stress and avoid confrontations while meeting patient needs.

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Distinguishing People in Pain Seeking Opioids from People Seeking Opioids for Addiction or Diversion

Patients with pain as their primary complaint represent up to 75–80 percent of emergency patients. After 7 p.m., up to 70 percent of motor vehicle collisions are related to alcohol use. Similarly, the prevalence of patients with addiction as a medical disorder rises in patients presenting to the ED after 7 p.m. Even in inner-city hospitals at night, the ratio of patients in pain to those with addiction or diversion issues remains greater than three-to-one. The age of the patient is not of value; people visiting the ED for opioid abuse come from *all* age groups, including young children (Center for Behavioral Health Statistics and Quality, SAMHSA, Drug Abuse Warning Network, 2009).

Emergency physicians believe we can identify people coming to the ED for addiction or diversion, but *this is not true.* In a case-controlled study, 21 percent of patients requesting analgesia and 13 percent of controls tested positive for drug addiction using the DAST-20 survey (of those who agreed to participate). There was no correlation between the pain score and the DAST score. Almost one-half of patients scoring positive for addiction had a history of multiple ED visits and requests for specific opiates or "allergies" to opiates—*but more than half did not*. (*California J EM*. 2005;6:3-8). This inability to identify such patients usually results in labeling all patients seeking pain relief or requesting analgesics as "opioid seekers" for diversion rather than people suffering from inadequate pain management.

In my next column, I will discuss standardizing the ED approach to patients seeking opioids.

BETTER, SAFER, FASTER ... WHILE REDUCING COSTS

COST-EFFECTIVE CARE

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A High-Value Diagnostic Approach to Low-Back Pain

As emergency physicians, we have two roles in evaluating back pain: to treat patients' symptoms and to diagnose potentially life- or limb-threatening causes.

by MICHELLE LIN, MD, MPH, AND JEREMIAH SCHUUR, MD, MHS

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Halfway through a busy overnight shift, the healthy 45-year-old man you are seeing for low-back pain says, "Doc, my back is killing me—the pain is shooting down my leg! Can't you do an X-ray or CAT scan to tell me what's wrong with me?" You took a full history and examined him thoroughly, and you don't think imaging will reveal anything emergent, but as you consider launching into a long explanation about the risks and benefits of imaging, you hear a new ambulance arrival. You worry that after counseling he will still want imaging, and you know that your patient-satisfaction scores are monitored closely, so you order an X-ray and analgesia and decide to reassess the patient later.

Back pain is one of the most common emergency department presenting complaints, accounting for more than 2.6 million visits in 2006.[1] As emergency physicians, we have two roles in evaluating back pain: to treat patients' symptoms and to diagnose potentially life- or limb-threatening causes. In 2006, more than 30 percent of ED patients with back pain underwent an X-ray, and nearly 10 percent underwent CT or MRI, an increase from 3.2 percent in 2002, despite the fact that imaging is not associated with improvement in clinical outcomes.[1,2]

A thorough clinical history and exam in patients with *no* history of major trauma can identify many patients for whom imaging can be avoided. Important high-risk findings (see Table 1) of bowel or bladder incontinence, significant or evolving motor and/or sensory deficit, IV drug abuse or unexplained fever, history of cancer, and advanced age (typically >70 years) are reasons to obtain imaging for low-back pain. Otherwise, imaging rarely alters management, and the emphasis should be on treatment, reassurance, and education. This is supported by guidelines from both the American College of Radiology and the American College of Physicians.[3]

Which patients can be safely evaluated without imaging?

- Patients with *nonspecific back pain* for less than six weeks and normal neurologic examination without high-risk findings can be safely discharged with reassurance and outpatient primary-care follow-up. Patients who are able to identify acute inciting event without direct trauma are much more likely to have musculoskeletal causes of back pain.
- Patients with *back pain and radiculopathy* corresponding to L4–L5 or L5–S1 nerve roots (90 percent of disc herniations) are also candidates for outpatient follow-up without ED imaging. A positive straight leg raise is 91 percent sensitive and crossed straight leg raise is 88 percent specific for herniated discs. Patients with signs consistent with lumbar radiculopathy should *not* routinely undergo MRIs in the ED. While MRI is sensitive for the disc disease, identifying herniated discs doesn't alter ED management. One study of asymptomatic patients demonstrated that 64 percent had abnormal discs, 52 percent had bulging discs, and 31 percent had disc protrusion![4] MRI is an outpatient preoperative test for patients with persistent symptoms less than six weeks who may be candidates for spinal injections or surgery. Indications for surgery include failure of conservative therapy after four to six weeks and neurologic deficit causing disability.
- The majority of patients in both groups will improve with conservative management within four to six weeks; emergent imaging does not alter clinical outcomes.

CONTINUED *on page 28*

Table 1. High-Risk History and Physical Examination Findings Warranting Further Workup[5]

FINDING	CONSIDER...
Age > 70 or < 20 years	Infection, cancer, vascular disease
History of cancer or unexplained weight loss	Metastatic disease
Persistent fevers/ night sweats Immunocompromise, HIV Prolonged steroid use Intravenous drug use	Epidural abscess, osteomyelitis, metastatic spine lesion, osteomyelitis (discitis)
Aortic aneurysm	Retroperitoneal rupture
Motor neurologic deficit	Cord or root compression
Urinary retention (90 percent sensitive), bowel incontinence, saddle anesthesia	Cauda equina syndrome (0.04 percent of all back-pain patients)

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Emergency Physicians Should Prepare to Measure Performance and Show Cost-efficient Care

An alliance between quality and clinical practice

by JAMES J. AUGUSTINE, MD, FACEP

As emergency department leaders, it is critical that emergency physicians understand the national data sources available to improve the local emergency system and the functions of the department. This column will review the most important sources and applications of ED performance measures and how they should impact the practice of emergency medicine, including your personal practice. These critical data elements are important for all emergency physicians as discussions evolve regarding the value of emergency care with hospital leaders, community decision makers, and the designers of the future health system.

