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Pages 109-120

IN THIS ISSUE

- Don't omit life-saving info during handoff of a child. . . cover
- Identify early signs of shock in pediatric patients 111
- Dramatically cut delays in door-to-drug times for stroke . . . 112
- Make nurses aware of infections that came from the ED 113
- Give immediate EKGs to patients with atypical symptoms . . . 115
- Don't be misled by normal-appearing vital signs of elders 116
- Get shortness-of-breath patients treated much sooner 117
- Discover duplicate prescriptions taken by your patient. 118

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Don't let children suddenly deteriorate during handoffs: Use proven practices

Prevent errors and harm

A five-year-old boy with a fever and rash was about to be admitted to the in-patient pediatric unit at Children's Hospital Boston for dehydration and infection. However, the ED nurse had a gut feeling that something more serious was going on.

"She noted that the child's vital signs remained abnormal for his age," recalls **John S. Murray**, PhD, RN, CPNP, CS, FAAN, director of nursing research in the ED. "The child's persistent tachycardia, hypotension, and continuing fever worried his nurse."

After additional diagnostic testing, it was determined that the boy had a coronary artery aneurysm associated with Kawasaki's disease. "Because of this nurse's excellent clinical skills, the decision was made to transfer the child to a higher level of care," says Murray.

Rapid recognition

Clinical handoffs are particularly critical in the pediatric population, warns Murray. "Timely communication of thorough and accurate patient information, including a nurse's intuition, is vital to preventing errors and harm," he adds.

Children are more susceptible to life-threatening conditions, and can

EXECUTIVE SUMMARY

Clinical handoffs are particularly critical to prevent errors and harm in the pediatric population because children can deteriorate much more quickly than adults. Share this information:

- The amount of acetaminophen given at home and in the ED.
- Possible early signs of shock.
- Medications that were ordered, but not yet given.

deteriorate much more quickly than adults, warns Murray. "While some progress has been made in improving clinical handoffs in the adult population, there remains a gap regarding understanding this issue in pediatric health care," says Murray.

When handing off a child, pause and make sure that all bases are covered before you move on, says **Deena Brecher**, MSN, RN, ACNS-BC, CEN, CPEN, clinical nurse specialist in the ED at Alfred I. duPont Hospital for Children in Wilmington, DE.

"Review any continuous infusions and check pumps," she says. "For kids on insulin drips, validate that they are truly getting what they should be."

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Editorial Questions

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Ideally, says Brecher, the outgoing ED nurse gives the handoff to the nurse who will be caring for the patient. "Nurses may look at handoff as 'I'm getting rid of this patient and moving on to the next one,'" says Brecher. "It doesn't always get the attention or respect that it should." Always share this information when handing off an ED pediatric patient:

- **"Red flag" parent/child interactions.**

"These should be passed on, because of the potential of abuse," says **Inge Morton**, RN, BSN, CPN, education manager in the ED at Children's Hospital Los Angeles.

- **A child's developmental stage.**

"This might not reflect the child's chronological age, either due to developmental delay or regression due to the illness," says Morton.

- **A complete list of home medications and underlying conditions.**

If you're caring for a child with complex chronic medical conditions, omitting this information during report can "seriously impair subsequent care and management," warns **Robin Wood**, RN, MSN, CPEN, lead nurse in the ED at Children's Hospital Los Angeles.

"If handoffs have to occur during an acute deterioration or new diagnosis, the risk for not communicating all pertinent information is far greater, due to the dynamic situation," adds Wood.

If a child is developmentally delayed or technology-dependent, for example, an oncoming nurse might wrongly assume that the child's current condition is the patient's baseline when it's actually the result of an acute deterioration, says Wood.

Omitting a patient's past medical history or home medications can lead to dangerous errors, says Wood. "We have seen children on diuretic therapy for cardiac disease, which the parent assumed they should continue during a time when the patient was dehydrated and required intravenous fluid therapy," she reports.

