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Want to keep patients flowing out of the waiting room? Don't have chairs

To ease overcrowding, offer alternative locations, push primary care

Encouraging patients *not* to come to your ED? Building a new ED with no waiting room? These are among the creative, and perhaps controversial, strategies adopted by two ED managers determined to address surge capacity in new and more effective ways.

At Lenoir Memorial Hospital in Kinston, NC, the ED ran a billboard that essentially said, "If you have a primary care physician, see him or her first," as part of an ongoing campaign to educate the public about what should and should not be considered emergency care. Lenoir also added a medical unit from which it could monitor patients remotely.

At Ball Memorial Hospital in Muncie, IN, a spanking new ED opened minus a traditional waiting room. The walk-in entrance resembles a small hotel lobby, minus the chairs. Patients are escorted immediately to a private room and registered at the bedside. These strategies have paid off. At Lenoir, "since these went into effect, on a routine basis, we do *not* hold patients," says **Christina Miller**, RN, the ED manager. And at Ball Memorial, length of stay has been reduced by 30 minutes — for general and for fast-track ED patients.

Encouraging informed decisions

Miller emphasizes that the main message at Lenoir was *not* "Don't come to the ED." Rather, she says, "We wanted to give people the opportunity to make informed decisions about their care; people were using the ED for primary care treatment."

Executive Summary

You can't always make your ED bigger, but you *can* reduce patient logjams with creative strategies.

- Encourage the public to see their primary care providers for nonurgent medical treatment before going to the ED.
- Remote monitoring systems enable you to house patients in locations separate from your ED.
- Look for underutilized space in your hospital that can be converted to an additional unit.

During the high-census months of December 2003 and early 2004, "We were having some difficulty with holding patients for admission, especially when we were overwhelmed [with overcrowding] on a routine basis," she says.

In the spring, months before the billboard appeared, articles ran in the hospital's quarterly publication, *Medlines,* in which, Miller says, "We took a huge stance to educate people about what's appropriate for ED care." In addition, there were postings in the hospital about limiting visitors and a monthly insert in the paper targeting key health issues. "In all of them, we always put out what is appropriate for the ED — especially [when we were] in high-census mode," she stresses.

Then, as flu season approached, the billboards appeared. They read: "Flu is in the ED: See your doctor." That terse message was fleshed out, however, in *Medlines* articles and in the other marketing vehicles used by Lenoir, including TV interviews with hospital representatives.

"The overall message was not 'Don't come here,' but rather, 'If you have symptoms, there is help available; go see your physician,'" Miller explains. "[The physician's office] can be much safer — in our environment, there are a lot of very sick people — and there may be a longer wait."

The publicity campaign also informed patients who did not have primary care physicians, but who had primary care needs, that the ED had "Express Care" service available. "We are a 23-bed ED, with six dedicated to express care patients — people who would normally go to primary care, with colds, sinus infections, twisted ankles," says Miller. "We can fast track these patients with a turnaround time of 90 minutes."

The other key strategy employed at Lenoir was the additional medical unit. "We had the ability to monitor patients in the ED, but it became a huge customer service issue when patients had to wait four to five hours, or even overnight, for a bed," she adds. So the hospital managers held a cross-organization discussion and decided to open a medical unit that would have remote monitoring capability for patients waiting for admission.

"It was in an area of the hospital that was not being utilized; the beds had been licensed for long-term care beds," Miller recalls. "Through a certificate of need, we could open [the new unit] with the existing beds." The unit started with 15 beds, with more to come, and it has six or seven monitors.

Addressing satisfaction and overcrowding

The unique design for the Ball Memorial ED was not only an attempt to improve patient flow, but also to enhance patient satisfaction.

"In the original meetings with the architects, we had a traditional waiting room in there," says **Karla Kirby**, RN, ED administrator. "But when we made a presentation to the CEO, he challenged us to think differently about the patient and family experience — to look at our service in terms of the patient, and not what was most convenient for the staff."

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The new ED, which has been in operation a little more than a year, works like this: When the patient comes in, a quick-sort triage is performed. "An RN who is trained to be a triage nurse talks to the patients fairly briefly about what brought them to the ED," Kirby explains. "They take their name and birth date, put [the information] on a [computerized] tracking board, and the patients are escorted to a room." **(For information about a virtual tour of the new ED, see the resource box, below.)**

Meanwhile, the tracking board is monitored by ED registration staff. "Whenever they see a patient on there, they do a quick admission," she notes. That quick admission allows the ED to have an account number, Kirby adds. "If they have been in here before, they already have one, so we can do the admission immediately," she says.

The patient is registered at the bedside. The registration clerk goes to the room, monitors the information already in the computer, and then takes the patient's financial information.

