JANUARY 2016 VOLUME 10, NUMBER 4

Urgent Care Association of America



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The Diagnosis and Management of **Tick-Borne Diseases**

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From Good to Great: A Guide for the Urgent Care Provider



t's easy to think that all the steps we physicians and advanced practice providers must take before we are professionals make us great. After all, doesn't everyone admire our impressive signature with its collection of professional certifications at the end?

Not so fast. Greatness is not conferred or bestowed by degrees or certifications, and often it isn't officially recognized. Instead, greatness is practiced, like yoga or karate. It is never a final achievement; it is a perpetual pursuit.

That sounds like a lot of work. Isn't being good at what we do good enough? Perhaps not. Being a health-care professional inherently involves making sacrifices. There are easier paths to the comfortable incomes we enjoy, and most of us were afforded plenty of career options by our academic achievements. Yet we chose our professions for their service orientation, in which we are sworn to protect the interests of our patients ahead of our own. Many of us were pursuing greatness when we graduated from our training programs, energized with idealism and energy. But then for most of us, that pursuit was crushed under the weight of student loans, regulatory burdens, hospital mandates, and new families to attend to and support. The greatness train got derailed by the plodding monotony of clock-punching.

Where does the way out begin? Start with the recognition that greatness is a worthy pursuit, one that requires commitment and sacrifice, sometimes without an immediate return. Then acknowledge that it mandates exposing the ego to vulnerability in ways that may not seem sensible at first. A few ground rules:

- Don't take shortcuts: There will be many temptations, but making a commitment to do all the little things right is requisite for greatness.
- Prepare for pain: If you are looking for a pain-free path to greatness, you will be looking for a very long time.
- Be ready to be resilient: Others will be threatened by your pursuit. Frankly, that's because you are making them look bad. But if you need affirmation for everything you do, you are not ready.
- You gotta have faith: Believe in the merits of the journey, rejecting doubt.

Remember that you will never get there: As Buddha said, "It is better to travel well than to arrive."

What active steps can we take toward greatness?

- Make every case a learning opportunity: Even the simplest illnesses have differential diagnoses. For example, most urgent care providers can diagnose the flu. But what about the flu mimics? What other entities can present this way? What are the red flags for these bad actors? Greatness is about a relentless focus on what we don't know, creating challenges where they don't normally exist.
- Seek and embrace feedback: Feedback opportunities are the building blocks of greatness. Without them, we become overconfident in our proficiency. In urgent care, we can get feedback from our patients and our colleagues alike. That feedback can help us confirm or modify a suspected diagnosis and refine our practice.
- Commit to continuing education: Lifelong learning is mandatory for greatness. Skip the "derm cruise" and focus on professional development in urgent care. Seek opportunities that offer more than just continuing medical education credits.
- Above all, be humble: Greatness does not come to those who have an answer for everything.

It is probably apparent by now that pursuing greatness requires time and energy, two of our most precious resources. With all the strain already on these resources, it may seem counterintuitive to use more of them. Yet we must balance the strain with a more purposeful commitment of time and energy. Such mindfulness will help us regain control of our careers and, more broadly, of our lives. The rewards of this sacrifice are surprising.

Lee A. Resnick, MD, FAAFP Editor-in-Chief, JUCM, The Journal of Urgent Care Medicine



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CLINICAL

8 Urgent Care Diagnosis and Management of Tick-Borne Diseases

The incidence of tick bites is increasing in the United States. Do you know the symptoms of the various tick-borne diseases? *Tovin Fapohunda-Adekola, MD, MBA*

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17 Janitorial and Maintenance Roundtable: Best Practices for Managing Environmental Services

Urgent care center cleanliness protects patients, providers, and staff members against infection and biohazards. This panel discussion will help you find the environmental services contractor that fits your center's needs.



Alan A. Ayers, MBA, MAcc, Mark Regna, Aaron Bailey, Steven Gottfried, and Matthew Watkins.

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23 Urgent Care Management of Acute Otitis Media in Children



The examination for acute otitis media is difficult, and many urgent care practitioners might not have had enough training in it. Learn the newest diagnostic criteria and treatment recommendations.

Michael E. Pichichero, MD

CASE REPORT

39 Sudden-Onset Severe Headache

Sudden headaches can herald a life-threatening condition. If you understand what to look for, you can help prevent devastating consequences because of a misdiagnosis.

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Mission Statement

JUCM The Journal of Urgent Care Medicine supports the evolution of urgent care medicine by creating content that addresses both the clinical practice of urgent care medicine and the practice management challenges of keeping pace with an ever-changing healthcare marketplace. As the Official Publication of the Urgent Care Association of America and the Urgent Care College of Physicians, JUCM seeks to provide a forum for the exchange of ideas and to expand on the core competencies of urgent care medicine as they apply to physicians, physician assistants, and nurse practitioners.

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appy New Year! Have you decided on your resolution for 2016? If not, consider taking your level of professionalism from good to great. Our Editor-in-Chief, Lee Resnick, MD, FAAP, explains how to work your way out of the plodding monotony of clock-punching and toward experiencing the joy of service in your profession. Memorize the ground rules, and then you'll be ready to take the active steps he outlines. To help you on that journey, we've filled this issue with articles to build your expertise in several areas.

Of all tick-borne infections in the United States, Lyme disease is the most common, and it is the seventh most common reportable disease in the country. Toyin Fapohunda-Adekola, MD,



MBA, teaches you to recognize the various kinds of ticks and the symptoms of tick-borne illnesses so that you can decide on the appropriate treatment plan.

Fapohunda-Adekola is a 2014 graduate of the Urgent Care Fellowship at the University Hospital of Cleveland, Department of Family Medicine, Case Western Reserve, Cleveland, Ohio.



What you think you know about acute otitis media in children is likely outdated, and your medical-school training in examining patients for the disease was probably limited. Michael E.

Pichichero, MD, explains the newest examination techniques and technology and which otopathogens are now the biggest problem.

Pichichero is Clinical Professor of Pediatrics at the University of Rochester, a Research Professor at Rochester Institute of Technology, and Director of Research at Rochester General Hospital Research Institute.

In our Practice Management section, Alan A. Ayers, MBA, MAcc, leads a panel discussion on an aspect of running an urgent care center that deserves more attention. both for health reasons and because it matters to patients: janitorial and maintenance services. Industry experts





Mark Regna, Aaron Bailey, Steven Gottfried, and Matthew Watkins share their insights on selecting an environmental services contractor, negotiating pricing, and maintaining service levels.



Ayers is Practice Management Editor of the Journal of Urgent Care Medicine, a member of the board of directors of the Urgent Care Association of America, and Vice President of Strategic Initiatives for Practice Velocity. Regna is International Director for Jani-King Healthcare Services, based in Dallas,

Texas; Bailey is Vice President of Sales for National Janitorial Solutions, based in Mt. Laurel, New Jersey; Gottfried is Cofounder and Chief Strategy Officer for ServiceChannel, based in New York; and Watkins is President of Katharos Management Group, based in Raleigh, North Carolina.

In our case report, Arash Mirzaie, MS4, and Michael Weinstock, MD, write about severe, sudden-onset headaches that can represent a life-



threatening condition. Patients with these headaches may appear to be in fairly good health except for their level of pain. Failure to be on the lookout for such an insidious disorder can have devastating consequences.

Mirzaie is a fourth-year medical student at International University of the Health Sciences School of Medicine. He also practices on weekends as a certified physician assistant in an urgent care center in Bellevue, Washington. Weinstock is Associate Clinical Editor for the Journal of Urgent Care Medicine; Adjunct Professor of Emergency Medicine, Department of Emergency Medicine, Ohio State University College of Medicine; Chairman and Director of Medical Education, Mount Carmel St. Ann's Hospital Department of Emergency Medicine, Columbus, Ohio, Immediate Health Associates, Inc.; and Editor-in-Chief. UC:RAP.

Also in this issue:

In Health Law and Compliance, Alan A. Ayers, MBA, MAcc, makes it clear why you must have a thorough yet easily understood job description for every position in your urgent care center. He takes you step by step through composing descriptions that will help produce better staff role performance, result in fewer employment disputes, and hopefully even forestall legal action.