- **How long has the child has been without anything to eat or drink?**

Dehydration could occur if you fail to tell the receiving nurse the amount of time a child has been NPO, says Brecher. "Infants and toddlers need their fluids, especially if they are in respiratory distress or febrile," she adds.

- **How much acetaminophen was given?**

If you fail to share this information and the child is febrile when he or she gets upstai rs, the daily maximum dose may be exceeded, says Brecher, which can lead to liver failure.

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It may be difficult to determine exactly how much acetaminophen was given before a child arrived at the ED, says Brecher, adding that she's cared for many children who come to the ED with unintentional overdoses.

One child whose chief complaint was vomiting had been given more than the lethal dose of acetaminophen at home, reports Brecher, and was admitted to the intensive care unit. If Brecher is unclear how much the child got at home, she pulls out a bottle and asks the family to show how much they gave. "If we are unsure when the last dose was given, we will just use ibuprofen instead, if appropriate for the patient's condition," she says. (See related stories on reporting early signs of shock and medications *not* given in the ED, p. 111.) ■

SOURCES

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CLINICAL TIP

Report these possible early signs of shock

After you access a central line, draw labs, and give antibiotics, a possibly septic child who was awake and alert now becomes fussy. "It may be that they just want to get out of the ED, but

it may be altered mental status because they are in early shock," says **Deena Brecher**, MSN, RN, ACNS-BC, CEN, CPEN, clinical nurse specialist in the ED at Alfred I. duPont Hospital for Children in Wilmington, DE.

Children with hematologic or oncologic problems who present with fever, have central lines and present with fever, or have a history of metabolic disorder are all at higher risk for developing septic shock, which can rapidly become decompensated shock after a dose of antibiotics, says Brecher.

"If the vital signs look like a rose, and you give them antibiotics and send them upstairs, they may still have early signs of shock," says Brecher.

Look for tachycardia, bounding pulses, increased work of breathing, delayed capillary refill, and hands and feet getting colder, she advises. "The child may go from being cooperative to being fussy, or from being fussy to being tired," says Brecher. "If you don't pay attention, you may miss the early signs of shock." ■

Tell receiving nurse the meds you *didn't* give yet

Avoid harmful missed dosages

If a bed just became available for an intensive care unit patient being held in your ED and an antibiotic was just ordered, you'd probably want to send the patient upstairs right away for definitive care. In this case, be sure to tell the receiving nurse that the patient *didn't* get the first dose of the antibiotic, says **Deena Brecher**, MSN, RN, ACNS-BC, CEN, CPEN, clinical nurse specialist in the ED at Alfred I. duPont Hospital for Children in Wilmington, DE.

If both ampicillin and gentamicin are ordered for a neonate being admitted for rule-out sepsis, says Brecher, you may give one antibiotic but not the other.

If you forget to tell the receiving nurse this information, the patient may not receive an antibiotic that he or she really needs to have, says Brecher, which "sets the patient up for potential long-term consequences."

A neonate with fever may need a dose of vancomycin on top of the ceftriaxone he or she already got in the ED. In this case, "it's important to be clear that you didn't give the dose of vancomycin, and that the patient needs to get that when they

go upstairs,” says Brecher. Likewise, if a patient is going to the OR, the piperacillin/tazobactam may have been ordered but the patient hasn’t gotten it yet, she adds, which is important to prevent surgical infections.

You may have given a dose of ceftriaxone in the ED but the inpatient side wants a different medication, adds Brecher. “That communication is extremely important,” she says. “If you just say, ‘the patient got their antibiotics,’ the nurse may assume I meant the antibiotics that were ordered upstairs.” ■

Misconceptions can harm your next stroke patient

Patient outcomes are at stake

If a patient’s only complaint is dizziness, stroke may not be the first thing you think of, but patients with vertebral artery occlusion may present this way, says **Karen Bergman**, RN, neuroscience coordinator at Bronson Methodist Hospital in Kalamazoo, MI.

“While some stroke syndromes produce symptoms that are easily identified as stroke, such as hemiplegia and facial droop, other stroke syndromes produce more vague symptoms,” she notes.