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ED Performance Focused Data Sources

The Emergency Department Benchmarking Alliance (EDBA), founded in 1994, has 20 years of experience in defining ED performance measures, cohorts, and mechanisms for improving the management of EDs. The EDBA annual data survey produces a small number of well-defined performance measures and descriptive elements of the ED. The alliance now comprises 1,000 EDs from every state, and every volume and acuity, that serve 40 million patients. Emergency physicians can find trends in performance measures related to ED size, flow, acuity, disposition, productivity, use of diagnostic tools, and space utilization.

The Centers for Disease Control and Prevention (CDC) initiated a study in 1992 to investigate the types of patients being served in EDs, their medical characteristics, and the disposition of the patients at the end of the visit. The National Hospital Ambulatory Medical Care Survey (NHAMCS) is a wealth of information on emergency medicine in America. The CDC sampling and analysis process takes some time, so the latest available is the 2010 data report, which is based on a sampling of 34,936 ED patient-care reports from 357 EDs. National population census data are used to estimate utilization of ED services by populations. The survey has almost 20 years of annual data, which have been used to identify important trends for emergency physicians and regulatory leaders.

The surveys collectively report on the success of 50 years of prevention programs to which emergency physicians have made tremendous contributions. There has been little recognition of the success in preventing premature death related to trauma, burns, and cardiac arrest. The surveys make it apparent that prevention is working in the emergency population, with ED visits related to *injuries* continuing to shrink. These now represent about 29 percent of ED patient encounters.

EDs are serving more high-acuity patients and more patients who are arriving in an ambulance. The combined effects of these trends are that ED visits have increased over 12 years from 369 visits per 1,000 population to 428 per 1,000. There is no indicator that points to decreased utilization of emergency services. The ED population is aging, which is in line with the demographics of the country. The ED visit rate for persons older than 65 is much higher than for those younger than 65. As this population group is going to boom for years, emergency physicians must plan for higher ED volumes and design departments that are friendlier to a senior population.

A significant increase in ED utilization is also occurring for patients with mental health and chemical use presentations. The NHAMCS report is finding an increased number of patients seen for mental health reasons, and their disposition is often difficult and time consuming. An examination of the NHAMCS database reveals that about half of patient transfers from EDs are for mental health treatment. This is a significant burden on emergency physicians and the organizations that must move these patients safely between sites.

Matching the increase in acuity is the need for further hospital-based service at the end of ED visits. A growing percentage of hospital admissions are funneled through the ED. The EDBA data indicate that 68 percent of all hospital inpatients are processed through the ED. In many hospitals, especially those in community settings, the number is 80 percent or greater. *Clearly, the ED is the front door to the hospital!*

The growing volume of patients also reflects the position of the ED as the diagnostic center for the American medical community. The need for precision in defining patient needs has resulted in increased use of diagnostic tools in the ED, especially diagnostic imaging. The use of diagnostic testing has changed dramatically over the last 20 years, according to surveys on ED practice. Some diagnostic tests have almost completely disappeared. Arterial blood gases were used in many patients in 1992 and now have completely disappeared due to low utilization.

The use of other diagnostic tests has increased. CT scans increased in usage from about 2.4 percent of visits in 1992 to about 16 percent in 2010. The EDBA uses a different collection and reporting methodology and found that CT use, as measured by the number of CT procedures performed per 100 patients, plateaued in 2008 at about 23 procedures per 100 patients and has now decreased to about 20 CT procedures per 100 patients. Plain diagnostic X-rays, of which about 50 percent are chest X-rays, were performed on about 42 percent of patients in 1992 and have since decreased to about 35 percent in 2010.

ECG utilization has increased from a rate of 13 uses per 100 patients in 1992 to about 26 in 2010.

The most common medicine used in the ED was promethazine prior to about 2007, when it was replaced by ondansetron, which came off patent protection in 2006, dropping the cost to hospitals significantly. Both drugs were used about 12 times per 100 patients. The changeover was also boosted due to the unusual black box warning on promethazine in 2009.

As we progress to a significantly revised health care system in America, emergency physicians must be facile in their knowledge of ED performance measures and be prepared to explain the value of emergency care to the health system. This column will explain the data elements available for emergency physicians to develop the reports on high-quality and cost-efficient care provided in EDs.

Sources

1. The Emergency Department Benchmarking Alliance. Information is available at: www.EDBenchmarking.org
2. The calendar year 2010 Emergency Department Summary Tables are available at: http://www.cdc.gov/nchs/data/ahcd/nhamcs_emergency/2010_ed_web_tables.pdf. The CDC data tables are now published without an analysis. It is important to archive the 2007 report for use as a reference when looking at the data tables in later years. It is available at: http://www.cdc.gov/nchs/data/nhsr/nhsr026.pdf.

PROTECT YOUR POT OF GOLD FROM BAD ADVICE

THE END OF THE RAINBOW

JAMES M. DAHLE, MD, FACEP, blogs as The White Coat Investor at http://whitecoatinvestor.com. He is not a licensed financial adviser, accountant, or attorney and recommends you consult with your own advisers prior to acting on any information you read here.

The Rent Is Too Damn High

by JAMES M. DAHLE, MD, FACEP

In 2010, a former postal worker, Jimmy McMillan, famously ran for Governor of New York on the slogan, "The rent is too damn high!" That slogan can also be applied to the price most physicians are paying for financial advice. When it comes to investing, unlike with most things in life, you get (to keep) what you *don't* pay for. Advisory and management fees come directly out of your investment return. Therefore, your goal should be to pay the least amount possible for good financial planning advice and quality asset management.