The ED is subdivided by acuity, Kirby observes. "Essentially, we have an area of the ED where we take care of minor illness and injury: a fast-track area with designated rooms," she says.

Kirby likens the overall process to a tollbooth area of a turnpike, where a special express lane is set aside for automobiles with prepaid stickers on their windshields that are electronically registered as they whiz by. "This is kind of the same thing; instead of stopping to pay the toll, the patients are just slowing down a little bit at triage, then moving quickly to a room and through to care," she declares.

It has clearly had an impact on throughput. "Over this year, we've been able to cut 30 minutes out of throughput to fast track; we now run about 90 minutes," Kirby reports. "For regular patients who are discharged on the other side, we have also cut 30 minutes — down to 163."

As for patient satisfaction, the new ED has paid dividends as well. "The patients are highly satisfied; the difference is dramatic," says Kirby. "We use Press Ganey [to measure patient satisfaction], and prior to the move, we were never above the 50th percentile. Now, we are running in 80s and 90s."

Patients are giving staff positive comments about the new no-waiting room ED "all the time," says Kirby, and adds she's not surprised. "One of the things we know is that people hate to wait," she says. Waiting rooms are unpleasant places, especially in an ED where people are sick, hurting, bleeding, and vomiting, Kirby says.

"We thought if we used the space normally allocated for a waiting room for more patient room, when the patients arrived they could get to the rooms more quickly, it would be more satisfying for the patients, and they would also be spared the unpleasant parts of the waiting room atmosphere," she says. ■

Sources/Resource

For more information on strategies to address surge capacity, contact:

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- **Christina Miller**, RN, ED Manager, Lenoir Memorial Hospital, 100 Airport Road, Kinston, NC 28501. Phone: (252) 522-7933. E-mail: cmiller@lenoir.org.

For a virtual tour of the new ED at Ball Memorial, go to www.cardinalhealthsystem.org. On the left-hand side menu, click "ED," and you will be asked if you wish to take a virtual tour.

New ED will feature wired private patient rooms

Hookup also will let docs review charts, labs

The ED patient, lying in bed in her own private room, picks up the all-in-one telephone handset and remote control beside her and calls her husband to tell him she's been in a car accident. She clicks on the 12-inch TV monitor, watches for a while, and then decides to switch over to the radio for some calming music.

Remembering the workday has begun, she plugs her laptop into the set and proceeds to send off a quick e-mail to her boss. Later that morning, her physician comes by. Together they view her X-rays on the monitor and discuss her treatment options.

This type of scenario will be played out in reality once the new ED is completed at Sun Coast Hospital in Largo, FL, where all 21 patient rooms will be private and will include the multifunctional technology known as Patientline. The ED staff and hospital administration at Sun Coast contend the new system not only will improve efficiency, but also will significantly boost patient satisfaction.

"While the patients are here for medical care, there are things on the personal end they need to check on in between tests or waiting for results," notes **Brenda McCarthy**, RN, the ED manager. "On the other hand,

Executive Summary

Some innovations in your ED may be worth doing, even if you can't guarantee a return on investment.

- High-tech amenities for patients can be expected to boost satisfaction and increase market share.
- Recognize that patients may need to take care of real-world responsibilities while in the ED.
- Accessing test results electronically at the bedside speeds processes and enhances physician-patient relationship.

it provides us a very personal way to review lab results, which can be brought up on the screen by the physicians and interfaced with the hospital system."

The new Sun Coast ED, which will encompass a total of 10,000 square feet, is being built in two phases. The first part will open in June 2005, and the second will open in November 2005. It will include computed radiography.

Officials at Sun Coast don't know whether this new technology will increase revenues to their ED, but they *do* know it will set them apart in the market, and they expect and intend that their new facility will increase patient satisfaction.

"Basically, the ED is the gateway to the hospital," says **Larry Archbell**, the hospital CEO. "We want to be as efficient as we possibly can and bringing technology to the ED will boost efficiency and process improvement, and it will also increase patient satisfaction."

The public today "has pretty high expectations, and our goal will be to exceed those expectations," he says. "Anything we can do to make their stay more comfortable, to be reassuring and efficient, we want to put in this ED."

The Patientline system selected by Sun Coast is manufactured by UK-based Patientline, with offices in Pleasanton, CA. **(For contact information, see resource box, below left.)** In addition to the aforementioned services, the terminal in the patient's room also enables movies on demand, video books, and games.

Archbell points out that in addition to providing convenient services, Patientline also will enhance the relationship between physician and patient. "It will enable a very private chat with physicians during which X-rays and other tests and clinical data can be shared with the patient," he says.

"You could even put in educational videos for the patient to watch, if they are going be here for some length of time," McCarthy adds. "So the system has multiple uses for hospital staff *and* patients," she says.

McCarthy and Archbell say they are sold on the potential benefits of the new Patientline system.

