

December 2010: Vol. 14, No. 2
Pages 12-23

IN THIS ISSUE

- Strategies to avoid a devastating tenfold dosage error. cover
- Do this immediately if trauma patient needs a chest tube . . . 14
- Get dramatic reductions in door-to-balloon times 15
- You could miss an elder's myocardial infarction 17
- Why almost half of asthma patients don't use inhaled corticosteroids 18
- Give patients in sickle cell pain crisis improved relief 19
- Put a stop to blocked views of your waiting ED patients. . . . 22

Enclosed in this issue:
End-of-semester survey for CNE subscribers; 2010 Index

Statement of Financial Disclosure:
Stacey Kusterbeck (Author), Coles McKagen (Executive Editor), Joy Daughtery Dickinson (Senior Managing Editor), and Darlene Bradley (Nurse Planner) report no consultant, stockholder, speaker's bureau, research, or other financial relationships with companies related to this field of study.

Nursing practices can avoid catastrophic tenfold dosage error

Risk of errors is 'much greater' in the emergency department

A man was given 10 times the normal dose of epinephrine, after presenting to an ED in June 2010 with an acute allergic reaction. He experienced chest pain and shortness of breath, and he died from the overdose. Could you be the one to prevent a devastating mistake like this from happening in your ED?

Ewa Drapala, RN, BSN, CMSRN, an ED nurse at Providence St. Vincent Medical Center in Portland, OR, has worked in a medical/surgical and ED and thinks the potential for errors is "much greater" in the ED.

"In the ED, medication administration doesn't happen at specific times like 0900 and 2100, with a preprinted Medication Administration Record," says Drapala. "Potential for interruptions goes up. There is so much less structure around the procedure."

Messy handwriting and the incorrect usage of decimals, commas, and zeros can result in tenfold errors, adds Drapala. "Computerized charting can be helpful in eliminating some of these errors, along with diligence regarding standardized charting," she says.

Kyle Kennedy, DO, medical director of emergency services at Freeman Health System in Joplin, MO, says one challenge in preventing tenfold errors is a high turnover of nursing staff, with new graduates frequently rotating through high-acuity clinical areas.

To prevent catastrophic dosage errors, says Kennedy, "EDs, ICUs and other critical care areas should only allow those nurses with a mandatory level of clinical experience to work in those high-acuity areas."

Kennedy says that medications at high risk for tenfold dosage

EXECUTIVE SUMMARY

An ED patient died as a result of a tenfold overdose of epinephrine earlier this year, which underscores the need for clinical prevention strategies.

Some safe practices:

- Use verbal orders only for emergencies.
- Require signatures for double checks.
- Draw up medications only at the bedside.

errors are vasoactive drugs, insulin, heparin, and other medications that are given in a low volume/high concentration formulation. “Other high-risk medications include those not given frequently by staff, or pediatric medications, specifically parenteral medications given to children,” says Kennedy.

Any of these medications “should have dosing checked before delivery to the patient,” says Kennedy, “This would include certifying accuracy of the order, as well as accuracy of drawing the medication into the syringe, if applicable.” Use these practices to prevent tenfold dosage errors:

- **Obtain medications in quieter areas.**

Are automated medication dispensers right in

the middle of the loudest patient care areas in your ED? If so, consider moving them.

“There is so much going on around you, with other nurses grabbing supplies or talking to you, and patients trying to get your attention from their rooms,” says Drapala. “It is hard to ever complete the task of obtaining medications without interruption.”

- **Get a signature with double checks for high-risk medications.**

Before a high-risk medication is given at Providence St. Vincent, two nurses are required to double check the order and the medication. This practice is used with all doses of insulin and blood thinners, intravenous (IV) and subcutaneous.

“The practice is also used by some nurses for starting certain IV drips, like dopamine or nitroglycerine, but this is done by individual nurse discretion and is not a part of our ER’s policy,” notes Drapala.

She advises having nurses sign their name next to the medication they double checked. “This gives the nurse more responsibility for actually doing the check, since it would implicate her as also being at fault if a medication error were made,” she says. “I don’t think the ‘honor system’ is as effective as making people sign their names.”

At St. Elizabeth Fort Thomas (KY), a newly implemented electronic documentation system requires all high-risk medications to be cosigned by a second nurse before they are removed, says **Ashel Kruetzkamp**, BSN, SANE, CFN, nurse manager of the ED. “We have computers at all the bedsides,” Kruetzkamp says. “Nurses can check and verify the correct dose and route before giving a medication.”

Pharmacy verifies all “high-alert” medications before they’re removed from automated medication dispensers and also when the order is placed in the electronic medical record. “No high-alert medications will be sent from pharmacy, or be released to be removed, without pharmacy verification,” says Kruetzkamp. “This includes medications that are weight-based.”

- **Don’t use verbal orders for non-emergency situations.**

Kennedy advises requiring physicians to use written orders only, or electronic physician order entry, with the exception of emergency situations. “In those emergency ‘at bedside’ situations, all verbal orders should be repeated back

Subscriber Information

Customer Service: (800) 688-2421 or Fax (800) 284-3291. World Wide Web: <http://www.ahcmedia.com>. E-mail: customerservice@ahcmedia.com.

Subscription rates: U.S.A., one year (12 issues), \$299. Add \$17.95 for shipping & handling. Outside U.S., add \$30 per year, total prepaid in U.S. funds. Discounts are available for group subscriptions, multiple copies, site-licenses or electronic distribution. For pricing information, call Tria Kruetzer at 404-262-5482. Missing issues will be fulfilled by customer service free of charge when contacted within 1 month of the missing issue date. Back issues, when available, are \$37 each. (GST registration number R128870672.)

Photocopying: No part of this newsletter may be reproduced in any form or incorporated into any information retrieval system without the written permission of the copyright owner. For reprint permission, please contact AHC Media LLC. Address: P.O. Box 740056, Atlanta, GA 30374. Telephone: (800) 688-2421, ext. 5491, Fax: (800) 284-3291.

ED Nursing® (ISSN# 1096-4304) is published monthly by AHC Media LLC, 3525 Piedmont Road, N.E., Six Piedmont Center, Suite 400, Atlanta, GA 30305. Telephone: (404) 262-7436. Periodicals Postage Paid at Atlanta, GA 30304 and at additional mailing offices.

POSTMASTER: Send address changes to ED Nursing®, P.O. Box 740059, Atlanta, GA 30374-9815.

AHC Media LLC is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center’s Commission on Accreditation.

This activity has been approved for 10 nursing contact hours using a 60-minute contact hour.

Provider approved by the California Board of Registered Nursing, Provider # 14749, for 10 Contact Hours.

This activity is authorized for nursing contact hours for 24 months following the date of publication.

ED Nursing® is intended for emergency department nurse managers, supervisors, unit managers, and quality assurance personnel.

Opinions expressed are not necessarily those of this publication. Mention of products or services does not constitute endorsement. Clinical, legal, tax, and other comments are offered for general guidance only; professional counsel should be sought for specific situations.

Editor: **Stacey Kusterbeck**.

Executive Editor: **Coles McKagen**
(coles.mckagen@ahcmedia.com).

Senior Managing Editor: **Joy Daughtery Dickinson**
(joy.dickinson@ahcmedia.com).

Production Editor: **Neill L. Kimball**.

Copyright © 2010 by AHC Media LLC. ED Nursing® is a registered trademark of AHC Media LLC. The trademark ED Nursing® is used herein under license. All rights reserved.



Editorial Questions

For questions or comments, call Joy Daughtery Dickinson at (229) 551-9195.

to the physician for confirmation before drug delivery,” he adds.

Otherwise, wrong medications or inappropriate doses of medications may be injected, or medications may be administered by the wrong route, warns **Helen Sandkuhl, RN, MSN, CEN, TNS, FAEN**, director of nursing for emergency and trauma services at Saint Louis (MO) University Hospital. “We all want what is best for our patients as quickly as possible. In reality, though, verbal orders should only be given when true emergencies are present,” Sandkuhl says. *(See related story on drawing up medications at the bedside, below.)* ■

CLINICAL TIP

Draw up all meds right at the bedside

Mary M. Pelton, RN, CEN, an ED nurse at Carteret General Hospital in Morehead City, NC, says, “The best change I have made to my practice to prevent errors is to not draw up any medication without the chart in hand, or a physician at the bedside in codes.”