Dizziness is a common ED complaint, adds Bergman, and this kind of presentation is sometimes not recognized as stroke-related. “By the time it is acknowledged as stroke, the patient may be outside of the treatment window,” she says.

Understanding the symptom patterns associated with different arterial occlusions can increase the

EXECUTIVE SUMMARY

Vague symptoms such as dizziness may not be recognized as possible stroke until your patient is outside of the treatment window. To improve care of stroke patients:

- Identify symptom patterns associated with different arterial occlusions.
- Be aware of treatment options beyond three hours.
- Don’t rule out elder patients as candidates for thrombolytics.

accuracy of differential diagnosis of stroke versus other illness, says Bergman.

“As we are all aware, time lost is brain lost,” says Bergman. “Diagnosing stroke quickly is imperative to initiating stroke treatment options and improving outcomes.” Here are other misconceptions about stroke:

Nurses may wrongly believe that the stroke treatment window always ends at three hours from onset of symptoms.

In fact, says Bergman, hospitals that specialize in stroke management are able to provide stroke treatment options well beyond the three hours that was approved by the Food and Drug Administration for intravenous (IV) tissue plasminogen activator (t-PA).

Most patients are eligible for IV t-PA in a three-to four-and-a-half-hour time window, she adds, with a few more exclusion criteria applying to this time frame.

Hospitals with neurological interventional radiology can offer treatment options such as intra-arterial t-PA and mechanical clot retrieval within an eight-hour time window, says Bergman. “When persons with stroke present to the ED outside of the three-hour IV t-PA time window, it is important that other treatment options are considered,” she says.

Nurses may mistakenly assume elder patients aren’t candidates for treatment with thrombolytics.

After determining that a 95-year-old woman’s left-sided weakness and inability to speak started 45 minutes earlier, and that she did not meet any exclusion criteria, ED nurses at Ronald Reagan University of California Los Angeles (UCLA) Medical Center administered IV t-PA per the ED’s protocol.

“Within six hours, this patient had notable improvement in her speech and left lower extremity strength,” reports **Jennifer Zanotti**, MS, RN, CEN, CCRN, ED clinical nurse specialist who cared for the patient.

Advanced age alone is not a contraindication for t-PA for the treatment of acute stroke, says Zanotti. “We activate our stroke team based upon clinical and time criteria, and do not exclude those with advanced age,” she says.

If the patient meets inclusion criteria and there are not other absolute contraindications, Zanotti says that t-PA should be offered to the patient. “The goal with any patient receiving treatment for acute stroke is to improve not only

mortality, but also their morbidity and functional status upon discharge,” she says. (See related story, p. 113, on how ED nurses shortened stroke treatment times.) ■

SOURCES

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Reduce ED infections by making nurses accountable

As an ED nurse was inserting a urinary catheter in a young man who had been critically injured in a motor vehicle collision, the trauma surgeon was watching closely.

“He noticed that, unknown to her, she had contaminated the catheter with part of her sleeve,” recalls **Ann White**, APRN, MSN, CCNS, CEN, CPEN, a clinical nurse specialist for emergency services at Duke University Hospital in Durham, NC.

The surgeon immediately stopped the procedure, says White, and ordered that a new insertion tray and catheter be set up. “This raised the awareness of *all* the nurses in the room,” says White.

EXECUTIVE SUMMARY

Publicly reported data on infection rates has shifted the focus from inpatient areas to the entire continuum of care, including the ED. To make ED nurses individually accountable:

- Stop procedures if strict asepsis is not adhered to.
- Do tracers to show when and where a contaminated catheter was placed.
- Post ED infection rates throughout the hospital.

“What we do might seem inconsequential, but to that trauma surgeon it was very significant. He did not want his patient to get a urinary tract infection from a contaminated catheter.”

Because the hospital’s trauma surgeons are continually evaluated for infection rates, White explains, they take great pains to make ED nurses aware they are part of the infection surveillance for each patient.

“When they are pegged with a hospital-acquired infection on their patient, they look to where that patient came in and what occurred,” says White.