"We'll provide a service to our patients for their personal needs, as well as providing a more enhanced way to review medical results," McCarthy says. "It will increase the speed of doing things, plus make the data much more visible for the patient," she asserts.

What *isn't* clear, however, is whether the new system eventually will generate a positive return on investment. "We're not sure about earn-back," concedes Archbell.

This is *not* to say, however, that he sees no financial benefit for the ED. "One benefit I see from this is — we are here to gain market share," he asserts. "If patients are happy and have a good experience in the ED as a result of the new system, they will come back, and we will be ED of choice in our market area." ■

Sources/Resource

For more information about Patientline, contact:

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- **Larry Archbell**, CEO, Sun Coast Hospital, 2025 Indian Rocks Road, Largo, FL 33774. Phone: (727) 581-9474.
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Uniform emergency codes: Will they improve safety?

California, NJ have systems, others may follow

In 2001, in the wake of a tragic incident in West Anaheim (CA) Medical Center where three employees were shot to death, state investigators questioned how the gunman was able to advance to a stairwell and a hospital lobby of the medical center after the first distress call was signaled. To ease staff confusion in such situations, the Healthcare Association of Southern California adopted the nation's first standardized hospital emergency codes.

Now, three years later, the state of New Jersey has initiated what it claims is the first statewide voluntary program for uniform codes among hospitals, long-term care facilities, and home health providers. Other states,

Executive Summary

There are pros and cons to uniform code systems, according to emergency medicine experts.

- Uniformity can be a benefit when ED nurses and other staff work at several facilities.
- It's critical that your staff understand not only what the codes stand for, but what they must do when codes are called.
- If your state institutes a new system, be sure to hold regular drills to familiarize your ED staff.

including Florida and Wisconsin, are considering following suit. **(See story, p. 6.)**

But the impetus for such systems goes far beyond protecting staff, says **Diane Anderson**, director of emergency preparedness and bioterrorism for the New Jersey Hospital Association based in Princeton. It started as a patient safety issue, she explains. In her area, hospitals often share staff, Anderson says. "So the idea of a 'code red' being the same 'code red' in every hospital supports that reality," she says. "They would know that whatever department or building they are in, a code red meant fire, and they would respond accordingly."

The New Jersey system, which closely mirrors the original one in California, includes the following codes:

- **Code Red:** Fire.
- **Code Blue:** Adult medical emergency.
- **Code White:** Pediatric medical emergency.
- **Code Amber:** Infant/child abduction.
- **Code Yellow:** Bomb threat.
- **Code Gray:** Security emergency/patient elopement.
- **Code Silver:** Hostage situation.
- **Code Orange:** Hazmat situation/decontamination needed.
- **Code Triage:** Disaster situation.
- **Code Clear:** The situation has been cleared.

Are they a good idea?

There remains some controversy as to whether uniform codes are a good idea. Uniform philosophies make sense, some argue, but not necessarily the specifics flowing from those philosophies.

That may be, in part, because the specifics are the hardest things to get right when it comes to emergency response — and yet they may be the most critical, says **David Goldwag**, DO, FACEP, chief of emergency medicine at Stamford (CT) Hospital.

"It's more important to have the right systems in place — a structure for what the code is supposed to mean — and to drill on those processes," he says. Even code responses in hospitals are variable, Goldwag adds. "Those things need to be drilled, so everyone knows when you call 'X' that everyone not only knows what to do, but they have *done* it," he explains.

For example, in Southern California's code, there is a defined list of responses for each different code. Under the responsibilities of a Code Gray, a staff member witnessing verbal abuse should:

- assist in attempts to verbally de-escalate the assailant;
- call in a second person to take over;
- add distance/barriers between victim and assailant.

If a staff member witnesses physical abuse, the proper responses under Code Gray are:

- protecting self and others by assisting victim to stop/deflect blows by assailant;
- creating a diversion by putting distance/barrier between victim and assailant;
- getting medical assistance if needed.

Stamford Hospital managers found when working with Homeland Security Act issues, every time you have a disaster or a bioterror drill, you find they don't work out as they were supposed to, Goldwag says. "To me, personally, it does not really matter what you call the thing as long as you have tested it," he says. "Two different EDs might hear the same overhead page, but one hospital may have a really good system and everyone knows what to do, whereas another has never really tested it."

Sources/Resource

For more information on uniform emergency codes, contact:

- **Diane Anderson**, Director of Emergency Preparedness and Bioterrorism, New Jersey Hospital Association, 760 Alexander Road, P.O. Box 1, Princeton, NJ 08543-0001. Phone: (609) 275-4209. E-mail: DAnderson@ NJHA.com.
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To obtain a free online copy of the 81-page guidebook from the Healthcare Association of Southern California, go to www.hasc.org. Then, click on the red and blue box that says, "Safety and Security Committee." This will take you to a page that contains the complete book and separate copies of each chapter. For additional information, contact Aviva Truesdell at (213) 538-0710. E-mail: atruesdell@hasc.org.