Secondly, Pelton does not draw up any medications except at the bedside. “That way, I can confirm the patient with the order and the dosage, prior to drawing it up,” she says.

Pelton confirms high-risk medications such as insulin and heparin with another nurse at the bedside. “I do this with oral as well as injectible medications. I feel this extra check at the bedside, in front of the patient, prevents mistakes,” she says.

If the patient has an allergy or they refuse the medication, it can be returned instead of having to waste it. “This allows for some savings to the facility,” Pelton says.

She adds, “With everything done at the bedside, in front of the patient, it compels me to make double, triple sure I am giving the right medication to the right patient with the right dose. The patient and family are right there looking at me.” ■

Is trauma patient going to need a chest tube?

Your actions can avoid delays

Patients with a mechanism of injury relating to chest trauma, such as penetrating or blunt trauma, are more likely to require a chest tube, says **Shelley L. Sides, RN, MSN, EMT-I**, trauma coordinator at Eastern Maine Medical Center in Bangor, ME.

Gabriela McAdoo, RN, trauma nurse coordinator at Stanford (CA) Hospital & Clinics, says, “Delay in care may result in death. Tension pneumothorax is the most common adverse outcome.”

To improve care of a trauma patient requiring a chest tube:

- **Assess for respiratory distress.**

Assess for tachypnea, circumoral cyanosis, pallor, and signs of decreased oxygenation including pulse oximetry if available, says Sides.

- **Always consider the nature of injury.**

“With any chest trauma or multi-trauma patient, you need to be suspicious of a pneumothorax or hemotoma, or both,” says Sides. “Pay close attention to your patient. Be suspicious of any abnormal findings.” She gives these tips:

- Assess chest wall symmetry.

- Inspect for soft tissue integrity.

- When assessing breathing, look specifically for rate, rhythm, lung sounds, symmetry of chest, presence of spontaneous breathing, chest wall integrity, and skin color.

- With circulation, look at the patient’s skin temperature, color and moisture; central pulses; and any uncontrolled bleeding.

“A pneumothorax or hemotoma, especially a progressing pneumothorax or hemotoma, can present abnormal findings in either of those two steps in the assessment,” says Sides.

- **Document the initial drainage output.**

“Include description of fluid drainage,” says McAdoo. “Is it bloody, straw-colored, or purulent? Document output every shift, and mark the chamber when transferring care.”

EXECUTIVE SUMMARY

Patients with penetrating or blunt trauma are more likely to require a chest tube. To improve their care:

- Assess for respiratory distress.
- Make sure that suction is working properly.
- Describe fluid drainage.

- **Don't miss delayed injury.**

Track and trend vital signs and intake/output to make sure your patient is improving and not deteriorating, advises McAdoo. "There may be times when trauma patients have delayed injury," she explains.

After any intervention, reassess your patient's condition, including airway, breathing, and circulation. "This is needed to make sure there are no life-threatening injuries that may have developed during your initial airway or fluid resuscitation," says McAdoo. *(See story on equipment used for this procedure, below, and clinical tip on what to palpate for, right.)* ■

Make sure equipment is working properly

At the beginning of your shift, make sure that the equipment you will be using is working properly and is ready for an emergency at any given time. "This is an important practice," says **Shelley L. Sides**, RN, MSN, EMT-I, trauma coordinator at Eastern Maine Medical Center in Bangor, ME.

At times, Sides has walked into a critical care emergency bay and not had suction available. "The tubing hasn't been replaced, the suction isn't hooked up, the wall-mounted suction isn't hooked up correctly, or Yankauer or French suction tips aren't available," says Sides. "This is dangerous and completely preventable."

Do you work in an ED that doesn't use chest tubes frequently? Sides says to check with an educator to refresh your knowledge on the setup and proper monitoring of the equipment. "Many of the equipment manufacturers have tutorials on setup and maintenance on their web sites," says Sides. "Identify your resources, and be prepared before you need it."

She recommends these steps:

- After you use the equipment, get it back in working order as quickly as possible for the next patient.
- Know what your chest tube insertion kit contains and what other supplies you might need including chest tubes in multiple sizes, tape/bio-occlusive dressing, drain sponges, and petroleum jelly gauze.
- Make sterile gloves and gowns available for the surgeon doing the procedure and any person who is going to be assisting.

- Be familiar with the chest tube chamber hook up.

- Know how to put your equipment together and get it "usable" for providers.

"Be diligent in making sure your ED is adequately stocked with supplies," says Sides. "Chest drain systems all work under the same premise. Be familiar with the science and then your equipment." ■

CLINICAL TIP

Palpate patient's skin for telltale symptom

“A surgeon once told me, ‘If you see someone come in with a ‘pumpkin head,’ you need to prep for bilateral chest tubes,’” says **Shelley L. Sides**, RN, MSN, EMT-I, trauma coordinator at Eastern Maine Medical Center in Bangor, ME.

“Pumpkin head” refers to a large amount of subcutaneous emphysema

within the soft tissue, explains Sides. “With chest and lung injuries, the patient can experience some severe subcutaneous air, causing the head to appear swollen,” says Sides. “The feeling of ‘Rice Krispies’ under the skin as you palpate is the usual finding.” ■

Door-to-balloon times can reach record lows

At Singing River Hospital in Pascagoula, MS, an “ST-elevation Myocardial Infarction (STEMI) Alert Protocol” helps ED nurses to meet a door-to-balloon time of 60 minutes or less.

First, an EKG is obtained and presented to the ED physician for confirmation within five minutes, says **Bobby Kiser**, BSN, an ED nurse on the hospital's STEMI Protocol Committee. Locating the ED physician for EKG review has been a problem at times, however.

“Paging the physician for location has helped,” says Kiser. “Encouraging the ED techs to have the physician sign and time the EKG review has allowed

management a tracking tool for problems. This tends to make the physicians more accountable.”

If a STEMI is suspected, an ED nurse initiates these steps:

- The patient is placed on a monitor and defibrillator pads.
- IV access is obtained with a 18 or 20 gauge IV, using two sites if possible, with concurrent lab draw. Intravenous fluid therapy is initiated, as directed by the ED physician. Extensions are added to IV tubing for additional points of access.
- A point-of-care cardiac profile is performed, and lab draws are labeled to include a complete blood count with platelets, international normalized ratio, basic metabolic panel, and lipid profile.
- Beta blockers, anti-coagulants, anti-platelet(s), nitrates, narcotics, and other appropriate medications are administered per physician’s orders.
- An ED tech or STEMI nurse preps the patients’ groins.
- The patient and family are updated, and the ED physician explains cardiac catheterization and percutaneous intervention procedure.
- The patient is prepared for transfer to the cardiac catheterization lab.

Once the STEMI Alert page has been initiated, an “all call” page system notifies the on-call cardiologist, cath lab personnel, house supervisor, lab personnel, and respiratory therapist assigned to the ED.

From January 2008 to August 2010, the ED’s door-to-balloon time for patients presenting with signs and symptoms of a MI decreased from 91.22 minutes to 53.70 minutes. “Call back times are recorded by ED clerk as part of the ongoing monitoring tool used to improve door-to-balloon times,” says Kiser.

“Well below” standards

All ED patients with chest pain receive an EKG within 10 minutes at Fletcher Allen Health Care in Burlington, VT.

“We have adopted a ‘pit crew’ attitude when

EXECUTIVE SUMMARY

ED protocols can reduce door-to-balloon times for patients with ST-elevation myocardial infarction. To reduce delays:

- Present EKGs to physicians within five minutes.
- Page ED physicians to find out their location.
- Have the physician sign and time the EKG review.

an acute cardiac patient comes into the ED,” says **Donna Chicoine**, RN, BSN, ED nurse educator.