Sean M. McNeeley, MD, and the Urgent Care College of **Physicians** review new reports from the literature on central thermometers, inhaled steroids and pneumonia risk, azithromycin in children for lower respiratory infections, recovery from upper respiratory infections in aging patients, antibiotic resistance in Neisseria gonorrhoeae, new diverticulitis treatment guidelines, asymptomatic bacteriuria, and flu vaccines in pregnant women.

In Coding Q&A, David Stern, MD, CPC, discusses how to code for the same or similar diagnoses for follow-up visits to urgent care providers.

Our *Developing Data* piece provides statistics on the volume of prescriptions, by medication type, at U.S. urgent care centers in 2014. 🔳



Orlando Urgent Care Spring Convention

The 2016 UCAOA Awards Nominations Are Open!

The Urgent care association of America (UCAOA) invites you to recognize the difference we all make in the urgent care industry by nominating a deserving urgent care peer, employee, center, company or even yourself, for a 2016 UCAOA Award. Award recipients will be recognized during a ceremony to be held at the 2016 Spring Convention (April 17-20) in Orlando.

Awards Categories

- **Outstanding Achievement Award:** The highest honor given by UCAOA, this award recognizes significant achievements in the field of urgent care medicine.
- Lifetime Membership Award: Recognizes an individual member's significant contributions to the Urgent Care Association of America.
- Advocacy Award: Honors individuals, organizations or companies for impactful advocacy efforts benefitting patients or the industry on a state or national level.
- **Community Service:** Recognizes an individual or organization for significant volunteer initiatives that result in a positive impact on community health.
- Humanitarian: Recognizes an individual or organization for substantial medical-related volunteer outreach on a national or international level.
- **Innovation (New!):** Recognizes outstanding creativity in products, services or clinical discoveries that advance the urgent care industry.

Submit your nominations at ucaoa.org/?awards_nominations by Monday, February 15, 2016.



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Increasing Recognition of Urgent Care in Washington

P. JOANNE RAY

Members of the Urgent Care Association of America (UCAOA) board of directors and Health & Public Policy Committee, accompanied by UCAOA staff members and Washington representatives, made the rounds of agencies, associations, and legislative offices in Washington DC in early November to share the urgent care story and increase recognition of urgent care centers. This year, in comparison with the last visit 2 years ago, the group was met with a greater level of understanding and acknowledgment of the role of urgent care centers as highquality, cost-efficient, and convenient sites of service for urgent and primary healthcare services. Discussions were held with key leaders of America's Health Insurance Plans, American Hospital Association, Alliance for Healthcare Reform, National Committee for Quality Assurance, National Conference of State Legislatures, and the Office of Carrier, Driver and Vehicle Safety Standards of the Federal Motor Carrier Safety Administration in the U.S. Department of Transportation. In addition, nearly 30 meetings took place with U.S. senators, U.S. representatives, and their staff members from Arizona, California, Louisiana, Maryland, Michigan, North Carolina, New Jersey, Ohio, and Texas.

Stay tuned via *UCAccess* (http://www.ucaoa.org/? UCAccessIssues) for updates from these meetings and ongoing UCAOA activities and work in Washington DC as well as specifics from these meetings. In 2016, we are considering opening the Day on the Hill experience to interested UCAOA members so that more can join us in carrying the voice of our industry to legislators and decision-makers. We hope you'll consider joining us!



1. Part of the UCAOA delegation at the offices of America's Health Insurance Plans (left to right): Nathan Newman, MD, FAAFP; Tonia Trimuel; Robert R. Kimball, MD, FCFP; Laurel Stoimenoff, PT, CHC; John C. Kulin, DO, FACEP; and Steve P. Sellers, MBA. 2. Part of the UCAOA delegation at the offices of America's Health Insurance Plans (left to right): Sean M. McNeeley, MD; Don Dillahunty, DO, MPH; Roger Hicks, MD; Cindi Lang, RN, MS; and Robert G. Graw Jr., MD. 3. UCAOA group with two staff leaders from the National Committee for Quality Assurance. 4. From left to right, the delegation to the

American Hospital Association: Steve P. Sellers, MBA; Sean McNeeley, MD; Robert R. Kimball, MD, FCFP; Roger Hicks, MD; and Nathan Newman, MD, FAAFP. 5. UCAOA representatives met with Senator Bill Cassidy (R-LA). Left to right: Sean McNeeley, MD; Nathan Newman, MD, FAAFP, Cassidy; and Steve P. Sellers, MBA. 6. Steve P. Sellers, MBA (left), met with Senator David Vitter (R-LA). 7. UCAOA Washington representatives Camille Bonta, MHS, and Geoff Werth, MPP, led the group to the Russell Senate Office Building.

Clinical

Urgent Care Diagnosis and Management of Tick-Borne Diseases

Urgent message: As the incidence of tick bites increases, it is imperative for urgent care physicians to be able to recognize various species of ticks and the symptoms of tick-borne illnesses and to know what to do when a patient presents with a tick bite.

TOYIN FAPOHUNDA-ADEKOLA, MD, MBA

Introduction

yme disease is the most common tick-borne infection in the United States (**Figure 1**) and Europe. With a total of 279,509 cases reported between 2003 and 2012, it is currently the seventh most common reportable disease in the United States.² *B. afzelii* and *B. garinii* are the causative spirochetes in Asia and Europe. In the United States, however, Lyme disease is caused by the bite of an *Ixodes* tick carrying the spirochete *Borrelia burgdorferi*, so the discussion here is limited to *B. burgdorferi*.

Lyme disease was first brought to medical attention when a cluster of what was thought to be juvenile rheumatoid arthritis cases occurred in Lyme, Connecticut; since then, the number of both suspected and confirmed cases has grown progressively each year, with 13 states (**Figure 2**) accounting for 95% of all reported cases: Connecticut, Delaware, Maine, Maryland, Massachusetts, Minnesota, New Hampshire, New Jersey, New York, Pennsylvania, Vermont, Virginia, and Wisconsin.²

Lyme disease is transmitted by different *Ixodes* species. In the eastern and north central regions of North America, most cases are caused by *I. scapularis*, whereas most

Toyin Fapohunda-Adekola, MD, MBA, is a 2014 graduate of the Urgent Care Fellowship at the University Hospital of Cleveland, Department of Family Medicine, Case Western Reserve, Cleveland, Ohio.



cases in the western regions are caused by I. pacificus.

Life Cycle of *Ixodes scapularis* and Transmission to Humans

Stage 1: Larvae

The larvae of *I. scapularis* are six-legged hatchlings usually found in the early summer that are generally uninfected. After they are released, they search for their first blood

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(From Lyme disease graphs. Atlanta, GA: Centers for Disease Control and Prevention [updated 2015 November 5; cited 2015 August 27]. Available from: http://www.cdc.gov/lyme/stats/graphs.html.

Figure 2. Reported cases of Lyme disease in the United States in 2014. The map shows 1 dot placed randomly within the county of residence for each confirmed case.



Prevention [updated 2015 March 4; cited 2015 October 27]. Available from: http://www.cdc.gov/lvme/stats/.

meal from birds and from mice and other small rodents. It is usually this first blood meal that transfers the *B. burgdor-feri* spirochete. Once fed, the larvae detach from their host, molt, and reemerge as nymphs the following spring.

Stage 2: Nymphs

Nymphs find a host to feed on and, in the process, transfer the spirochete to the host. Through this process, small rodents become infected and ensure the transfer of infection to future larvae. Nymph activity starts in mid-May and usually peaks in June. By late July, nymph activity is at its most minimal. Once fed, nymphs molt to adults in the fall.

Figure 3. Female nymph-stage blacklegged tick, *lxodes scapularis* Say.



(Photograph courtesy of Michael Patnaude, University of Florida, with permission. Retrieved 2015 September 1 from http://entomology.ifas.ufl.edu/ creatures/urban/medical/deer_tick.htm.)

Figure 4. Male nymph-stage blacklegged tick, *Ixodes scapularis* Say.



(Photograph courtesy of Michael Patnaude, University of Florida, with permission. Retrieved 2015 September 1 from http://entomology.ifas.ufl.edu/creatures/urban/medical/deer_tick.htm.)

