

Toward Ensuring Patient Safety in Urgent Care

Urgent message: Creating a safety culture in the urgent care clinic starts with proper hand washing before even seeing a patient and ends with transitioning care out of the practice—and includes close attention to every detail in between. The second of two parts.

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The Institute of Medicine's 1998 *Report to Err is Human* grabbed media attention by estimating that 98,000 deaths each year can be attributed to adverse events in U.S. hospitals. More than 10 years later, the importance of keeping patients safe in public facilities, including healthcare institutions, continues to make headlines—witness the recent panic over reported cases of swine flu.

With urgent care continuing to grow in prominence along the continuum of care, the time is right to review some of the more common risks inherent to treating patients in any acute care setting.

Part 1 of this two-part series (*JUCM*, May 2009) focused on patient identification and medication and lab safety. This article continues the discussion of creating a "safety culture" and minimizing risk with regard to:

- healthcare-associated infections
- radiation safety



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- transitioning care
- emergency preparedness
- personnel qualifications and competency
- patient rights and informed consent
- verifying the correct patient/site/procedure
- patient discharge instructions.

Case Example

Dr. Smith noticed a troubling pattern of methicillin-resistant *Staphylococcus aureus* (MRSA) infections in his urgent care center. In a two-week span, seven patients from different families presented to his center with

MRSA skin infections on the trunk and extremities.

He decided to investigate the pattern and found that the only common denominator for these infections was a previous visit to his UCC in the two weeks prior to the onset of infection.

A root cause analysis by the staff of the center revealed that clinical personnel practiced proper hand washing or use of alcohol rubs before and after patient contact

Table 1. Suggested Immunizations for Staff

1. **MMR:** If born after 1956, personnel should receive two doses of vaccine, unless confirmed immunity to all three components.
2. **Hepatitis B:** Series of three vaccines or confirmed immunity, required by OSHA for personnel with blood contact.
3. **Varicella:** Two doses of vaccine unless confirmed immunity or documented illness.
4. **Influenza vaccine:** Should be offered free of charge to all employees.
5. **Adolescent–adult Tdap:** Recommended once for all personnel with direct patient contact.

Source: Centers for Disease Control and Prevention. *MMWR* Recomm. Rep. 2004, volume 43.

in only 20% of patient visits.

Reducing Healthcare-associated Infections

Reducing the risk of healthcare-associated infections is one of The Joint Commission's major National Patient Safety Goals for 2009. Urgent care centers have an important role to perform in preventing transmission of infections from patient to patient, and between patients and staff.

We also must keep abreast of emerging infections within the community, as urgent care may be the entry point for these infections in our patients. Local health departments and the Centers for Disease Control and Prevention are the best sources for up-to-date information on emerging infections.

There are four possible routes of transmission of infectious agents:

1. Fecal–oral
2. Contact
3. Droplet
4. Airborne

Fecal–oral transmission can be prevented with scrupulous hand hygiene after using the toilet.

Contact transmission requires human-to-human touching; typically, this occurs between patients and staff. The vast majority of cold viruses are transmitted by means of direct contact. Viruses are spread from hands and fomites within the building, such as toys, stethoscopes, medical equipment, door handles and countertops.

Keep It Clean

Bearing in mind the prevalence of cold viruses in the urgent care center, a comprehensive approach to disinfection of the clinic is important.

Exam rooms should be kept visibly clean. Counters, exam tables, and handles should be disinfected after every patient, using wipes or sprays designated for such use and approved by the Environmental Protection Agency.

Providers should avoid wearing white coats unless they are laundered daily; studies by Kerr and Dancer, published in the *Canadian Medical Journal* and *The Lancet Infectious Disease*, respectively, have shown pathogens are present on the sleeves of white coats, neckties and stethoscopes. In fact, white coats are banned in the United Kingdom.