If and when other states begin adopting uniform codes, EDs should take the lead role in hospital adoption, Goldwag notes. "ED docs are often those most familiar with emergency procedures, even though they affect the whole hospital," he explains.

There are strategies you can use to help make adoption of a uniform system run more smoothly, Goldwag continues. For example, one hospital put a list of the hospital codes and what they were supposed to do on the back of staff members' name tags.

You need every advantage you can find, he asserts. "It seems like such an easy thing, but when you start putting it in place, it's more work than you thought it would be," Goldwag concludes.

It's been nearly a year since the new system rolled out to hospitals in New Jersey, and Anderson reports that more than 90% of the acute care hospitals in the state are implementing it or have fully implemented it. "The hospitals were enthusiastically behind it," she asserts. "We're rolling out now to long-term care facilities, and EMS called this morning and expressed some interest." ■

Code responses should be tailored to your facility

The prospect of uniform codes has been floated in Wisconsin by, of all things, the local media. After a reporter in Marshfield, WI, who was covering a disaster drill at the Marshfield Clinic noted that the overhead announcement of color codes confused employees at nearby St. Michael's Hospital, he ran a follow-up article illustrating the different codes used by hospitals statewide. The article also included arguments pro and con from emergency response experts across the state.

But it's not the color codes that are the problem, says **Michael Neely**, director of facility services at St. Michael's Hospital in Stevens Point. "While on the surface, standard codes may seem like a great idea, every hospital and ED still will respond differently," he asserts.

For example, a seven-story hospital will respond differently to a fire than a one-story hospital, Neely says. A larger hospital that has full maintenance and security staffs will have different responses than ones in rural facilities that don't have those staffs, he explains. "In other words, every hospital will tailor their responses to the kind of facility they are," Neely says.

Neely is not even convinced that the issue of using staff from different facilities during a disaster is an argument that would hold water. "The argument out there is if you had to bring a physician in from the outside to help during a disaster situation, if he did not know what the overhead codes were, he would not know what to respond to," he notes. "But in my mind, and from the point of view of our central regional disaster groups, we'd rather have patients sent to where the *doctors* are — that is, getting the right patient to the right hospital through EMS in field triage."

In addition, he notes, it may be ill advised for hospitals to make their internal codes and responses known to the public, as they are likely to be if uniform codes are adopted. For example, parts of the Southern California code and specific responses are cited and quoted in articles readily available on the Internet.

"If we have an agitated patient, I would not want him to know what we might do," Neely explains.

The bottom line, he adds, is that uniform codes are not as big an issue as some people make them out to be. "There are issues of such greater magnitude out there in terms of local and national emergency response, that I really consider this to be a low-hanging fruit," Neely says. ■

Source

For more information on uniform emergency code issues, contact:

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Atypical MI symptoms in women mean delays

EDs must raise staff awareness to reduce disparity

A recent study by a University of Michigan cardiologist on behalf of a Michigan-wide angioplasty research group produced a sobering statistic: Of 1,551 heart attack patients who had emergency angioplasty at hospitals in Michigan, women waited on average more than 118 minutes before treatment began, compared with 105 minutes for men. Even after correcting for the fact that the women in the study had more co-existing health problems, they still found that women were slightly more likely to die before returning home.[1] **(For more on the study's findings, see story, p. 8.)**

Another University of Michigan study conducted nearly simultaneously revealed some possible causes for

these delays that will ring true to many ED managers: Women with acute myocardial infarction (AMI) often present with atypical symptoms; and there is an underlying biased assumption, even among female nurses, that men are more likely to suffer heart attacks than women.[2] "[Triage] nurses do understand the different ways in which patients present, but they still tell me the first thing they think with women is gallbladder or anxiety; with men, they think heart attack," says **Cynthia Arslanian-Engoren**, PhD, RN, CNS, University of Michigan School of Nursing in Ann Arbor, and author of the second study. Often, these nurses have practiced in the ED for 15 to 20 years, she says.

Women are less likely to have an EKG seen and read in less than 10 minutes, Arslanian-Engoren says. Nurses also are less likely to consider the possibility of a cardiac problem in younger women, she adds.

Abdominal pain is a most common presenting symptom in women with AMI, says **Jennifer Gegenheimer-Holmes**, RN, BSN, MHSA, director of operations for the ED at the University of Michigan Hospitals and Health Centers in Ann Arbor, who aided Arslanian-Engoren with data collection for her study.