Stage 3: Adults

Adults feed during warm days; their preferred host is the white-tailed deer. Ticks seek warm-bodied hosts that emit carbon dioxide and will latch onto any organism that fits this description. In the spring, after a blood meal, the female (**Figure 3**) lays her eggs and the process repeats itself. The adult female tick may feed for 5 to 7 days, but the male tick (**Figure 4**) feeds only sparingly, if at all.

Because female ticks lay and their eggs in woodlands, people may be at higher risk because of their occupations (forestry, hunters, etc.) or because of their recreational activities (camping, hiking). In highly endemic areas, people might be high risk in their own backyards, especially where grassy lands meet woodlands.

Transmission of Lyme disease to humans has been found primarily to be through nymphs as vectors. Although most people would notice adult ticks attached to them, most nymphs are smaller than 2 mm, allowing them to go undetected for the 2 days necessary to transfer *B. burgdorferi* to their hosts.

Evaluation of Tick Bites: Pertinent Medical History Questions

Most patients with an actual tick bite understandably find the whole experience very stressful and frightening. As public awareness of Lyme disease and incidental situational exposure to ticks increases, urgent care physicians must know what time-sensitive questions to ask and how to act on the answers:

- Was the tick species of the *Ixodes* family? This is a very important question to ask because not every tick that bites is of the Ixodes family, and neither is every tick a carrier of B. burgdorferi. A study was conducted on 3766 specimens submitted and identified by physicians as ticks between 1988 and 1990. Of these, 36.5% were beetles, most often spider beetles; 11.6% were mites; 10.4% were true bugs, mostly bedbugs; 12% were lice (crabs, or pubic lice—head and body); and 7.9% were spiders.² Valid identification of the insect in question can reduce unnecessary testing and treatment, alleviating the fears of the patient. Adult ticks are usually 3 mm in size, with males being any color from dark brown to black. Female Ixodes ticks typically are orange to red in color and have a dark brown oval spot called a scutum on their back. Another tick commonly misidentified as Ixodes is Dermacentor variabilis, the American dog tick, which is much larger than Ixodes.
- Was the tick a larval, nymphal, or adult tick? As previously mentioned, nymphs are much more likely than adult ticks to escape detection because of their small size, allowing them to remian attached for the duration necessary to transmit *B. burgdorferi. Ixodes* nymphs are approximately the size of poppy seeds and have a round body. *D. variabilis* nymphs are much larger and rarely bite human beings.
- Was the tick attached? If so, for how long? Lyme disease is transmitted during the tick feeding process; this requires a firm attachment to the human body. Ticks found in clothing or walking along the surface of the body cannot transmit the disease. Attachment duration is another important factor for evaluating disease risk. A study was conducted in which rabbits were exposed to spirochete-infected *Ixodes* ticks for various numbers

of hours. Rabbits exposed to ticks for shorter periods than 48 hours were not infected.⁴

• Was the tick engorged? When ticks feed and become engorged with blood, they release their spirochete-laden saliva into the wound, thus transferring *B. burgdorferi* into their host.

Tick Removal

The removal of an attached tick should be approached with the proper technique, with the goal of removing the insect intact, including all parts of the mouth. Different lay techniques have included burning the tick with a match, covering it with petroleum jelly or nail polish in attempts to suffocate it, and pulling it out directly. Some of these methods carry the risk of infection by releasing infectious secretions onto already pierced skin, thereby increasing the chances of spirochete transmission.

To properly remove a tick, use a small utensil such as tweezers or forceps. Firmly grasp the tick as close as possible to the surface of the patient's skin. Pull upward instead of twisting or squeezing. If there are remnants of the mouthpiece, leave them alone; they usually spontaneously fall out. Thoroughly clean the area with a disinfectant, such as alcohol or Betadine. If the patient has a clear and precise timeline indicating that a nonengorged tick was attached for less than 48 hours, give the patient clear instructions on monitoring the site for the development of erythema migrans (EM), teaching the patient how to distinguish between EM and a postbite reactive rash.

Clinical Manifestation of Lyme disease

Lyme disease can be categorized into three distinct stages.

Early Localized Disease

EM usually appears at the site of the tick bite; it is the most common localized reaction to Lyme disease, occurring in 70% to 80% of patients with tick bites.⁵ It is extremely relevant clinically because it is the only manifestation of Lyme disease in the United States that is sufficiently distinctive to allow clinical diagnosis in the absence of laboratory confirmation.⁶

EM is considered an early manifestation because it presents anywhere from 3 to 30 days (average, 7–14 days) after tick detachment.⁶ It is important to for physicians to be able to distinguish EM from tick-bite reactions that may occur in reaction to the antigens being injected into the skin. Hypersensitivity reactions occur



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Figure 5. Erythema migrans is an erythematous rash that occurs in 70% to 80% of patients with Lyme disease.



(From James Gathany via the U.S. Centers for Disease Control and Prevention. Retrieved 2015 October 27 from http://phil.cdc.gov/phil/details.asp?pid=9875.)

while the tick is still attached to the skin and usually encompass an area of 5 cm at most, are pruritic, and start to fade in 24 to 48 hours. In contrast, EM tends to affect a larger area initially and continue expanding (**Figure 5**). In some instances when it is difficult to distinguish EM from hypersensitivity, it can be helpful to use a skin marker to outline the rash's border and then observe the rash for 48 hours before initiating therapy.

Primary EM varies in appearance among patients. Although the typical red rash with a central clearing, also called a bull's-eye rash, is common, sometimes EM rashes are homogenously red. In other situations, especially on the lower extremities, the lesion may be purpuric with vesicles or pustules present. When there is more than one EM rash, the secondary lesions are thought to be hematogenous dissemination from the primary rash.⁶

Early Disseminated Disease

Neurologic symptoms are necessary for Lyme to be considered disseminated, and in some situations, they may be the first manifestations of the disease. They include cranial nerve palsies, with cranial nerve VII (the facial nerve) being the most typically affected; Lyme disease is one of the few causes of bilateral cranial nerve palsies. Also noted are peripheral neuropathy, radiculopathy, and even lymphocytic meningitis. The most common presenting group of neurologic anomalies is a triad of meningitis, a motor or sensory radiculoneuropathy, and a cranial neuropathy.

Late Disseminated Lyme

Arthritic disease, either monoarticular or polyarticular, is a frequent physical sign of late Lyme disease, with the knee being the most common joint involved. The arthritis symptoms may be frequent or intermittent and tend to appear months after the initial tick contact. Lyme encephalopathy is the neurologic manifestation of late disease, and in its specificity, it is completely different from the neurologic findings in early disease.

Approach to Serologic Testing

Serologic testing for Lyme disease should be performed in all individuals who meet *all* of the following criteria:

- Residence in or travel to an endemic area
- At risk for tick exposure (e.g., landscapers, horticulturists)
- Symptoms consistent with any stage of Lyme disease

Testing is contraindicated under the following criteria:

- In screening the general public
- In asymptomatic people living in endemic areas
- In people with vague, nonspecific symptoms (e.g., fever, malaise, arthralgia)
- In people with EM; the early disease symptom of EM qualifies for automatic treatment without the need for testing

A two-tiered approach is recommended for testing for *B. burgdorferi* antibodies. The patient undergoes an initial sensitive enzyme-linked immunosorbent assay (ELISA); if test results are positive, a more specific Western blot test is conducted on the same sample. If the ELISA results negative, there is need for further testing. This approach is recommended because the ELISA can easily produce false positive results because of the presence of other diseases such as syphilis, systemic lupus erythematosus, rheuma-

Figure 6. Amblyomma americanum tick.



(From the U.S. Centers for Disease Control and Prevention. Retrieved 2015 September 1 from https://commons.wikimedia.org/wiki/File:Amblyomma_ americanum_tick.jpg.)

toid arthritis, and even bacterial infections. The ELISA can distinguish between early disease (immunoglobulin M bands) and late disease (immunoglobulin G bands). The Western blot works by the detection of antibodies to specific parts of *B. burgdorferi* and is therefore more specific. It is important to know that seropositivity alone does not make a diagnosis of active Lyme disease, because antibodies may still be present even up to 20 years after full treatment and resolution of the disease.³

Therapeutic Management of Lyme Disease

Early Disease (Erythema Migrans)

In the absence of neurologic findings, doxycycline (100 mg twice a day) is the recommended treatment for adult patients with early localized or early disseminated Lyme disease. If there is an allergy to penicillin, if the patient is pregnant, or if the patient is younger than age 8 years, amoxicillin (500 mg three times a day) or cefuroxime (500 mg twice a day for 14 days) may be used.⁶ Although treatment duration has always been 21 days, trials have proven that doxycycline for 14 days is just as effective.

