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Don't overlook clinical needs of homeless patients in your ED

Simple interventions 'can go a long way'

Each time a homeless person comes to your ED, you are faced with many challenges. Your patient is likely to have poor hygiene, multiple chronic medical problems, no funds for prescriptions, no transportation, and also might be intoxicated.

"Many of the homeless that we see on a regular basis suffer from mental illness and/or some type of chemical dependence," says **Tina Alafa**, RN, ED nurse at Kaweah Delta Medical Center in Visalia, CA. "Often-times, they arrive in our department with soiled clothing, disheveled, and lacking proper hygiene. This can make simply approaching them a challenge for ED staff."

U.S. cities are reporting increases in homeless people and families of 12% to 40%, according to the Center on Budget and Policy Priorities. This means that ED nurses are caring for many more homeless.

Alafa says her ED is seeing a marked increase in homeless patients. "Although they come to the ED seeking medical attention, they are often unwilling to complete a medical exam," she notes. "This poses its own challenges when trying to accurately assess their medical status."

Anette Bickett, RN, CEN, CPEN, TNCC, an ED nurse at Jewish Hospital Medical Center South, a rural community medical center in Shepherdsville, KY, says, "Once a person becomes my patient, I have a responsibility to assist them with managing their new or chronic medical problems."

Rates of chronic medical illness are high among homeless adults seen in the ED, says **Mairead O'Regan**, RN, an emergency nurse and administrative director of logistics at Newark (NJ) Beth Israel Medical Center. In

EXECUTIVE SUMMARY

ED nurses are caring for many more homeless patients, many of whom have chronic illnesses, mental illness, and chemical dependence. To improve their care, consider the following:

- Refer patients to community resources.
- Give patients the opportunity for self-care.
- Give warm clothing to patients.

addition, homeless patients usually have social or psychological problems in addition to their physical ailments.

It's a mistake, though, to label homeless patients as "non-compliant," adds O'Regan. "Many of our homeless population have psychological issues. Their perception of compliance is often very different from the expected norm."

Poor access to meds

You're used to telling your patients why a medication is needed, but if your patient is homeless, you need to worry about how they will get it.

Bickett says, "It is one thing to see these

patients get diagnosed and treatment for their ailments. But what do I do when they are given three or four prescriptions, with no financial resources to get them filled?"

Alafa says, "We send the homeless out with prescriptions for antibiotics and no source of income to pay for them, discharge instructions to follow up with their primary provider when they have none, or directions to keep wounds clean and dry, but no supplies or education on how to do so."

Bickett says that once she realizes her patient has limited resources, she does these interventions:

- Determine their level of ability to follow the given recommendations.

"I ask the uncomfortable question of how they are going to pay for their prescriptions," says Bickett.

- Make sure that they have a doctor or facility to follow up with.
- Refer patients to pharmacies that offer free or discounted pharmaceuticals.
- Keep a list of other community resources.

This list might help your ED patient receive health care, dental care, mental health services, meals, counseling, or affordable housing.

"It just takes a few minutes to make some phone calls and surf the net, in order to help my patient in an appropriate direction," says Bickett. "It is my job to get this information into the hands of my patient upon discharge."

One elderly woman being discharged from Jewish Hospital's ED was unable to care for her own needs. ED nurses worked with emergency medical services (EMS) staff, who transported the patient, to set up short-term assistance.

"We then involved our local adult protective services," says Bickett. "An agent personally reviewed her situation and got her the assistance she so desperately needed."

Assess self-care

Poor hygiene affects patients' well being from a mental and physician standpoint, O'Regan says.

"Assist the patient with daily activities, showers, and clothing," she says.

Alafa typically offers homeless patients a meal and the opportunity to clean themselves. "Offering a meal sustains the body's need for nutrition. Allowing them the opportunity to clean themselves improves wound healing and decreases the risk for infection," she says. "A simple boxed sandwich lunch and a basin with some soap and warm water

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can go a long way.”

Denise Foster, RN, MSN, ED director at Oregon Health & Science University in Portland, says that the number of homeless patients at her facility has steadily increased. She says that because ED nurses are the ones who spend the most time with these patients, they are the best ones to assess the person's ability to provide self-care.

“Commonly the homeless are sent out, only to return to the ED shortly thereafter,” says Foster. “In the worst case scenarios, their condition significantly deteriorates due to lack of follow-up care.” (See story below on hypothermia in homeless patients.) ■

Assess for hypothermia in homeless patients

Due to the increasing number of homeless patients seen at the ED at Oregon Health & Science University in Portland, nurses started a clothing donation center in the department. Staff and patients brought in items that otherwise would have been discarded.

“The result is we currently have a decent stock of clothing,” says Denise Foster, RN, MSN, ED director. “In the cold winter months, a warm coat can make the difference between life and death for the homeless. We are sensitive to the fact that many of our homeless are ill-prepared to dress for the elements and thus can arrive with hypothermia.” To improve assessment, consider these items:

- Hypothermia develops gradually over several hours.

Cases have these characteristics, says Foster:
— Patients with mild hypothermia have temperatures of 93.2-96.8°F and might present with uncontrolled shivering, loss of memory, depression, fatigue, and poor judgment.

— Patients with moderate hypothermia have temperatures of 86.0-93.2°F. “The heart rate, blood pressure, and respiratory rate falls, and cyanosis occurs,” says Foster.

— In severe cases with temperatures below 86.0°F, cardiac arrhythmias can occur along with unconsciousness. “Death usually occurs when the temperature falls below 78°F,” says Foster.

- Patients with hypothermia are hypoxic, dehydrated, and hypoglycemic.

- Treatment involves preventing further loss of heat and re-warming. “Address both external and internal warming techniques, fluid resuscitation, and treatment of hypoglycemia,” says Foster. ■

Stop needless ED visits with smart discharge

You gave your patient thorough discharge instructions, verbal and written, but are you sure he or she really understands them?

Some patients return to the ED because they don't have a clear understanding of discharge instructions or the next steps for follow up, says **Carrie L. Baumann**, RN, BSN, patient care supervisor in the Emergency Department Trauma Center at Children's Hospital of Wisconsin.

