

Toward Ensuring Patient Safety in Urgent Care

Urgent message: As urgent care's role in the continuum of care continues to evolve, the practitioner must take steps to create a culture that supports proper patient identification, drug safety, and adherence to lab standards.

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In the 1998 report *To Err is Human*, the Institute of Medicine defined patient safety as “freedom from accidental injury.” The ensuing media coverage focused on the 98,000 deaths that IOM estimated occur each year due to adverse events in U.S. hospitals.

Yet, the report also discussed errors that lead to injury and death across the continuum of healthcare, from medical offices, to pharmacies, home healthcare, and long-term care.

Ten years after the report, urgent care centers are an important component in the continuum of care for patients. As such, we need to evaluate our systems to ensure patient safety.

The purpose of this two-part article is to outline the common areas of risk inherent to the urgent care environment and to discuss concrete recommendations for mitigating that risk.*

* The majority of the recommendations were adapted from the Joint Commission, with whom the Urgent Care Association of America recently agreed on a voluntary accreditation process for urgent care centers. This article is not intended to be a legally binding guideline. Other useful resources on the topic are the Institute of Medicine, the American Board of Medical Specialties, and the Institute for Safe Medication Practices.



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Safety Culture in the Urgent Care Center

A culture that emphasizes patient safety should begin with the physicians and administration of the urgent care center.

Physicians can model behavior oriented toward intellectual curiosity, continuous quality improvement, and patient advocacy. Successful practices will use “near misses” as opportunities for learning for the entire staff, and not react by singling out individual staff for blame or ridicule.

In an approach similar to the airline industry's, sen-

tinel events can spur the practice to perform a root-cause analysis to prevent other medical errors of the same type.

It is helpful to designate a safety officer for the practice—someone responsible for keeping the center up to date on the latest recommendations from reg-

ulatory and accrediting bodies, for annual assessments of potential areas of risk, and for staff and provider education. This need not be a physician, but the individual needs to have the full support and cooperation of the physicians in order to succeed. It may be helpful for the practice to assess its safety preparedness with the Physician Practice Patient Safety Assessment, available at www.physiciansafetytool.org.

Case Example

Mrs. Amy Jones presents to the urgent care center for treatment of cough and a fever. In the triage area, she gives the assistant her list of medications and notes that she is allergic to penicillin. The patient is evaluated by the physician in room 2, has a chest x-ray, and is diagnosed with pneumonia. Her physician decides levofloxacin would be the most appropriate treatment, and leaves to complete the chart and prescriptions.

Meanwhile, Mrs. Charlene Jones is seen by another provider for strep throat in room 3. Her physician reviews her medications and allergies and prescribes a shot of penicillin G benzathine. The order is written on the chart and handed to the nurse for the injection. The nurse sees the room number 2 in the corner of the chart—the wrong room number—and prepares the injection of penicillin and walks into room 2, where Amy Jones is sitting on the exam table. The nurse says, “Hi Mrs. Jones, I have an injection that the doctor ordered for you.” Feeling quite ill, Amy Jones does not question the injection. She is given the penicillin intended for the other Mrs. Jones, next door, and suffers an anaphylactic reaction.

Patient Identification

Both the Joint Commission and the American Board of Medical Specialties (ABMS) recommend that health-care providers utilize two unique patient identifiers before performing any procedure, drawing blood, or administering medications or vaccines.

The most reasonable method is to identify patients by their first *and* last names *and* their birthdates.

In the example listed above, the medication error could have been prevented in a number of ways:

- If the doctor had discussed the treatment options with the patient and mentioned that only oral medications would be prescribed, then the patient might have questioned the injection before she received it.
- The nurse could have verified that she had the correct patient by asking her for her first and

last names and date of birth.

- Nurses should always verify drug allergies prior to administering an injection.
- If a practice has more than one patient with the same or similar names, they can highlight the chart and name to bring the potential confusion to light for staff.

Medication Safety

Medications are the greatest source of adverse events in ambulatory care. One systematic review by Thomsen, et al found that they occur at the rate of 14.9 events per 1,000 person months.