In this type of scenario, which happened more than once in White’s ED, “there was a degree of embarrassment involved.” White first reviewed the nurses’ technique, then reminded them that they *also* have the right to stop a procedure if anyone is interfering with maintaining strict asepsis.

“Nobody else should be a barrier to that,” says White. “If the orthopedic resident is moving a patient’s leg while you are trying to insert a catheter, call a ‘time out.’”

Tracer pinpoints source

ED infection rates have gone down significantly at Trinity Regional Medical Center in Fort Dodge, IA, says **Amy Mundisev**, RN, BSN, CEN, ED clinical educator, because of changes in standard of care and Medicare reimbursement.

If a patient is diagnosed with a catheter-associated urinary tract infection (CAUTI), a tracer is done to show where and when a contaminated catheter was placed, and by *whom*. “These numbers are shrinking significantly,” says Mundisev.

The number of CAUTIs in various areas, including the emergency department, is posted throughout the hospital, says Mundisev, which motivates ED nurses to be extra careful. “This has increased accountability to *slow down*, because of the negativity that may be associated with a patient that develops a CAUTI from the emergency department,” she says.

Urine culture results might reveal, for example, that a patient’s infection was caused by a skin contaminant microbe that got inserted with a catheter in the ED. “It’s essentially a given that a young man who comes in from a motor vehicle collision didn’t come here with any bacteria in his bladder,” says White.

A patient who acquires an infection in the ED requires antibiotics and has a longer length of stay, says White, and the hospital has increased costs

and decreased reimbursement. “What ED nurses do is absolutely *huge* in preventing infections,” she says.

Publically reported data on infection rates has shifted the focus from inpatient areas to the entire continuum of care, says White — including the ED. “The whole sequence of care is included,” she says. “The ED doesn’t get a ‘by’ anymore, for all of those metrics.” (See related stories on clinical practices to reduce infections and getting catheters discontinued, p. 114.) ■

SOURCES

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Stop needless infections with these simple steps

During various in-services on preventing hospital-acquired infections, emergency nurses at Duke University Hospital in Durham, NC, hear one message repeated over and over: *Asepsis can't be rushed.*

“Even though this is an ED, that *doesn't* give you permission to cut corners on basic aseptic procedures,” says **Ann White**, APRN, MSN, CCNS, CEN, CPEN, clinical nurse specialist for emergency services. “When you are drawing blood, doing venipuncture, or inserting a urinary catheter, you don’t speed through those things.”

You need to allow the cleansing agent to dry the appropriate amount of time in order to foster the most antimicrobial environment, for example, says White. Use these practices to prevent infections:

- **Have a designated nurse monitor hand wash-**

ing for anyone entering a patient’s room.

Consulting physicians coming from inpatient areas bring hospital microbes down into the ED, says White, while patients bring in community microbes. “We are approaching this from both of those areas,” she says. “We have been very successful in increasing compliance.”

- **Each month, have ED nurses review a case of a real patient.**

During in-services, says White, “it isn’t unusual for us to select cases involving a patient with a hospital-acquired infection who was seen in the ED. It points out that we play a big part in this.”

- **Bring an extra catheter with you as a “back-up.”**

“Like a baseball player with his lucky socks, I can’t start a urinary catheter without an ‘extra’ at the bedside,” says **Amy Mundisev**, RN, BSN, CEN, ED clinical educator at Trinity Regional Medical Center in Fort Dodge, IA.

This saves you from taking off your gloves and leaving the room if the catheter should become contaminated, Mundisev explains.

If a catheter is placed in a female’s vagina instead of the urethra, Mundisev typically has the nurse leave it in place while the “back-up” catheter is getting ready to place, avoiding the area where the contaminated catheter is. “Usually I tell nurses to ‘go above’ the misplaced catheter,” she says. “Once the new and sterile catheter is placed, the old contaminated one can be removed and thrown away.” ■

CLINICAL TIP

Allow nurses to get catheters discontinued

ED nurses at Thomas Jefferson University Hospital in Philadelphia can now get a patient’s urinary catheter discontinued, based on a set of parameters in a newly implemented urinary catheter protocol.