Physician, nurses, and EMTs all respond as a team to start peripheral lines, draw the cardiac panel, start medications, and disrobe the patient. “We are well below the recommended [American Heart Association] door-to-balloon standards of 90 minutes,” says Chicoine. “We have one patient with a door-to-open artery time of 17 minutes, and he came through triage and not EMS.”

EMS is now doing 12-leads in the field and transmitting these so they can be shown to an ED physician, adds Chicoine. If a STEMI is called from the field EKG, the catheterization lab, charge nurse, and cardiology are all paged simultaneously.

“If the catheterization lab is ready and the patient does not require any immediate life-saving intervention, the patient is quickly assessed on the EMS stretcher in the hall by one of the ED physicians or cardiology and bypasses the ED,” says Chicoine.

At one point, the ED managers believed that the 10-minute EKG window was being met, but they found after reviewing two months of charts that the average timeframe was actually twice as long. Here is how the ED got back to the 10-minute mark:

1. The responsibility was assigned to the triage EMT for the patients who arrive through triage, and to the receiving nurse for EMS patients.
2. Nurses and EMTs were educated on the subtleties of cardiac symptoms.
3. EKGs are performed on all cardiac complaints and on patients who have a cardiac history. “ED nurses do not hesitate to call for a physician immediately if EKG changes are evident,” adds Chicoine. *(Also see stories on one ED’s ‘STEMI Kit,’ below, and using ED cases as learning tools, p. 17.)* ■

CLINICAL TIP

‘STEMI kit’ gives easy access to meds

ED nurses at Singing River Hospital in Pascagoula, MS, use a “STEMI Kit” containing radiopaque lead wires, IV extensions, clippers with blades, timer, and a checklist for preparation of

patients going to the cardiac catheterization lab. The kit also includes a pharmacy bag with these medications:

- Lovenox 100 mg injection;
- heparin bolus 1000 units/ml times 10 ml;
- heparin drip;
- nitroglycerin 0.4 mg SL tablets;
- nitroglycerin drip 100 mcg/ml;
- aspirin 325 mg tablet;
- Lopressor (metoprolol) 5 mg injection times three;
- Plavix 300 mg tablets times two equals 600 mg;
- normal saline prefilled syringes times five;
- normal saline 1000 ml bag.

“The drugs used are easily available for the nurse if orders are given, thus decreasing time in locating and retrieving meds,” says **Bobby Kiser**, BSN, an ED nurse on the hospital’s STEMI Protocol Committee. “This helps to decrease time in the ED, allowing the patient to reach the cath lab sooner.” ■

CLINICAL TIP

Use post-ED info as learning tool

What happens after a cardiac patient leaves the ED? Often, ED nurses never find out. At Fletcher Allen Health Care in Burlington, VT, the catheterization lab gives the ED regular feedback on patient outcomes.

“The feedback on the STEMI patients is important to the ED nurses,” says **Donna Chicoine**, RN, BSN, ED nurse educator. “It is a way to follow up with education and training if something was missed.”

However, it is also positive reinforcement for care well done. “This is often missing for many patients we care for emergently. It is nice to know our care helped to save someone’s life,” says Chicoine.

Feedback usually is given with a call-back to the specific ED nurse who cared for the patient. “The ED is included in a roundtable discussion with the

catheterization lab and the transferring hospitals that send STEMI patients to our hospital,” says Chicoine. “Door-to-open artery time continues to improve for the ED and sending facilities.”

Recently, a patient presented with gastrointestinal symptoms, and complaints of chest discomfort. “The nurse felt something was not quite right and did an EKG that showed the patient was having a STEMI,” says Chicoine. Another nurse at triage decided to do an EKG on a patient in the hallway because the ED and waiting room were full. She discovered that despite chest discomfort that was vague, he was indeed having a STEMI.

“Either of these patients could easily have been missed or had worse outcomes if the ED nurses had not trusted their critical thinking or had less awareness of cardiac issues,” says Chicoine. ■

You could miss an MI due to an elder’s pacemaker

ST elevation may be masked

A very sick elder with multiple chronic conditions presented to ED nurses at St. Joseph’s Hospital and Medical Center in Phoenix with vague symptoms including shortness of breath. Her initial EKG revealed a paced rhythm.

“We recognized that there was more to her shortness of breath than her chronic obstructive pulmonary disease,” says **Rhyan Weaver**, RN, BSN, CEN, clinical supervisor in the ED. “A complete assessment of her condition prompted us to try and capture her rhythm unpaced.”

An anterior wall myocardial infarction (MI) was revealed. “Without diligent assessment and persistence in obtaining important diagnostic tests, we may not have captured the STEMI so quickly,” says Weaver. “Relying solely on cardiac markers or classic signs of an MI could have taken hours, causing devastating damage to the myocardium.”

Elders have age-related changes to the cardiovascular system, causing conduction abnormalities, and might require an implanted pacemaker, notes Weaver. This might mask ST elevation on the EKG, causing late identification of a myocardial infarction, she explains. “In any patient who is paced, the nurse must use his or her assessment skills to identify signs of an MI, since the EKG does not provide this information,” says Weaver. To identify a serious condition, Weaver says look

for pale or diaphoretic skin, chest pain, gastrointestinal discomfort, and the comment, “I just don’t feel well.”

Unfortunately, there is no proven way to capture a rhythm unpaced, says Weaver. This means you have to rely on other assessment methods such as chief complaint, past medical history, skin assessment, breathing patterns/effort, and diagnostic measures such as cardiac markers.

“This is why diagnosing a STEMI on a paced patient is so tricky,” says Weaver. “The most important measurement, the gold standard EKG, is useless in this situation.”

Atypical symptoms

Colleen Claffey, RN-BC, MSN, CEN, CPEN, nurse educator for the ED and critical care at Jackson North Medical Center in North Miami Beach, FL, says, “The elderly population commonly present with atypical symptoms, compounding the complexity of making a definitive diagnosis. Meticulous clinical assessment and history-taking become that much more important.”

The older population will not necessarily report chest pain or shortness of breath. “Rather, feelings of fatigue, epigastric pain, back discomfort, or nausea and vomiting are much more common complaints,” says Claffey.

An elderly woman recently reported profound fatigue and tightness across her shoulders to Jackson North’s ED nurses. The patient had a dual chamber pacemaker and history of diabetes, and she was hypotensive and tachypenic. The cardiac team was notified, and a decision was made to take her emergently to the cardiac catheterization lab. “The patient was diagnosed with an inferior myocardial infarct and required stent placement,” says Claffey. “In the case of an elderly patient with a pacemaker, keen assessment abilities and a proactive cardiovascular program is essential.” (See *clinical tip, above right, on identifying cardiac risk factors.*) ■

EXECUTIVE SUMMARY

Implanted pacemakers can mask ST elevation on the patient’s EKG, causing late identification of a myocardial infarction (MI). To prevent this:

- Attempt to capture the patient’s rhythm unpaced.
- Don’t rely solely on cardiac markers or classic signs of an MI.
- Look for pale or diaphoretic skin, chest pain, gastrointestinal discomfort, and the comment, “I just don’t feel well.”

CLINICAL TIP

Use medication history to ID cardiac risk factors

A detailed medication assessment can identify risk factors that may reveal the need for a cardiac catheterization, says Colleen Claffey, RN-BC, MSN, CEN, CPEN, nurse educator for the ED and critical care at Jackson North Medical Center in North Miami Beach, FL.

“Antihypertensives, statins, or anti-dysrhythmics are good indicators in the patient’s medications of cardiac risk factors,” says Claffey. “Personal history risk factors include obesity, smoking, or large alcohol consumption.” ■

Is asthma patient leaving with misinformation?

You’ll have a ‘tremendous impact’

You might assume that caregivers of asthmatic children probably understand how to use inhaled corticosteroids, but a recent study shows this might not be the case.

Researchers surveyed 228 parents of children with asthma exacerbations who presented to two pediatric EDs, and they found that only 51% of children with persistent asthma were using inhaled corticosteroids.¹

Many were using them only “as needed” instead of daily to prevent asthma exacerbations, with 29% of the parents having a misconception that inhaled corticosteroids would “immediately open the airways.”