“Wrong dosages of medication and schedules aren't maintained, due to the patient not listening to instructions or throwing out written instructions,” says Baumann.

To avoid needless repeat visits, she says to do the following:

- **Make an effort to provide patients with a primary care provider.**

Most of Children's Hospital of Wisconsin's ED pediatric population doesn't have a primary care provider. “We need to be diligent with giving them

EXECUTIVE SUMMARY

If you make sure that patients understand their discharge instructions, this step can prevent unnecessary repeat ED visits. Use these interventions:

- Refer to a primary care provider.
- Contact high-risk patients by phone.
- Give instructions on cold and fever management.

the contacts, so that they are able to find someone that fits their needs and expectations,” says Baumann.

- **Sit down with patients and thoroughly read through the instructions.**

When you are finished, Baumann says to ask your patient, “What can I answer for you at this time?” and “Is there anything you need from us at this time?”

“Repeat, repeat, repeat,” says Baumann. “Ask for verbalization of the medication schedule, dosage, and what it is for. Go through the teaching sheets with them, in case there is verbiage or concepts that are not understood.”

- **Track previous visits.**

Children’s Hospital’s ED nurses can access the Wisconsin Information Exchange. “If the patient has been seen at other EDs in the city, we are able to track where they have been,” says Baumann. “We can then coordinate with the other ED if there is a pattern, or any missing information.”

- **Address the needs of patients with chronic**

conditions such as sickle cell or asthma.

“We need to ensure that the plan at discharge is discussed and that all information is given to their primary care provider,” Baumann says. “If the instructions are clear at discharge and information is readily accessible, there are markedly fewer visits by chronic patients.”

- **Patients are contacted post-discharge.**

“Our outreach nurse attempts to contact all individuals seen in our ED on a daily basis,” says Baumann. “Even the most benign visits are called back.”

The nurse asks if follow-up appointments are scheduled, checks acetaminophen or ibuprofen dosages if fever is continuing, calls in forgotten prescriptions, calls for lab reports, and changes prescriptions if needed. “This decreases repeat visits. It has a huge impact on the patient and family,” says Baumann. “It allows them to ask the questions they were too overwhelmed to ask at the time in the ED.” (*See story below on giving patient handouts at discharge.*) ■

CLINICAL TIP

Give ‘fever packets’ to frequent patients

Kevin Perry, RN, ED nurse at Providence St. Vincent Medical Center in Portland, OR, gives the example of a young child who is brought in “for the umpteenth time, for a simple fever or cold. How many of these visits could be prevented with proper fever management teaching?”

St. Vincent’s nurses developed “fever packets.” These are given to children under 16 with fever as part of their discharge plan. “This program empowers those parents to care for their child’s simple fevers at home. It thereby prevents unnecessary ER visits,” says Perry. Each packet includes:

- one bottle of children’s acetaminophen;
- one oral syringe;
- a digital thermometer;
- acetaminophen dosing chart for infants/children;
- ibuprofen dosing chart for infants/children;

- information sheet on fever management in English and Spanish;

- a pamphlet on preventing the spread of germs.

“A research study is currently under way to evaluate the effect these packets have had,” reports Perry. “Data is still being collected. However, the initial results are encouraging.” (For more information, contact Perry at Kevin.Perry@providence.org. The “fever packets” are included with the online version of ED Nursing. For assistance, contact customer service at (800) 688-2421 or customerservice@ahcmedia.com) ■

Suspect a fall although an elder says otherwise?

You might need to probe further

If an elder patient denies falling, would you take the answer at face value or probe further? “What I have found in my practice over the last 15 years is that the elderly patient population does not like to complain,” says Jill Hill, RN, clinical educator for emergency services at Southwest Washington Medical Center in Vancouver. “They are generally very stoic. You may have to do a bit more investigation and cajoling to get to the truth.”

Elders might fear losing their independence. “The patient may think that if they tell you they ‘tripped and fell — again,’ that their daughter will put them in a home, or if they admit, ‘I hit the gas pedal instead of the brake,’ that their driver’s license will be taken away,” says Hill.

This worry, real or unfounded, can cause elder patients to leave out details of an injury or claim there has been no injury at all, says Hill.

Falls also go undetected in elder patients due to lack of awareness in those around them. “This is much like heart attack and stroke used to be,” says Hill. “You’ll hear, ‘I just thought mom was being goofy,’ or ‘Dad did tell us he has been dizzy lately, but we just told him to lie down.’”

Family and friends might believe their loved one is just having a ‘senior moment’ when in fact their behavior indicates a possible head injury, says Hill. “Also consider most families are spread out these days. The altered level of consciousness and bruises from a fall may not be noticed by anyone for several days,” says Hill.

To improve assessment of elder fall injuries, take these steps:

- Ask every patient with a complaint that indicates a possible head or brain injury whether “anything out of the ordinary” happened in the past three weeks.

What might seem like an insignificant event to the patient might tell you that a brain injury is a significant possibility that needs to be ruled out, says Hill. “With some patients, it is not necessarily what you ask, but how you ask it,” she says.

- If the patient appears to have an altered level of consciousness, get in touch with family or caregivers.

“You need to be assured the patient is a reliable source of information,” says Hill. “The altered person in front of you may be generally sharp as a tack, according to friends or family.” (See story, p. 126, and clinical tip, right, on neurological assess-

EXECUTIVE SUMMARY

Elders might deny falling or minimize their injuries because of fears of losing their independence. To improve your assessment:

- Ask if anything out of the ordinary happened in the past three weeks.
- Contact caregivers if the patient has altered level of consciousness.
- Identify medications that impact cognitive ability or balance.

SOURCES

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ment of elders.)

- Find out if the patient takes any medications that affect balance or cognitive ability.