In disseminated disease *with* facial palsy but *without* any other neurologic findings, a 21-day regimen of doxycycline remains the first choice. It is imperative to explain to the patient that the antibiotics are not necessarily to treat the facial palsy but to prevent further neurologic complications. Any other neurologic findings require intravenous treatment and are beyond the scope of urgent care.

Jarisch-Herxheimer Reaction

In a small minority of patients, there may be a worsening of symptoms within the first 24 hours of antibiotic treatment. This is known as a Jarisch-Herxheimer reaction; it is a systemic response to the release of antigens by dying spirochetes. A patient might call to report feeling worse than before treatment. Conservative management (increased hydration, rest, nonsteroidal anti-inflammatory medications, etc.), along with reassurance, can help the patient through this phase.

Differential Diagnosis

Southern Tick-Associated Rash Illness

STARI, or southern tick-associated rash illness, is associated with the lone star tick (Amblyomma americanum) and the spirochete B. lonestari. STARI presents as a rash similar to EM with flu-like symptoms, but when patients with it are tested, there is no serologic evidence of B. burgdorferi. Another factor that differentiates STARI from Lyme disease is the rash; although both have erythematic rings with central clearing, STARI rashes have the development of papules at the very point of the tick bite. A. americanum is also physically different from I. scapularis; it can be distinguished by the solitary white spot or "star" found on the back of the female tick (Figure 6). At present, there is no specific serologic test for STARI. Most patients with STARI experience significant symptom relief with the doxycycline regimen used in Lyme disease. Although the name suggests that the disease occurs strictly in Southern U.S. states, cases of STARI have been found as far away as Maine.

Human Monocytic Ehrlichiosis

Human monocytic ehrlichiosis is another disease transmitted by the vector *A. americanum*, but carrying the bacteria *Ehrlichia chaffeensis*. Although there are different species of *Ehrlichia, chaffeensis* is the most common one found in human infections. Symptoms are usually nonspecific and may include malaise, fever, chills, and myalgia. Diagnosis is made by polymerase chain reaction, and treatment is with doxycycline (100 mg daily) or with rifampin in children and pregnant women—for 7 to 10 days.

Babesiosis

Babesiosis is a flu-like infection that is tick-borne and caused by protozoa, most commonly *Babesia microti*. It is a disease that is spread by tick bites and transfusion of *Babesia*-infected blood. Because the *Ixodes* tick is vector for both *B. burgdorferi* and *B. microti*, babesiosis is a

"To properly remove a tick, use a small utensil such as tweezers or forceps. Firmly grasp the tick as close as possible to the surface of the patient's skin. Pull upward instead of twisting or squeezing. If there are remnants of the mouthpiece, leave them alone; they usually spontaneously fall out. Thoroughly clean the area with a disinfectant, such as alcohol or Betadine."

reasonable differential diagnosis for patients with Lyme disease. Although symptoms may include arthralgia, malaise, and myalgia, there is no rash associated with this disease. Diagnosis is made via polymerase chain reaction, which is more sensitive and specific than microscopic evaluation of red blood cell smears. Treatment is a regimen of 7 to 10 days of a combination of atovaquone with azithromycin *or* of quinine and clindamycin.

Conclusion

As the incidence and awareness of Lyme disease increases, urgent care physicians are usually the first providers to see patients with the disease who are seeking fast and efficient care for tick exposure. Thus, it is prudent for urgent care providers to have a firm understanding of Lyme disease and an appropriate treatment plan.

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Practice Management

Janitorial and Maintenance **Roundtable: Best Practices for** Managing Environmental **Services**

Urgent message: Every urgent care center must have a plan to clean and maintain its physical facility. In this JUCM-exclusive panel discussion, industry leaders share their insights on selecting an environmental services contractor, negotiating pricing, and maintaining service levels.

Introduction

Irgent care is often considered a blind product because patients generally lack the formal training necessary to assess the quality of the actual medical services delivered. As a result, satisfaction or dissatisfaction is determined in large part by factors that patients can see, touch, and experience, including time spent waiting, the friendliness of staff members, and the upkeep and cleanliness of the physical facility. A facility that is dated, has heavy wear and tear, is disorganized, and/or appears unclean will likely be considered of poor quality regardless of the medical outcomes provided. Because urgent care centers routinely deal with infectious agents and other biohazards, the environment must not only be presentable; in addition, it must be compliant with regulations that protect patients and employees. Yet despite the importance of having a clean, well-maintained environment, many centers consider cleaning an afterthought or nuisance to be dealt with instead of a differentiator or benefit. This roundtable discussion provides insights on questions commonly asked by urgent care operators about cleaning and maintenance services.

Staying In-House Versus Outsourcing

Ayers: What are the advantages and disadvantages of



contracting cleaning and maintenance services out to third parties versus hiring cleaning and maintenance staff or having the center's nonmedical staff perform routine facility tasks?

Moderator

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Alan A. Ayers, MBA, MAcc, is Practice Management Editor of the *Journal of Urgent Care Medicine*, a member of the board of directors of the Urgent Care Association of America, and Vice President of Strategic Initiatives for Practice Velocity, Inc.

Panelist Profiles



Mark Regna is International Director for Jani-King Healthcare Services, based in Dallas, Texas.



Aaron Bailey is Vice President of Sales for National Janitorial Solutions, based in Mt. Laurel, New Jersey.



Steven Gottfried is Cofounder and Chief Strategy Officer for ServiceChannel, based in New York.



Matthew Watkins is President of Katharos Management Group, based in Raleigh, North Carolina.

Regna: Whether handling things in-house or outsourcing, the organization must understand what is needed to ensure that the cleaning and disinfecting process is completed and documented. The first priority must be providing a clean, disinfected, and safe environment for patients, visitors, and staff. Maintaining a clinical environment is not like cleaning your home. Environmental services (EVS) staff must understand and use disinfectants, equipment, and other supplies registered with the U.S. Environmental Protection Services (EPA) that require a higher level of training and education. The choice to use a contractor versus the center's staff comes down to who is best qualified, who understands the requirements, and who provides services that assist in the reduction of health-care-associated infections.

Bailey: For multifacility companies, outsourcing services helps maintain a consistent brand image across all units via a standardized scope and chemicals. The scope of work is monitored by professionals and allows the centers' nonmedical staff to concentrate on other important tasks necessary to run the operation. Outsourcing all facilities to one contractor is much less expensive than hiring individual cleaning companies for each center, particularly because of administrative fees and the rising costs of minimum wages and insurance.

Another advantage is additional layers of insurance and indemnity, which puts the center in the third position. A disadvantage I've noticed is when a manager asks a crew to complete a task that is outside the standard scope of work, there is often a delay because of the need for corporate office proposal and approval time, whereas if the service was done in-house, there would be no question and no delay.

Gottfried: An obvious advantage with the outsourcing model is having access to best-in-class providers or at least having the flexibility to change providers as quickly as needed. The primary challenge with this model, as we see it, affects companies that manage a number of different facilities in various locations. Just the act of sourcing the best providers in each location can be difficult. On top of that, there are the operational challenges in keeping track of project status, budgeting, and vendor performance. Overcoming these challenges is the immense market opportunity behind serviceautomation technology.

Watkins: The greatest advantage of contracting with a third party is the ability to allow all clinic staff to focus on their main role and objectives—to ensure highquality patient care. The greatest disadvantage would be having nonemployee staff members managing a key component within the clinic that is a major focus on the environment of care in each center. Thus, ensuring that you have a top-quality and communicative vendor would be of the utmost importance.

Desirable Contractor Qualities

Ayers: What steps does the urgent care operator typically follow in identifying cleaning and maintenance contractors? What factors should an urgent care operator consider when evaluating a contractor?