“Similar to prior studies, we found that many children with asthma were not receiving appropriate preventive asthma care,” says Jamie N. Deis, MD, the study’s lead author and an ED physician at Wake Forest University Baptist Medical Center in Winston-Salem, NC. He gives these recommendations:

- Make sure parents of children with asthma understand the vital difference between immediate relief bronchodilators and inhaled corticosteroids.

“This is one area, in particular, where nurses could have a tremendous impact,” says Deis.

EXECUTIVE SUMMARY

Only 51% of children with persistent asthma were using inhaled corticosteroids, and those that were using them often used them inappropriately, says a recent study. To improve care of children with asthma:

- Explain the difference between immediate relief bronchodilators and inhaled corticosteroids.
- Discuss common triggers of asthma.
- Initiate treatment for acute exacerbations shortly after arrival, even if vital signs are stable.

- **Discussing common triggers of asthma, the importance of second-hand smoke avoidance, and the importance of the influenza vaccination.**

“There is tremendous opportunity to provide this type of asthma education in the emergency department setting,” says Deis.

- **Focus on the difference between inhaled corticosteroids and bronchodilators. Deis recommends these practices when reviewing the patient’s medications at triage:**

— If the child is on an inhaled corticosteroid, ask if the child is using the medicine every day. If not, remind the patient and the parent that this medicine is a daily preventive medication designed to reduce the number of asthma exacerbations.

— Reinforce the fact that inhaled corticosteroids will not provide immediate benefit if the child is having an acute asthma attack and that albuterol should be used as the rescue medication. (*See clinical tip on a warning sign to watch for, below.*)

REFERENCE

1. Deis JN, Spiro DM, Jenkins CA, et al. Parental knowledge and use of preventive asthma care measures in two pediatric emergency departments. *J Asthma* 2010;47:551-556. ■

CLINICAL TIP

Tell patients to watch for this warning sign

Tell asthma patients to take note if they use an inhaler more than twice daily for two days, says **Rena M. Rovere, RN, MS, FNP-C**, a clinical

nurse specialist/nurse practitioner for the Department of Emergency Medicine at Albany (NY) Medical Center.

“This is a sign that asthma is becoming unstable,” Rovere says. “The patient may need adjustment of their medications, which may include beginning inhaled steroids, nebulization treatments, evaluation for triggers or infection, or oral steroids.”

Emphasize that inhaled steroids are not rescue medications, she says. “While they may be the only medication left if the child has used up all of rescue medications too soon, it will be more dangerous to the child because of the delay in receiving the medication to open the airway,” she says.

Rovere tells patients to keep the inhaled corticosteroids in the bathroom to use twice per day before brushing their teeth. “This is order to remember the importance of rinsing the mouth after inhaled corticosteroids, to reduce the incidence of thrush,” she says. ■

Sickle cell patients need better pain relief

Of 21,112 sickle cell disease patients in eight states who were hospitalized or treated and released from hospital emergency departments in 2005 and 2006, 40% returned to the ED for treatment of pain or were rehospitalized within 30 days.¹

“The most important aspect for emergency department nurses would be to recognize that patients with sickle cell disease frequently receive care at more than one institution and receive care at hospitals and EDs repeatedly,” says **Claudia Steiner, MD, MPH**, one of the study’s authors and a senior research physician at Agency for Healthcare Research and Quality’s Healthcare Cost and Utilization Project.

Ask the patient when they were last seen by their primary care physician, if they have a primary care physician, and where and when the patient was last treated in the hospital or ED. “This will help to establish how severe the patient’s sickle cell disease is, as well as understand how coordinated or uncoordinated the patient’s care is,” says Steiner.

Many sickle cell patients do return to the ED shortly after being treated, reports **Jim Phillips, MD**, associate professor of emergency medicine at University of Mississippi Medical Center (UMMC)

EXECUTIVE SUMMARY

Sickle cell patients often return to the ED within 30 days, and many receive care at multiple hospitals and EDs. To improve their care:

- Ask when the patient last received treatment.
- Don't underestimate the quality and severity of the patient's pain.
- Consider oxygen therapy and oral fluid intake.

in Jackson. "The reasons for this are largely based on opinion," he says. "A minority of patients experience opiate addiction. Other groups of patients simply experience pain that may last for days at a time."

Unique needs

Sickle cell pain patients experience this chronic condition "in a very individual and unique way," says **Jeremy Johnson**, RN, PhD(c), CEN, CCRN, an ED nurse at UMMC. "The medical literature is sparse, when it comes to a definitive tool that can be used to treat all patients in crisis."

Johnson says that "the first and foremost mistake" an ED nurse can make, though, is to underestimate the quality and severity of the patient's pain. **Nwachi Nwakanma**, RN, a sickle cell nurse at Grady Health System in Atlanta, says, "It is not just giving the pain medicine. Showing some compassion goes a long way."

A small population of these patients visit UMMC's ED several times a week or month. "Every ED nurse is familiar with these patients," says Johnson. "It is easy to become complacent when treating patients with sickle cell disease."

Although a small minority of patients in sickle cell pain crisis are 'frequent flyers,' they make up a majority of ED visits, says **Robert Cox**, MD, PhD, professor and associate chair of emergency medicine at UMMC. "This makes management a particularly difficult task," he says.

Cox says that factors such as opiate-induced hyperanalgesia, opiate withdrawal, and drug-seeking behavior come into play for a small number of patients. "Unfortunately, the ED management of sickle cell pain crisis can lead to the development of opiate dependence," says Cox. This dependence is especially prevalent if the patient is visiting multiple EDs within a local area, he adds.

"Opiates have been the mainstay of treatment, but higher doses are often needed, due to tolerance by some patients," says Cox. (*See clinical tip, above right, on hydration, and related story on assessment of sickle cell patients, right.*) ■

REFERENCE

1. Brousseau DC, Owens PL, Mosso AL, et al. Acute care utilization and rehospitalization for sickle cell disease. *JAMA* 2010;303:1288-1294. ■

CLINICAL TIP

Sickle cell crisis? Hydrate adequately

For an ED patient in sickle cell crisis, administration of hypotonic solutions such as one-half normal saline can be helpful, says **Robert Cox**, MD, PhD, professor and associate chair of emergency medicine at University of Mississippi Medical Center in Jackson.

"Oxygen therapy and oral fluid intake are often encouraged in patients, even if they are not hypoxic and/or clinically dehydrated," he adds.

Nwachi Nwakanma, RN, a sickle cell nurse at Grady Health System in Atlanta, says, "Our fluid of choice is D5W unless it's contraindicated for our patient. We also encourage oral hydration. It gets the patient out of trouble and keeps them from getting into crisis." ■

Medical emergencies possible with sickle cell

Don't assume anything

Even if you think pain control is the only reason a sickle cell patient is presenting to your ED, always perform a complete assessment, says **Misty Heggemeier**, RN, an ED nurse at St. John's Mercy Medical Center in St. Louis, MO. Heggemeier once cared for a man with a sickle cell crisis who had a cardiac event.

"The patient may be judged or assessed inaccurately due to frequent visits to the ER, often for the same complaint," says Heggemeier. "Staff may begin to assume the reason the patient is coming in and miss an actual emergent event."

Changes in vital signs, reported "new" pain,

and findings such as weakness or chest pain should not be overlooked, warns **Jeremy Johnson**, RN, PhD(c), CEN, CCRN, an ED nurse at University of Mississippi Medical Center in Jackson. “It is important that the ED nurse maintain a higher index of suspicion for these patients, especially since they visit the ED so much,” says Johnson.

Treatment for sickle cell pain crisis is typically aimed at resolving the pain and returning the patient to a baseline status, he notes. However, these patients should be treated with a high degree of clinical suspicion, Johnson says.

“This is especially important when the patient reports new clinical symptoms or different qualities of pain,” says Johnson. “ED nurses often are able to spot these new symptoms in frequently visited patients and can intervene much earlier.” ■

Who is a high-risk patient to keep close to you?