Jack Bogle, the founder of Vanguard, has said, "The long-term investor must be aware of the portion of investment return that will be consumed by [investment] expenses. Cost lops the same number of percentage points off both nominal and real [after-inflation] returns, but given persistent inflation, it nearly always consumes a proportionally larger share of real returns. To state the obvious, the long-term investor who pays the least has the greatest opportunity to earn most of the real return provided by the stock market."

Consider two investors who each contribute $50,000 in the same investment, which returns 9 percent per year—before expenses—over 30 years. The first pays 0.1 percent in annual expenses. The second pays 2 percent in annual expenses. After 30 years, the first has $6 million. The second ends up with $4.2 million—30 percent less. Bogle refers to this phenomenon as the "tyranny of compounding." Just like the "magic of compounding," where small differences in return can result in a vast difference in wealth over many years, with the tyranny of compounding, small differences in expenses can also result in a monstrous loss of wealth.

Another way to demonstrate the importance of keeping investment costs low is to consider your portfolio withdrawals in retirement. Historical studies demonstrate that investors can take out around 4 percent of their portfolio value per year and expect it to have a very good chance of lasting at least 30 years. If investors are paying 2 percent in investment expenses, then they can really only withdraw 2 percent per year and expect the portfolio to last. If you combine the smaller portfolio value from the above example with a lower withdrawal rate in retirement, you'll see that high-cost investors end up being only able to spend 35 percent as much in retirement as low-cost investors, or $84,000 versus $240,000.

That simple demonstration of arithmetic is enough to turn many doctors into die-hard do-it-yourselfers, but in my experience, most busy physicians would still prefer to hire an expert to assist with their financial planning and investment management. It is certainly reasonable to pay a fair price for good advice. However, that is easier said than done. "You are engaged in a life-and-death struggle with the financial-services industry. Every dollar in fees, expenses, and spreads you pay them comes directly out of your pocket," said William J. Bernstein, MD, a former neurologist and widely recognized investing author. "If you act on the assumption that every broker, insurance salesman, mutual-fund salesperson, and financial advisor you encounter is a hardened criminal, you will do just fine."

Not every financial planner and asset manager is a hardened criminal, of course. There are plenty of good advisers out there, although they are a distinct minority among those who call themselves financial advisers. The first order of business is to make sure the advice is good. There is no price too low for bad advice. Doing a little bit of self-education and getting a second opinion are two helpful techniques for identifying bad advice. It also helps to avoid advisers who are paid on commission. You want a fee-only adviser who gets paid the same no matter what you invest in or what insurance products you buy. However, even among high-quality fee-only advisers, there can be vast differences in pricing. One well-known physician-focused firm starts its asset-management fees at 1.75 percent of assets under management (AUM). Even with a portfolio of $3 million, it still charges 0.9 percent, or $27,000 per year.

Your goal should be to pay the least amount possible for good financial planning advice and quality asset management.

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It may seem that 1 percent of AUM is the going rate for asset-management services. Many asset managers even throw in financial planning for free when you pay the asset-management fees. However, once you become familiar with asset managers who charge far less, 1 percent may start to seem rather expensive, especially for a large portfolio and especially after you apply the tyranny of compounding to those fees.

I know of several asset-management firms that charge far less than 1 percent. One charges a flat $1,000 per year, and another charges $1,800–$3,600. A third charges a minimum of $3,700 per year, plus 0.37 percent of all assets more than $1 million. A $3 million portfolio doesn't take any more effort to manage than a $300,000 portfolio, much less 10 times the effort. So it is silly to pay for asset management as a percentage of assets, but that is unfortunately the way most of the industry works. If you choose to go with a manager who charges based on AUM, at least do the math (AUM fee multiplied by the portfolio size) to determine the equivalent flat annual fee. If you're paying more than $5,000–$10,000 per year, it is probably worth your time to shop around.

Financial planning can also be done on an hourly or flat-fee basis. Most planners tell me it takes six to eight hours to do the process right, and hourly planners typically charge $100–$400 per hour. There is simply no reason to pay tens of thousands of dollars in ongoing fees for a task that can be done well for $1,000–$2,000, with lesser amounts in future years for minor tweaks to the plan.

When it comes to financial advisory fees, "the rent is too damn high." Pay close attention to the fees you are paying for financial planning and asset management because every dollar you pay in fees comes directly out of your investment return.

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The Intubation Checklist

by SCOTT D. WEINGART, MD, FCCM, AND ANGELA HUA, MD

The Case

A 63-year-old male with severe sepsis from pneumonia is brought to the emergency department. The monitor shows blood pressure of 72/48 mm Hg and a blood oxygen saturation (SpO_2) of 92 percent. The decision is made to intubate the patient for predicted worsening clinical course as well as poor mental status. What now? Just jump into rapid sequence intubation (RSI), right? But it's pretty disappointing to realize that the patient's blood pressure has dropped even lower after you push the meds, and he has turned out to be an unanticipated difficult airway. You yell for the necessary equipment and meds, but nobody seems to understand the seriousness of the situation.

Wouldn't it be better to make sure everything was prepared to give you optimal success every time whether the intubation is smooth or difficult? This is a situation ripe for a checklist.

Not Everyone Respects Checklists

From a doctor on a critical-care mailing list, regarding a checklist: "This is so over the top! Instead of using a checklist, I just intubate. Sorry for sounding gung ho. Many of the items on the checklist are required to be on standby 24-7 in every ED. No point to go through them. Briefing is clearly superfluous and a waste of time. The checklist obsession just got worse!"