Regna: Urgent care operators must first consider the level of risk posed by the environment and the community demographic. Next, they must walk the facility with key members of the organization and decide on the level of cleaning and disinfecting, the number of days needed, floor types, floor care, and the overall perception of the organization by the community.

Sidebar 1 lists the policies, procedures, and documents that should be brought to the very first meeting to establish the ability of the contractor to provide service in this environment.

To ensure compliance and continued success in the center, remember the Five R's: Right Staff, Right Train-

ing, Right Chemical, and Right Equipment at the Right Time. If any one of these five fails, disinfecting will not occur and over time will become a quality issue.

Bailey: Operators should look at a company's profile before even accepting a proposal. The nature of healthcare facilities requires cleaners to have a specialized knowledge of the way services are performed. An experienced company understands the guidelines of the Occupational Safety and Health Administration (OSHA) and Centers for Disease Control and Prevention (CDC) and trains its cleaners in the use of appropriate chemicals and methodology. They also should check on the references provided to see if they fulfill expectations. Other factors to consider: Do they offer 24/7 emergency response? Do they have a biohazard program? Are they capable of handling the entire geographic portfolio of your company to ensure brand consistency?

Gottfried: There was a time when it was the responsibility of each facility's operations team to meticulously develop the relationship with qualified contractors one by one, site by site. But as an enterprise such as an urgent care company scales up, this individual sourcing becomes quickly untenable from a time and management perspective. However, with cloud, web, and mobile technologies, it is now possible to choose from a global network of qualified contractors at a moment's notice from one platform. Further, having these networks in a consolidated platform also provides the means to objectively and quantitatively rate their performance and share other relevant data across the enterprise. We have obviously seen this work well in consumer applications such as Yelp, so it was only a matter of time before facility managers took advantage of these advancements. For example, in our own network, we have more than 50,000 qualified contractors that we make available to our customers. Multiply that by the hundreds of companies offering such services, and you have the means to completely transform how contractors are sourced.

Watkins: The biggest way in which a contractor can be an asset to an urgent care group is to be responsive to the evolving needs that can arise within multiple locations and clinics across various geographic areas. Although the cleaning side can be very specific and standardized, the maintenance side of things is an area that is not predictable. The steps to find a contractor must include reviewing the way(s) that the contractor will work alongside the urgent care facility to achieve the facility's vision.

Sidebar 1. Requirements and Credentials for Health-Care Environmental Services

According to Mark Regna, International Director of Jani-King Healthcare Services, urgent care operators choosing an environmental services contractor should ensure that competencies are documented for training to the level required to clean and disinfect the facility, and that the following items are documented as well:

- Health Insurance Portability and Accountability Act (HIPAA) training
- U.S. Department of Transportation regulated medical waste training
- Blood-borne pathogens training
- Background check to the level of the Federal Bureau of Investigation
- No presence on the exclusions list of the Office of Inspector General (U.S. Department of Health & Human Services)
- Tuberculosis skin test results; familiarity with tuberculosis policy and procedures
- Influenza vaccine requirements
- Uniforms
- Identification badges
- Proper use of personal protective equipment
- Liability insurance
- Designation of a local office to provide oversight and quality-assurance inspections
- Cleaning schedules and checklist
- Written policies and procedures
- Compliance with regulations of the U.S. Environmental Protection Services
- Compliance with regulations of the Occupational Safety and Health Administration of the U.S. Department of Labor
- Compliance with the Chemical Right to Know Act
- Professional references

Pricing Options

Ayers: How are cleaning and maintenance contracts typically priced? Are they based on hours worked, or on services provided? What recommendations would you make to the urgent care operator who is negotiating the scope and pricing of a cleaning or maintenance contract?

Regna: EVS contracts for the most part will be different, and each will have specific needs to be addressed. An outsourced company with experience in health-care settings will use production rates to maintain the facility. For example, if you have a facility that has five examination rooms, and each examination room is 35 square feet, you would multiply the five examination rooms by 35 feet to get a total square footage of the examination rooms. In this case, you would have 175 square feet of examination rooms. A reputable contractor who is looking to truly clean and disinfect the examination rooms will use a production rate of 650 to 850 square feet per hour, depending on the acuity of the room (low, medium, or high). Once you have the total hours needed to service the facility, then you will add in the fully loaded labor rate to the daily hours and multiple that by how many days per month the organization is looking for service. From this, you get the price to clean and disinfect the facility, with the understanding that labor is the biggest expenditure for service providers.

As new laws are being passed by county, city, state, and federal governments to increase minimum wages and living wages, the cost of labor continues to increase. As wages change, you will also see changes for providing mandated health insurance. The key is to get creative, know your facility, and understand what is required to provide a clean, disinfected, safe health-care environment.

The question was asked whether to either contract for services or use the staff from the facility to do the cleaning and disinfecting. In some cases you can do both, if the facility staff members clean and disinfect their own nonclinical work areas four times per week and the contractor does a deep weekly or monthly cleaning of those areas. This would reduce the organization's cost to clean and disinfect.

Bailey: Typically, pricing at urgent care facilities is based on hours worked for janitorial services (normal service frequency in urgent care ranges from 3 times a week to 7 times week), and square-footage pricing for floor-care services (strip and wax, auto-scrub, and so on). The more frequent the service, the lower the per-service cost. There are many studies in health care that support daily cleaning services and a scheduled recurring floorcare maintenance program. Operators should also compare the cost of minimal cleaning with the value of customers' reactions to visiting a clean clinical facility.

Watkins: In the urgent care market, winning the contract will often be based on price over value. The greatest success we have had is partnering with the urgent care throughout the bid process—even helping to create the scope of work. Ultimately our goal and model is to provide facility services at or below 2.5% of the projected annual budget of a specific clinic. Two percent of that is generally routine maintenance and janitorial services, and the 0.5% is long-term planning or capital improvements—painting, renovations, and so on. In our pricing model, we want to give the most value at the best price. Part of our process is having a greater facility management strategy and vision versus simply routine maintenance and janitorial services. A few of the things we do to ensure competitive value and cost are partnering with janitorial consultants, implementing FacilityDude.com (an online tool for requesting, managing and reporting work orders), and working toward establishing preventive maintenance on a monthly schedule.

Maintaining Quality Over Time

Ayers: A common complaint is that over time, cleaning services start to neglect minor details. How can an urgent care operator best keep its cleaning services accountable?

Regna: As the cost of labor increases, you have contractors starting to cut corners and not clean as thoroughly. Unfortunately, you have some contract providers who are not experienced in bidding or cleaning in health-care organizations. The contractor has misjudged the hours, pay rates, or requirements for training and compliance. The best way to keep the little details from becoming big issues is to do environmental rounds with the key contact from the EVS provider and to complete customer-satisfaction surveys. Make sure your contract has an out clause for poor performance; this is key to being able to switch providers if there is poor service.

Bailey: The best way to ensure quality is to have an effective communication and quality-control program in place. Service-based companies will inevitably run into poor-performance issues occasionally. The best ones will accept that fact and have a system to correct any defects in a timely manner.

Gottfried: Vendor performance management is one of the most vexing problems that our customers want to solve in deploying service-automation technology. The key issue is that the traditional method of managing vendor performance, if completed at all, was highly asynchronous-meaning it was done after the fact and often on the honor system. That is, the contractors provided performance updates and reviews, and the customers took the information on face value or not. Real-time performance management and project status updates were very difficult to achieve before service automation. Now it is second nature for contractors to check in to a project site (using mobile devices enabled for a global positioning system [GPS]) and providing real-time, blow-by-blow project updates, including sharing photos and other multimedia information to demonstrate progress. In addition, service automation now empowers facility-management

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teams with business intelligence analytics to give them a historic view of how any contractor performed over time, using key performance indicators such as reliability, time to case resolution, and costs. Having these data points is the ultimate tool for accountability, because there are hard metrics to back up performance evaluations, good or bad.