(Editor’s Note: This is the second part of a two-part series on keeping patients safe during lengthy wait times. Last month, we gave practices to identify a patient’s deterioration, enlist the help of others in visualizing patients, and instruct family members. This month, we report on identifying which patients are at high risk for deterioration, using safe triage practice, and avoiding blocked views of patients.)

Is there no room available for a patient who you suspect has an urgent illness, a patient at risk for falling, a patient on blood thinners, or a patient at risk of hurting self or others? If so, move these patients within your visual range, advises **Karen Toulson**, RN, MSN, CEN, NE-BC, an ED nurse manager at Christiana Care Health System in New Castle, DE.

“Patients that are a known risk for deterioration, or where the triage nurse has concerns, should not be sent to the waiting room,” says Toulson. Instead, she says to perform a complete physical assessment of the patient related to the chief complaint, including current medications and past medical and surgical history.

“Accommodations for the patient to go to a treatment room should be discussed with the charge nurse,” says Toulson. “The patient should remain with the triage nurse until moved.”

EXECUTIVE SUMMARY

Some patients need to be moved where you can see them clearly, or closely monitored while awaiting bed placement, because they are at high risk for deterioration during waits.

- Place patients in an unused room or in a wheelchair by the front desk for frequent checks.
- Inform the charge nurse of the risk of deterioration.
- Document the patient’s baseline vital signs.

At times, triage nurses at Huntsville (AL) Hospital place a certain patient on a monitor in an unused triage room or in a wheelchair by the front desk. The patient is checked frequently until a bed becomes available. “Any patient that the triage nurse is concerned about needs to be closely monitored while awaiting bed placement,” says **LaGina May**, RN, an ED nurse and triage coordinator. She says that category includes patients with altered mental status, psychiatric patients, elderly patients, chest pain patients with or without a cardiac history, immunocompromised patients, and patients with shortness of breath, allergic reactions, weakness, seizures, or abnormal vital signs.

“The list could go on and on,” says May. “If the triage nurse is concerned about a patient, the triage coordinator needs to be notified. We ensure the patient gets back as quickly as possible and treatment is initiated quickly.” (See related stories on safe triage practices, below, and avoiding blocked views, p. 22.)

For safety’s sake, do not assume — or hurry

When you have a patient that needs to be seen “sooner than later” and you have to put them back in the waiting room, do the following, says **Tarah Grooms**, RN, ED director at Method-

COMING IN FUTURE MONTHS

■ Stop medication mistakes in boarded patients

■ Use “quick kits” to speed care for emergent conditions

■ Avoid dangerous mistakes with invasive procedures

■ Prevent needless disasters with lumbar punctures

ist Richardson (TX) Medical Center:

1. Inform the charge nurse of the presenting signs and symptoms of the patient and the risk for deterioration.

2. Document the patient's baseline vital signs.

"If or when they do deteriorate, the physicians and nurses have evidence to base their interventions on," says Grooms.

3. Place these patients within a visual field that gives you the ability to assess them as needed.

Grooms says the pediatric population is at high risk in the waiting area if they are experiencing any respiratory compromise. "They have to be watched closely due to the risk for rapid deterioration," she says. "Any elderly patient with vague complaints needs to be watched for worsening in presenting symptoms."

Listen to all info

The triage nurse should not allow any patient that is alone with any high-risk presentations to be out of his or her visual field, adds Grooms. "We always pay attention to the patients that sign in and go sit out of the triage nurse's visual field. They are usually the high-risk patients that will 'fall through the cracks,'" she says.

Always be aware of patients that have the potential to change, whether that means their level of consciousness, vital signs, pain severity, or behavior. **LaGina May**, RN, an ED nurse and triage coordinator at Huntsville (AL) Hospital, says, "Psychiatric patients, with or without a plan, may first appear calm but then later become a harm to themselves and to others."

"Triage nurses should also avoid getting in a hurry and not listening to all information that a patient or family may want to give," says May. "Sometimes the one clue you need is the one not heard."

Frequent ED patients are also high risk for a condition that goes undetected at triage, she says. "Just because Jane Doe is always here with a headache doesn't mean that this time she is not going to have a headache and a head bleed," says May.

A patient's sudden change in acuity might not even be related to the initial complaint. For example, a patient might come in with an ankle injury, but she forgot to eat after she took her daily insulin.

"She has been waiting for a while, when suddenly someone comes running to the desk hysterically about this patient," says May. "Upon recheck, the patient has a decreased level of consciousness due to drop in blood glucose." ■

Avoid blocked views of waiting patients

Does your waiting room's layout or design limit your view of patients? If so, you might need to make these changes:

1. **Change the layout of the chairs.**

"All chairs need to face the triage staff. You can't effectively visualize a patient if their back is turned," says **LaGina May**, RN, an ED nurse and triage coordinator at Huntsville (AL) Hospital.

2. **Place the nurse charting area in the line of sight of the patients.**

John Provost, an ED nurse at St. Joseph's Hospital and Medical Center in Phoenix, says, "In the facility I work in, all nurse charting stations were placed at the door of two patient rooms. This allows the nurse to view his or her patients while they are being treated, as well as waiting on disposition."

3. **Use cameras to assist in visualizing areas of the waiting room.**

At Methodist Richardson (TX) Medical Center's ED, the view of the cameras at the back nurse's desk was changed to cover the areas the triage nurse might not be able to see while in the room with a patient.

CNE INSTRUCTIONS

Nurses participate in this continuing nursing 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.

After completing this semester's activity with this issue, you must complete the evaluation form provided and return it in the reply envelope provided in this issue to receive a letter of credit. When your evaluation is received, a letter will be mailed to you. ■

EDITORIAL ADVISORY BOARD

Consulting Editor: **Darlene Bradley**, RN, CNS, CCRN, CEN, MICN, FAEN, Director Emergency/Trauma Services, University of California Irvine Medical Center, Orange

James J. Augustine, MD

Director of Clinical Operations, EMP Management
Canton, OH
Clinical Associate Professor,
Department of Emergency Medicine
Wright State University
Dayton, OH

Kay Ball,

RN, PhD, CNOR, FAAN
Perioperative Consultant/
Educator
K&D Medical
Lewis Center, OH

Sue Dill, RN, MSN, JD

Director
Hospital Risk Management
OHIC Insurance Co.
Columbus, OH

Linda Kosnik, RN, MSN, APN

Vice President of Clinical Services
Vistaar Healthcare Solutions
Parsippany, NJ

Darlene Matsuoka, RN,

BSN, CEN, CCRN
Clinical Nurse Educator
Emergency Department
Harborview Medical Center
Seattle

Barbara Weintraub

RN, MPH, MSN
Manager
Pediatric Emergency Services
Northwest Community Hospital
Arlington Heights, IL

CNE OBJECTIVES/ QUESTIONS

Upon completion of this educational activity, participants should be able to:

- identify clinical, regulatory or social issues related to ED nursing;
- describe the effects of clinical, regulatory, or social issues related to ED nursing on nursing service delivery;
- integrate practical solutions to ED nursing challenges into daily practice.

21. Which is recommended to prevent medication dosage errors?

- A. ED nurses should avoid using a preprinted Medication Administration Record.
- B. Use of verbal orders is advisable even in non-emergency situations, as long as these are repeated back to the physician for confirmation before administration.
- C. ED physicians should be required to use written orders only, or electronic physician order entry, with the exception of emergency situations.
- D. ED nurses should not be required to sign their name next to the medication they double checked.

22. Which is true regarding care of trauma patients requiring chest tubes?

- A. If you observe a patient has a swollen head due to presence of subcutaneous air, bilateral chest tubes are usually not required.
- B. There is no need to assess for respiratory distress.
- C. It is not necessary to describe the patient's fluid drainage, as long as the patient's output is documented every shift.
- D. Track and trend vital signs and intake and output, to make sure your patient is improving and not deteriorating.