Numerous studies have documented the presence of pathogens on waiting room toys. Unless an urgent care center is prepared to disinfect toys after each child plays with them, it is suggested that toys not be offered to children. Parents can be encouraged to bring their own toys to the clinic and take them home after the visit.

Hand hygiene with an alcohol-based rub or soap and water is the single most important method of prevention of contact transmission. Alcohol-based rubs should be available for patients to use in the reception area and all patient contact rooms. Care providers need to use alcohol-based rubs before and after each patient contact, and after removing gloves. (Gloves can contaminate hands on removal, or they may have microscopic breaks.)

Alcohol rubs contain 60% to 95% isopropyl alcohol and decontaminate hands more effectively than soap and water. Urgent care centers should select rubs with 1% to 3% glycerol or other skin conditioners to prevent excessive dryness, or compliance with their use will be low.

Soap and water washing is recommended whenever the hands are visibly soiled, after using the bathroom, and before and after eating. The CDC has created an interactive training website for healthcare personnel on hand hygiene, available at www.cdc.gov/handhygiene.

Droplets

Infectious pathogens in the respiratory tract of patients and personnel can be transmitted a few feet through the air via droplets.

Examples of droplet transmission include influenza virus, *Bordetella pertussis*, adenovirus, and SARS-related coronavirus. To prevent droplet transmission within the urgent care center, patients with suspected influenza or one of these other agents should be of-

ferred a mask and triaged to an exam room as soon as feasible. Employees should be immunized against influenza and pertussis.

The CDC recommends that we educate our patients in proper cough etiquette: covering the mouth and nose with the bend of the elbow when coughing or sneezing. There are posters available for waiting areas. Keep contagious patients with URI symptoms at least three feet away from other patients and staff.

Airborne

A few infectious agents are capable of suspension in the air and transmission several feet to other patients and employees.

Examples include measles, varicella and *Mycobacterium tuberculosis*. These infections will be very difficult to prevent within the urgent care center. Therefore, it is best to keep them out altogether.

For measles, we must ensure that our employees and patients are properly immunized and be aware of any community outbreaks. For varicella, immunization is also recommended. If a patient arrives with suspected varicella or measles, they should be seen in the car or brought in and out of the center through a back entrance, utilizing a remote exam room.

Active tuberculosis cases (patients with pulmonary infection, cough, fever, night sweats and weight loss) need to be identified immediately. If possible, these patients should be referred to the health department or a facility with reverse airflow capabilities for treatment, and not seen in the urgent care center.

According to the CDC, personnel need to be tested before employment and annually for tuberculosis with a tuberculin skin test to ensure early detection.

Urgent care centers should follow standard precautions as directed by the CDC. In addition to proper hand hygiene, clinical personnel should wear personal protective equipment if there is anticipated exposure to bodily fluids.

- Gloves should be used if there will be hand contamination or mucous membrane contact.
- Masks and eye protection should be worn if there could be splashes of fluids.
- Gowns should be worn if there could be soiling of the clothes.

In addition, patients need to be protected from bloodborne pathogens through use of only approved medical waste containers for blood-soaked sponges and drapes. Use only OSHA acceptable sharps containers, best mounted on the wall, away from children.

Table 2. Standard Precautions Modified for Urgent Care

1. Hands should be disinfected with alcohol-based hand rubs before and after patient contact. Have alcohol rubs in every patient room and waiting area.
2. Soap and water should be used when hands are soiled, and before and after using restroom or eating.
3. Gloves should be worn when contacting mucous membranes, open wounds, or body fluids.
4. Masks and protective eyewear should be worn during procedures that might generate droplets of blood or body fluids.
5. Gowns should be worn if splashes of blood or body fluids are possible.
6. Respiratory hygiene: Cover mouth and nose with arm when coughing, keep ill patients 3 feet apart; patients with suspected influenza should be given a mask.