Watkins: You can hold contractors accountable to the extent you are holding staff members accountable. So much of what we run into is more on the customer-service and communication side than the cleaning side. Obviously as contractors, we must maintain excellence in our facility man"There was a time when it was the responsibility of each facility's operations team to meticulously develop the relationship with qualified contractors one by one, site by site. But as an enterprise such as an urgent care company scales up, this individual sourcing becomes quickly untenable from a time and management perspective.

agement, and that means hiring the best people to perform all types of work. However, the extent to which we are held accountable must be acknowledged by those on the corporate side as well as those within the clinic. So much of what we strive to do is work with our end customer not necessarily the one who signs the check—so that we can address the little things that separate a good contractor from a great contractor.

Managing Risk

Ayers: Medical environments create unique risks, ranging from exposure to pathogens to protection of confidential health records. What steps should the urgent care operator take to ensure that individuals cleaning the facility are informed and compliant with all the regulations governing health-care facilities?

Regna: The biggest thing a provider can do is to ensure that the contractor has provided all documentation prior to starting the contract. The person who handles the contract and who is responsible for the cleaning and disinfecting of the facility should review who is in the facility and make sure that they have organizational clearance to work in the facility.

Bailey: Service-based companies emphasize the proper awareness and provide training to their cleaners on proper handling of pathogens and the privacy rules governed by the Health Insurance Portability and Accountability Act (HIPAA). Center personnel must be properly trained in handling pathogens and using proper chemicals to protect against the spread of infectious disease. Operators should always ensure that patient information is protected and out of plain sight. In most cases janitorial cleaning and floorcare services are performed after hours, so HIPAA regulations do not come into play.

Gottfried: Again, for us, the *how* facilities and operations managers can fix this issue is just as important, if not more important, than the *what* they're fixing. Managing compliance with the various regulations is a major operational challenge for urgent care providers or any large enterprise in general. And regulatory

compliance is only one aspect—there are corporate compliance requirements dictated by corporate functions, such as procurement, that facility managers have to be mindful of. The problem can quickly escalate out of control. Consider one urgent care provider and the dozens to hundreds of contractors and suppliers they deal with. Then multiply that by the increasingly number of compliance documents and items they have to manage, each with different deadlines and milestones. Having a global view of all the compliance status updates for all contractors and suppliers is now possible through service automation. This is "Uber-ification" in action, and one of the most important ways that facility management is transforming as a profession.

Watkins: We believe that staff engagement is necessary to achieving a high-level result. Thus, we operate under a methodology of continual education of our staff members about infection prevention, floor care, efficiencies, and so on, and we extend this to our entire client base as well. We contract with a third-party independent consultant to help us standardize our process of cleaning, and ultimately achieve the desired outcomes for our customers (and their clients, members, patients, etc). We base our training model on documentation and guide-lines from the CDC, EPA, OSHA, Joint Commission, and other regulatory agencies in order to instill confidence in our customers that our process has been researched and proven to work effectively.

Clinical

Urgent Care Management of Acute Otitis Media in Children

Urgent message: The possibility of ear infection is the most common reason parents seek care for their young children during viral upper respiratory infections with fever. Urgent care providers should know the new criteria for making the clinical diagnosis and how to use technology such as an acoustic otoscope before concluding that antibiotics are necessary.

MICHAEL E. PICHICHERO, MD

Introduction

Diagnosing acute otitis media (AOM) is a visual process based on viewing the eardrum and determining whether it is bulging, whether it is retracted or neutral in position, and whether there is a middle ear effusion.¹ The examination is difficult to perform, and training in diagnosis often is limited and outdated. This review presents the newest guidelines on diagnostic criteria and treatment recommendations for AOM.

Epidemiology

AOM is an infection predominantly occurring among children between 6 months and 3 years of age.^{1–4} In nearly all cases, AOM is preceded by a viral upper respiratory infection (URI). AOM typically occurs on day 2 to 5 after onset of URI symptoms.¹ Some viruses are more likely to lead to AOM, including respiratory syn-

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cytial virus, influenza, and rhinoviruses. Summer enteroviruses very infrequently lead to AOM. Given these facts, the diagnosis of AOM without URI is so infrequent that a second look at the eardrum and reconsideration of the AOM diagnosis should be routine.¹

Table 1. Diagnosing Acute Otitis Media by Signs and Symptoms					
Source and Symptoms	Sensitivity (%)	Specificity (%)			
Ear pain	54	82			
Ear rubbing	42	87			
Fever	40	48			
Cough	47	45			
Rhinitis	75	43			
Excessive crying	55	69			
Poor appetite	36	66			
Vomiting	11	89			
Sore throat	13	74			
Headache	9	76			
Ear pain	60	92			
Fever	69	23			
Cough	84	17			
Rhinitis	96	8			
Restless sleep	64	51			
Ear pain	100	NA			
Fever	79	70			
Upper respiratory tract infection	96	29			
Parental suspicion of acute otitis media	70	80			
Data from Rothman R, Owens T, Simel DL. Does this child have acute otitis media? IAMA. 2003;200:163-40.					

Diagnosis

Medical History

The history of AOM is nonspecific and is essentially the same history as that of a viral URI (**Table 1**). The child has a runny nose, cough, and perhaps a fever. There may be crankiness, poor sleeping, and even tugging of the ear pinnae. None of the symptoms elicited in the medical history are diagnostic for AOM, because they all occur just as often as they occur during a viral URI. Therefore, most experts do not regard the medical history as particularly helpful in correctly diagnosing AOM.^{1–4}

Physical Examination

The Key Diagnostic Feature: A Bulging or Full Eardrum A normal eardrum without middle ear effusion behind it is shown in **Figure 1**. AOM should be diagnosed when the

Figure 1. A normal eardrum without middle ear effusion.



Figure 2. The eardrum in acute otitis media bulges because of pressure behind the eardrum from inflammation in the middle ear space.



eardrum is bulging or full because of pressure behind the eardrum, caused by inflammation in the middle ear space, and when there is pus in the middle ear¹ (Figure 2).

This is a change from the past, when the presence of fluid behind the eardrum and redness of the eardrum were considered the important examination findings.



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Figure 3. A retracted eardrum in otitis media with effusion.



The switch to bulging as a key parameter for the diagnosis of AOM by the 2013 guidelines of the American Academy of Pediatrics (AAP) is evidence-based.² Table 1 compares the sensitivity of various ear examination findings and the presence of bacteria behind the eardrum as proven by tympanocentesis.³ It is evident that bulging is the best predictor of bacteria causing AOM.

Redness of the eardrum is no longer considered a reliable sign because it has a poor correlation with bacterial AOM. Most cases of AOM occur in children between ages 6 months and 3 years of age, and they cry when their ears are examined. Crying, insertion of a speculum, and fever makes the eardrum turn red, so that is why redness has been removed as a key diagnostic sign of AOM. An exception is if the clinician sees a child whose one eardrum is bright red but whose other eardrum is of normal color.

Acute Otitis Media Is Not Associated with a Retracted Eardrum

A retracted eardrum is usually a viral-mediated process and is associated with otitis media with effusion¹ (OME; Figure 3).

In older children and adults, obstruction of the Eustachian tube may occur because of an upper airway allergy, but in young children a retracted tympanic membrane is most often due to a viral URI. What happens in the middle ear space is much the same as what happens in the nose during a viral URI. Congestion and mucus build up in the Eustachian tube, and this causes the natural air flow into the middle ear from the back of the throat to diminish—just like a stuffy or blocked nose. With the Eustachian tube closed, the air in the middle ear seeps across the eardrum, creating a small vacuum in the middle ear. Consequently, the eardrum becomes retracted, so a retracted eardrum is a normal finding in the context of a viral URI and does not indicate AOM. The problem is that a retracted and bulging eardrum can be difficult to distinguish from the normal state. In both cases, the light reflex is splayed and the eardrum looks distorted.

Otitis Media with Effusion

It was once thought that AOM could be distinguished from OME because OME was not associated with inflammation in the middle ear space. OME was instead considered to be caused by a buildup of fluid caused by natural mucous secretions in the middle ear. New research findings show there are inflammatory mediators in the middle ear fluid when OME is present. OME causes hearing loss, and there can be other symptoms. In fact, fluid in the middle ear is uncomfortable, and a patient may feel popping noises as air gains entry via the Eustachian tube into the middle ear space. This may cause the child to pull and tug at the ear or even cry. Pressure changes in the middle ear can occur during OME, and pressure changes that move the eardrum forward or backward cause excitation of nerve receptors in the eardrum to fire and cause pain. The crying of children in an airplane on takeoff and landing is caused by pressure changes in the cabin, not the sudden development of AOM or OME.

