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IN THIS ISSUE

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Are you giving older MI patients poor care? Change your practice now

Elderly patients aren't being considered for life-saving interventions

If a 70-year-old man had a syncopal episode but reported he was undergoing radiation therapy, would you still suspect an acute myocardial infarction (AMI)? If a 90-year-old woman had several comorbidities, would you still consider all treatment options regardless of her age?

For the man with syncope, a 12-lead electrocardiogram (ECG) was done within minutes, and it was discovered that the man was having an AMI. "The key for this case was the screening net — assuming the cause could be cardiac," says **Jennifer Williams**, RN, BC, CEN, CCRN, clinical nurse specialist for emergency services at Barnes-Jewish Hospital in St. Louis.

A study has found that older patients presenting to the ED with AMI receive lower-quality medical care than younger patients. For example, these patients are less likely to receive effective therapies in the ED such as aspirin, beta-blockers, and reperfusion therapy.[1]

These patients could have poor outcomes that are avoidable, due to not getting appropriate interventions in the ED, says **David Magid**, MD, MPH, the study's lead author and ED physician at the clinical research unit at Kaiser Permanente Colorado in Denver.

The patients in the study who did not receive treatment were clear-cut candidates, he adds. "There shouldn't have been a lot of confusion," Magid says. "The people we identified as needing reperfusion therapy all had classic ECG

EXECUTIVE SUMMARY

Older myocardial infarction patients are less likely to receive appropriate interventions in the ED, such as aspirin, reperfusion therapy, and beta-blockers, a recent study indicates.

- Don't rule patients out just because they have comorbidities.
- Have a high index of suspicion for vague complaints such as fatigue or weakness.
- Use protocols to ensure that all patients receive consistent care.

findings. The patients who needed beta-blockers all had cardiac positive enzymes and were clearly having an MI."

Older patients have more comorbidities and illnesses, which makes them more likely to have adverse events or complications from medication therapy, says Magid. This may make ED staff reluctant to administer these medications, because they fear an adverse outcome, he adds.

"It may be that when staff see an 85-year-old patient, they assume they're probably not a candidate without carefully evaluating it," says Magid. "But a lot of older patients *are* candidates for therapies. We should not automatically assume they are not, just because they are older."

Older patients also have a higher risk of death after a heart attack, notes Magid. "While there may be a higher risk of complications associated with these therapies in older patients, the benefits outweigh the risk," he says. "So by not giving these therapies to older patients, we may be depriving the patients who would benefit the most."

To improve care of older MI patients, try these:

• Perform a thorough assessment.

Kim Henson, RN, ED nurse at Spartanburg (SC) Regional Medical Center, says, "Sometimes a complete medical history and medication list may be missed, due to nurses being busy." This miss can result in medication interactions, unanticipated side effects, and overdoses, she adds.

• Use protocols to ensure consistent care.

At Spartanburg's ED, whether the patients come in via ambulance or by car, they are placed on an acute coronary syndrome pathway, which means that a 12-lead electrocardiogram (ECG) is obtained within 10 minutes of arrival, and an intravenous (IV) line is immediately established with labs drawn, Henson explains.

Standing orders also include starting a heparin lock, lab tests, and administering aspirin therapy, nitroglycerin, morphine sulfate and possibly metoprolol tartrate, she adds.

When a patient with signs and symptoms of AMI presents to the ED at Barnes-Jewish, the nurse obtains a brief cardiac history and immediately obtains a 12-lead ECG, reports Williams.

"The nurse asks the patients if they are diabetic, if they have a history of hypertension, cardiac disease, or intervention, and the time of onset of symptoms," she says.

If the ECG results reveal an AMI, the patient is immediately moved to a treatment room for further examination. At that point, the decision is made to administer thrombolytics, take the patient to the cardiac catheterization lab, or medically manage the patient, says Williams. "Our protocols allow for all patients to have the same screen, regardless of their age," she says. "This prevents a subjective bias based on age."

• Don't overlook vague complaints.

Older patients may complain of generalized aches and pains or weakness, which can be dismissed as arthritis, neuropathy, fibromyalgia, or confusion, says Henson. "Sometimes older patients have difficulty describing specific complaints," she says.

Even if older patients report only vague symptoms, you always should consider the possibility of an AMI, says Williams.

"Older patients may not describe their symptoms in the typical manner," she emphasizes. "Be very suspicious of vague abdominal pain, nausea, back pain, and general weakness. Assume all syncopal episodes and falls are of cardiac origin until proven otherwise."