Ask about sedatives, sleeping pills, blood pressure pills, and anti-arrhythmics, as well as alcohol use. “A little bump on the head for the average person may be nothing more than that. But if you are on a blood thinner, the ball game changes,” says Hill. “Also, always ask the patient what their definition is of ‘just a little cocktail in the evening.’” ■

CLINICAL TIP

Don’t let staff rely on previous assessment

Can you be sure that your patient’s mental status or pupil size hasn’t changed from the last time the off-going nurse saw her, until the moment you walked in the room?

“Always do your own neurological assessment for an elder with a fall injury. Brains can swell quickly,” says **Jill Hill**, RN, clinical educator for emergency services at Southwest Washington Medical Center in Vancouver, WA.

Perform hourly roundings and assessments on your patients, at a minimum, Hill says. “If your gut tells you to reassess more often, go with that feeling,” she says. “You cannot go wrong with more frequent assessments.”

One of Hill’s ED nursing interns detected fixed and dilated pupils on a patient, which led to an immediate CT and immediate departure to the OR.

“She had a ‘feeling,’ decided to do neuro checks every 15 minutes, picked up on the change and notified the provider immediately,” says Hill. “We are the front line at the bedside. If anyone is going to be the first to notice a change in our patient’s condition, it should be us.” ■

Note subtle neuro changes in an elderly patient?

Your elder patient with a fall injury could have an undiagnosed brain injury. This is because their presenting symptoms might be masking a more subtle neurologic change.

“If an older patient falls and sustains a wrist fracture, the fact that they also hit their head may go unnoticed while the health care providers are trying to control pain and stabilize the fracture,” says **Karen Bergman**, RN, neuroscience coordinator at Bronson Methodist Hospital in Kalamazoo, MI.

Bergman gives these recommendations:

1. Ask the patients if they hit their head, either on the ground or on another object, while falling.

“Inspection of the head may help to identify abrasions or bruising, indicating that the head did have an impact,” says Bergman.

2. Perform neurologic exams to identify subtle changes in the patient’s status.

“Neurologic exams in the ED should be compared to baseline neurologic status, in order to detect changes,” says Bergman.

3. Be aware of interventions that are helpful or harmful to brain tissue survival.

Bergman says these three interventions are helpful for controlling secondary damage from severe traumatic brain injury:

- Elevate the head of the bed, when allowed.

- Maintain low normal partial pressure of carbon dioxide levels.

- Provide adequate oxygenation and blood pressure support to increase brain tissue oxygen.

“Hypotension and hypoxia following traumatic brain injury are known to increase mortality,” adds Bergman.

4. Establish the mechanism of injury, so that you can understand the magnitude of the impact that the brain sustained.

A fall from a standing position versus a fall from 10 feet would create different forces on the brain upon impact, says Bergman. This informa-

tion alone, however, doesn’t tell you if the injury is mild, moderate, or severe, she notes.

“Severity of injury to the brain is established by clinical assessment and CT findings,” says Bergman. “Mechanisms of injury and medical and medication history are used to heighten awareness to potential complications.” The fact that your patient is on warfarin, for instance, should increase your suspicion for intracerebral hemorrhage. ■

Prepare before you have a difficult intubation

When a man was transferred to the ED at St. John’s Mercy Medical Center in St. Louis, MO, with burns and possible inhalation involvement, his room air saturation was in the lower 90% while remaining on a non-rebreather.

The ED physician who intubated the patient took extra time to gather the necessary equipment prior to the procedure, recalls **Jessica VanLaere**, RN, BSN, one of the ED nurses who cared for this patient.

“The physician eventually used the glydescope to appropriately intubate the patient and could see the burn marks in his throat, as the airway was visualized,” says VanLaere. To anticipate the needs of the ED physician, VanLaere says to have the necessary supplies ready in the room before the patient’s arrival.

“At the start of the shift, every nurse should be responsible for making sure that there are oxygen delivering devices, suction capabilities, bag valve mask, and monitoring equipment in each room,” says **Kelly Powers**, RN, an ED nurse ED at Christiana Care Health System in Wilmington, DE. To prepare for a difficult intubation, do the following:

- **Have an airway emergency box ready.**

Include different size endotracheal tubes, end tidal detectors, and laryngeal blades, says Powers.

EXECUTIVE SUMMARY

To prepare for a difficult intubation, gather equipment in advance and keep a watchful eye on the patient during the procedure.

- Make sure supplies are in each room at the start of your shift.
- Use an airway emergency box.
- Watch for medication errors and vital sign changes.

She also recommends using a rapid sequence intubation (RSI) kit.

“This ensures that you can save time looking for the necessary medications for intubation,” says Powers. “Not having the essential equipment, suction, non-rebreather mask, or ambu-bag in every room could be detrimental to the patient’s care.”

At St. John’s Mercy, ED nurses store a pre-assembled RSI kit in the automated medication dispenser. This includes the most commonly used sedation and paralytic medications. “That way, we only have to get one item for a patient that is having an airway emergency,” says VanLaere.

VanLaere says that her “no. 1 tip” for ED nurses is to be familiar with the medications used for RSI and the typical doses used in the ED.

- **Assess the patient continuously.**

Jayne K. McGrath, RN, MS, CCRN, CEN, CNS-BC, an ED clinical nurse specialist at University of Wisconsin Hospital & Clinics in Madison, says, “Facial or airway trauma, or even just a person’s anatomy, can make an intubation difficult. Be the ‘watchful eye’ during these procedures.”

Continually assess the pulse oximetry, says McGrath, and be sure your patient is adequately oxygenated prior to the intubation.

“Monitor the patient’s oxygen saturation and heart rate to make sure they stay stable during the intubation process,” says VanLaere. “Make sure the rest of the staff in the room are aware of the patient’s vital signs and if there are any changes.”

- **Be sure your equipment is ready and working.**

McGrath says, “Have a tracheotomy tray available in the event that an emergency trach needs to be done.” (See *clinical tip on intubation attempts, right.*) ■

SOURCES

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CLINICAL TIP

If intubation attempt is too long — act

Attempting to intubate should not take the intubater more than 30 seconds, says **Jayne K. McGrath**, RN, MS, CCRN, CEN, CNS-BC, an ED clinical nurse specialist at University of Wisconsin Hospital & Clinics in Madison.