"Triage nurses may not recognize this and give the patient a lower acuity level, and they may wait an hour or two to be seen by a physician," Gegenheimer-Holmes explains. "It often turns out in the course of evaluation that, in fact, the abdominal pain was probably chest pain, and the EKG shows a cardiac event or angina."

University of Michigan cardiologist **Mauro Moscucci**, MD, who directs interventional cardiology at the University of Michigan Cardiovascular Center and who was lead author of the first study, concurs. "I believe [the reason for longer door-to-balloon times for women] predominantly is the atypical symptoms — and we tend to be less suspicious with woman than men; we believe they are at lower risk," he says.

One of the keys to reducing door-to-balloon times is to reinforce staff awareness of the different symptoms with which women may present, says **Ron Dobson**, MD, director of emergency services at Swedish Medical Center in Seattle.

"The challenge for us in emergency medicine is to make it widely known — not only at the physician level, but in nursing and triage protocols — this widened range of presenting symptoms for women," he says. "We have to lower our threshold for suspecting heart attacks."

That range of symptoms, he continues, is outlined in a study in *Circulation* in 2003 that looked at women

Executive Summary

Re-educate your staff about the presenting symptoms of acute myocardial infarction most common in women.

- Hold inservices to review differences between men and women and missed diagnoses in actual cases
- Point out common triage biases; i.e., younger women are less likely to have heart attacks than younger men.
- Adjust ED processes; conduct electrocardiograms on a routine basis, and check them immediately.

Sources/Resources

For more information about women and acute myocardial infarction (AMI), contact:

- **Cynthia Arslanian-Engoren**, PhD, RN, CNS, University of Michigan School of Nursing, 400 N. Ingalls Building, Room 2175, Ann Arbor, MI 48109-0477. Phone: (734) 647-0182. E-mail: cmae@umich.edu.
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For more information on atypical AMI symptoms in women, see:

- McSweeney JC, Cody M, O'Sullivan P, et al. Women's early warning symptoms of acute myocardial infarction. *Circulation* 2003; 108:2,619-2,623.

For more information on national guidelines for triaging possible AMI patients, contact:

- **American Heart Association.** Web: www.americanheart.org. On the left-hand side of the page, click "Science & Professional." Next, click "Get with the Guidelines." Scroll down to "Current Program Modules: Coronary Artery Disease," then click on "GWTG-CAD."
- **American College of Cardiology.** Web: www.acc.org. On the left-hand side of the page, click "Guidelines Applied in Practice." Then, click the "ACC/AHA practice guidelines" link. Under "Search the A-Z Guide, by topic or" click on "Search for Clinical Practice Guidelines," then scroll down to "Percutaneous Coronary Intervention."

who presented with AMI. **(For information on the study, see resource box, p. 7.)** The symptoms include fatigue, sleep disturbance, indigestion — even just vague anxiety.

"These are not things that make MI pop into mind," Dobson observes. "It's not even incorporated into triage protocols, so when a female shows up saying, 'I've been really fatigued of late,' it does not trigger the same awareness as, 'I have chest pain.'"

Dobson is working to educate his staff to suspect MI under those conditions, "and to get those patients back at least for an immediate electrocardiogram (EKG)." He's doing this education through inservices, one-on-one meetings and, periodic presentations at his monthly ED meetings.

This is a good avenue for a clinical nurse specialist to update the staff and remind them to adhere to national guidelines put out by the American Heart Association and the American College of Cardiology, adds Arslanian-Engoren. **(For information on how to access these guidelines, see the resource box, p. 7.)**

Be familiar with those atypical symptoms, and set up a process, Moscucci advises. "Sometimes, there are time delays in obtaining EKGs, or sometimes they are obtained on a routine basis, but not immediately assessed or checked," he says.

Moscucci currently is working with the hospitals that participated in his study to improve door-to-balloon times — in men as well as in women. "The current American College of Cardiac Surgeons' gold standard is 90 minutes, and that was reached in only 35% to 38% of patients for *all* genders," he says.

For several years, Gegenheimer-Holmes has been covering this topic with triage nurses as part of continuous quality improvement.

"We've dealt with it in case review and regularly at staff meeting reviews," she says. Now she is developing a formal educational program for nurses.

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1. Moscucci M, Smith DE, Jani S, et al. Gender differences in time to treatment for patients undergoing primary percutaneous coronary intervention for acute ST segment elevation MI: An important target for quality improvement. Presented at the American Heart Association Scientific Sessions. Dallas; November 2004.

2. Arsianian-Engoren C. Do emergency nurses' triage decisions predict differences in admission or discharge diagnoses for acute coronary syndromes? *J Cardiovasc Nurs* 2004; 1:280-286. ■

University of MI studies: The numbers don't lie

Two recent studies conducted at the University of Michigan in Ann Arbor bring into stark relief the differences between men and women when it comes to the triage and diagnosis of acute myocardial infarction. In a study by *Moscucci et al.,*[1] here are some of the key findings:

• In addition to waiting 13 minutes longer than men to have emergency angioplasty or percutaneous coronary intervention, it took women on average an extra 20 minutes to reach the ED after their symptoms began, resulting in half an hour more of wasted time and damaged heart muscle.