• Involve family members as needed.

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Older patients may be reluctant to undergo emergent procedures, Williams explains. "Taking the time for explanations and family involvement can assist with addressing the emergent need for intervention," she says.

After the decision was made for an elderly man to go to the cardiac catheterization lab for treatment, he insisted on his wife being notified first. "She was not in the facility at that point, but needed to be contacted at the patient's request," says Williams.

Having contact information available enabled the staff to contact the man's wife quickly, and the patient was reassured and agreed to the intervention, she recalls. "Make sure that you get emergency contact information before you let the family leave so that you can contact them immediately," says Williams.

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Stop dangerous practices for giving oral medications

Using the wrong type of syringe can result in tragedy

It's something you probably do almost every day: Drawing up an oral dose of antibiotics. But in one recent case, an ED nurse used a parenteral syringe and accidentally gave the medication intravenously (IV) to an infant, causing the child to go into respiratory arrest. The baby was successfully resuscitated, but after the incident, the nurse was so upset that she resigned.[1]

Have you ever used a parenteral syringe to prepare doses of oral liquid medication? This practice is dangerous, warns **Susan Paparella**, RN, MSN, director for consulting services for the Huntingdon Valley, PA-based Institute for Safe Medication Practices (ISMP).

"We are still hearing about these errors happening," she says. "Depending on the medication, it could be very dangerous," she says. "Nobody attempts to do this on purpose. It typically happens in the midst of a very busy ED."

Nurses may prefer to use a parenteral syringe because it makes preparing and administering a dose of liquid medication easier for young children and adults, says Paparella. Unfortunately, EDs often don't have oral syringes readily available, and many nurses are unfamiliar with this device, she adds.

"At almost every ED we visit, we ask, 'Are you using oral syringes?'" Paparella says. "Often, ED nurses are preparing their own antibiotics without the pharmacy support that inpatient units have. Thus, they often don't have the devices they need."

A typical scenario is as follows: The nurse has a parenteral syringe in hand, has drawn up the oral liquid up intending to administer it orally, but is distracted, says Paparella. "The nurse may have other syringes in his or her hand, or may have a couple things to give IV and something else to give orally," she says. "The syringes aren't labeled, and the next thing you know, they've pushed everything."

To ensure the safety of patients when giving oral medications, do the following:

• Use an oral syringe to measure and administer medications.

An oral syringe should be used for all oral liquid

EXECUTIVE SUMMARY

Using parenteral syringes to prepare and administer doses of oral liquid medication is a dangerous practice. Oral syringes should be used instead.

- If oral syringes aren't in your ED, ask the pharmacy to supply them.
- Avoid sending parents home with parenteral syringes to administer oral liquid medication.
- If possible, obtain parenteral syringes without translucent plastic caps.

SOURCES/RESOURCE

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A video on aspirated syringes can be downloaded at no charge on the FDA Patient Safety News web site (www.fda.gov/psn). Click on "View Broadcasts!" and scroll down to "Show #3, April 2002." Click on "Headline: Article on Preventing Asphyxiation from Aspirated Syringe Tip Caps."

medications, says **Nancy Blake**, RN, MN, CCRN, CNAA, director of critical care services at Children's Hospital Los Angeles.

"Regulatory agencies also recommend that everything drawn up for use be labeled with the drug name and the patient name wherever possible," she says. "If everything is appropriately labeled, it will eliminate the risk for medication error."

Because oral syringes don't have Luer-lock tips, they cannot accidentally be used to administer oral medication by the intravenous route, explains Paparella. "An oral syringe will not connect to a needleless port or accept a needle, and thus this wrong route error can never happen," she says.

Because many pediatric medications are liquid doses, this is especially important to consider when administering medications to children, adds Paparella. "We just need to get nurses to understand the danger, and that we have a fix for it, and it's pretty simple," she says. "If you don't have any oral syringes in your ED, ask the pharmacy to get you some."

Your ED should develop a policy stating that no oral medications are to be drawn into parenteral syringes, recommends Paparella. She suggests the following wording: "Prepare oral liquid medications in unit-dose oral syringes or facility-supplied measuring devices."

• Avoid sending parents home with parenteral syringes.

"If you are dispensing the medication for a family member to give at home, they should be given an oral syringe and not a parenteral one," says Blake.