“Nurses are empowered to question the need for a catheter,” says **Jenny Bosley**, RN, MS,

CEN, an ED clinical nurse specialist. A urinary catheter may be necessary only for a short-term need, she explains. For instance, a patient with acute shortness of breath may require treatment for acute pulmonary edema or heart failure with diuretics.

The patient may be too unstable to get out of bed to void, or may have a pre-existing condition that may prevent him or her from getting out of bed frequently to void, says Bosley. "Once the catheter is no longer needed, get it discontinued," she says. ■

"Atypical" patients may wait longer for EKGs

Listen carefully to patient's symptoms

A 28-year-old man was given an immediate EKG when he told ED nurses at Parkland Health & Hospital Systems in Dallas that he felt like someone was "holding my chest tight, like a band around my chest."

"There were no outstanding clues, just his story of substernal chest pain radiating down both arms," says Lillian Jones, RN, who cared for the patient, who had cardiac damage.

Cardiac patients who present with *atypical* symptoms, however, may wait longer for EKGs, says Jones. At Parkland's ED, all chest pain patients 35 years and older, diabetics, and those with a history of cocaine use or coronary artery disease have a set of stat vital signs and an EKG done. "This takes care of a high percentage of overall chest pain patients," she says.

However, you need to listen closely to what your patient tells you, to determine if a stat EKG is needed, says Jones.

EXECUTIVE SUMMARY

Cardiac patients who present without the classic presentation of chest pain, diaphoresis, and shortness of breath may wait longer for EKGs. Consider these red flags during your assessment:

- Dyspnea, weakness, and fatigue.
- Brief anginal pain occurring without exertion.
- Pain in the medial aspect of the left arm.

"The classic presentation of chest pain, diaphoresis, shortness of breath, and an 'I'm going to die' look is easy to see," says Jones. "It's the patients that *don't* fit the above criteria that need a thorough assessment."

Get description of pain

No matter what criteria you use to determine which patients should get an immediate EKG, you still have to rely on the patient's description of symptoms and how he or she looks, says Jones. Jones advises using "APQRST" to improve your assessment, as follows:

A = Associated symptoms.

"Dyspnea, and to a lesser extent weakness and fatigue, are big red flags," says Jones. Think of right coronary artery occlusion stimulation of vagal receptors if the patient reports vomiting and nausea, says Jones, and consider brady-tachycardia dysrhythmias if the patient is lightheaded or dizzy.

P = Precipitating factors.

Angina is often brought on by exertion, and angina at *rest* is a worrying factor, says Jones. "If the patient reports chest pain with deep inspiration, don't forget to ask about recent chest trauma," she adds.

Q = Quality. (See clinical tip, p. 116, to get patients to describe their pain.)

R = Region, radiation, and risk factors.

"Pain in the medial aspect of the left arm often accompanies ischemic chest pain," says Jones. "Pain that is easily localized to a small area is rarely ischemic."

S = Severity.

"Ask the patient to rate the pain on a scale from one to 10," says Jones.

T = Timing.

Anginal pain is usually brief, lasting from five to 15 minutes, says Jones. "If the chest pain occurs 20 to 30 minutes after meals or is worse when lying down, it's usually [gastroesophageal reflux disease]," she adds. ■

SOURCE

For more information on which patients should receive an immediate EKG, contact:

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CLINICAL TIP

Instead of “pain,” ask about “discomfort”

If you ask your patients to describe the chest pain they’re experiencing, you may not get the information you’re looking for. “This is usually very difficult for patients to describe,” says **Lillian Jones, RN**, an ED nurse at Parkland Health & Hospital Systems in Dallas.

Jones says to use the word “discomfort” rather than “pain.” “Don’t prompt the patient,” she advises. “Let them tell you in their own words what it feels like.” ■

Normal vital signs in elder? Shock may still be present

Consider “cornucopia of medications”

The medications your elder patient is taking can cause a worsened injury or misleading vital signs, warns **Chris Hoag-Apel, RN, TNS, SANE**, trauma service supervisor at Freeman Health Systems in Joplin, MO. “With aging comes a cornucopia of medications, including anticoagulants, beta-blockers, and calcium channel blockers,” she says.