“If it is, then it’s important to stop and re-bag the patient with 100% oxygen,” McGrath says. ■

Many EDs non-compliant with asthma guidelines

ED nurses should take a lead role

Many ED nurses are apparently not following guidelines for pulmonary function testing and asthma medications, according to a recent study.¹ Of 1,078 adults with an acute asthma exacerbation, less than 60% received guideline-recommended therapy with a bronchodilator, corticosteroid, and supplemental oxygen. Also, at discharge, 18% of patients did not receive a prescription asthma medication.

Felicia Allen-Ramey, PhD, one of the study’s authors and associate director of global health outcomes at Whitehouse Station, NJ-based Merck & Co., says, “The suboptimal adherence to treatment guidelines observed in this study could be reduced by enhancing the partnership between nurses and physicians and other allied health professions, especially respiratory therapists, in the ED.”

EXECUTIVE SUMMARY

Take a lead role in improving compliance with asthma treatment guidelines, which is poor in many EDs. Use these practices:

- Triage based on exacerbation severity.
- Tailor treatments to specific age groups.
- Assist patients with arranging post-ED care.

CLINICAL TIP

Give nebulized treatments with supplemental oxygen

If you listen to the lungs of an asthmatic child and don't hear wheezing, this situation might be deceptive.

"The problem is that when you have so much mucus production in the airways, you give them albuterol which opens up the airways. But it causes the mucus to be very free to move around," says **Veronica Abshear**, RN, education coordinator for the ED at Children's Hospital of The King's Daughters in Norfolk, VA.

Suddenly the oxygen saturation level might start to drop. "The child can go into more of a visible respiratory distress than what you started with," says Abshear. "They can actually go downhill a little bit before going up."

The worst case scenario is a child getting so fatigued that he or she goes into respiratory failure, she says. For this reason, all nebulized treatments are given with supplemental oxygen. "A child breathing 60 times a minute can't keep it up for very long and might need an elective intubation where we manually assist them with breathing," explains Abshear. ■

we can head off a bigger exacerbation and, hopefully, an admission."

- **Tailor treatment to age-specific groups.**

ED nurses at Providence St. Vincent use colorful nebulizer masks that look like toys ("Nic" the Dragon masks, Kidsmed, Hinsdale, IL) when caring for an asthmatic child. "We allow greater participation for the child and adolescent in the delivery of treatment," says Hilderbrand. (*See clinical tip, above, on pediatric asthma patients.*)

Plain masks that allow 4-6 liters of oxygen flow are used for patients who can't hold a hand-held nebulizer, such as a young child or an elderly patient with dementia. "The masks have a base that allows for the attachment of the nebulizer directly to the mask," says Hilderbrand. "This then allows the mask to be fitted to the patient's face and the treatment delivered."

Allen-Ramey recommends that ED nurses:
— work collaboratively with physicians to develop clinical pathways that triage asthma patients according to exacerbation severity (*To download a copy of the Global Initiative for Asthma's Pocket Guide for Asthma Management and Severity, go to www.ginaashma.org. Select "Guidelines & Resources" and "Pocket Guide for Asthma Management and Prevention."*);
— lead quality improvement projects to improve compliance with recommendations for periodic assessments and use of objective measures;
— assist patients with arranging post-ED care before they are discharged.

To improve care of asthma patients in your ED, use these approaches:

- **Start treatment immediately.**

Sue Hilderbrand, RN, CEN, an ED nurse at Providence St. Vincent Medical Center in Portland, OR, says, "Early assessment and intervention are key to the management of the asthma patient."

Hilderbrand says your assessment should include auscultation of breath sounds, measurement of the heart rate, respiratory rate and effort, skin color, and the patient's level of anxiety.

"Continued reassessment of these parameters, while remaining alert to sudden decompensation in the patient's respiratory status, is paramount," she says.

Hilderbrand adds that ED nurses use nurse-initiated orders to start treatment once asthma patients are assessed in triage. These orders include peak flow measurement and treatment with bronchodilators.

Kerri Helm, RN, BSN, an ED nurse at Hendrick Health System in Abilene, TX, says the biggest change her department has made with asthma patients is getting them treated more quickly. "We initiate nebulizers the minute they get through the door. The kids get oxygen, treatments, corticosteroids, or arterial blood gases, according to their severity," says Helm. "By getting to them quickly,

SOURCES

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- Give education on medications, peak flow devices, or aerochamber delivery devices.

“We send the patient home with preprinted instructions regarding their medications and the asthma care devices,” says Hilderbrand. “Teaching by demonstration and return demonstration are also employed.”

REFERENCE

1. Fitzgerald JM, O’Byrne PM, McFetridge JT, et al. Pulmonary function testing in the emergency department and medications prescribed at discharge: results of the Multinational Acute Asthma Management, Burden, and Outcomes (MAMBO) study. *Prim Care Respir J.* 2010;19:155-162. ■

Avoid a terrible outcome with ED patient transport

While Sabrina Jung, RN, was transporting an uncontrolled seizure patient from the ED at St. Anthony’s Medical Center in St. Louis, MO, for a CT scan, the patient had another seizure.

“I was prepared and had an order from the physician to take [lorazepam] with me and give as needed,” says Jung.

Jung gave the medication as soon as the seizure activity started, but the patient stopped breathing on his own. “I called over to the ED, while having my tech bag the patient, and asked for the physician and charge nurse to come over to help intubate the patient,” says Jung.

Within minutes, the physician and charge nurse were in the room with the appropriate medications and equipment. “If I had not been with my patient during the transport, the situation could have had a very poor outcome,” says Jung.

When transporting a critically ill patient from the ED for diagnostic testing or another unit, be ready for the unexpected to happen. “Nothing is worse than having your patient change right in front of your eyes, and knowing that you may have been able to prevent it if you would have just taken a few minutes to double check all equipment,” says Jung. “Think about what might go wrong, just in case.” Take these steps:

- Notify the area receiving the patient, with a timeline for transport.