In some cases, adverse outcomes have occurred when family members were given parenteral syringes to administer oral liquid medication, which may be packaged with a small plastic syringe tip, Paparella says. "The tip is not easily visible, and especially not to nonpractitioners. So when the antibiotic is injected into the child's mouth, they also inadvertently inject the tiny tip, which can lodge into the trachea," she says.

When a father was sent home from an ED with a parenteral syringe to administer liquid cefpodoxime to his infant son, the syringe cap accidentally was injected and became stuck in the child's airway. The child died as a result.[1]

There have been several reported deaths, reports Paparella. "Obviously, we need to do everything possible to prevent similar events," she says. "Some syringe manufacturers have stopped producing syringes with the plastic tip, but not all have followed suit." She recommends doing the following:

— If parents are routinely sent home with syringes to dose medications for their children, warn them about the dangers of syringe tip shield aspiration.

— Place warnings near the location where parenteral syringes and oral liquid medications are stored, stating, "Do you use oral syringes for proper administration?"

— Work with materials management to purchase syringes without the translucent syringe caps.

At Virginia Commonwealth University Medical Center's ED, there is a policy that no medications are dispensed home, says **Susan Richards**, RN, lead transport/trauma nurse for the pediatric ED. "We refer patients to their pharmacy or give them a sheet that they can take to our general pharmacy so that they can receive medications at a much discounted price," she says. "They receive at that time an oral syringe for medication administration."

Reference

1. United States Pharmacopeia, Institute for Safe Medication Practices. Medication Error Reporting Program. Reports received 1971 — Present. ■

Reduce risks when patients come back to the ED

Don't miss a second chance to get it right

When a young man with a lap belt injury from a motor vehicle accident returned to the ED reporting nausea and vomiting, he was diagnosed with gastroenteritis — despite visible bruises on his abdomen from the belt and an elevated white blood cell count.

On the third visit — more than a week after the accident — his peritonitis and bowel injury finally were detected. The delay resulted in the need for a colostomy — and a lawsuit against the ED physicians and triage nurses. The case still is in litigation.

When a patient returns to your ED within a few days after initially being seen complaining of the same or similar symptoms, questions may be raised about the adequacy of care, says **Stephen A. Frew**, JD, vice president and risk consultant with Johnson Insurance Services, a Madison, WI-based company specializing in risk management for health care professionals.

"The ED triage or treatment nurse may become involved in a suit in which the plaintiff alleges that improper care was provided at the first or subsequent ED visit," he explains.

When a patient presents for a return visit to the ED, it is the staff's opportunity to get it right this time, says **Sue Dill**, RN, MSN, JD, director of hospital risk management at Columbus-based Ohio Hospital Insurance Company and former vice president of legal services at Memorial Hospital of Union County in Marysville, OH. "It is really hard to explain to a jury if the patient came in twice, and you missed it both times," she emphasizes.

Even if the patient is coming back with the same complaint, a medical screening examination is required by the Emergency Medical Treatment and Labor Act (EMTALA), stresses Frew. "It is important to note that the patient is a new presentation each and every time they come to the ED, even if only minutes or hours have passed," he says. "Reliance on previous exams may not be sufficient."

EXECUTIVE SUMMARY

When a patient returns to the ED with the same complaint, there are increased liability risks since patients may claim that improper care was given at the first visit.

- Always take complaints seriously, and perform a complete assessment.
- Document that discharge instructions were given and understood.
- If possible, have a different nurse assess the patient.

Don't dismiss 'frequent flyers'

To improve care of patients who return to the ED, do the following:

• Never assume that patients don't have a "real" complaint.

Often, patients who repeatedly visit the ED with the same or similar complaints are known as "frequent flyers." "The potential liability lies in that one instance where the patient is really sick — and the nurse and physician don't take them seriously," says **Kathryn Eberhart**, BSN, RN, CEN, a Santa Rosa, CA-based legal nurse consultant and ED nurse at Santa Rosa Memorial Hospital. "You never know when a patient is going to have a serious illness."

Typically, alcoholics, psychiatric patients, and pain complaints are likely to be taken less seriously on return visits, says Frew. "A patient who has a poor use of medical vocabulary to describe their complaints is also likely to be given less credence," he says.

He gives the example of a patient who complained to ED nurses of "not feeling well" and came back two hours later complaining that they were "really not feeling well," and then two hours later, returned for a third time, demanded to see a physician, and was told to leave.

"The patient went across the street to another hospital, approached the triage desk, and dropped dead of a heart attack," says Frew. "The person either did not know how to describe their problem or was an understated person who did not want to be viewed as a complainer."