Anticoagulants can result in major head trauma from a minor injury, says Hoag-Apel,

while beta-blockers and calcium channel blockers can block the expected signs associated with shock.

Tachycardia as a response to shock may not be seen in the elderly trauma patients with a history of hypertension, she adds. “The heart does not respond or pump as effectively in the elderly,” says Hoag-Apel. “Shock may be present with normal vital signs.”

A normal blood pressure is *not* a good sign in a patient with a history of hypertension, warns Hoag-Apel, and in fact, may indicate shock.

Hoag-Apel’s ED is seeing a greater number of geriatric patients each year, with 32% of severely injured patients 65 or older in 2010. “They are active and at high risk for injury due to changes in their visual acuity, sensation, and proprioception,” says Hoag-Apel.

To improve care of elders, use these practices:

- **Consider blood transfusions early, to maintain the oxygen-carrying capacity of the blood.**

“Pre-existing anemia is often present in the elderly,” Hoag-Apel explains.

- **Remember that urine output is a poor indicator of effective fluid resuscitation.**

This is because the kidneys do not respond well to stress, says Hoag-Apel.

- **Consider supplemental oxygen.**

This is to prevent hypoxia in the elderly trauma patient, says Hoag-Apel.

- **Dosages of analgesics and medications in elders should be decreased.**

“This is due to altered organ function,” says Hoag-Apel.

- **Keep patients warm, as they are prone to hypothermia.**

“The elderly have decreased subcutaneous fat, so they develop pressure ulcers and have problems maintaining normal body temperature,” says Hoag-Apel. (See clinical tip, p. 117, on reports from caregivers.) ■

EXECUTIVE SUMMARY

ED nurses are caring for a greater number of geriatric trauma patients, and vital signs of these patients are often misleading due to their age and/or medications. Remember that:

- Anticoagulants can result in major head trauma.
- Beta-blockers and calcium channel blockers can block the expected signs associated with shock.
- A normal blood pressure in a patient with a history of hypertension may indicate shock.

SOURCES

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CLINICAL TIP

Don't dismiss patient "not acting like themselves"

It may be the only clue you get

Did a nursing home caregiver tell you that the patient "isn't acting like themselves?" "All too often, we blow off this type of report," says **Mary M. Pelton**, RN, BSN, CEN, an ED nurse at Carteret General Hospital in Morehead City, NC.

If you dismiss this report of level of consciousness by the caregivers, says Pelton, you may miss the earliest sign of inadequate perfusion. "We would better serve the elder patient if we, for our initial assessment, left out the vital signs and actually looked at the patient and listened to the caregiver," says Pelton.

Level of consciousness is a reflection of perfusion to the brain, and in the elderly, it is may be the only early clue that you get, says Pelton. Pelton says to count the respirations and note the pattern of breathing. "Tachypnea is a very clear-cut indicator of critical illness," she notes.

Cold, mottled skin and delayed capillary refill indicate inadequate perfusion and a more critical patient, says Pelton, as opposed to a pink, warm, well-perfused patient. "Assessing these items takes less than a minute. It will provide you with an accurate reflection of the acuity of your elderly patient," she says. ■

Shortness of breath? Get treatment 40 minutes sooner

Start care at triage

When patients with shortness of breath received either a partial or a full standing order set, their median treatment time decreased

by 40 minutes, according to a study done at Johns Hopkins Bayview Medical Center in Baltimore.¹

Of 1706 patients who presented to the ED with a chief complaint of shortness of breath from January 2007 through August 2009, 304 did not receive any triage standing orders, and the remainder received diagnostic tests at triage to identify pulmonary or cardiac causes, with the results made available to the ED physician immediately, says **Rodica Retezar**, MD, the study's lead author and an ED physician at the hospital.

"Therefore, a disposition decision can be made for whether the patients needs more tests, can be admitted, or can be discharged," she says.