• In all, patients of both sexes whose angioplasty began within 90 minutes of arrival at the hospital had a 50% lower risk of dying in the hospital than those who waited longer.

• In all, the researchers found only 25% of the female patients underwent emergency angioplasty within the recommended 90 minutes, as compared with 34% of men.

• Even after receiving this treatment, one in every 13 women in the study died, compared with one in every 32 men.

All of the patients had the same kind of heart attack: acute ST-segment elevation myocardial infarction.

Educate public on symptoms

Since the gender difference in the time it took to get to the ED was even greater than it was in door-to-balloon time, EDs should place a greater emphasis on public education, says **Ron Dobson**, MD, director of emergency services at Swedish Medical Center in Seattle. "Most reasonably educated people today know that if you have chest pain, you should be concerned about your heart," he says, "But I don't think they are aware of these other symptoms [i.e., fatigue, sleep disturbance, indigestion, and vague anxiety] that can be associated with it, so they are less likely to come in or to call 911."

Jennifer Gegenheimer-Holmes, RN, BSN, MHSA, director of operations of the ED at University of Michigan Hospitals and Health Centers in Ann Arbor, agrees, while noting that it is something that has been talked about in nursing circles.

In the University of Michigan School of Nursing study, the researchers found that out of 108 nurse triage inferences, 47 patients were admitted to the hospital. Of those 47, nurses made an initial inference of acute coronary syndrome (ACS) in 22 (47%). Of those

22, 15 received an admission diagnosis of ACS, but 11 of the 25 patients who the nurses did *not* think had ACS were diagnosed as having ACS on admission to the hospital.

The author refers to a "mental template" that may prevent triage nurses from diagnosing ACS correctly when patients present with atypical symptoms. Despite the fact that 80% to 90% of people with coronary heart disease have diabetes, hypertension, hyperlipidemia, or smoke, the nurses interviewed omitted the first three of these factors as significant predictors of ACS.

Reference

1. Moscucci M, Smith DE, Jani S, et al. Gender differences in time to treatment for patients undergoing primary percutaneous coronary intervention for acute ST segment elevation MI: An important target for quality improvement. Presented at the American Heart Association Scientific Sessions. Dallas; November 2004. ■

Falls, self-pay data are key stats in ACS report

Examine length of stay by injury

ED managers should note two areas of the recently released 2004 Annual Report from the National Trauma Data Bank (NTDB) of the American College of Surgeons (ACS): the aging population and falls, and the number of self-pay payments.

That's the advice of **Connie J. Potter**, RN, MBA:HCA, executive director of the Irvine, CA-based National Foundation for Trauma Care and a former Level I ED and trauma administrator. Falls, she notes, account for 16.7% of cases reported to the NTDB, with the incidence of falls peaking for people at 82 years of age.

Geriatric falls: On the bed "like velcro"

"The incidence of falls is growing, and the geriatric population who suffers trauma very rarely return to home, and within one year the vast majority are dead," she says. "The disposition of these patients presents the ED with a particular problem that translates into ED overload and diversion; once that person's on the bed [he or she is] there like Velcro." It is this inability to get these patients to subacute care that leads to ED crowding, which in turn, leads to diversions, Potter explains.

Source

For more information on trauma care, contact:

- **Connie J. Potter**, RN, MBA:HCA, Executive Director, National Foundation for Trauma Care, 230 Commerce, Suite 210, Irvine, CA 92602. Phone: (714) 838-9024. Fax: (714) 838-9675. E-mail: connie@traumafoundation.org. Web: www.traumafoundation.org.

The number of self-pay patients is significant, she continues, "because trauma patients are disproportionately self-pay," Potter says. Self-pay is the largest single payment category (20.59%) in the databank, followed by managed care (14.3%), and Medicare (13.48%).

"About one-fourth of them make over $60,000, and many are self-employed people who choose to go without insurance because they are risk-takers — or they're young and don't think they need it," she notes.

This translates into a huge problem for higher-level trauma centers, Potter says. "It results in longer transport time for ambulances," due to diversion she observes. "Patients come to you in worse shape, and the ED can't bill and collect for these folks."

The NTDB report contains a wealth of information based on more than 1.1 million records from 405 trauma centers in 43 states, territories, and the District of Columbia — the largest aggregation of trauma registry data that has ever been assembled, according to the ACS.