On review, it becomes clear that many of these are preventable. Errors may occur in the ordering, prescribing, administering, refilling, and storing of medications.

Starting with the intake of the patient, the staff should obtain a complete medication and allergy history of every patient for every encounter. This list should include prescription medications, over-the-counter meds, herbal products, and supplements.

Allergies considered should include medications, foods, latex, and contrast agents. The urgent care center should have a system in place to ensure this is done for every encounter and that the provider can rely on the medication list.

Prescription “hygiene”

When prescribing medications, the provider should indicate the full name, dose, route, frequency, duration, and indication for every medication. The prescription must be legible if handwritten, or follow a standardized method in an electronic medical records or electronic prescribing tool.

The support staff needs to be encouraged to ask for clarification for any prescription that is incomplete, illegible, or unclear.

Oral and telephone orders are an area of potential danger for patients. Whenever possible, spoken orders should be avoided within the urgent care center. However, there are occasions when spoken or telephone orders are unavoidable. In these cases, a spoken order should specify the exact medication or procedure, the dose, route, and patient identifiers.

Clinical staff who receive spoken/telephone orders should write the order in the chart or order sheet and read the order back to the prescribing person, who must verify the order.

Clinicians need to be aware of common look-alike

and sound-alike medications that have been identified as common sources of medication errors. Most of the drugs with similar-sounding names will have different medical indications, so attaching the indication for use to every prescription will help prevent confusion.

Table 1 lists such medications that are used frequently in the urgent care setting.

All clinical personnel need to be aware of these meds so they have a heightened sense of safety when prescribing or refilling them. The urgent care center may even choose to post such a list in the clinical area.

All employees need up-to-date drug references at their fingertips, including accurate pediatric dosing. An online database with a patient education component (such as Epocrates or MD Consult) would allow for clinicians to discuss side effects and provide the patient with a written summary of the information.

Samples

Prescription samples are commonly dispensed from the urgent care center. A staff member should be responsible for maintaining the order of the sample closet and purging expired meds.

Again, particular care should be taken with medications that look alike or sound alike; these should not be stored next to each other.

Sample medications should be accepted by the practice only if they are known to be safe and effective, to be useful for common conditions seen in the urgent care center, and to be present on managed care formularies available to patients.

Providers must document the samples dispensed in the medical record in the same manner as normal prescriptions. The dosage and instructions for use need to be included. If the center has an EMR system, it may be possible to search the patient database for samples dispensed in the event of a drug recall or FDA removal.

Sound decisions based on accurate information

Physicians should prescribe medications only within the context of the urgent care center. In order to have all the necessary information for an accurate prescription, the clinician needs to have a chart with a full medication and allergy history, past medical history, and accurate demographic information. When clinicians make exceptions to this rule, they are more likely to make an error or encounter a patient who will have a preventable adverse reaction.

This is also true for personnel who are involved in

Table 1. Sound-alike and Look-alike Meds

Celebrex and Celexa
Clonidine and Klonopin
Hydromorphone and morphine
Lorazepam and alprazolam
Metformin and metronidazole
Topamax and Toprol XL
Zyprexa and Zyrtec
Advicor and Advair
Darvocet and Percocet
Hydrocodone and oxycodone
Prilosec and Prozac
Zantac and Xanax
Zestril and Zetia
Liquid morphine products—many concentrations available
Insulin products—numerous confusing products

the refilling of meds. They, too, must have access to the full chart. Chart access is improved in the setting of an EMR, because more than one individual may view the chart simultaneously, or even remotely.

It is most helpful when all members of the team utilize standardized protocols for refilling medications, whether electronic, by fax or, by phone. All refills must be documented in the medical record and be accessible as part of the ongoing medication history.

Jenkins, et al cite an anonymously authored article published in the *Journal of the American Medical Association* in reporting that up to one third of physician handwriting is illegible. For this reason and many others, urgent care clinicians are moving toward electronic prescribing and EMRs to enter medication orders and prescriptions. Some of these systems allow for updated drug information, interaction checking, and allergy warnings to prevent errors.