23. Which is recommended for assessment of myocardial infarction in elders with pacemakers?

- A. It is a good practice to rely solely on cardiac markers.
- B. A detailed medication history can help to identify cardiac risk factors.
- C. It is not advisable to attempt to capture the patient's rhythm unpaced.
- D. Implanted pacemakers will not mask ST elevation on the EKG.

24. Which is true regarding sickle cell patients?

- A. A majority of patients experience opiate addiction.
- B. ED nurses should avoid underestimating the quality and severity of the patient's pain.
- C. Almost all sickle cell pain crisis patients experience opiate withdrawal.
- D. Higher doses of opiates should not be given.

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

Tarah Grooms, RN, the hospital's ED director, says, "We have video cameras to view the entire waiting area and entrance from the back nursing station. This can help avoid the high-risk situations."

4. Place patients in busy staff areas.

"If the nurse is not able to watch constantly, then other team members will be able to assist," says Provost.

5. Put blinds in treatment and triage rooms.

Cassandra Richard, RN, CEN, an ED nurse at Oregon Health and Science University Hospital in Portland, says, "The waiting room must be visible to the registered nurse posted at triage. In our department, the triage rooms are private and secure rooms but have blinds that can be opened to allow visibility of the waiting patients."

6. Reposition the furniture.

Grooms says, "There is a beam in the middle of the ED waiting area that was obstructing the nurses' view. We moved the chairs in the waiting area to different locations, so the patients can be visualized at all times from all different angles." ■

When looking for information on a specific topic, back issues of ED Nursing may be useful. To obtain 2010 back issues, go online to www.ahcmedia.com. Select "activate your subscription." Or contact our customer service department at (800) 688-2421 or (404) 262-5476. Fax: (800) 284-3291 or (404) 262-5560. E-mail: customerservice@ahcmedia.com.

Abdominal pain

Just abdominal pain? Don't rule out cardiac, MAY:75

Airway emergencies

Equipment glitches can be dangerous, AUG:113

Have a bag valve mask available as back-up, AUG:113

If intubation attempt is too long — act, SEP:127

Prepare before you have a difficult intubation, SEP:126

You may not be ready for airway emergencies, AUG:112

Assessment

Always remove patient's clothing, NOV:11

Ask this question about elder's fall, MAR:59

Can't decide? Then look at risk factors, JUN:88

Check for this while taking BP, AUG:111

Dim lights when assessing pupils, OCT:138

Do not delay repeat assessments, OCT:137

Don't be fooled by 'normal' blood pressure, JUL:99

Don't ignore these factors in your pain assessment, FEB:42

Don't let staff rely on previous assessment, SEP:125

Don't let 'stroke mimics' delay your patient's care, JUN:89

Don't make dangerous mistakes with elder vital sign assessment, JUL:97

Don't miss underlying reason for elder's fall, MAR:58

How to ID adolescent intent on self-harm, APR:70

Identify early, subtle signs of septic shock, JAN:34

Get "must-have" info on elders in the ED, JUL:106

Get on eye level with child at triage, JAN:28

Good assessment led to good outcome, JUL:105

How ED nurses can avoid misleading oximeter reads, OCT:141

Palpate patient's skin for telltale symptom, DEC:15

Watch for these vague signs of sepsis in elders, JAN:35

You can learn this from a quick look, APR:63

You could miss these shock signs in elders, NOV:5

Your goal: ID sepsis in the early stages, JUN:94

Asthma

Adult ED Nursing Protocol: Respiratory Distress, JUN:Online

Asthma patients shouldn't wait for their meds, MAR:53

Avoid intubation with quick actions, MAR:53

Give nebulized treatments with supplemental oxygen, SEP:128

Half of ED asthma patients receive delayed meds, FEB:46

Is asthma patient leaving with misinformation? DEC:18

Make immediate changes to stop ED asthma visits, MAR:52

Many EDs non-compliant with asthma guidelines, SEP:127

PPMC Department of Emergency Nursing Asthma Treatment Pathway, FEB:Online

Tell patients to watch for this warning sign, DEC:19

Cardiac (Also see Congestive Heart Failure)

Adult ED Nursing Protocol: Chest Pain, JUN:Online

Can't decide? Then look at risk factors, JUN:88

Does patient appear anxious? Suspect MI, MAY:76

Door-to-EKG delays? Get them close to zero, AUG:116

Dramatically cut delays in review of an EKG, NOV:7

ED nurses do EKG within 3 minutes, JUN:89

Door-to-balloon times can reach record lows, DEC:15

Is it an AMI or not? Get the whole story, APR:63

Just abdominal pain? Don't rule out cardiac, MAY:75

Obtain important data on MI patient at triage, OCT:135

Speed cath lab arrival: Define clinical tasks, OCT:135

STEMI guidelines put you front and center, JUN:87

STEMI Job Aide, APR:Online

"STEMI kit" gives easy access to meds, DEC:16

Suspect cardiac pain? Use the right words, APR:63

Use medication history to ID cardiac risk factors, DEC:18

Use post-ED info as learning tools, DEC:17

Will a STEMI patient survive? New evidence says your actions are key, OCT:133

You can learn this from a quick look, APR:63

You could miss an MI due to an elder's pacemaker, DEC:17

Your ED's next acute MI patient might not be what you're expecting, APR: 61

Congestive heart failure

Acute Heart Failure Evaluation and Treatment, FEB:Online

Is it safe to discharge a heart failure patient? MAY:79

Must-do interventions for your next CHF patient, FEB:45

Perform these interventions for congestive heart failure, FEB:44

Suspect CHF even with this vague complaint, FEB:46

Titrate nitroglycerine more aggressively, FEB:46

Diagnostic tests

Does a patient really need this CT scan? OCT:142

Door-to-EKG delays? Get them close to zero, AUG:116

Dramatically cut delays in review of an EKG, NOV:7

ED nurses do EKG within 3 minutes, JUN:89

Discharge (Also see Discharge instructions)

Is it safe to discharge a heart failure patient? MAY:79

Discharge instructions

Ask this question before patient leaves, AUG:115

Cover Your Cough, SEP:Online

Give 'fever packets' to frequent patients, SEP:124

How to Help When a Child Has a Fever, SEP:Online

Is asthma patient leaving with misinformation? DEC:18

Stop needless ED visits with smart discharge, SEP:123

Tell patients to watch for this warning sign, DEC:19

Documentation

Chart weight before pound conversion, AUG:112

Suspect infection? Then document this, MAR:57

Education

ED nursing near misses can be used as red flags, APR:69

NSPG requires you to obtain education

on central lines, FEB:39
Spent zero dollars to create simulated patient, APR:69
Use post-ED info as learning tools, DEC:17

Equipment

Are supplies all there and in working order? SEP:129
Make sure equipment is working properly, DEC:15

Falls

Ask this question about elder's fall, MAR:59
Don't miss underlying reason for elder's fall, MAR:58
Elder with fracture? Take these steps, MAR:59
Suspect a fall although an elder says otherwise? SEP:124

Frequent ED patients

Annoyed? That's risky for patients, AUG:114
Don't get fooled by your "frequent fliers," AUG:113
Give "fever packets" to frequent patients, SEP:124
Stop needless ED visits with smart discharge, SEP:123

Geriatrics

5 triage practices that help elders, AUG:118
Ask these questions for traumatic brain injuries, JUL:102
Ask these questions if TBI is possible, JUL:103
Ask this question about elder's fall, MAR:59
Be careful with elders and antiepileptics, APR:65
Beta blockers may mask symptoms in septic elders, JUL:106
Current stats on elders in EDs, JUL:99
Dangerous handoffs with elders must end, JUL:104
Don't be fooled by "normal" blood pressure, JUL:99
Don't let staff rely on previous assessment, SEP:125
Don't make assumptions about older psych patients, JUL:99
Don't make dangerous mistakes with elder vital sign assessment, JUL:97
Don't miss these adverse drug reactions in elders, JAN:33
Don't miss underlying reason for elder's fall, MAR:58
Don't rule out TBI even with GCS of 15, JUL:103
Do your part to stop harmful drug interactions, JUL:101
Elder has a fall history? Rule out intracranial bleed, APR:66
Elder's meds might hide these early signs of shock, OCT:136
Elders with seizures might surprise you, JUL:100
Elder with fracture? Take these steps, MAR:59