It's especially important to consider both cardiac *and* pulmonary causes for shortness of breath in elders with multiple comorbidities, adds Retezar. "Standing orders are of value when there is delay in being seen by a provider, which allows for the processing of these tests during this time," she says.

Rapid interventions

A nurse-initiated shortness-of-breath protocol, including peak flow measurements, is used by ED nurses at Tufts Medical Center in Boston. "This helps us determine the degree of compromise in a patient with shortness of breath," says **Alexandra Penzias**, RN, MEd, MSN, CEN, an ED clinical nurse educator.

For patients presenting with shortness of breath following a blunt or penetrating injury, the ED's trauma protocols require nurses to place a patient in a trauma bay and activate a pager system that alerts the trauma team, says Penzias.

For patients whose shortness of breath is not related to an injury, the protocols allow a triage nurse to place a patient in a room immediately and initiate care, says Penzias. "This includes, in select patients, the administration of nebulized medications," she says. "This reduces time to treatment,

EXECUTIVE SUMMARY

Standing orders at triage can decrease treatment time of shortness-of-breath patients by 40 minutes in the ED, says a new study. To improve care:

- Consider both cardiac and pulmonary causes in elders with multiple comorbidities.
- Give nebulized medications immediately if appropriate.
- Ask if patients were previously hospitalized or intubated.

which is essential in this population of patients who are at high risk of morbidity.”

Learn this immediately

Ask these questions during your initial assessment if your patient reports shortness of breath, advises **Maria Miralles**, RN, BSN, CEN, clinical nurse IV in the ED at NorthBay Medical Center in Fairfield, CA.

- Was the onset sudden or gradual?
- Did anything precipitate it?
- Is it associated with a cough? If so, productive or non-productive?
- Is there pain with it?
- Is the patient orthopneic?
- Does the patient have any adventitious breath sounds, or no breath sounds?
- Is there fever?
- Is there any lower extremity swelling?
- Was there any trauma prior to the shortness of breath?
- Are there symmetrical breath sounds?
- Is there any associated history?
- Is the patient speaking in short phrases or words, or able to speak in full sentences?
- Are there any nasal or sternal retractions?

“Based on these questions, we can identify treatment that is appropriate for patients, such as some of our core measures for congestive heart failure and pneumonia,” says Miralles. “We also determine if the shortness of breath is related to a trauma.” (See **clinical tip on questions to ask your patient**, p. 118.) ■

REFERENCE

1. Retezar R, Bessman E, Ding R, et al. The effect of triage diagnostic standing orders on emergency department treatment time. *Ann Emerg Med* 2011;57(2):89-99.

SOURCES

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CLINICAL TIP

Will patient deteriorate? Ask these two questions

If your patient reports shortness of breath, **Alexandra Penzias**, RN, MEd, MSN, CEN, clinical nurse educator in the Department of Emergency Medicine at Tufts Medical Center in Boston, MA, says to ask these two questions: “Have you ever been hospitalized for your shortness of breath?” and “Have you ever been intubated or treated in an intensive care unit for your shortness of breath?”

“If answered in the affirmative, this indicates a patient with a history of serious disease and a tendency to deteriorate rapidly,” says Penzias. ■

Your patient may be taking duplicate meds

You’ll need to “play detective”

When a woman reported depression, migraines, and slurred speech over a

EXECUTIVE SUMMARY

Your medication reconciliation may reveal a patient is taking duplicate prescriptions, which could be causing his or her presenting symptoms. Use these practices:

- Review the patient’s home medications.
- Compare current medications to medications given in the ED.
- Ask whether the patient is still taking medications listed in previous records.

period of months to **Casie McMaster**, RN, an ED nurse at St. Anthony's Hospital in St. Louis, MO, she reviewed her patient's home medications.

"I noticed she had several bottles of amitriptyline. She had been prescribed this drug twice, by two different doctors," she says.