Source: Infection Prevention and Control in Pediatric Ambulatory Setting. American Academy of Pediatrics, Committee on Infectious Diseases. *Pediatrics*. Vol. 120 No. 3 September 2007, pp. 650-665.

Surgical site infection

Urgent care centers need to prevent surgical site infections to the best of their ability. Physicians should follow the evidence-based guidelines for asepsis and antibiotic prophylaxis.

The Joint Commission recommends that hair be clipped instead of shaved when prepping a surgical site or laceration because shaving leaves microscopic wounds that have been shown to increase the rate of infections.

Sick employees

In some cases, employees will need to be restricted from direct patient care to prevent transmission of infections.

- Employees with conjunctivitis or URIs should stay home until active discharge (runny nose, runny eyes, sneezing,) resolves, and use scrupulous hand hygiene until all symptoms are gone.
- Employees suffering from gastroenteritis should be excluded from work until they no longer experience vomiting and diarrhea.
- Gastroenteritis is difficult to contain until suffers are no longer vomiting or have diarrhea.
- Employees with hepatitis A should be restricted one

Table 3. 2009 National Patient Safety Goals for Urgent Care

1. Improving accuracy of patient identification—use two unique identifiers.
2. Improve the effectiveness of communication among caregivers.
3. Improve the safety of using medications.
4. Reduce the risk of healthcare-associated infections.
5. Accurately and completely reconcile medications across the continuum of care.
6. Reduce the risk of surgical fires.
7. Encourage patients' active involvement in their own care.

Adapted from The Joint Commission.

week after onset of jaundice.

- Herpetic whitlow is contagious until lesions are crusted.
- Measles is contagious until seven days after the onset of the rash.
- Mumps is contagious for five days after onset of parotitis.
- Employees with pertussis should be restricted until treated for five days with antibiotics.
- Personnel infected with MRSA (or who have any *Staph* infection) need to stay home until all wounds can be kept covered and the patient has been on appropriate antibiotics for 24 hours.
- Group A strep infections are contagious until at least 24 hours has elapsed on antibiotic treatment.
- Employees with varicella need to stay home until all lesions have crusted over.
- As mentioned above, tuberculosis-infected employees need to be excluded from work until their treating physician states they are no longer contagious.

Radiation Safety

Most urgent care practices have on-site radiology services for patients. In general, these services are regulated by the state health department. All centers need to be aware of their pertinent state regulations and guidelines for safe equipment operation and maintenance, as well as the competencies for x-ray personnel.

In addition, the practice should have written policies and procedures for the x-ray department. Women of

childbearing age should be queried about possible pregnancy and offered a pregnancy test if necessary. Lead shields should be used to protect the fetus and the genitals of patients.

Providers also need to be aware of the level of radiation exposure associated with their common x-rays. In general, plain films have very little radiation exposure.

However, CT scans have exponentially higher levels of exposure, and this is where we really need to pay attention. Lee, et al, estimate in *Radiology* that one abdominal CT exposes a patient to the equivalent radiation of 100 to 250 chest x-rays. This is particularly important when considering a CT scan on a child or young adult because these scans have been associated with a higher rate of cancer in later years. For instance, Brenner reports that a head CT on a child confers a 0.35% lifetime risk for eventual cancer.

Handoffs and Transitions

Another of The Joint Commission's National Patient Safety Goals for 2009 is improving communication among care providers. In the urgent care setting, this will impact several areas.

As discussed in part 1 of this series (*JUCM*, May 2009), providers should try to avoid ordering prescriptions or other treatment orally. In addition, moving toward electronic records will eliminate handwriting as a possible source of errors.

When the practice transfers responsibility of a patient to an ED, hospital or another physician, the urgent care clinician needs to identify the receiving physician and confirm that the new physician accepts responsibility. Necessary clinical information has to be transmitted to the ED charge nurse or receiving physician and the conversation documented in the medical record.