Get "must-have" info on elders in the ED, JUL:106
Good assessment led to good outcome, JUL:105
Infected elders may have no fever, JUL:107
Inform elders about grapefruit juice, JUL:102
Make your waiting room safe for elderly patients, AUG:117
Monitor waiting elders remotely, AUG:119
Note subtle neuro changes in an elderly patient? SEP:126
On the phone, obtain this info, JUL:105
Remember unique needs of elder stroke patients, SEP:131
Suspect a fall although an elder says otherwise? SEP:124
Suspect a seizure in an elder? Don't be fooled, APR:64
Take these actions for elder seizures, APR:64
Use lactate levels to gauge elder status, NOV:5
Warn elders of these drug risks, JUL:102
Watch for these vague signs of sepsis in elders, JAN:35
With elders, be cautious with fluid resuscitation, NOV:4
You could miss an MI due to an elder's pacemaker, DEC:17
You could miss these shock signs in elders, NOV:5

Head Injury

Head injury? Watch your patient for this, NOV:7

Handoffs

Dangerous handoffs with elders must end, JUL:104
Don't miss key details: Do face-to-face reports, OCT:138
On the phone, obtain this info, JUL:105

Homeless

Always remove patient's clothing, NOV:11
Assess for hypothermia in homeless patients, SEP:123
Don't overlook clinical needs of homeless patients in your ED, SEP:121

Hospital-acquired infections (Also see Infection Control and Sepsis)

Check heels for skin breakdown, MAR:58
Did your ED patient arrive with an infection? MAR:57
Don't get complacent with hand hygiene, MAR:54
ED advised to switch to a CASS endotracheal tube, APR:67
ED makes changes to achieve compliance, MAR:55
Insert "many fewer" central lines, catheters, FEB:40
Is patient intubated? He or she is at risk for VAP, APR:66
NSPG requires you to obtain education on central lines, FEB:39

Put clean gloves "at arm's length," MAR:56
See unwashed hands? You should speak up, MAR:55
Spot these signs of infection at triage, MAY:83
Suspect infection? Then document this, MAR:57
Use these tips for peripheral IV insertion, FEB:39
Will your next emergency patient obtain a hospital-acquired infection? FEB:37
You might not need invasive procedure, FEB:39
Your hands may be clean, but is equipment dirty? MAR:56

Infection control (Also see Hospital-acquired infections and Sepsis)

Don't take needless risks if patient needs isolation, APR:68
Identify an infection at triage? Notify others! JUN:92
Goshen General Hospital/Contact Isolation — C. Diff Emergency Department, APR:Online
NCBH Emergency Department Infection/Pneumonia/Sepsis Protocol, JAN:Online
Prevent contamination from commode contents, APR:68
Protect patients at highest risk, JUN:93

Invasive procedures

Insert "many fewer" central lines, catheters, FEB:40
NSPG requires you to obtain education on central lines, FEB:39
Use these tips for peripheral IV insertion, FEB:39
Tufts Medical Center Central Venous Catheter Insertion Checklist, FEB:Online
Tufts Medical Center Non-ICU Procedure Cart Inventory List, FEB:Online
You might not need invasive procedure, FEB:39

Joint Commission

NSPG requires you to obtain education on central lines, FEB:39
Stop poor compliance for verbal order standard, JAN:29

Medications (Also see Patient Safety)

Asthma patients shouldn't wait for their meds, MAR:53
Be careful with elders and antiepileptics, APR:65
Beta blockers may mask symptoms in septic elders, JUL:106
Chart weight before pound conversion, AUG:112
Consider these drugs for initial intervention, FEB:43
Constant ED interruptions make drug errors likely, OCT:141
Detect early signs of reactions to sedation, OCT:139
Don't ignore these factors in your pain assessment, FEB:42
Don't miss these adverse drug reactions in

elders, JAN:33
 Don't overmedicate a suicidal adolescent, APR:71
 Do you need to refuse a physician's order? JAN:31
 Draw up all meds right at the bedside, DEC:14
 ED gets complications with propofol to zero, OCT:140
 Nursing practices can avoid catastrophic tenfold dosage error, DEC:12
 Elder's meds might hide these early signs of shock, OCT:136
 Give anticoagulants early in ED: You'll reduce PE mortality rates, JUN:85
 Give nebulized treatments with supplemental oxygen, SEP:128
 Giving a med for first time? Be ready for ADEs, MAY:76
 Half of ED asthma patients receive delayed meds, FEB:46
 Immediate interventions for medication ODs in children, JAN:29
 In case of ingestion, "assume the worst," MAY:78
 Inform elders about grapefruit juice, JUL:102
 Look for transdermal patches on patients, FEB:42
 Personal Medication Record, JUL:Online
 Put a stop to errors with weight-based dosage, AUG:111
 Seton Family of Hospitals — Understanding the Risks and Benefits of Treatment of Acute Ischemic Stroke with Tissue Plasminogen Activator (tPA), MAR:Online
 Start with low dose of IV pain meds, FEB:43
 "STEMI kit" gives easy access to meds, DEC:16
 Stop poor compliance for verbal order standard, JAN:29
 Suspect an OD? Ask this question, MAY:79
 Tell patients to watch for this warning sign, DEC:19
 Titrate nitroglycerine more aggressively, FEB:46
 Use medication history to ID cardiac risk factors, DEC:18
 Warn elders of these drug risks, JUL:102
 Watch for problems with IV antibiotics, MAY:78
 When in doubt, contact pharmacy, JAN:32
 With narcotics, avoid potentially fatal mistake, FEB:41
 You need to follow chain of command, JAN:32

Neurological (Also see Stroke)

Ask these questions for traumatic brain injuries, JUL:102
 Ask these questions if TBI is possible, JUL:103
 Dim lights when assessing pupils, OCT:138
 Do not delay repeat assessments, OCT:137
 Don't rule out TBI even with GCS of 15, JUL:103

Neuro Assessment Form, OCT:Online
 Neurological Observation Flow Sheet, JUN:Online
 Note subtle neuro changes in an elderly patient? SEP:126
 SJMH Emergency Services Guideline/ Neurological Monitoring, JUN:Online

Overcrowding

Avoid blocked views of waiting patients, DEC:22
 Do a "roll check" in the waiting room, JAN:27
 For safety's sake, do not assume — or hurry, DEC:21
 Tell patients to let you know if they worsen, JAN:27
 Who is a high-risk patient to keep close to you? DEC:21
 Your patients are at risk after triage — wait times are unsafe for 59%, JAN:25

Overdose

Immediate interventions for medication ODs in children, JAN:29
 In case of ingestion, "assume the worst," MAY:78
 Suspect an OD? Ask this question, MAY:79

Pain management

Consider these drugs for initial intervention, FEB:43
 Don't ignore these factors in your pain assessment, FEB:42
 Don't overlook prescription drug abuse, NOV:8
 Look for transdermal patches on patients, FEB:42
 Medical emergencies possible with sickle cell, DEC:20
 New info on ED visits for pain med abuse, NOV:9
 Sickle cell crisis? Hydrate adequately, DEC:20
 Sickle cell patients need better pain relief, DEC:19
 Start with low dose of IV pain meds, FEB:43
 With narcotics, avoid potentially fatal mistake, FEB:41

Patient flow

ED nurses focus on one set of orders at a time, NOV:5

Patient safety

Chart weight before pound conversion, AUG:112
 Constant ED interruptions make drug errors likely, OCT:141
 Don't take your eyes off high-risk patients: ID sudden deterioration, NOV:1
 Draw up all meds right at the bedside, DEC:14
 ED nursing near misses can be used as red flags, APR:69
 Nursing practices can avoid catastrophic tenfold dosage error, DEC:12
 Get others on your "team" to view patients, NOV:3

Give family specific symptoms to look for, NOV:4
 Is it safe to discharge a heart failure patient? MAY:79
 Put a stop to errors with weight-based dosage, AUG:111