Give a comprehensive patient report, says Dawn Wotawa Bennett, BSN, RN, a clinical nurse educator for emergency and pediatric services at St. Anthony’s Medical Center in St. Louis, MO.

EXECUTIVE SUMMARY

Be ready for unexpected events when transporting ED patients for diagnostic testing. To prevent poor outcomes, do the following:

- Verify that the receiving area is prepared for your patient.
- Ensure equipment is working properly.
- Protect the endotracheal tube from being dislodged.

“If there is poor communication between ED caregivers and accepting diagnostic area staff, the receiving area may not be prepared for the patient,” says Bennett. “Verify that the receiving area is prepared to take the patient and has all of the resources needed.” These might include patient transfer equipment, monitors, pumps, ventilators, respiratory therapist support, and appropriate nursing and medical staff, says Bennett.

- Complete a full set of vital signs.

“Do a focused patient assessment prior to leaving the ER,” says Bennett. This should include monitor rhythm and pain control, as well as documenting the patient’s general appearance and mentation, she says.

- Document whether the patient’s condition has improved or worsened since arrival to the ED.

“The nurses in the unit may see the patient as a complete train wreck, but in reality the patient was much worse and is looking better since receiving care in the ED,” says Bennett. “Or, the patient’s condition may be declining, and the unit staff must know that, too.”

Your documentation must include any drips or drugs with rates, fluids with rates, whether family is present, any patient and/or family teaching that was done, and any pending labs or procedures that need to be completed in the unit, says Bennett. (*See stories on protecting endotracheal tubes during transport, p. 130, and making sure that equipment is working properly, below.*) ■

Are supplies all there and in working order?

It can save a patient’s life

Dawn Wotawa Bennett, BSN, RN, a clinical nurse educator for emergency and pediatric services at St. Anthony’s Medical Center in St.

Louis, MO, was transporting an unstable patient with low blood pressure and heart rate to get a diagnostic magnetic resonance imaging (MRI) for a brain injury.

“The patient had a head bleed which needed MRI to verify the exact location,” says Bennett. “Typical medication pumps cannot be used, or will quit working, due to the magnet that is in the MRI.”

For this reason, a special type of medication pump that can be used in the MRI area suddenly became necessary. “If the medications were not able to be administered to maintain the blood pressure and heart rate, the patient might have coded during the long MRI procedure,” says Bennett.

The patient ultimately went to the OR and had a good outcome. Bennett was thankful that ED nurses had been in-serviced on use of the MRI pump before the incident. “For those staff members I was not able to meet with one on one, I sent out an e-mail that included all of the information that was given during roving rounds,” she says.

After ED nurses read the information and looked at the pump, they e-mailed Bennett an acknowledgement. “The patient had a head bleed which needed MRI to verify the exact location,” says Bennett. “Without prior knowledge of the MRI pump and its use, the MRI would not have been completed until the patient stabilized, possibly days later. This could have led to a poor outcome or even death.”

When transporting a patient, Bennett says to include the patient’s chart with therapeutic support order such as “do not resuscitate” or full advanced cardiac life support (ACLS), airway box, monitor/defibrillator, ACLS medications, emergency supplies in the event a chest tube is accidentally removed, medication pumps, and a ventilator

SOURCES

For more information on transporting ED patients, contact:

- **Dawn Wotawa Bennett**, BSN, RN, Emergency and Pediatric Services, St. Anthony’s Medical Center, St. Louis, MO. Phone: (314) 525-7217. E-mail: Dawn.WotawaBennett@samcstl.org.
- **Sabrina Jung**, RN, Emergency Department, St. Anthony’s Medical Center. E-mail: Sabrina.Jung@samcstl.org.

with respiratory therapy support.

Is it working?

Before you leave the ED, Bennett says to check these things:

- The monitor and defibrillator are charged for transport.
- A systems check on the monitor has been completed in the last 24 hours.
- The defibrillator pads are with the monitor.
- A bag valve mask is on hand, in the event the patient’s respiratory condition changes.
- The oxygen tank is full and functioning.
- A respiratory therapist is accompanying you when transporting a patient on a ventilator, so one of you can bag the patient while the other pushes the ventilator.
- Intravenous pumps are in good working order and charged.
- Chest tubes are secure and functioning well without leaks.

Jung says taking a few extra minutes to make sure everything you need is with you and working properly before leaving the ED “can save precious moments if your patient takes a turn for the worst.” ■

CLINICAL TIP

Moving a patient? Protect the ET tube

When a patient is intubated, the endotracheal tube (ETT) is their lifeline, says **Ann Heywood**, RN, BSN, CEN, SANE, trauma nurse coordinator for the Emergency Care Center at Champlain Valley Physicians Hospital Medical Center in Plattsburgh, NY.

“It is your responsibility to protect that lifeline,” Heywood says.

The most likely time that a ETT will be dislodged or pulled out is when the patient is moved, whether from the ambulance stretcher to the ED stretcher, or the ED stretcher to the CT table or

intensive care unit bed, says Heywood. “This is a high-risk time,” she warns.

Heywood advises that you take these steps:

1. Take control by instructing all involved not to move the patient until directed.
2. Disconnect the bag valve mask from the ETT.
3. Direct the team to move the patient onto the table or bed.
4. Once the patient is safely transferred, reconnect the bag valve mask.
5. Resume ventilation.

“The disconnect is only for the brief time of the actual transfer,” says Heywood. “What you do not want is the respiratory therapist or other health care provider to be standing there with the bag valve mask with an ETT hanging off the end of it, and the patient on the table without the ETT and not breathing.” ■



Remember unique needs of elder stroke patients

Older ED stroke patients are at substantially higher risk for adverse clinical outcomes, including in-hospital mortality, warns **Gregg C. Fonarow**, MD, director of the Ahmanson University of California-Los Angeles Cardiomyopathy Center.

“It is very important that these patients receive timely assessment and optimal care from the time of presentation to the ED, throughout hospitalization, and in transition to outpatient

COMING IN FUTURE MONTHS

- Immediate actions for prescription drug ODs
- Don't miss emergencies in peds psych patients
- Dramatically improve triage of cardiac patients
- Save the life of an intoxicated trauma patient

care,” says Fonarow. “Ensuring evidence-based therapies are provided in a timely fashion is critical.”