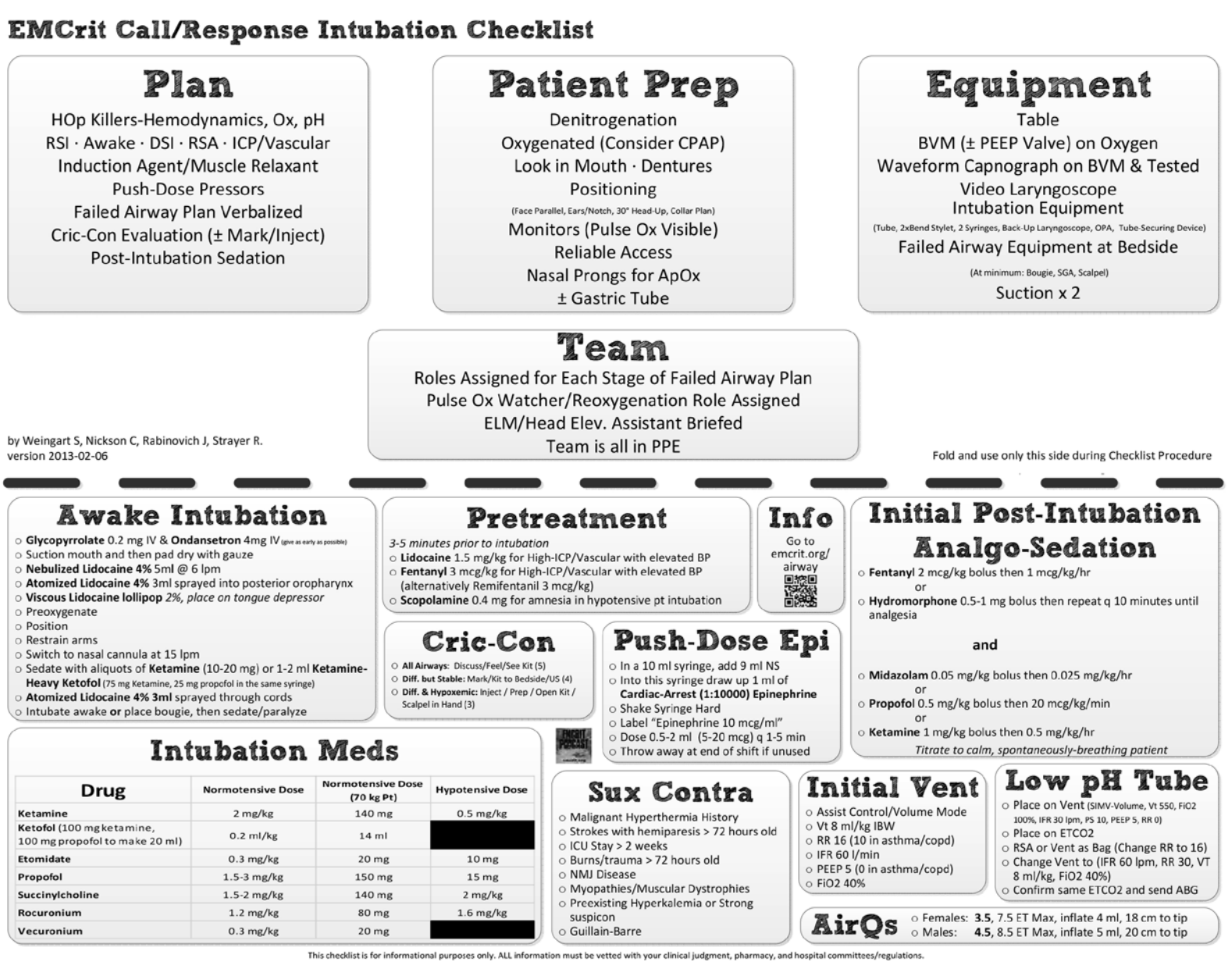
You may think a checklist is unnecessary, but think again. In 2001, Peter Pronovost, MD, PhD, introduced an intensive-care checklist protocol for central venous catheter insertion.[1] In the first three months of use after the launch of the Keystone ICU project, the median rate of infections at a typical ICU dropped from 2.7 per 1,000 patients to 0.[2] An estimated 1,500 lives and $175 million were saved over the first 18-month period.[1] Since this landmark study showing the efficacy of a checklist, medicine has begun to embrace the idea of integrating these cognitive aids into clinical practice. Most checklists have been adopted in elective procedures, where the controlled and stable setting allows for the time and patience to run through the list. However, we can likely gain similar safety and cognitive benefits from checklists for ED intubations.

Every time the decision is made to intubate, we are putting patients at risk. It is imperative to consider and prepare for predictable dangers, especially when intubating in an adrenaline-charged environment like the ED. The EMCrit call/response intubation checklist is designed for use in such a situation.

How to Use the EMCrit Call/Response Intubation Checklist

The checklist (FIgure 1, below) is available at emcrit.org/podcasts/emcrit-intubation-checklist. Print the checklist double-sided on a single piece of paper. Fold it in half along the dotted line on the front page; only the top portion of the page is the actual checklist to be used while intubating. The bottom of the front page is an aid for commonly needed doses and reminders for the peri-intubation period. The back (inside the fold) includes instructions for the use of the checklist—these should only be used for review or to teach

Figure 1: Actual Intubation Checklist for Clinical Use



EMCrit Call/Response Intubation Checklist

Plan
HOp Killers-Hemodynamics, Ox, pH
RSI · Awake · DSI · RSA · ICP/Vascular
Induction Agent/Muscle Relaxant
Push-Dose Pressors
Failed Airway Plan Verbalized
Cric-Con Evaluation (± Mark/Inject)
Post-Intubation Sedation

Patient Prep
Denitrogenation
Oxygenated (Consider CPAP)
Look in Mouth · Dentures
Positioning
(Face Parallel, Ears/Notch, 30° Head-Up, Collar Plan)
Monitors (Pulse Ox Visible)
Reliable Access
Nasal Prongs for ApOx
± Gastric Tube

Equipment
Table
BVM (± PEEP Valve) on Oxygen
Waveform Capnograph on BVM & Tested
Video Laryngoscope
Intubation Equipment
(Tube, 2xBend Stylet, 2 Syringes, Back-Up Laryngoscope, OPA, Tube-Securing Device)
Failed Airway Equipment at Bedside
(At minimum: Bougie, SGA, Scalpel)
Suction x 2