Problems also can occur when patients have limited English proficiency, notes Frew.

A patient should not have to "say the magic word" at triage in order to be taken seriously, adds Frew. "The patient who complains of 'not feeling right' may not be viewed with the same urgency as if they state 'I am having crushing, substernal chest pain radiating into my jaw and shoulder.'"

The Centers for Medicare & Medicaid Services expect triage nurses to draw out the necessary information by interview and exam, and not merely rely on a poorly articulated chief complaint, says Frew.

It's a dangerous mistake to assume that return patients are abusing the system, adds Dill. "The research suggests that this is simply not true," she says. "It is usually because the diagnosis was wrong, or symptoms developed that were not originally present and the disease

SOURCES

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process has progressed, so now the correct diagnosis can be made."

• Document carefully.

Because the ED nurse never knows if the patient is going to be returning within a few days, careful documentation for *all* patients reduces risks, says Frew. Take a careful history during your initial assessment, and record vital signs and pertinent signs and symptoms, he advises. Document treatments given in the ED and discharge instructions, particularly the signs or symptoms that should prompt a return to the ED, and document that the patient understood and repeated the instructions, says Frew.

"A return visit within a few hours or days should raise red flags," he adds. The medical record should include documentation of a careful evaluation of the patient's condition, and it should note whether symptoms have increased or remained the same, Frew says.

For return visits, document whether the patient followed the instructions and, if so, still worsened, or failed to follow the instructions and had a foreseeable complication, advises Frew.

• Have different caregivers treat the patient.

If possible, have the patient assessed by a nurse and physician other than the ones who originally saw the patient, recommends Dill.

"A second set of eyes and objective person may pick up something the first practitioner missed," she says. "When they arrive at your ED, they should be seen as completely new patients, and a complete assessment should be done." ■

Break vicious cycle of repeat asthma visits

Don't send patients home without a plan

Giving asthmatic patients inhaled corticosteroids reduces return visits to the ED and improves quality of life, but most EDs don't do this, according to a just-published study.[1]

Patients with persistent asthma, whether mild, moderate, or severe, should be started on daily inhaled corticosteroids as the preferred treatment, says **Nina M. Fielden**, MSN, RN, CEN, clinical nurse specialist for the ED at Cleveland Clinic Foundation. "This includes children, as the benefits of the steroids far outweigh the potential but small risk of delayed growth," she says. **(See the ED's tool for classifying asthma symptoms on p. 19.)**

Infants and young children who have more than three wheezing episodes in the previous year that lasted longer than one day and affected sleep and who have risk factors for asthma should be started on inhaled corticosteroids, adds Fielden.

"Alternative treatments for adults and children include a leukotriene modifier," she adds.

To improve care of asthma and prevent return visits, do the following:

• Use a protocol.

At St. Joseph Medical Center in Towson, MD, ED nurses initiate a protocol for patients who need bronchodilator therapy. Nurses assess the patient's respiratory rate, pulse oximetry and lung sounds, and determine if the patient could benefit from a nebulizer treatment. If so, the respiratory therapist is called to assess

EXECUTIVE SUMMARY

To improve care of asthma patients, develop an action plan, give inhaled corticosteroids on discharge, and use bilevel positive airway pressure (BiPAP) to prevent intubation.

- Consider having nurses give nebulizer treatments at triage.
- Send patients home with a detailed list of daily, rescue, and emergency medications and peak flow monitoring information.
- When using BiPAP, assess heart and respiratory rate, pulse oximetry, arterial blood gases, and level of consciousness.

Asthma Symptom Classification Tool

Signs and Symptoms	Mild Acuity I	Mild Acuity II	Severe Acuity III
Wheeze	None or mild end expiratory wheeze	Inspiration and expiration wheeze, audible wheeze	Silent chest, breath sounds becoming inaudible
Dyspnea	Able to speak in complete sentences	Partial sentences	Fragmented speech purse lip breathing, speaks only single words
Accessory Muscles	No intercostal retractions	Mild retractions present, diaphoretic	Does not lie flat, accessory muscle use, intercostal retractions, diaphoretic
Peak Flow/FEV_1	> 80% predicted	50%-80% predicted	< 50% predicted

Source: Cleveland Clinic Foundation Emergency Department.

the patient, and nebulizer treatments are given from a predetermined set of standing orders.