In a recent study, researchers analyzed outcomes in 502,036 ischemic stroke admissions from 1,256 hospitals in the Get With the Guidelines — Stroke program from 2003 to 2009.¹ They found some good news: Age-related treatment gaps were narrowed or eliminated over time for most ischemic stroke performance measures.

“I was surprised by how much care for older ischemic stroke patients had improved,” says Fonarow, the study's lead author.

Assessing and managing older patients with ischemic stroke can be particularly challenging, though, as these patients have more comorbid conditions, says Fonarow. “The burden of stroke is borne disproportionately by older patients, who have a greater incidence, mortality, and prevalence of ischemic stroke than younger individuals,” he says. “Achieving door to CT times within 25 minutes and door-to-needle times with IV tPA within 60 minutes remain areas that are challenging for ischemic stroke patients of all ages.”

REFERENCE

1. Fonarow GC, Reeves MJ, Zhao X, et al. Age-related differences in characteristics, performance measures, treatment trends, and outcomes in patients with ischemic stroke. *Circ* 2010;121:879-891. ■

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 the December issue, you must complete the evaluation form provided in that issue and return it in the reply envelope provided in order to receive a certificate of completion. When your evaluation is received, a certificate will be mailed to you. ■

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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.

9. Which intervention is recommended to control secondary damage from severe traumatic brain injury?

- A. Avoid elevating the head of the bed.
- B. Maintain high normal partial pressure of carbon dioxide levels.
- C. Provide adequate oxygenation.
- D. Perform assessments no more than hourly.

10. Which is recommended for treatment of asthma patients?

- A. Never tailor treatment to specific age groups.
- B. Give nebulized treatments to children with supplemental oxygen.
- C. Do not start treatment with bronchodilators immediately after the patient is assessed at triage.
- D. Do not base triage levels on exacerbation severity.

11. Which is recommended regarding CT scans performed in the ED, according to Stephen R. Pitts, MD, MPH, at Emory University Hospital Midtown?

- A. Ask physicians if plain films, ultrasound, or magnetic resonance imaging could be used instead.
- B. Perform studies with and without contrast whenever possible, even if multiple trips to the scanner are necessary.
- C. Take steps to decrease use of abdominal CTs done strictly to evaluate for kidney stones, as these have a particularly negative impact on patient flow.
- D. Discourage admission to observation units due to lengthy CT scans.

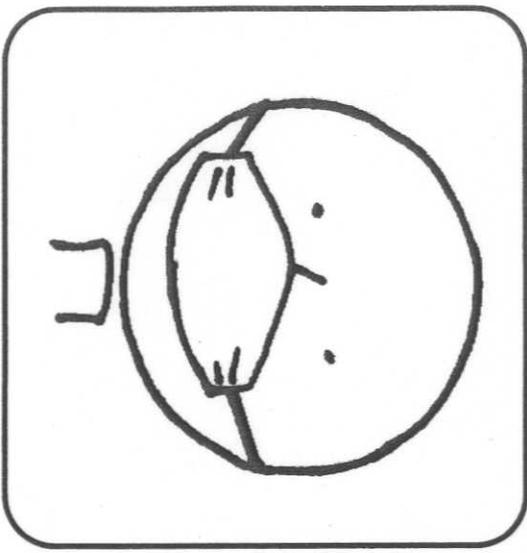
12. Which of the following is true regarding transporting an ED patient for diagnostic testing, according to Dawn Wotawa Bennett, BSN, RN, at St. Anthony's Medical Center?

- A. Performing a focused patient assessment, including monitor rhythm, is not necessary prior to leaving the ED.
- B. It is important to specifically document whether the patient's condition has improved or worsened since arriving in the ED.
- C. There is no need for respiratory therapist to accompany the ED nurse when transporting a patient on a ventilator.
- D. It is not typically necessary to check that the monitor and defibrillator is charged for transport.

Answers: 9. C; 10. B; 11. A; 12. B.

When you are at a clinic or hospital:

- Cover your cough or sneeze with a tissue and dispose of the used tissue in the waste basket.
- Clean your hands with soap and water or an alcohol-based hand cleaner.

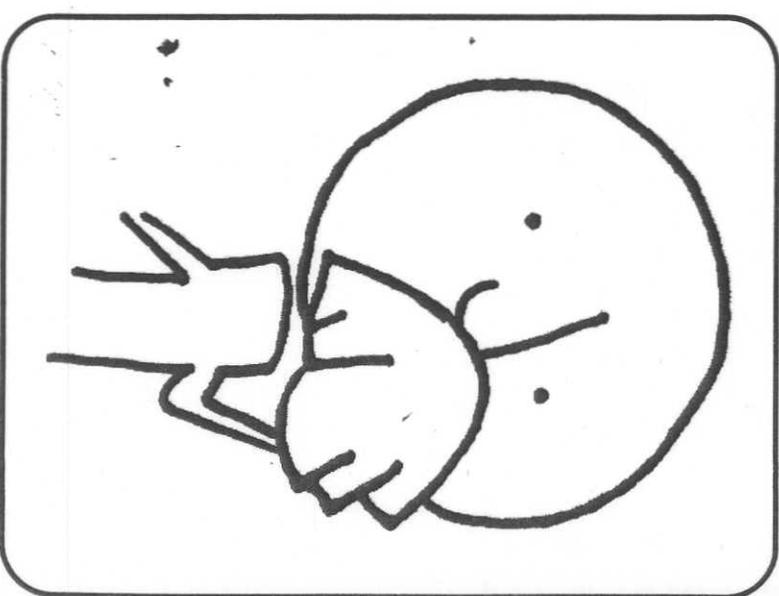


- You may also be asked to wear a mask to protect others.

* Don't worry if you see staff and other people wearing masks. They are preventing the spread of germs.

Stop the spread of germs that
make you and others sick!