This handoff must include an accurate medication list, allergies, and treatments received at the urgent care center. If orders are given, they should be read back. If the patient is being transferred to the ED/hospital, the urgent care should provide EMTs or family members with written documentation of the visit whenever possible.

Our centers are often staffed by people working shifts, so there may be times when patient transitions occur within the practice, at the end of the shift. Providers and nurses should focus on accurate handoffs, in a quiet area. It is helpful to provide written notes concerning the future plan of care for the new provider to follow. The first clinician must document their contribution to the care and make clean on the medical record where the transition occurred.

Emergency Preparedness

Urgent care centers need to be prepared for emergencies—medical and non-medical—that could affect their patients. It is most helpful to designate a safety officer who can oversee the program for the center.

In the area of life safety, practices should be prepared for natural disasters and have a plan for evacuating and closing their office if necessary. Other potential emergencies must be considered, as well, however.

Fire

Urgent care owners need to consider fire safety and compliance in the construction and finish-out of the building.

The National Fire Protection Agency's Life Safety Code pertains to all urgent care centers that care for "four or more patients at the same time, if the patients

receive treatment that renders them incapable of saving themselves in the event of an emergency." Regulations govern everything from the width of doors and hallways to the presence of firewalls and fire doors.

On the local level, the fire marshal may mandate that your site have rails, ramps, or illuminations, so it is important to have a fire inspection early in the build-out of a clinic, especially if the space is being converted from non-medical use.

Fire extinguishers should be installed at regular intervals in the building, as directed by the fire marshal, and be tested or inspected annually.

In the event of a fire, safe egress has to be anticipated for several patients at once. Therefore, the hallways and exits need to be well illuminated and clear. Anticipate that some patients will be incapacitated by illness or the emergency itself.



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Quarterly fire drills are recommended, though actual evacuation of live patients is not necessary. Smoke detectors should also be tested quarterly. Fire alarms should be tested annually. Care should be taken to prevent combustible materials being stored around oxygen.

Medical emergencies

The practice will need to identify possible medical emergencies that could present to the urgent care, and decide on a process for handling these. Anticipating actual emergent diagnoses that could present will help to create a process to triage and treat each condition.

There should be a written policy or guideline for each such condition or chief complaint (e.g., chest pain, dyspnea, seizures, and loss of consciousness). There should also be policies in place regarding the advanced cardiac life support (ACLS) training of providers and basic life support (BLS) for other staff.

The urgent care center will need to have emergency medical equipment available and the staff properly trained in its use. The exact content of the crash cart will depend on the location of the center and its proximity to emergency services. However, most urgent cares will possess, at a minimum, an automatic defibrillator, airway and suction equipment for bag and mask ventilation of children and adults, oxygen, and a few basic emergency medications.

Personnel Qualifications and Competency

Patients receiving care in any urgent care center will be expecting that only qualified and competent individuals are part of the clinical team. Improperly trained physicians, nurses, or medical assistants can be a source of preventable adverse events.

Every new physician or employee should receive a structured orientation that covers the policies, procedures, and administrative guidelines of the clinic, as well as the use of all medical equipment where applicable.

Nurses and medical assistants can be provided with a checklist of all procedures and skills required in the clinic, and a supervisor can check off each competency as it is demonstrated. The checklist can be a part of the employee file.

Providers should be encouraged to partake in urgent care-specific continuing education. The practice should not rely on pharmaceutical representatives to provide accurate prescribing information, but instead should use evidence-based materials to make clinical decisions. The materials need to be available at the clinical workstation to ensure their use.

Patient Rights and Informed Consent

As healthcare providers, we are encouraged to involve our patients in their own care. This means communicating clearly and providing quality patient education.

The Joint Commission states that practices should have written policies on patient rights. All care providers need to introduce themselves in person to each patient, and wear a nametag or embroidery that indicates their professional credentials.

Patients have the right to participate in discussions about their care and to make treatment decisions in conjunction with the provider.