The protocol lists criteria for mild, moderate, and severe presentations, based on respiratory rate, pulse oximetry, and whether the patient is retracting. "They can give one to three treatments or start a continuous nebulizer if the patient warrants," says **Vicki Blucher**, RN, BSN, CEN, clinical educator for the ED.

Because the physician doesn't need to see the patient before the protocol is initiated, treatment is expedited, with about 10 minutes per patient saved, she says.

At Hospital of the University of Pennsylvania in Philadelphia, most asthma patients are given an immediate nebulizer treatment of albuterol and atrovent at triage, says **Michelle Langrehr**, RN, MSN, CRNP, ED nurse. "Soon after being evaluated, they are given an oral dose of prednisone," she says. "If patients improve after three nebulizer treatments and oral steroids, they are discharged home to follow up with their primary care doctor, usually with an albuterol metered dose inhaler and oral steroids."

If patients do not improve after three treatments, with no improvement in symptoms and continued decreased pulse oximetry and peak flow, they usually are admitted, says Langrehr.

• Give patients an asthma management plan.

"There is evidence that using an Asthma Action Plan in asthma self-management can reduce ED visits and improve lung function, says Fielden.

At Cleveland Clinic's ED, all asthma patients are sent home with an Asthma Action Plan, which includes a list of daily, rescue, and emergency medications and peak flow monitoring information. "We send them home with an inhaler and a peak flow meter if they don't already have one," she says. "We also send them home on inhaled steroids if they currently aren't on them."

The ED has more than 30 patient education handouts to give asthma patients on topics including asthma medications, how to use an inhaler, how to use a peak flow meter, asthma triggers, resources, exercise and asthma, school and asthma, and a daily asthma diary to keep track of peak flow readings, medications, and symptoms.

"If they do not have a pulmonary physician, an appointment is made for them with one, either pediatric or adult," Fielden says.

While treating a 34-year-old woman who reported having bad asthma attacks for two days, a nurse at Langrehr's ED was able to identify her trigger for asthma flare-ups, which was upper respiratory infections. "The nurse reviewed with the patient how to use her metered dose inhaler and provided her with a spacer, which she had not used before," says Langrehr.

The patient received three nebulizer treatments and oral prednisone and her peak flow increased from 200

SOURCES

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to 400 upon discharge, she reports.

• Use BiPAP on asthma patients instead of intubating, if possible.

Research shows that using bilevel positive airway pressure (BiPAP) in severe asthmatic patients can alleviate the attack quicker, improve lung function, and significantly reduce the need for hospitalization.[2]

At Cleveland Clinic's ED, BiPAP is used to prevent an intubation and possible intensive care unit admission as a result, says Fielden. "We use BiPAP as a first-line treatment for patients in acute respiratory failure if they are conscious," she says. "Nebulized bronchodilators and steroids can be given via BiPAP as well."

When using BiPAP, nurses should assess heart and respiratory rate, pulse oximetry, and arterial blood gases to determine if respiratory failure is improving or worsening, and assess the patient's level of consciousness, says Fielden.

"Patients may require intubation if they cannot maintain consciousness," she says. "Watch for signs of tiring out such as accessory muscle use and whether they coordinate their respiratory effort with the ventilator."

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JCAHO surveyors focus on flow, competencies

Nurses answer detailed questions on safety

When the Joint Commission for Accreditation of Healthcare Organizations surveyed McKay Dee Hospital in Ogden, UT, surveyors focused on something that ED nurses did not expect: competencies of agency staff.

"We only use them in a blue moon, a couple of times a year, but this was a major focus," says **Teri Howick**, RN, nurse educator for the ED.

Surveyors asked, "Just because the agency says they are certified in advanced cardiac life support, how do you determine they are competent?"

"They feel that the individual needs to be observed," says Howick. "No amount of paperwork can reassure them." Surveyors recommended that this observation be done before the agency nurses are used in a clinical setting, but this is difficult if no one is qualified to observe them, such as the technician who runs the lithotripsy machine, notes Howick.

"They weren't happy with the current practice and would *prefer* they be observed," she says. "But the nature of an agency person is that you don't have enough staff to cover your shift. How then, are you going to observe them?" The issue has yet to be resolved, Howick adds.

Surveyors also were interested in patient flow, and they liked the electronic tracking system used to identify reasons for admission delays. "We now know if

EXECUTIVE SUMMARY

Accreditation surveyors who recently visited EDs wanted to know how the ED ensured that nurses were competent, how sentinel events were addressed, and how errors are reported.