Data includes LOS

In addition to providing information about what types of traumatic injuries result in the most fatalities, the report also examines traumatic injury variations by age and gender, as well as hospital length of stay related to the mechanism of injury and source-of-payment issues. The ACS is now using NTDB data to work with the Health Resources and Services Administration (HRSA) on a project to develop a national minimum trauma care data set. In addition, the two groups are developing a national sample that will allow trauma researchers to make inferences about a trauma population when using NTDB data for analyses.

The entire National Trauma Data Bank Report Version 4.0 is available free on the ACS web site at www.ntdb.org . On the right side of the page, click on "National Trauma Data Bank Report 2004 (4700K PDF)" or "National Trauma Data Bank Report 2004 (5100K PowerPoint)." ■

EMTALA Q & A

[Editor's note: This column addresses readers' questions about the Emergency Medical Treatment and Labor Act (EMTALA). If you have a question you'd like answered, contact Steve Lewis, Editor, ED Management*, 215 Tawneywood Way, Alpharetta, GA 30022. Phone: (770) 442-9805. Fax: (770) 664-8557. E-mail: steve@wordmaninc.com.]*

Question: How Does EMTALA apply to law enforcement requests for services in the ED?

Answer: In the midst of a busy ED, police officers present with a handcuffed person and request a blood alcohol test. The police report that the person had a motor vehicle accident but give no details. The patient is behaving strangely and appears to be in pain, but does not request any medical services.

An emergency nurse asks the physician on duty: "Are we required to perform a medical screening examination [MSE] for this person?"

The EMTALA regulations are quite specific: A hospital must provide an MSE to an individual who presents to a dedicated ED seeking or in need of examination or treatment for a medical condition, notes **M. Steven Lipton**, JD, partner and head of the health care department at Davis Wright Tremaine in San Francisco. The rules may be clear in many cases, but how do they apply to law enforcement requests for a blood alcohol test, examination for rape or sexual assault victims, or pre-jail clearance?

In 2003, the Centers for Medicare & Medicaid Services (CMS) commented in the *Federal Register* that requests by law enforcement personnel for services in the ED would be reviewed on a case-by-case basis to determine whether the hospital is required to provide an MSE and other required EMTALA services. (The final amended EMTALA regulations were published in the *Federal Register* Sept. 9, 2003, and were effective Nov. 10, 2003.) The comments, however, only highlighted the dilemma faced by emergency personnel and did not elaborate on how hospitals and physicians should respond to law enforcement requests.

On May 13, 2004, Lipton notes, CMS issued new EMTALA interpretive guidelines that finally provide some direction for hospitals and physicians. In general, the guidelines provide that the gathering of evidence for criminal law cases — such as sexual assault or blood alcohol tests (BAT) — do not trigger the requirements for an MSE or other EMTALA-required services. However, the guidelines go on to qualify this exemption from EMTALA:

If an individual is brought to the ED, and law enforcement personnel request that emergency department personnel draw blood for a BAT only and [do] not request examination or treatment for a medical condition, such as intoxication, and a prudent lay person would not believe that the individual needed such examination or treatment, then the EMTALA's screening requirement is not applicable to this situation because the request made on behalf of the individual was for evidence. However, if for example, the individual in police custody was involved in a motor vehicle accident or may have sustained injury to him- or herself and presents to the ED, an MSE would be warranted to determine if an EMC [emergency medical condition] exists.

The same guidance, Lipton says, also applies to rape and sexual assault cases. If a victim of sexual assault requests or needs examination or treatment for possible injuries, EMTALA applies and an MSE should be performed. However, if the request is limited to the gathering of evidence, and there is no request or apparent need for a medical examination, a screening is not required, he advises.

However, Lipton says, requests for pre-jail clearance are different. The guidelines clarify that these types of requests trigger the EMTALA obligations. Therefore, hospitals should provide an MSE to determine whether the individual in police custody has an EMC.

In summary, he notes, the EMTALA interpretive guidelines direct surveyors to review the facts of each case to determine whether an MSE and stabilizing treatment should be provided to individuals presenting to the ED in the company of law enforcement officers. In conducting staff inservice, hospitals should discuss the types of cases that may trigger the EMTALA obligations even if law enforcement personnel do not make a specific request that a hospital render medical care for a patient in custody. Above all, if a prudent layperson believes that the behavior or appearance of an individual in police custody shows evidence of the need for examination or treatment for a medical condition, emergency personnel should provide an MSE and stabilizing treatment as clinically indicated. ■

Source

For more information on law enforcement requests for ED service, contact:

- **M. Steven Lipton**, JD, Partner, Davis Wright Tremaine, Suite 600, One Embarcadero Center, San Francisco, CA 94111-3611. Phone (415) 276-6500. E-mail: stevelipton@dwt.com.