Middle Ear Fluid Occurs with Acute Otitis Media and Otitis Media with Effusion

When the Eustachian tube is congested or closed during a viral URI, mucus begins to build up in the middle ear space. In the middle ear, goblet cells are present that make mucus to keep the middle ear epithelial cells moist. If that normally present mucus does not have an escape path through the Eustachian tube, then it builds up and a middle ear effusion becomes visible. For this reason, it is not sufficient to use a middle ear effusion as a sole criterion for diagnosis of AOM. In about one-third of cases when a child between 6 months and 36 months of age has a viral URI, they will develop AOM. That means if a clinician is diagnosing AOM in more than two-thirds of children presenting with a viral URI and symptoms consistent with AOM, then they are almost certainly overdiagnosing.⁴ Also when an earache is reported, about one-third of the time it is OME and two-thirds of the time it is AOM (Figure 4).

Is the Eardrum Opaque or Translucent?

A third aspect of the examination of the eardrum to consider is whether it is translucent or opaque. Note that in Figure 1 the eardrum is translucent, whereas in Figure 2 it is opaque; in Figure 3 it is again translucent. However, opacity occurs because inflammation of the eardrum is part of AOM. The eardrum is thickened because of the inflammation, making it difficult or impossible to determine whether there is fluid behind the eardrum. When an eardrum is bulging, it has an inflammatory middle ear effusion pushing it toward the examiner. A translucent or transparent eardrum almost never occurs with AOM.^{1–4} A retracted eardrum cannot represent AOM, but a retracted eardrum with fluid behind it represents OME.

Pneumatic Otoscopy

The 2013 AAP guidelines recommend the use of pneumatic otoscopy to distinguish a bulging eardrum from a retracted eardrum.² Training in this technique is omitted in most residency curricula, but the skill can be mastered with practice by any clinician. Pneumatic otoscopy involves making a seal with the speculum and generating positive pressure on insufflation to see backward movement when an eardrum is bulging and negative pressure to see forward movement when an eardrum is retracted.

Obstruction of Eardrum View Because of Wax in the External Ear Canal

About half of children between the ages of 6 months and 36 months, when AOM is most common, have sufficient wax that removal is essential to get an adequate view of the eardrum. Clinicians should not be satisfied with a glimpse of a small portion of the eardrum, because that is not sufficient to make the diagnosis of AOM. It is recommended that the clinician take the time and make the effort to clear all or nearly all of the ear canal earwax to view all or nearly all of the eardrum. A soft plastic earwax-removal spoon is often effective.

Disposition and Follow-Up

The new AAP guidelines advocate consideration of appropriate antibiotics or watchful waiting in management of AOM.² Follow-up is recommended if the tympanic membrane has ruptured, if there is a history of recurrent AOM, or if there is a history of hearing loss.

Figure 4. Incidence of otitis media with effusion (OME) versus acute otitis media (AOM) by age.



Data from Faden H, Duffy L, Boeve M. Otitis media: back to basics. *Pediatr Infect Dis J.* 1998;17:1105–12.

Technology to Aid Diagnosis Newer Otoscopes

To expertly examine the eardrum and middle ear space, it is essential to have maximum light of an appropriate color focused on the eardrum. Newer otoscopes offer potential advantages compared with older otoscopes. A macro-view otoscope allows the clinician to view the entire eardrum without panning and to zoom in and focus the device's magnification to accommodate their own vision (myopia and/or presbyopia). Also, newer otoscopes have improved the amount of illumination and color spectrum provided by the halogen lightbulb.

Tympanometers

A hand-held or desktop tympanometer unit may be used as an adjunct in examining the eardrum and middle ear.^{5–7} The tympanogram identifies the movement of the eardrum in response to positive and negative pressure, applied by pressing a button once a seal is established between the device speculum and the external auditory canal. If no movement occurs with applied pressure and the seal is adequate, then the tympanogram readout is flat (type B tympanogram). This is the typical case for AOM. In some cases the tympanic membrane will be full or bulging, also called a positive-pressure tympanogram readout (type A tympanogram). This occurs early in the pathogenesis of AOM. In some cases the tympanic membrane will be retracted, also called a negative-pressure tympanogram readout (type C tympanogram). This occurs during a viral URI, sometimes with concomitant



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Figure 5. An acoustic otoscope.

Table 2. Acoustic Reflectometry Readouts							
Level	Predicted Risk of Middle Ear Effusion	N	% of Ears with Documented Middle Ear Effusion				
1	Low	383	3.4				
2	Low to moderate	279	15.8				
3	Moderate	82	34.2				
4	Moderate to high	76	57.9				
5	High	50	92.0				
Data from Block SL, Mandel E, McLinn S, et al. Spectral gradient acoustic reflectometry for the detection of middle ear effusion by pediatricians and parents.							

reflectometry for the detection of middle ear effusion by pediatricians and parent Pediatr Infect Dis J. 1998;17:560-564.

middle ear fluid, and is consistent with OME. Tympanometry requires a seal of the inserted speculum-like device in the external auditory canal. In children younger than age 2 years, when AOM is most common, the child often moves during the use of the tympanometer and a seal cannot be obtained. Also, if a child is crying, a tympanogram reading cannot be obtained.

Spectral Gradient Acoustic Reflectometers

Another instrument helpful in the diagnosis of AOM and OME is the spectral gradient acoustic reflectometer (SGAR), also called an acoustic otoscope (**Figure 5**).

This technology assists the clinician in the detection of middle ear fluid.^{7,8} The device sends a sonar sound wave to detect middle ear fluid. If there is only air in the middle ear space, then the sonar sound wave bounces back, giving a high numeric readout on the head of the

Bacteria	% of Total Pathogen
Streptococcus pneumoniae	12
Amoxicillin-resistant	20
Haemophilus influenzae	56
Amoxicillin-resistant	50
Moraxella catarrhalis	22
Amoxicillin-resistant	100

device. If the sonar sound wave bounces back slowly because of fluid in the middle ear, then the readout is a lower number. The more viscous the fluid in the middle ear, the slower the sonar sound wave bounces back. Thicker fluid is more likely pus associated with AOM, whereas thinner fluid is more likely associated with OME. The specificity of the SGAR to detect middle ear fluid⁷ is shown in Table 2.

The SGAR does not require a seal in the external auditory canal, so readings can be obtained in the crying child. The main limitation is the presence of wax in the external auditory canal. Complete blockage of the sonar wave emitted by the acoustic reflectometer by earwax produces a readout of "not interpretable," whereas a blockage of 50% or less does not. SGAR use is not a replacement for otoscopy or pneumatic otoscopy. It is a diagnostic aid with a performance similar to that of tympanometry; the two technologies complement each other.

Red Flags for High-Risk Presentations

Any child with AOM who is younger than 1 month of age is at high risk, and the otopathogens affecting such a young child may be different. Consultation is advisable. AOM in the first 6 months of life is much more often associated with recurrent AOM than is AOM in the typical age range of 6 months to 36 months. Children with eardrum ruptures should be referred for follow-up examination. Fever is typical with URI and associated AOM, but high fever, in excess of 102°F (39°C), should prompt examination for other sources such as pneumonia.

Treatment

Changing Pathogens

To prescribe the best antibiotic for AOM, it is important

Figure 6. Comparative activity, based on PK/PD^a and clinical trials, of antibiotics against (A) *Streptococcus pneumoniae* and (B) *Haemophilus influenzae* β -lactamase positive.