- Surveyors observed staff using hand sanitizers.
- Nurses demonstrated that medications were given in a timely fashion.
- Nurses were asked specific questions about their nursing notes.

the room is delayed because it's being cleaned or patients are being moved. That helps us because we can track trends," says Howick. "If we can never get a patient upstairs from 11 to 2, that tells us they are not staffing well enough for lunches."

Surveyors also looked at door-to-doctor time and average time spent in the ED, and they asked nurses to explain patient flow for specific patients whose charts were pulled, says Howick. "They looked at the whole flow continuum and where the delays are," she says.

After reviewing the nursing notes in patient charts, Joint Commission surveyors asked specific questions such as, "Why did you place your patient on a monitor?" "Why did you put in a Foley catheter?" "What did you do to assess your patient initially? "What did you deduce from your assessment?" and "How often are you planning to check on your patient and what are you assessing for when you do check on her?" recalls **Laurie Brown**, RN, an ED nurse. "They also checked the doctor's sheet against my nursing notes," she adds.

Surveyors watched staff to see if hand sanitizers were used. "We went through gallons of it," says Howick. "We had a cardiac alert where our goal is door-to-cath lab time of 30 minutes, so people were going in and out of the room like crazy. I probably Avagarded my hands 20 times in 10 minutes," she says.

Here are other questions asked of ED nurses by surveyors:

• What sentinel events have occurred, and how were they addressed?

"Previously, in most facilities, these things were looked at in a negative light. If something bad happened, it was kept quiet," says Howick. "Now the rationale is to let everyone know about the problem and take proactive steps to correct it."

Nurses told surveyors about an incident in which a psychotic patient hooked his intravenous line to his pneumatic blood pressure, which could have been dangerous because both had Luer locks. They explained how the adaptations were changed to reduce the risk of injury.

"We also tightened our observation of confused and psychiatric patients," says Howick.

• How are errors reported?

Nurses explained the process, beginning with a compute- generated event report that goes to the risk management team for review. The team's recommendations are reviewed by the clinical practice council so system changes can be implemented as needed, says Howick.

• If somebody called and asked if a patient was in the ED, how would you respond?

Surveyors were looking to see that nurses were complying with patient privacy regulations, says Howick. Nurses replied that unless the patient has requested that their name not be posted, the caller can be told that the patient is at the ED but cannot be told their complaint.

• How do you ensure that nurses are competent?

Previously, nurses attended a skills lab with a written test afterward, says Howick. "But to me, that didn't mean that they were competent — just that they had showed up," she says. Howick now does one-on-one observation to observe skills such as setting up a Level 1 infuser or electrocardiogram recognition, until she's confident that the nurse is competent. "It's pretty time-consuming, but the surveyors liked that process," she says.

• How do you know what time a medication was ordered and given?

Surveyors were focused on the timing of orders and wanted to see that nurses had given medications in a timely fashion, says **Pam Lindley**, RN, a staff nurse at McKay Dee's ED. "We had a physician order with no time documented, but the nurse had meticulously charted serial assessments for pain, when she notified the doctor, and when she gave the meds," she says. "They were trying to push the responsibility on the nurse, but it's a doctor issue to time their orders."

The physician can verbally order a medication but must then write the order on the chart and time stamp it, or write in the time ordered, Lindley explains. "This new process is more logical and gives a better picture of the care the patient received," she says.

[Editor's note: If your ED was recently surveyed by the Joint Commission and you would like to be featured in an upcoming ED Nursing *article, please contact Staci Kusterbeck, Editor,* ED Nursing*, 280 Nassau Road, Huntington, NY 11743. Telephone: (631) 425-9760. Fax: (631) 271-1603. E-mail: StaciKusterbeck @aol.com.]* ■

SOURCES

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Creative ways to educate about stroke assessment

Is your ED certified by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) as a Primary Stroke Center? If so, eight hours of annual education is required for each nurse on the stroke team.

"But JCAHO does not mandate that the information be approved for continuing education by the state, so our options are wide open," says **Diana Everley**, RN, staff development specialist and former clinical educator for the ED at Deaconess Hospital in Evansville, IN. Also, the programs don't have to be stroke-specific, she says. "They can include diabetes, atrial fibrillation, or hypertension, since all of these impact the care of the stroke patient or risk factors."

To improve stroke education for ED nurses and comply with Joint Commission requirements, do the following:

• Update nurses on new research.