Team
Roles Assigned for Each Stage of Failed Airway Plan
Pulse Ox Watcher/Reoxygenation Role Assigned
ELM/Head Elev. Assistant Briefed
Team is all in PPE

by Weingart S, Nickson C, Rabinovich J, Strayer R.
version 2013-02-06

Fold and use only this side during Checklist Procedure

Awake Intubation
- **Glycopyrrolate** 0.2 mg IV & **Ondansetron** 4mg IV (give as early as possible)
- Suction mouth and then pad dry with gauze
- **Nebulized Lidocaine 4%** 5ml @ 6 lpm
- **Atomized Lidocaine 4%** 3ml sprayed into posterior oropharynx
- **Viscous Lidocaine lollipop** *2%, place on tongue depressor*
- Preoxygenate
- Position
- Restrain arms
- Switch to nasal cannula at 15 lpm
- Sedate with aliquots of **Ketamine** (10-20 mg) or 1-2 ml **Ketamine-Heavy Ketofol** (75 mg Ketamine, 25 mg propofol in the same syringe)
- **Atomized Lidocaine 4% 3ml** sprayed through cords
- Intubate awake **or** place bougie, then sedate/paralyze

Pretreatment
3-5 minutes prior to intubation
- **Lidocaine** 1.5 mg/kg for High-ICP/Vascular with elevated BP
- **Fentanyl** 3 mcg/kg for High-ICP/Vascular with elevated BP (alternatively Remifentanil 3 mcg/kg)
- **Scopolamine** 0.4 mg for amnesia in hypotensive pt intubation

Info
Go to emcrit.org/airway

Initial Post-Intubation Analgo-Sedation
- **Fentanyl** 2 mcg/kg bolus then 1 mcg/kg/hr
  or
- **Hydromorphone** 0.5-1 mg bolus then repeat q 10 minutes until analgesia

and

- **Midazolam** 0.05 mg/kg bolus then 0.025 mg/kg/hr
  or
- **Propofol** 0.5 mg/kg bolus then 20 mcg/kg/min
  or
- **Ketamine** 1 mg/kg bolus then 0.5 mg/kg/hr

Titrate to calm, spontaneously-breathing patient

Cric-Con
- **All Airways:** Discuss/Feel/See Kit (5)
- **Diff. but Stable:** Mark/Kit to Bedside/US (4)
- **Diff. & Hypoxemic:** Inject / Prep / Open Kit / Scalpel in Hand (3)

Push-Dose Epi
- In a 10 ml syringe, add 9 ml NS
- Into this syringe draw up 1 ml of **Cardiac-Arrest (1:10000) Epinephrine**
- Shake Syringe Hard
- Label "Epinephrine 10 mcg/ml"
- Dose 0.5-2 ml (5-20 mcg) q 1-5 min
- Throw away at end of shift if unused

Intubation Meds

Drug	Normotensive Dose	Normotensive Dose (70 kg Pt)	Hypotensive Dose
Ketamine	2 mg/kg	140 mg	0.5 mg/kg
Ketofol (100 mg ketamine, 100 mg propofol to make 20 ml)	0.2 ml/kg	14 ml	
Etomidate	0.3 mg/kg	20 mg	10 mg
Propofol	1.5-3 mg/kg	150 mg	15 mg
Succinylcholine	1.5-2 mg/kg	140 mg	2 mg/kg
Rocuronium	1.2 mg/kg	80 mg	1.6 mg/kg
Vecuronium	0.3 mg/kg	20 mg	

Sux Contra
- Malignant Hyperthermia History
- Strokes with hemiparesis > 72 hours old
- ICU Stay > 2 weeks
- Burns/trauma > 72 hours old
- NMJ Disease
- Myopathies/Muscular Dystrophies
- Preexisting Hyperkalemia or Strong suspicon
- Guillain-Barre

Initial Vent
- Assist Control/Volume Mode
- Vt 8 ml/kg IBW
- RR 16 (10 in asthma/copd)
- IFR 60 l/min
- PEEP 5 (0 in asthma/copd)
- FiO2 40%

Low pH Tube
- Place on Vent (SIMV-Volume, Vt 550, FiO2 100%, IFR 30 lpm, PS 10, PEEP 5, RR 0)
- Place on ETCO2
- RSA or Vent as Bag (Change RR to 16)
- Change Vent to (IFR 60 lpm, RR 30, VT 8 ml/kg, FiO2 40%)
- Confirm same ETCO2 and send ABG

AirQs
- Females: **3.5**, 7.5 ET Max, inflate 4 ml, 18 cm to tip
- Males: **4.5**, 8.5 ET Max, inflate 5 ml, 20 cm to tip

This checklist is for informational purposes only. ALL information must be vetted with your clinical judgment, pharmacy, and hospital committees/regulations.

Visit emcrit.org/podcasts/emcrit-intubation-checklist to download.

others in nonclinical situations.

With a call/response checklist, one person should go through the list and ask the questions while another member of the intubating team, ideally the intubator, provides the answers. By the time the checklist has been completed, all equipment gathering and preparations have already been accomplished. In this case, the checklist takes less than a minute to run through. It only takes longer when items have been forgotten.

Understanding the Items on the Checklist

Plan Section

Think about the presence of the "HOp Killers": hemodynamic kills, oxygenation kills, and pH kills. Issues such as preexisting hypotension, poor cardiac output, poor oxygenation, and metabolic acidosis may cause patients to destabilize and code in the peri-intubation period. This is a reminder to address these issues before the tube, choose strategies based on their presence, and prepare for further decompensation.