Cover your cough



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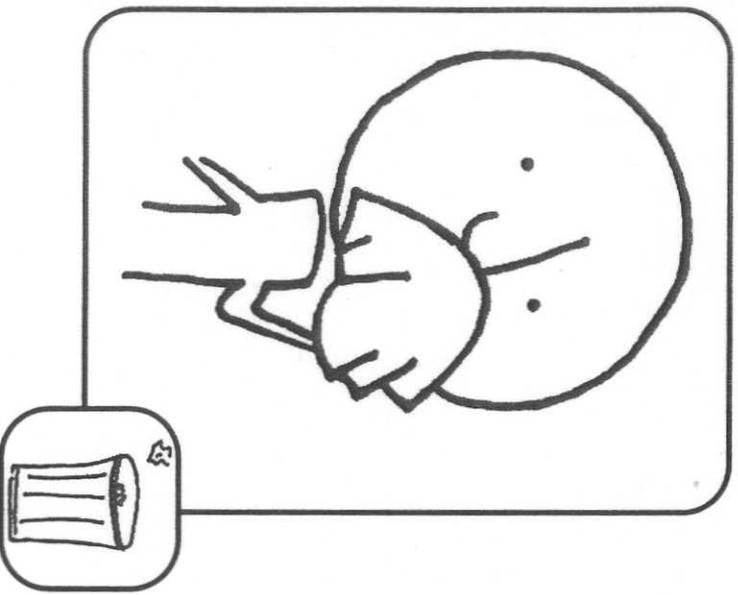
 APIC
ASSOCIATION FOR PROFESSIONAL INFECTION CONTROL AND EPIDEMIOLOGY, INC.

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Why should I cover my cough?

- Serious respiratory illnesses like influenza, respiratory syncytial virus (RSV), whooping cough and Severe Acute Respiratory Syndrome (SARS) are spread by:
 - Coughing or sneezing
 - Unclean hands

• These illnesses spread easily in crowded places where people are in close contact.



How do I stop the spread of germs if I am sick?

- Cover your nose and mouth with a tissue every time you cough or sneeze. Throw the used tissue in a waste basket.
- If you don't have a tissue, sneeze or cough into your sleeve.

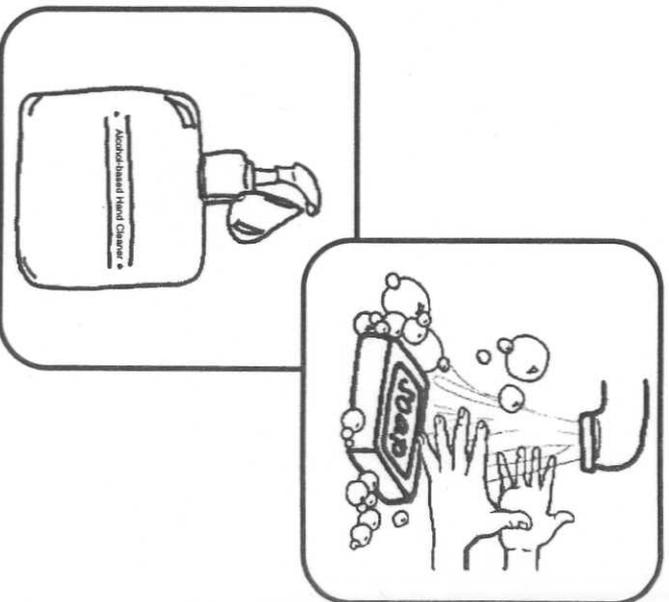


- After coughing or sneezing, always clean your hands with soap & water or an alcohol-based hand cleaner.
- Stay home when you are sick.
- Do not share eating utensils, drinking glasses, towels or other personal items.

How can I stay healthy?

- Clean your hands often with soap and water or an alcohol-based hand cleaner.
- Avoid touching your eyes, nose or mouth.
- Avoid close contact with people who are sick, if possible.

• Get vaccinated! Influenza (flu) and pneumococcal (pneumonia) vaccines can prevent some serious respiratory illnesses.



How to Help When a Child Has a Fever

Having a sick child is never easy. The people of Providence want to help you care for your children in the right place. Some illnesses may require a trip to a doctor or a hospital. Other illnesses can be treated best at home.

Here are some resources to use when your child gets a fever. This kit contains:

1. A digital thermometer
2. Acetaminophen (Tylenol®) and
3. An acetaminophen dosage chart

What is a fever?

A fever is the increase of the body's normal temperature. In most children, normal body temperature is between 97.4 and 100.2F (36.3 and 37.9 Celsius). Fevers can last for a short, specific period of time. Or, fevers can come back once in a while over a longer period. When fevers are present, the body is telling its immune system to fight bacteria and viruses. Even though fevers can be upsetting, they may actually help the body heal. Treating fevers help make a child more comfortable, so that they can drink fluids and be more active.

Does your child have a fever?

A correct temperature reading is helpful to determine if your child is sick. If you think that your child has a fever, there are three ways to find out your child's true temperature. You can take an oral temperature, you can take a temperature under the arm (axillary) or you can take a rectal temperature. Speak to your doctor to see which method is best for you. Here's how to find out your child's true temperature:

Take an oral temperature (best for older, more cooperative children)

1. Place the thermometer below your child's tongue
2. Have your child close his or her lips
3. Hold the thermometer in place until it beeps
4. Take the thermometer out
5. Read the digital display
6. A Normal oral temperature is between 97.4 and 100.2 degrees
7. Clean the thermometer with cool soapy water, and then rinse it before putting it away

Take an under-arm temperature

1. Hold your child's elbow
2. Gently lift your child's arm away from his or her side
3. Place the tip of the thermometer in your child's armpit
4. Be sure that all sides of the thermometer directly touch your child's skin
5. Lower the arm over the thermometer
6. Keep the thermometer in place
7. Wait for the thermometer to beep
8. Take the thermometer from under the arm
9. Read the digital display
10. Normal under the arm temperature is between from 97.4°F and 99.4°F
11. Clean the thermometer with cool soapy water and then rinse it before putting it away