At Borgess Medical Center's ED in Kalamazoo, MI, a "stroke notebook" is updated every two weeks with new literature on stroke care, with a sign-up sheet and short test provided for nurses who read the articles.

By taking the test, the nurse is able to accrue some credit for the article, says **Ken Lanphear**, RN, BSN. "This is also a way for the hospital to show ongoing competency in stroke care, which is always an issue with JCAHO," he adds.

• Require nurses to be certified in the National Institutes of Health Stroke Scale (NIHSS).

At Deaconess, new ED nurses take an eight-hour stroke class and then take the exam to become certified in performing the NIHSS, says Everley. For other nurses, a four-hour recertification course for the NIHSS is held, with discussion on areas that nurses find most difficult to complete.

"We assist them in logging on to the American Stroke Association's web site so they can complete the training module and then take the annual exam," says Everley. **(See resource box, below, for more information.)**

• Share data.

ED nurses regularly review the data required by the Joint Commission for stroke patients, Everley reports. "The stroke team provides up-to-date data so we can relay this to the staff," she says. "We spend time explaining the data, so when they see it posted on their units

EXECUTIVE SUMMARY

To educate ED nurses on care of stroke patients, use current research, bedside teaching, and data on actual stroke patients.

- Have nurses watch a videotape on stroke assessment, either at work or home.
- Give one-on-one inservices to nurses who work off shifts.
- Use a specific stroke patient as the focus of a monthly group discussion.

SOURCES/RESOURCES

For more information on educating nurses on stroke assessment, contact:

- **Ken Lanphear**, RN, BSN, Emergency Department, Borgess Medical Center, 1521 Gull Road, Kalamazoo, MI 49048. Telephone: (269). E-mail: kenl55@yahoo.com.
- **Diana Everley**, RN, Staff Development Specialist, Employee Education and Development, Deaconess Hospital, 600 Mary St., Evansville, IN 47747. Telephone: (812) 450-7173. E-mail: Diana_Everley@deaconess.com.
- **Christine Whelley Wilson**, RN, BSN, Stroke Program Coordinator, University of Wisconsin Hospital and Clinics, 600 Highland Ave., Madison, WI 53792. Telephone: (608) 264-4698. E-mail: cm.wilson@hosp.wisc.edu.

- **For a free on-line training program on administering the National Institutes of Health Stroke Scale** (NIHSS) for acute stroke assessment, go to the American Stroke Association's on-line NIH Stroke Scale training program: (asa.trainingcampus.net).
- **A NIHSS Training DVD is available** for $50 including shipping. To purchase the DVD, call (800) 352-9424 or order on-line from asa.trainingcampus.net. Click on "Resources & FAQ." Under "National Institute of Neurological Disorders and Stroke," click on "Buy NIH Stroke Scale DVD Here." After viewing the stroke scale DVD, nurses may return to the site and enter scores to earn a maximum of 3.5 hours of continuing education credit.
- **A training videotape on "Stroke: Acute Management in the Emergency Department — Assessment, Treatment, and Documentation"** made by Wisconsin Hospital and Clinics can be downloaded at no charge at the Wisconsin Stroke Alert web site (www.strokealert.org). Click on "Resources."

each month, they actually understand it."

As a result, documentation has improved, such as dysphagia screening prior to patients being given anything to swallow. "The staff are also made aware of items that that the physician needs to document and ensure that this is done, such as the inclusion/exclusion criteria for giving t-PA [tissue plasminogen activator]," adds Everley. The classes are small, with fewer than 12 nurses, so the staff have an opportunity to ask questions, she notes.

• Make a videotape.

If they can't attend lectures, ED nurses can watch a 50-minute videotape on stroke assessment developed by the hospital's stroke team, says Everley. "There is a VCR in the nurse break room, and relief can be given at slow times for the nurses to watch it at work," she says. "Also, the ED has several copies so that staff can check it out and watch it at home if they prefer." **(See resource box, p. 22, to download the videotape at no charge.)**

• Teach at the bedside.

There is no replacement for bedside teaching, says **Christine Whelley Wilson**, RN, BSN, stroke program coordinator at University of Wisconsin Hospital and Clinics in Madison. "It is the best way for nurses to learn concepts and remember them," she says.

When a stroke patient presents to the ED, the stroke team compares their assessment with the ED nurses, to see if there was anything the nurse overlooked, Wilson says. "The main reason to compare our assessments is to see if the patient is recovering or has fluctuating symptoms," she says. This might mean the patient is actually having a transient ischemic attack and may not require t-PA, Wilson explains.