Recently, the Institute of Medicine recommended that all prescriptions be electronic by 2010. For those who have not yet made the transition, safety experts suggest that prescriptions be written carefully, while sitting in a quiet area, to improve legibility.

Abbreviations in prescriptions are especially problematic and prone to error. When writing the prescription, the name and dosing frequency should be indicated in full text, along with the indication for the prescription.

The Joint Commission recommends against using

certain abbreviations (**Table 2**) and symbols altogether. The entire list is available in PDF form at www.jointcommission.org/PatientSafety/DoNotUseList/.

Injectables

Most urgent care centers administer injectable medications and vaccines to patients. There are a number of ways one can reduce the risk of errors in these instances. For example:

- An urgent care center could choose to stock only one concentration of a medication.
- The provider must be very careful to specify the route of administration (IV, oral, SQ, IM).
- Only providers and qualified clinical personnel should administer medications.
- A member of the staff should be responsible for ongoing review of the safety and efficacy of all stocked and administered medications.
- Before administering the medication, the nurse should verify the patient with two identifiers.
- Make certain the correct patient is receiving the correct medication, correct dose, and correct route, and that the med has not expired.
- Liquid medications should be administered only in approved measuring devices. Parenteral syringes used for this purpose have accidentally resulted in aspiration of the syringe tip.
- The members of the clinical team need to be warned when a vital medication is low or out of stock.
- After administration, the center should be prepared to monitor the patient for possible adverse reactions or anaphylaxis, and be equipped to handle a complication, should one arise.

Storage

The proper storage of medications is also important. The urgent care center should follow storage instructions specified by the manufacturer.

In addition:

- Medications should not be stored in patient areas or exam rooms.
- Medications should be stocked by a standardized

Table 2. Abbreviations to Avoid Using

Do not use	Potential problem	Use instead
U (unit)	Mistaken for "o" (zero), the number 4, or "cc"	Write "unit"
IU (International Unit)	Mistaken for IV (intravenous) or the number "10"	Write "International Unit"
Q.D., QD, q.d., qd (daily) Q.O.D. QOD, q.o.d., qod (every other day)	Mistaken for each other Period after the Q mistaken for I and the O mistaken for I	Write "daily" Write "every other day"
Trailing zero (X.o mg)* Lack of leading zero (.X mg)	Decimal point is missed	Write X mg Write o.X mg
MS MSO ₄ and MgSO ₄	Can mean morphine sulfate or magnesium sulfate Confused for one another	Write "morphine sulfate" Write "magnesium sulfate"
*Exception: A "trailing zero" may be used only where required to demonstrate the level of precision of the value being reported, such as for laboratory results, imaging studies that report size of lesions, or catheter/tube sized. It may not be used in medication orders or other medication-related documentation.		

- inventory, with a specific staff member responsible for purging expired meds at least quarterly.
- Multi-dose vials should be discarded within 30 days of opening (labeling the vial when opened with a date) or changed to single-dose vials to prevent administering expired meds.
- Emergency medications should be available as unit doses and labeled age appropriately. They should be kept separately in a crash cart in ready-to-use formulations.
- Controlled substances need to be kept in another separate locked area, and monitored daily by nursing staff.
- Medications and reagents (e.g., hemocult developer, eye drops, glucose monitor reagents) designed for external use (i.e., podophyllin, benzoin, phenol) should be labeled "for external use only" and kept separate from other medications.

When prevention fails

Despite our best efforts, medication errors and adverse

Table 3. Sample Test Tracking Log

Test Tracking Log							
Patient name	Test ordered	Location	Ordering physician	Results received (date, time)	Action plan or no action needed	Follow-up completed (date)	Staff initials

reactions will continue to occur. In such cases, the prescribing physician should always be informed of the reaction. The urgent care center should have a process to perform a root-cause analysis of the error, so problems with the medication system can be corrected.

Lab Safety and CLIA-waived Testing

The Clinical Laboratory Improvement Amendments of 1988 (CLIA) classifies lab testing according to four complexity levels:

1. High complexity
2. Moderate complexity
3. Provider-performed microscopy (a subset of moderate complexity)
4. Waived testing

The vast majority of urgent care centers possess a moderate complexity lab or a waived testing lab. Moderate complexity designation carries with it stringent requirements for compliance on personnel qualification, quality assurance, and controls. When followed, these guidelines help protect the patient.