Next, consider the approach to intubation: **RSI/DSI/RSA/Awake/ICP-Vascular**. RSI is our default management strategy in EM. Delayed sequence intubation (DSI) might be beneficial in those patients not allowing pre-oxygenation due to delirium or altered mental status. Rapid sequence airway (RSA) may be used for patients who need to be bagged during the apneic period (i.e., severe metabolic acidosis). The technique consists of induction and paralysis immediately followed by placement of a supraglottic airway (SGA) to allow safe apneic-period bagging. When patients have fully relaxed, the device is removed, and you are ready to intubate. Consider awake intubation when you predict patients to be a difficult airway and you have a few minutes to prepare for an awake look. The intracranial pressure (ICP)/vascular approach refers to situations in which there is great concern about a peri-intubation blood pressure spike (eg, subarachnoid hemorrhages, aortic dissections, and head trauma). Once the approach is determined, choose the induction agent and muscle relaxant. On the bottom of the front page, there is a table for intubation medications and their dosages.

Other things to think about during this planning stage are **push-dose pressors** in patients who are already hypotensive or have the potential to drop their blood pressures, a **failed-airway plan**, **cric-con evaluation** (evaluation and possible marking of the cricothyroid membrane), and **post-intubation medications**. The push-dose epinephrine will help raise blood pressure and increase cardiac output; mixing instructions are found on the bottom half of the sheet. The failed-airway plan and sequencing should be verbalized and discussed among the team so everyone in the room is on the same page. For instance, specify who will try the first, second, and third attempts and what changes are to be made between each one. After a failed third attempt, state, "We'll try SGA, and if that fails, then we'll move on to a cricothyroidotomy." Lastly, have the post-intubation analgesics and sedatives prepared prior to the intubation to avoid having paralyzed patients in pain crying while they wait for the meds. There is a table of analgesia and sedation medications, with their dosages, on the bottom of the fold.

> Every time the decision is made to intubate, we are putting patients at risk. It is imperative to consider and prepare for predictable dangers.

Patient Preparation

After the plan has been developed, you're ready to move on to the "Patient Prep." It is important to think about **denitrogenation** and **oxygenation** separately. To denitrogenate, or replace the nitrogen in the lungs with oxygen, patients will need at least eight vital-capacity breaths or three minutes on a high FiO_2 oxygen source. For oxygenation, the goal oxygen saturation is more than 95 percent. If that is difficult to achieve with a nasal cannula/non-rebreather mask (NC/NRB) combination, consider CPAP or allowing the patient to breathe spontaneously through a bag valve mask (BVM) with a PEEP valve and a nasal cannula underneath. Next, ensure **proper patient positioning** for a safe intubation: face plane parallel to ceiling, ear-to-sternal notch, head of bed 30 degrees up to help with preoxygenation and glottic exposure. If patients are in a cervical collar, use reverse Trendelenburg. Verify that the **monitors are functioning** with accurate blood pressure readings, adherent ECG leads, etc.; there must be a reliable pulse oximeter, preferably visible to the intubator and whomever is overseeing the intubation. Assign a person to call out when the saturation hits 93 percent, the point at which patients should be reoxygenated. Patients must also have reliable **IV or IO access**. A nasal cannula should be placed on patients for preoxygenation and **apneic oxygenation**. Consider placing a **gastric tube** if patients have a gastrointestinal bleed or small bowel obstruction.

Equipment

Next, check the intubation equipment. There must be a **table** for the location of equipment; placing supplies on the patient bed guarantees they will be on the floor when you need them most. The **BVM** should have oxygen turned up high and include a PEEP valve if the oxygenation HOp Killer is present. Test the waveform **capnograph** and place it between the bag and the mask of the BVM. Have the **intubation supplies**, including a backup standard laryngoscope, a video laryngoscope, and all of the **failed-airway equipment,** at the bedside to enact the previously verbalized plan if necessary. There should also be two syringes, an appropriately sized oropharyngeal airway, a stylet, a tube-securing device, and **two functioning sources of suction**.

The Team

Finally, brief the team. Assign roles for each stage of the failed-airway plan. Assign a pulse-ox watcher to call out at 93 percent. Brief the assisting staff on what is expected of them. Ensure that all of the team is in personal protective equipment (PPE), which at a minimum should include eye protection and a surgical mask.

Conclusion

Every intubation means taking a patient's life into your hands. Extensive planning and preparation is imperative. This checklist may help with the meticulous organization that is necessary to make certain the intubation will be as safe as possible. For more information or the podcast on this checklist, please refer to emcrit.org/podcasts/emcrit-intubation-checklist.

References

1. Gawande, A. The Checklist: if something so simple can transform intensive care, what else can it do? *New Yorker*. Available at: www.newyorker.com/reporting/2007/12/10/071210fa_fact_gawande?currentPage=all.
2. Pronovost P, Needham D, Berenholtz S, et al. An intervention to decrease catheter-related bloodstream infections in the ICU. *N Engl J Med*. 2006;355 (26):2725-32.

Figure 2: Supplemental Information for Reference

Plan

RSI or Awake? · DSI? · RSA? · ICP/Vascular?
- Consider performing awake intubation in patients predicted to be difficult airway/reoxygenation and will allow 5-10 minutes preparatory time
- Consider Delayed Sequence Intubation in patients not tolerating preoxygenation/denitrogenation/preparatory positioning or procedures
- Consider Rapid Sequence Airway (Induce patient and immed. place SGA) in patients who will need to be bagged during apneic period
- Consider an ICP/Vascular intubation in normotensive/hypertensive patients at risk from an increase in sympathetic tone/MAP

Are the peri-intubation medications ready?
- Full possible dose of induction agent with dose/ml labeling
- Full possible dose of muscle relaxant with dose/ml labeling
- If pt has potential for BP decrease, push-dose pressors should be drawn up and at bedside in a syringe marked with dose/ml labeling

What is the plan for unexpected difficult or failed airway?
- The team must verbalize the entire progression of the failed airway plan including who will perform each step
- Would this patient benefit from the presence of a 2nd ED Attending or a consultant?