• Don't overlook nurses who work off shifts.

Instead of having nurses who work off shift attend lectures on the day shift, Wilson kept a tally of who was missing the lectures and made a point of doing one-on-one education with those nurses during their regular shift.

• Focus on a particular patient.

At Everley's ED, actual cases of stroke patients are used for a "patient care circle" group discussion. "A staff nurse from each area describes the course of events for the patients while they were in their unit and discusses their care," she says. "The staff can receive stroke education hours for being a presenter or a participant. Lunch is offered as an added bonus." ■

COST-SAVING TIP

ED saves $5,200 a year with recycled suture sets

The ED at Southern Ohio Medical Center in Portsmouth saved $5,200 last year by switching to recycled suture sets, reports **Betsy Marsh**, RN, assistant nurse manager for the ED. After use, ED nurses place the instruments in recycling buckets provided by the manufacturer, Indianapolis-based Tri-State Hospital Supply Corp., which provides a $1 rebate per tray.

"The rebate comes to materials management in a lump check monthly, and that check is applied directly to the ED cost centers, resulting in a savings of $5,200 annually," says Marsh. "There is no extra work on the part of the nurses. When the bucket is full, it is sealed, and we are blessed with a wonderful vendor who comes and picks them up."

Sometimes a few of the ED's standard instruments get mixed in with the recycled ones, but the vendor simply returns those, says Marsh. As a result of using the disposable trays, which cost $6, the number of permanent suture trays, which cost about $75 apiece, were cut from 25 to five. "They were kept as backup in case of a shortage, and for some individual physicians who don't handle change well. They are hardly ever used now," says Marsh. "The 20 trays were repackaged as individual instruments, thereby increasing our inventory of certain items, and over the years, decreasing the amount spent in replacement of instruments." ■

SOURCE

For more information on recycled suture sets, contact:

- **Betsy Marsh**, RN, Assistant Nurse Manager, Emergency Department, Southern Ohio Medical Center, 1805 27th St., Portsmouth, OH 45662. Telephone: (740) 356-5000. E-mail: MarshB @somc.org.

COMING IN FUTURE MONTHS

■ Effective strategies for Joint Commission's toughest safety requirements

■ Proven ways to avoid infection in high-risk wounds

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CE instructions

Nurses participate in this continuing education program by reading the issue, using the provided references for further research, and studying the questions at the end of the issue.

Participants should select what they believe to be the correct answers, 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.

The semester ends with this 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*questions*

After reading this issue of *ED Nursing*, the CE participant should be able to:

- **Identify** clinical, regulatory, or social issues relating to ED nursing.
- **Describe** how those issues affect nursing service delivery.
- **Cite** practical solutions to problems and integrate information into the ED nurse's daily practices, according to advice from nationally recognized experts.

21. Which is recommended for the treatment of older patients with acute myocardial infarction, according to David Magid, MD, MPH, ED physician at Kaiser Permanente Colorado in Denver?
A. Patients older than 80 should not be considered candidates for reperfusion therapy.
B. Beta-blockers are contraindicated if patients have more than one comorbidity.
C. Patients undergoing radiation therapy aren't candidates for medication therapy.
D. All patients are potential candidates for medication therapy regardless of age.

22. Which is recommended when administering oral liquid medications, according to Susan Paparella, RN, MSN, director for consulting services for the Institute for Safe Medication Practices?
A. Always use an oral syringe.
B. Use a parenteral syringe for antibiotic administration.
C. Send parents home with parenteral syringes.
D. Draw oral medications into parenteral syringes.

23. Which of the following is accurate regarding use of bilevel positive airway pressure (BiPAP) for asthmatics, according to Nina M. Fielden, MSN, RN, CEN, clinical nurse specialist for the ED at the Cleveland Clinic Foundation?
A. There is an increased likelihood of intensive care unit admissions.
B. Use of BiPAP may prevent the need for intubation.
C. BiPAP cannot be used for patients in acute respiratory failure.
D. Steroids and nebulized bronchodilators cannot be given via BiPAP.

24. Which were Joint Commission surveyors looking for during a recent survey at McKay Dee Hospital?
A. That no sentinel event had occurred in the previous year.
B. System changes that were made as a result of sentinel events.
C. A decrease in reported errors involving ED patients.
D. Fewer sentinel events due to patient flow problems.

Answers: 21. D; 22. A; 23. B; 24. B.

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