For those urgent care centers following waived testing rules, the Joint Commission requires several elements of performance.

- The urgent care center should have a designated lab director who is identified on the CLIA certificate; even CLIA-waived labs need a certificate.
- A clinical policy and procedure manual for the practice should be created.
- There should be a policy on collecting and proper labeling of specimens. Whenever possible, specimens should be labeled in the presence of the patient to reduce identification errors.

- Test reagents need to be stored and purged according to manufacturers' instructions.
- Controls on point-of-care tests should be run as indicated.
- There should be quality controls in place for the tests, with guidance for lab personnel when they have an equivocal result. Too often, lab assistants substitute their own judgment when a test is unclear. Instead, they should defer to the provider or repeat the test.
- There needs to be a clear procedure for reporting and documenting the test results, with a separate log of all in-house labs with results to be used as a back-up.
- It is important that lab personnel and the director review manufacturers' instructions when the vendor is changed or the test is updated.

The other critical component of a safe CLIA-waived lab is the lab personnel. Only designated clinical personnel should be allowed to perform lab tests. They should be identified by job title and description (e.g., certified medical assistants). Only personnel that have been properly oriented to the center's lab should perform the tests. New hires should be instructed in the proper performance of each test and their competence documented by a supervisor before they operate independently. A checklist for lab competencies would be helpful, and could be updated annually.

Tracking Lab and X-ray Results

Another area of concern for patient safety is the tracking of outside test results. This includes outside reference labs, pathology specimens, and imaging. Clinics that send blood, urine and stool tests to outside ref-

erence labs must have a tracking system that is reliable for all providers and clinical employees to follow. A paper-based system should include a log of each patient, with the name of the test ordered, when the results were received, when notification was given to the patient, and what follow-up was arranged.

The ABMS recommends that patients be notified of all test results—even normal results—within a 24–48 hour timeframe, and that the communication be documented in the medical record.

Table 3 offers an example of a test tracking log.

Some EMRs allow the provider to track test results within the “To Do List” of the software. A separate log can be created for imaging tests and for referrals to specialists.

Regardless of the system chosen, the key component is the follow-up. Every test should be tracked all the way through the work-flow to the point of follow-up. Designated employees should be tasked with checking the log on a weekly basis to make certain that all tests that were ordered were, in fact, performed. They can also be charged with investigating any missing tests. Not only will this system improve patient safety, but it will also reduce an important source of malpractice liability for urgent care centers.

Physicians should *avoid* telling patients that “no news is good news” when it comes to test results. It is preferable to instruct patients to contact the practice if they have not received the results, normal or abnormal, within a specific time frame. This approach will decrease the risk that a critical result will be missed or delayed and makes patients active partners in their care, which may prevent unnecessary delay.

Critical test results

In addition to tracking routine tests, the clinic should have a process to identify and track critical test results.

According to the ABMS, failure to communicate critical test results is responsible for the majority of adverse events that lead to disability; 85% of these failures are due to a delay in receiving the results.

A critical range should be identified for lab tests so personnel can recognize results that fall outside of the range. As soon as a critical result is received by the lab or clinical personnel, they need to notify one of the providers for guidance.

It is recommended that providers take responsibility themselves for notifying patients of critical test or imaging results. Only a provider can answer the important questions a patient will have in these cir-

cumstances, and direct the follow-up or referral of the case. Leaving these conversations to others allows more uncertainty to enter the process. The patient might not understand the diagnosis or the urgency of the matter. The follow-up should be arranged by the urgent care center and tracked to ensure that it has occurred in a timely fashion.

Part 2 of this article, which will be published next month in *JUCM*, will discuss:

- healthcare-associated infection
- radiation
- transitioning care from one provider to another
- emergency preparedness
- personnel qualifications
- patient rights
- discharge considerations. ■

Resources

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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 combustibles 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. ■

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