Can the cricothyroid membrane be palpated?
- Consider marking, consider ultrasound-guided marking, consider pre-intubation prep with lidocaine 2% with epinephrine

What is the plan for post-intubation sedation?
- A plan for an **analgesic** and a sedative should be verbalized and preparation should start during the intubation preparations if there are available personnel

Patient

Have we denitrogenated?
- 8 breaths on maximal flow NRB or 3 minutes of tidal volume breathing.
- Do not remove the NRB/Mask until pt is apneic

Have we preoxygenated?
- Sat ≥ 95% on NRB or switch to CPAP Preox. Should achieve a saturation of ≥ 95% or you max out on PEEP 15 cm/H20

Monitors?
- Is the patient hooked up to BP set to cycle q1 minute, EKG, and a pulse ox visible to resus leader & intubator or a pulse ox watcher assigned?

Is the patient positioned adequately?
- Ear to sternal notch and face plane parallel to ceiling unless spinal precautions
- If spinal precautions, have plan for collar removal and inline stabilization
- Is the head of bed at 30° or in Reverse-Trendelenberg?

Is there reliable access?
- At least one, preferably two. If there is any doubt, place IO

Is the patient prepared for ApOx (NoDESAT)?
- Is a nasal cannula on the patient for apneic oxygenation?
- Is a plan verbalized for who will remove the patient's NRB from O_2 port and switch to NC @15 lpm after meds are pushed or is NC on a separate oxygen cylinder?

Would the patient benefit from pre-intubation NGT?

Equipment

Do you have a table?
- All equipment must be on a procedure table, not on the bed or on the patient.

Is there a BVM hooked up to oxygen set to maximal flow?
- Is there a PEEP valve if saturation on high-fiO_2 is <95%?

Is waveform capnograph prepared?
- Tested by blowing and hook it up to The BVM. Qualitative Should be within eyesight (Leave it in Its package)

Is the video laryngoscope set up?
- All intubations should be performed with a video device **if CMAC** (decide if resident wants to look at screen), otherwise should be present at bedside

Is intubation equipment prepared and ready?
- Two functional laryngoscopes—sized and checked, properly sized oral airway, ETT tube with stylet bent at both ends in hockey stick configuration, with syringe attached—balloon checked, 2nd tube in package within eyesight, Extra 10 ml syringe, Tube-Securing Device

Is failed airway equipment prepared and ready?
- All equipment necessary to effect the failed airway plan must be at the bedside. Usually this consists of 2 NPAs, a bougie, an appropriate sized AirQ ILA, surgilube and a scalpel all still in their packages.

Is the suction equipment prepared?
- 2 suctions turned on, one at intubator's right hand--Listen to each. Pull on tubing to make sure it is attached to the off-centered attachment. Ask intubator to verbalize that if suction is needed, they will need to put their finger over the hole

Visit emcrit.org/podcasts/emcrit-intubation-checklist to download.

ENHANCING NEW STANDARDS FOR OLD PATIENTS

CONTINUED FROM PAGE 16

Table 1: Recommendations from the GED Guidelines

GENERAL CATEGORY	RECOMMENDATION	SPECIFIC EXAMPLES
STAFFING	ED availability of geriatric-trained physician and nursing leadership, including GED medical director who completes ≥8 hours of geriatric CME every two years	GED medical director serves as liaison with hospital staff and outpatient-care partners, identifies needs and resources for staff geriatric education, and reviews and approves all hospital geriatric policies and procedures
TRANSITIONS OF CARE	Transition-of-care protocols will facilitate timely communication of clinically relevant information appropriate for the level of geriatric syndrome (dementia, acute illness severity, frailty, sensory impairment) associated disability of the individual patient	Discharge instructions, available in large font, that provide HIPAA-compliant information to family/care provider, long-term care facilities, and surrogate decision makers
TRANSITIONS OF CARE	Establish and maintain relationships with key community resources to access as needed in transition from ED to outpatient care	Medical home, case managers, home safety assessment by occupational therapy or home care nursing, medical transportation services, meal assistance programs, and prescription assistance
EDUCATION	Continuing medical education programs will increase physician and nursing staff awareness of unique geriatric emergency care needs, policies, and procedures	Multidisciplinary nature of effective geriatric health recovery and maintenance, evidence-based geriatric syndrome screening instruments and interventions, atypical disease presentations balanced against overutilization of resources and goals of care, and palliative-medicine opportunities
QUALITY IMPROVEMENT	Geriatric quality-improvement program will be developed and monitored by the GED medical director and nurse manager	Semiannual reviews targeting geriatric syndrome prevalence of injurious fall screening rates and sequelae as well as patient-centric outcomes, delirium screening and management, catheter-associated urinary tract infection prevention efforts, and inappropriate high-risk medication prescribing
EQUIPMENT AND SUPPLIES	Physical infrastructure shall accommodate patients with mobility, continence, sensory, or cognitive impairment	Reclining chairs rather than gurneys to enhance comfort and minimize pressure ulcers, walking-assist devices and hearing aids at the bedside, patient-controlled lighting, and enhanced signage
POLICIES, PROCEDURES, AND PROTOCOLS	Department policies for prevalent geriatric syndromes should be developed by and readily available for staff	Delirium screening protocol, elder-abuse assessment strategy, urinary catheter placement criteria, transition-of-care priorities, and palliative-care triggers

workers, case managers, pharmacists, hospital administrators, and payers) can also participate via this boot camp idea. The intent is for participants in the boot camps to devise local and regional needs-based quality-improvement projects, which the boot camp faculty can assist; one-year outcomes will be assessed. The boot camp concept also provides a tangible test tube to evaluate the feasibility, acceptability, and barriers to implementing existing GED Guideline recommendations.