While the normal dose for migraine treatment is 10 mg per day, says McMaster, the normal dose for depression is 150 to 300 mg per day in divided doses. "I soon found out she was taking 450 mg a day in three doses, which put her 150 mg over the recommended dose per day," she says. "Her doctors had no idea what the other was prescribing."

The woman was taking three times the intended amount of the medication, says McMaster, which was making her drowsy and causing slurred speech. "This is an example of a huge discrepancy that could have been easily avoided if her primary medical doctor and psychiatrist would have communicated, or had the ability to compare what each was prescribing," says McMaster.

Medication reconciliation is often a frustrating task for ED nurses, since they need to "play detective" to figure out what a patient is taking, says McMaster.

To avoid discrepancies, McMaster says to compare the medications your patient is currently taking to what medications will be given in the ED or prescribed to a discharged patient.

"Patients are so ill or overwhelmed they don't think to tell us everything," says McMaster. "As your patient's advocate, make sure you have turned every stone prior to prescribing." (See **clinical tip on previous medications**, p. 119.) ■

SOURCES

For more information on medication reconciliation in the ED, contact:

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CLINICAL TIP

Check if patient still takes previous meds

Reviewing your patient's previous medical records will tell you the medications he or she was taking at the time he or she was discharged, but the patient might have discontinued taking some of these, says **Donna Sparks**, MSN, RN, CEN, director of emergency services at Baptist Hospital Miami (FL). "A pitfall is possible if the nurse were to list the old medications as the patient's current medications without validation," says Sparks. ■

COMING IN FUTURE MONTHS

- Prevent bad outcomes with procedural sedation medications
- Dramatically improve care of pediatric psychiatric patients
- Give better discharge instructions to elder patients
- Get your door-to-EKG times down to under 10 minutes

CNE INSTRUCTIONS

1. Read and study the activity, using the provided references for further research.
2. Log on to www.cmecity.com to take a post-test; tests can be taken after each issue or collectively at the end of the semester. *First-time users will have to register on the site using the 8-digit subscriber number printed on their mailing label, invoice, or renewal notice.*
3. Pass the online tests with a score of 100%; you will be allowed to answer the questions as many times as needed to achieve a score of 100%.
4. After successfully completing the last test of the semester, your browser will be automatically directed to the activity evaluation form, which you will submit online.
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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.

29. Which is true regarding early signs of shock in pediatric patients, says **Deena Brecher**, MSN, RN, ACNS-BC, CEN, CPEN?
A. Altered mental status is not a sign of early shock.
B. Children with central lines are at lower risk for developing septic shock.
C. Children with a history of metabolic disorder are at higher risk of developing septic shock.
D. Delayed capillary refill is not a sign of shock in children.

30. Which is true regarding care of stroke patients in the ED, according to **Karen Bergman**, RN?
A. Patients with vertebral artery occlusion will not present with dizziness.
B. The stroke treatment window always ends at three hours from onset of symptoms.
C. Advanced age alone is not a contraindication for intravenous (IV) tissue plasminogen activator (t-PA) for the treatment of acute stroke.
D. Most patients are eligible for IV t-PA in a three- to four-and-a-half-hour time window, with a few more exclusion criteria applying to this time frame.

31. Which is recommended regarding ED nursing assessment of chest pain patients, according to **Lillian Jones**, RN?
A. Right coronary artery occlusion stimulation of vagal receptors should be ruled out if the patient reports vomiting and nausea.
B. Brady-tachycardia dysrhythmias should be considered if the patient is lightheaded or dizzy.
C. Ischemic chest pain should be ruled out if pain occurs in the medial aspect of the left arm.
D. Ischemic chest pain is more likely if pain is easily localized to a small area.

32. Which is true regarding ED nursing assessment of vital signs of elders, according to **Chris Hoag-Apel**, RN, TNS, SANE?
A. Beta-blockers and calcium channel blockers can block the expected signs associated with shock.
B. Elderly trauma patients with a history of hypertension are more likely to have tachycardia as a response to shock.
C. A normal blood pressure in a patient with a history of hypertension is a good sign.
D. Urine output is a reliable indicator of effective fluid resuscitation.