Prepare your hospital for a very unusual flu season

Vaccine shortages may wreak havoc

With the unprecedented shortage of influenza vaccine this flu season, hospitals are scrambling to prepare for what may be a record number of flu patients presenting to their already overcrowded EDs and for staff shortages due to record absenteeism. After almost half of the United States' planned vaccine supply was contaminated, high-risk candidates — including the very young, the elderly, those with chronic illnesses, pregnant women, the immunocompromised, and health care workers with direct patient care — have been identified as those to receive the vaccine.

In response to the national shortage of vaccine, Thomson American Health Consultants has developed an influenza sourcebook to ensure you and your hospital are prepared for what you may face this flu season.

Hospital Influenza Crisis Management will provide you with the information you need to deal with ED overcrowding, potential liability risks, staff shortages, and infection control implications for staff and patients. This sourcebook will address the real threat of a potential pandemic and the proposed response and preparedness efforts that should be taken in case of such an event. Major guidelines and recommendations for influenza immunization and treatment are included, along with recommendations for health care worker vaccination and the efficacy of and criteria for using the live attenuated influenza vaccine. Don't miss out on this valuable resource.

Hospital Influenza Crisis Management also will offer readers continuing education credits. For information or to reserve your copy at the pre-publication price of $149 (a $50 discount off the regular price), call our customer service department at (800) 688-2421. Please reference code **64462**. ■

CE/CME answers

19. D 20. A 21. C 22. D 23. A 24. B

CE/CME *questions*

19. Which of the following vehicles did the ED at Lenoir Memorial Hospital use to educate the public about the appropriate use of emergency medical services?
    A. Billboards
    B. Newsletters
    C. Television interviews
    D. All of the above

20. According to Brenda McCarthy, RN, the ED manager, and Larry Archbell, the CEO, which of the following was *not* among the primary reasons for installing a bedside television/computer system at Sun Coast Hospital?
    A. A projected return on investment
    B. Improved patient satisfaction
    C. Better physician/patient communication
    D. Increased efficiency

21. According Diane Anderson, director of emergency preparedness and bioterrorism for the New Jersey Hospital Association, what is the most important problem a new uniform code system is designed to eliminate?
    A. Customized codes for each facility
    B. Ill-defined response processes
    C. Codes that can confuse part-time staff
    D. A lack of sufficient time for drills

22. According to Ron Dobson, MD, Director of Emergency Services at Swedish Medical Center, with which of the following atypical symptoms of acute myocardial infarction do women commonly present?
    A. Vague anxiety
    B. Indigestion
    C. Fatigue
    D. All of the above

23. According to Mauro Moscucci, Director of Interventional Cardiology, University of Michigan Cardiovascular Center, the American College of Cardiac Surgeons gold standard for door-to-balloon time is:
    A. 90 minutes.
    B. 85 minutes.
    C. 75 minutes.
    D. 60 minutes.

24. In the 2004 Annual Report from the National Trauma Data Bank of the American College of Surgeons, the largest single payment category is:
    A. Underinsured
    B. Self-pay
    C. Managed care
    D. Medicare

COMING IN FUTURE MONTHS

- How much data are enough? Here's one ED that found the answer
- How ED physicians improved care in 95% of cases
- Mysterious powder closes ED for nine hours: Could you do better?
- Paperless charts to eliminate long waits, lost patient information? 10 preventive measures for reducing overcrowding

CE/CME instructions

Physicians and nurses participate in this continuing medical education/continuing education program by reading the articles, using the provided references for further research, and studying the questions at the end of the articles. Participants should select what they believe to be the correct answers, and then refer to the list of correct answers to test their knowledge. To clarify confusion surrounding any questions answered incorrectly, please consult the source material. After completing this semester's activity with the March 2005 issue, you must complete the evaluation form provided in that issue and return it in the reply envelope provided in order to receive a certificate of completion. When your evaluation is received, a certificate will be mailed to you. ■

CE/CME objectives

For information on the CE/CME program, contact customer service at (800) 688-2421.

- Implement managerial procedures suggested by your peers in the publication. (See *Want to keep patients flowing out of the waiting room? Don't have chairs* and *Uniform emergency codes: Will they improve safety?)*
- Discuss and apply new information about various approaches to ED management. (See *New ED will feature 'wired' private rooms.)*
- Share acquired knowledge of these developments and advances with employees. (See *Atypical MI symptoms in women mean delays* and *University of MI studies: The numbers don't lie*.)
- Explain developments in the regulatory arena and how they apply to the ED setting. (See *EMTALA Q&A.)* ■

BINDERS AVAILABLE

ED MANAGEMENT has sturdy plastic binders available if you would like to store back issues of the newsletters. To request a binder, please e-mail **ahc.binders@thomson.com**. Please be sure to include the name of the newsletter, the subscriber number, and your full address.

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