The public release of the GED Guidelines represents an effort to transform emergency care for older adults. The unique health care needs of our aging population will challenge our health care system in and beyond the ED. For all hospitals, geriatric-only EDs will not be a mandate nor are they necessary. However, geriatricizing our EDs to provide optimal care for older adults will be a necessity.

DR. CARPENTER is chair of the ACEP Geriatric Section. **DR. HWANG** is president of the SAEM Academy for Geriatric Emergency Medicine. **DR. ROSENBERG** is immediate past chair of the ACEP Geriatric Section and is on the board of directors of the SAEM Academy for Geriatric Emergency Medicine.

A HIGH-VALUE DIAGNOSTIC APPROACH TO LOW-BACK PAIN

CONTINUED FROM PAGE 23

The next time you see a patient with back pain with no high-risk findings, spend a few minutes discussing the diagnosis and plan with the patient.

What are the costs of different imaging modalities?

X-ray is neither sensitive nor specific to identify the etiology of acute low-back pain. It is moderately sensitive for traumatic and compression vertebral fractures. Among 20 to 50 year olds, only 1 in 2,500 X-rays leads to a clinically unsuspected diagnosis.[6] The median cost of a lumbar-spine X-ray (two or three views) is $71 (range $15 to $371) based on Medicare reimbursement rates, a conservative estimate.

CT is a more sensitive test for vertebral fractures but is neither sensitive nor specific for spinal-cord disorders, and it has no role in the management of nonspecific back pain or patients with lumbar radiculopathy. The median cost of noncontrast lumbar-spine CT is $174 (range $34 to $1,280) based on Medicare reimbursement rates.

MRI is increasingly available in EDs nationwide, and its use has increased due to its lack of ionizing radiation and ability to image the spinal cord and nerve roots. However, it is time-intensive, limiting its applications in emergency care. In 2013, average Medicare costs for an MRI lumbar spine with and without contrast were $550 (range $166 to $2,022). MRI is the diagnostic modality of choice for patients in whom you suspect spinal-cord disorders such as cord compression, cauda equina, epidural abscess, or hematoma. For patients with a high clinical suspicion for these diagnoses, there is little utility to performing a preliminary X-ray or CT (if MRI is unavailable, you can substitute CT myelogram).

Patients may be seeking a fixable diagnosis when they request imaging, so a few minutes of education about the limited benefits and potential downsides of testing can improve both satisfaction and throughput. An example of how you might respond is shown in Table 2 (left).

So the next time you see a patient with back pain with no high-risk findings, spend a few minutes discussing the diagnosis and plan with the patient. Reassurance and an outpatient regimen of over-the-counter analgesia and supportive care can reduce cost and length of stay—and, more important, are clinically effective.

Table 2. A Script for Discussing Back Pain Without Imaging

"After hearing your history and examining you, I believe that your back pain is caused by…

- A muscular strain, or pulled muscle, or arthritis due to wear and tear.

  -or-

- A bulging spinal disc, which is irritating the nerve roots near your back tissue.

In most patients, this goes away on its own. If it is still bothering you after…

- Four to six weeks...

  -or-

- A trial of physical therapy or other supportive care…

…then imaging or other tests may be helpful. I am not ordering any imaging in the ED because it won't help you get better, will prolong your stay, and will add several hundred dollars to your bill. What questions do you have?"

References

1. Friedman BW, Chilstrom M, Bijur PE, et al. Diagnostic testing and treatment of low back pain in United States emergency departments: a national perspective. *Spine.* 2010;35(24):E1406–1411.
2. Chou R, Fu R, Carrino JA, et al. Imaging strategies for low-back pain: systematic review and meta-analysis. *Lancet.* 2009;373(9662):463–472.
3. Davis PC, Wippold FJ 2nd, Brunberg JA, et al. ACR appropriateness criteria on low back pain. *J Am Coll Radiol.* 2009;6(6):401–7.
4. Jensen MC, Brant-Zawadzki MN, Obuchowski N, et al. Magnetic resonance imaging of the lumbar spine in people without back pain. *N Engl J Med.* 1994;331(2):69–73.
5. Borczuk P. An evidence-based approach to the evaluation and treatment of low back pain in the emergency department. *Emerg Med Pract.* 2013;15(7):1–23.
6. Nachemson A. The lumbar spine: an orthopedic challenge. *Spine.* 1976;1:59-71.

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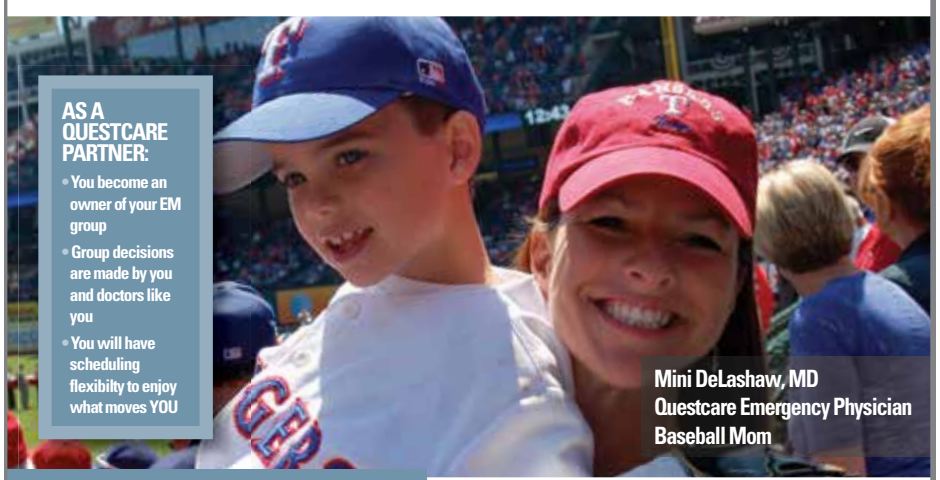

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