Patient transport

Are supplies all there and in working order? SEP:129
 Avoid a terrible outcome with ED patient transport, SEP:129
 Moving a patient? Protect the ET tube, SEP:130

Pediatrics

Get on eye level with child at triage, JAN:28
 How to Help When a Child Has a Fever, SEP:Online
 Immediate interventions for medication ODs in children, JAN:29
 New evidence is in, on ESI for pediatric triage, JAN:27

Pneumonia

NCBH Emergency Department Infection/ Pneumonia/Sepsis Protocol, JAN:Online

Policies, protocols and forms

Acute Heart Failure Evaluation and Treatment, FEB:Online
 Adult ED Nursing Protocol: Chest Pain, JUN:Online
 Adult ED Nursing Protocol: Respiratory Distress, JUN:Online
 Bedside Swallow Screen, MAR:Online
 Cover Your Cough, SEP:Online
 Emergency Department Stroke/TIA/ Intracranial Hemorrhage Protocol and Order Set, MAR:Online
 Emergent Order Set/Severe Sepsis, Septic Shock Orders; SJMH Emergency Services Guideline/Neurological Monitoring, JUN:Online
 Job Aide, APR:Online
 EMMC Emergency Department — Joint Practice Protocol/Acute Stroke Symptoms, MAY:Online
 Goshen General Hospital/Contact Isolation — C. Diff Emergency Department, APR:Online
 How to Help When a Child Has a Fever, SEP:Online
 Ischemic Stroke with Tissue Plasminogen Activator (tPA), MAR:Online
 NCBH Emergency Department Infection/ Pneumonia/Sepsis Protocol, JAN:Online
 Neuro Assessment Form, OCT:Online
 Neurological Observation Flow Sheet, JUN:Online
 NIH Stroke Scale, MAR:Online
 NMH Acute Ischemic Stroke Protocol, MAR:Online
 Nursing Dysphagia Screen for Stroke, MAY:Online
 Personal Medication Record, JUL:Online
 PPMC Department of Emergency Nursing Asthma Treatment Pathway, FEB:Online

Sepsis Criteria Worksheet, JUN:Online
Shock Orders, JUN:Online
Tufts Medical Center Central Venous
Catheter Insertion Checklist,
FEB:Online
Tufts Medical Center Non-ICU Procedure
Cart Inventory List, FEB:Online

Procedural Sedation

Detect early signs of reactions to sedation,
OCT:139
ED gets complications with propofol to
zero, OCT:140

Pulmonary embolism

Don't overlook PE in these patients,
JUN:87
Give anticoagulants early in ED: You'll
reduce PE mortality rates, JUN:85

Psychiatric patients

Don't make assumptions about older
psych patients, JUL:99
Prepare for more — many more —
mental health emergencies, AUG:109

Seizures

Be careful with elders and antiepileptics,
APR:65
Elders with seizures might surprise you,
JUL:100
Suspect a seizure in an elder? Don't be
fooled, APR:64
Take these actions for elder seizures,
APR:64

Sepsis

Beta blockers may mask symptoms in
septic elders, JUL:106
Emergent Order Set/Severe Sepsis, Septic
Shock Orders, JUN:Online
Identify early, subtle signs of septic shock,
JAN:34
Infected elders may have no fever,
JUL:107
NCBH Emergency Department Infection/
Pneumonia/Sepsis Protocol,
JAN:Online
Patients without spleen are high risk for
sepsis, JAN:35
Rush patient out of ED in this case,
JUN:95
Sepsis Criteria Worksheet, JUN:Online
Sepsis mortalities cut 50% with ED
changes, JUN:93
Sepsis screening is success for the ED,
FEB:47
Stop septic patients from rapid
deterioration, OCT:136
Watch for these vague signs of sepsis in
elders, JAN:35
Your goal: ID sepsis in the early stages,
JUN:94
Zero in on these 3 sepsis interventions,
JUN:95

Sickle cell

Medical emergencies possible with sickle
cell, DEC:20
Sickle cell crisis? Hydrate adequately,
DEC:20

Sickle cell patients need better pain relief,
DEC:19

Stroke

Bedside swallow is critical step, MAR:52
Bedside Swallow Screen, MAR:Online
Be sure no eligible patient misses new
treatment window for stroke, MAR:
49
Do fast, easy check to rule out a stroke,
JUN:90
Don't let "stroke mimics" delay your
patient's care, JUN:89
Emergency Department Stroke/TIA/
Intracranial Hemorrhage Protocol and
Order Set, MAR:Online
EMMC Emergency Department — Joint
Practice Protocol/Acute Stroke
Symptoms, MAY:Online
Neuro Assessment Form, OCT:Online
Neurological Observation Flow Sheet,
JUN:Online
NIH Stroke Scale, MAR:Online
NMH Acute Ischemic Stroke Protocol,
MAR:Online
Nursing Dysphagia Screen for Stroke,
MAY:Online
Remember unique needs of elder stroke
patients, SEP:131
Seton Family of Hospitals —
Understanding the Risks and Benefits
of Treatment of Acute
Ischemic Stroke with Tissue Plasminogen
Activator (tPA), MAR:Online
Simultaneous actions speed stroke care,
MAR:51
SJM Emergency Services Guideline/
Neurological Monitoring, JUN:Online
To meet stroke times, think of relay race,
JUN:91
What baseline and follow-up exams tell
you, MAY:74
Which TIA patients have highest stroke
risk? MAY:75
Your "normal-looking" patient just might
be having a TIA, MAY:73

Substance abuse

Don't overlook prescription drug abuse,
NOV:8
Immediate interventions for medication
ODs in children, JAN:29
Is your patient injured, intoxicated, or
both? NOV:10
New info on ED visits for pain med
abuse, NOV:9
Reduce absorption or eliminate toxin,
JAN:30
Suspect ingestion for all decreased LOC,
JAN:31

Suicidal patients

Don't overmedicate a suicidal adolescent,
APR:71
How to ID adolescent intent on self-
harm, APR:70
In case of ingestion, "assume the worst,"
MAY:78
Suspect an OD? Ask this question,
MAY:79
Suspect ingestion for all decreased LOC,
JAN:31

Transient ischemic attack

What baseline and follow-up exams tell
you, MAY:74
Which TIA patients have highest stroke
risk? MAY:75
Your "normal-looking" patient just might
be having a TIA, MAY:73

Trauma

Ask these questions for traumatic brain
injuries, JUL:102
Ask these questions if TBI is possible,
JUL:103
Assess capillary refill for trauma, MAY:82
Athletic injuries? Look for dehydration,
JUN:92
Be ready for injuries from weight training,
JUN:91
Don't let this bad outcome happen,
AUG:116
Don't overlook onset of hypothermia in
trauma, AUG:115
Don't rule out TBI even with GCS of 15,
JUL:103
Do this if C-spine injury is possible,
MAY:82
Ensure patency of patient's IV lines,
MAY:82
Is trauma patient going to need a chest
tube? DEC:14
Is your patient injured, intoxicated, or
both? NOV:10
Look for signs of perfusion, AUG:116
Make sure equipment is working
properly, DEC:15
Palpate patient's skin for telltale
symptom, DEC:15
Staff should be prepared for car crash
victims, MAY:80
Trauma patient stable? Don't assume a
thing, MAY:81

Triage

5 triage practices that help elders,
AUG:118
Avoid blocked views of waiting patients,
DEC:22
Do a "roll check" in the waiting room,
JAN:27
For safety's sake, do not assume — or
hurry, DEC:21
Identify an infection at triage? Notify
others! JUN: 92
Get on eye level with child at triage,
JAN:28
Give family specific symptoms to look for,
NOV:4
New evidence is in, on ESI for pediatric
triage, JAN:27
Obtain important data on MI patient at
triage, OCT:135
Spot these signs of infection at triage,
MAY:83
Tell patients to let you know if they
worsen, JAN:27
Who is a high-risk patient to keep close to
you? DEC:21
Your patients are at risk after triage —
wait times are unsafe for 59%, JAN:25