Take a rectal temperature

1. Place a small amount of petroleum jelly on the tip of the thermometer
2. Lay your child on his or her back on a firm surface, or, place your baby face down on your lap
3. Hold him or her securely to prevent moving
4. Hold your baby's ankles and lift both legs, like you are changing a diaper
5. Use one hand to part the baby's bottom; use the other hand to hold the thermometer
6. Gently slip the tip of the thermometer into the rectum. Never slip the thermometer farther than ¼ to ½ inch
7. Hold the thermometer in place until it beeps
8. Slide the thermometer out
9. Read the digital display

10. Normal rectal temperature is between 97.4°F and 100.2°F.
11. Clean the thermometer with cool soapy water, and then rinse it before putting it away

What to do if your child has a fever

If you find that your child has a fever, here are steps you can take to lower the fever and help your child feel better faster:

Try home remedies

Offer liquids. Fevers tend to take away needed water from our bodies. Without the right amount of water, our body temperature gets even higher. Offer your child plenty of liquid to help reduce a fever. Give small amounts of liquid, especially if your child has an upset stomach.

Know your child's perceived body temperature. If your child is old enough to choose his or her clothing, let your child be the judge of what to wear. If your child is too young to choose his or her clothing and warmth needs, look for noticeable body temperature signs. If your child is sweating or flushed, remove some clothing and blankets. If your child is shivering and looks pale, add some clothes and blankets.

Give a lukewarm sponge bath. Place your child in a bathtub and sponge him or her with lukewarm water. If your child is uncomfortable or is shivering, stop the sponge bath and take him or her out of the bath.

Try over-the-counter medications

Tylenol® (or its generic equivalent, acetaminophen) is an over-the-counter medicine that can help reduce a fever. We have included a sample bottle of Children's Tylenol 160mg/5ml in this packet. We have also included a dosage chart, which tells how much Tylenol to give your child based on your child's age and weight. If you use a different over-the-counter medicine, read the package label to find out the right amount of medicine to give your child. If your child is under the age of 2, consult a doctor or pharmacist before giving any medicines.

Give medicine when your child is awake. There is no need to wake a sleeping child to give him or her medicine.

Don't use acetaminophen and ibuprofen. Errors occur more often when both medications are used. Use only one medication unless your doctor recommends that you use both.

When you should call your child's doctor

A fever itself will not harm your child and does not necessarily require treatment. However, there are times when you should take your child to the doctor. Here are some signs to look for to help determine if a doctor should see your child:

- Your child is under 3 months of age and has a temperature of or higher than 100.2
- Your child is more lethargic (limp and sleepy) and/or more irritable than normal
- Your child has had the fever for three or more days
- Your child also has a sore throat, ear pain, abdominal pain, headache, stiff neck, rash or pain when urinating
- Your child is drinking less fluid than usual and has had fewer than four wet diapers in the past 24 hours or two urinations during waking hours
- Your child is having trouble breathing, with or without a fever

You're not alone. Providence is here to help

If you are a Providence Health Plan member, call the 24-hour RN Medical Advice Line for confidential, medical advice. The telephone number is located on the back of your member identification card. When you call, provide your member identification number located on the front of your member identification card.

If you are not a Providence Health Plan member, visit the Providence Health Plan Web site for general medical information and advice at www.providence.org/healthlibrary

Acetaminophen (Tylenol®) Dosing for Infants and Children

Weight (pounds)	Weight (kg)	Dose (mg)	Infant Concentrated (80 mg/0.8 ml)	Children's Suspension (160 mg/5 ml)	Children's Meltaways (80 mg each)	Jr. Tylenol Meltaways (160 mg each)	Adult Tylenol®
6-11 lbs	3-5 kg	40 mg	1/2 dropper	1/4 tsp - 1.25 ml			
12-17 lbs	6-7 kg	80 mg	1 dropper	1/2 tsp - 2.5 ml	1 tablet		
18-23 lbs	8-10 kg	120 mg	1-1/2 droppers	3/4 tsp - 3.75 ml			
24-35 lbs	11-15 kg	160 mg	2 droppers	1 tsp - 5 ml	2 tablets	1 tablet	
36-47 lbs	16-21 kg	240 mg	3 droppers	1-1/2 tsp - 7.5 ml	3 tablets	1-1/2 tablets	
48-59 lbs	22-27 kg	320 mg		2 tsp - 10 ml	4 tablets	2 tablets	1 tablet
60-71 lbs	28-32 kg	400 mg		2-1/2 tsp or 12.5 ml	5 tablets	2-1/2 tablets	
72-95 lbs	33-43 kg	480 mg		3 tsp - 15 ml	6 tablets	3 tablets	
More than 95 lbs	More than 43 kg	640 mg				4 tablets	2 tablets

For more information, visit us at www.providence.org/children



Ibuprofen (Motrin®) Dosing for Infants and Children

Weight (pounds)	Weight (kg)	Dose (mg)	Infant Motrin® Drops (40 mg/1 ml)	Children's Motrin® Suspension (100 mg/5 ml)	Children's Motrin® Chewable (50 mg each)	Jr. Strength Motrin® Chewable (100 mg each)
Not recommended for Infants under 12 lbs/6 kg						
12-17 lbs	6-7 kg	50 mg	1 dropper			
18-23 lbs	8-10 kg	75 mg	1-1/2 droppers	3.75 ml		
24-35 lbs	11-15 kg	100 mg		1 tsp or 5 ml	2 tablets	1 tablet
36-47 lbs	16-21 kg	150 mg		1-1/2 tsp or 7.5 ml	3 tablets	1-1/2 tablets
48-59 lbs	22-27 kg	200 mg		2 tsp or 10 ml	4 tablets	2 tablets
60-71 lbs	28-32 kg	250 mg		2-1/2 tsp or 12.5 ml		2-1/2 tablets
72-95 lbs	33-43 kg	300 mg		3 tsp or 15 ml		3 tablets
More than 95 lbs	More than 43 kg	400 mg				4 tablets

For more information, visit us at www.providence.org/children



Source: Providence St. Vincent Medical Center, Portland, OR.