The provider should review the common side effects of medications, and explain how to proceed in the event of an adverse reaction. Printed handouts on medications can be obtained from numerous online sources and databases.

Other patient education materials should be available for common conditions seen in the urgent care, as should after-care sheets on head injury, lacerations, splints, etc.

Prior to initiating an invasive procedure, the provider should obtain written informed consent from the patient and document it in the medical record.

The clinic should have a policy on treatment of minors that conforms to state law.

There needs to be a standard process for review of all patient complaints to address systematic problems that could impact quality and safety for patients.

Correct Person/Site/Procedure

In its report, *Crossing the Quality Chasm*, The Institute of Medicine recognized the extent of the problem of wrong person/wrong site/wrong procedures in the United States.

The Joint Commission developed a Universal Protocol to be followed for invasive procedures. Many of their recommendations do not apply to urgent care, where procedures are only performed on conscious patients (e.g. the requirements for pre-admission testing and surgical site marking). However, the issue is still important, as these errors do occur in urgent care, usually due to miscommunication.

To avoid treating the wrong patient, procedures need to be ordered carefully. Each patient should be identified and verified prior to initiating venipuncture, x-rays, injections, and treatments. Patients should not be identified by their room number or location, as these could be in error.

Procedures ordered for a side of the body or extremity must be designated in writing as to the side, and the patient queried prior to the procedure.

This is particularly important for x-rays. For example, a technician may believe an ankle film will be ordered,

Table 4. Structured Time-out Before Procedures

1. Is this the correct patient?
2. Is this the correct side and site for the procedure?
3. Written informed consent documented?
4. Does patient agree to the procedure?
5. Correct patient position?
6. Proper equipment and assistance available?
7. Medication and allergies verified?

but the physician actually desires a foot x-ray. The order should be written in the chart “left foot film, 3 views.”

To avoid performing the wrong procedure on a patient, the patient must be involved in the decision to treat and the treatment verified prior to initiating (i.e., “Ms. Jones, Dr. Smith has asked that I give you a Rocephin shot for your pneumonia. Does that sound correct to you?”).

As suggested in the Universal Protocol, a “time-out” is recommended prior to any invasive procedure. This allows the physician and assistants to verify that everything is correct before proceeding. A structured time-out for urgent care is provided in **Table 4**.

Patient Discharge Instructions

Effective communication at discharge will prevent many adverse events for urgent care patients. At the end of the patient visit, all patients should be provided with written discharge instructions that include the diagnosis given, procedures and treatments performed, medications prescribed, patient education material provided, and follow-up instructions.

The patients must understand how to take their medications and what side effects or adverse reactions are important. Patients should be encouraged to report significant side effects or adverse reactions; this will enable the provider to make modifications as necessary.

The clinician also needs to be very clear about additional instructions given to the patient regarding dietary and activity restrictions, expected course of the illness, what to do if the patient thinks he or she is getting worse, and when to return or call the office.

Most urgent care clinics provide acute care services only, and will desire the patient to follow up with a primary care provider or specialist. This follow-up needs to be documented in the medical record and on the written discharge instructions.

If the patient does not have a primary care physician, then the practice will want to have a database of local

clinics from which to choose to refer the patient. Patients with established relationships with a primary care can have their discharge instructions faxed to the office to facilitate follow-up. Other urgent care centers will offer varying degrees of primary care and follow up themselves. In these circumstances, specific follow-up at the practice should be arranged at discharge and documented.

Conclusion

This two-part article was created to highlight some of the important opportunities to improve the safety for our patients in urgent care. The author used The Joint Commission ambulatory standards as a guide to develop recommendations, as their experience and focus is directed at patient safety.

In 2008, the Urgent Care Association of America established a partnership for voluntary accreditation with The Joint Commission. Practices that correct deficiencies highlighted by this discussion can make useful strides to prepare for this accreditation in the future. ■

Resources

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