А		В		
Best Ceftria: Amoxic Amoxic Cefdini Cefpod Cefpro: Cefuro: Clindar Azithro Clarithr Cefaclo Loracan Trimett Worst Cefibu	xone cillin ^b cillin-clavulanate ^b r loxime proxetil zil xime axetil nycin mycin romycin or bef noprim-sulfamethoxazole ne iten	Best Wors	t CC CC CC CC CC CC CC CC CC CC CC CC CC	Cefixime Cefitibuten Ceftriaxone Amoxicillin-clavulanate ^b Cefdinir Cefpodoxime Cefprodoxime Cefuroxime Cefprozil Cefaclor Clarithromycin Loracarbef Irimethoprim-sulfamethoxazole Azithromycin Amoxicillin ^b
^a Pharmacokinetics/p ^b Double dose (80–10 Note: Drugs listed al	harmacodynamics. oo mg/kg per day). phabetically in each cluster.	^a Pharr ^b Doub Note:	macoki ole dos Drugs	inetics/pharmacodynamics. ie (80–100 mg/kg per day). listed alphabetically in each cluster.

to be aware of the predominant otopathogens and their antibiotic susceptibility. The situation is dynamic because use of pneumococcal conjugate vaccines has caused a downward shift in prevalence of *Streptococcus pneumoniae* and an upward shift in prevalence of *Haemophilus influenzae* in recent years.⁹ Also, the proportion of *S. pneumoniae* that are not susceptible to penicillin and the proportion of *H. influenzae* that are β -lactamase positive have been changing⁹ (Table 3).

Observation Option

The new AAP guidelines once again offer a noantibiotic treatment option.² They still advocate antibiotics in the population of children who are very young and nonverbal.

Antibiotic Choices

The 2013 AAP guidelines represent a change from the 2004 version regarding antibiotic recommendations.² The continued recommendation of amoxicillin as the treatment of choice takes into account the frequency of overdiagnosis, the higher risk of serious infection by *S. pneumoniae*, and cost.² Among the alternative treatments for AOM in children, in vitro testing allows a rank-ordering of their anticipated activity against the

two most common otopathogens¹ (Figure 6).

Symptomatic Treatment

Analgesics are recommended for pain and fever. Acetaminophen or ibuprofen in age-appropriate and weight-appropriate doses should be used. Use of analgesic eardrops is noted in the new AAP guidelines,² but the evidence for their benefit is weak.

Management of Otitis Media with Effusion

OME resolves spontaneously within 3 months of onset in more than 90% of cases. Antibiotics, decongestants, antihistamines, and intranasal sprays of steroids or other products are not helpful.¹⁰

Disposition and Follow-Up

Guidelines from 2004 from the AAP, the American Academy of Family

Physicians, and the American Academy of Otolaryngology—Head and Neck Surgery¹⁰ recommend that if OME does not resolve spontaneously within 3 months if involving both ears or within 6 months if involving one ear and there is associated hearing impairment, then referral to an otorhinolaryngologist for consideration of tympanostomy tubes is recommended.

Conclusion

Antibiotics should be prescribed for AOM but not for OME or otalgia. The key examination finding is the determination of the position of the eardrum and the presence of a middle ear effusion. To accomplish this task, the clinician must have adequate visualization of the eardrum and may supplement the examination with adjunctive tools such as pneumatic otoscopy, tympanometry, and acoustic otoscopy. Treatment may involve an observation option or an antibiotic. If an antibiotic is prescribed, then guidelines are available to direct selection. However, the situation is dynamic, so alternatives to traditional first-line choices should be assessed with each patient, taking into consideration the clinical condition and the efficacy, cost, and safety of the drug and the likelihood of good follow-up if the patient's condition does not improve or worsens.

"It was once thought that [acute otitis *media*] could be distinguished from *[otitis media with effusion, or OME]* because OME was not associated with inflammation in the middle ear space. OME was instead considered to be caused by a buildup of fluid caused by natural mucous secretions in the middle ear. New research findings show there are inflammatory mediators in the middle ear fluid when OME is present. OME causes hearing loss, and there can be other symptoms. In fact, fluid in the middle ear is uncomfortable, and a patient may feel popping noises as air gains entry via the Eustachian tube into the middle ear space."

Conflict of Interest Statement

Dr. Pichichero has served as a consultant to Welch Allyn regarding development of newer otoscopes and tympanometers. He served part time from 2014 through 2015 as chief medical officer of a company that developed an improved SGAR; he no longer holds that position.

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HEALTH LAW AND COMPLIANCE

The Importance of Having a Solid Job Description for Every Position in the Urgent Care Center

Alan A. Ayers, MBA, MAcc

Urgent message: Having concise, complete, and up-to-date job descriptions for all employees in an urgent care center will pay off with better role performance, fewer employment disputes, and hopefully the elimination of the possibility of legal action.

Introduction

Between 2012 and 2022, according to the U.S. Economic Census, health-care employment is expected to increase by 2.6% annually—or by 5 million jobs. This rate is approximately five times that projected for total employment growth during the same period, 0.5% per year. The health-care sector employed nearly 18 million Americans in 2012 and is expected to account for nearly one-third of all new jobs created between 2012 and 2022—more than in any other industry. The rapid growth of health-care employment only increases the demand for good people in urgent care centers and underscores the importance of having detailed job descriptions to accurately manage expectations and measure performance for every position in your practice.¹

The job roles within an urgent care center are varied and include physicians and physician extenders, registered and licensed practical nurses, medical technicians and assistants, medical coding and billing specialists, and various practice managers or administrators. It is important that as an urgent care owner or operator, you define each role in your center with a job description, which is said to be the key to good organizational design and the first defense against employee lawsuits.

A job description not only sets expectations as to what a job



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Table 1. The Importance of Having a Job Descriptionfor Each Position in an Urgent Care Center

A job description is a detailed written document that sets out the significant and essential duties and responsibilities of a specific position in the medical practice. It can be used for

- Job classification and organization
- Communicating the job expectations to the employee
- Recruiting efforts
- Interviewing and narrowing the field of prospective candidates for a new position
- Job evaluation and employee performance
- Understanding and adjusting workloads
- Clarifying relationships between jobs and avoiding overlaps and gaps
- Assisting with the analysis of compensation rates for staff members
- Defining career paths and opportunities for job growth
- Creating training and education curricula
- Assisting with employee and organization goal-setting
- Building status, respect, and motivation in employees
- Compliance with government regulations

entails for prospective and existing employees but it also spells out the *specific standards* against which actual work performance can be measured and provides a legitimate, businessrelated *justification for discipline* when an employee's work is not satisfactory.

Writing a Concise Job Description

Although **Table 1** outlines the varied uses of job descriptions in the urgent care setting, the primary objective of the job description is to provide a detailed and accurate overview of the

¹ Source: U.S. Department of Labor, Bureau of Labor Statistics. http://www.bls.gov/news. release/ecopro.nro.htm. Accessed October 18, 2015.

Sidebar 1. "Manager of Revenue Enhancement"— An Inappropriate Job Title

One multisite urgent care operation prided itself on its coding expertise—ensuring that documentation was accurate and complete, that documentation supported the level of service provided, that modifiers and other intricacies of coding were understood, and that its staff members knew what codes would be paid by the various payors. Given the importance of the billing department in ensuring that the center was paid for the services it provided-ensuring that no money was left on the table-the operation renamed its billing function "revenue enhancement" and its billing manager "manager of revenue enhancement." When the organization was visited by an outside consultant, the feedback was immediate—that the title must change to "billing manager." The reason? What would Medicare or a private payor assume of a manager whose job title is to enhance patient revenue through the billing process? The implication was upcoding or other types of fraud. The consultant informed the organization that the job title alone created risk.

position. The job description should encompass the type of work and its purpose, the requirements needed to perform the job, and the working conditions. It also should be based on what the actual job is *today* rather than on the ideal. As you consider the following components, consult or compare descriptions of comparable jobs available on the Internet via the websites of other urgent care centers or job-seeker sites like Monster.com or CareerBuilder.com.

Job Title

The job title should be descriptive and relevant to someone outside the practice, such as "medical billing clerk." Because you are creating a job description, it is best to base a working title for a job on its main role. Consider the conventional titles used in urgent care centers. The job title of "medical billing clerk" is quite transparent: That person processes the billing of medical services for the practice. Avoid using vague or overly specific job titles design a working title that describes both the level of responsibility and role of the position. If you are unsure of the title, it can be decided last, after the rest of the job description is written.

Keep the job title brief and concise. It should be one to three words that accurately articulate the composition, organizational level, and scope of responsibility of the job. Try to keep job titles consistent among employees within the office structure and with comparable places of business. The latter is particularly important when the job is posted online for prospective applicants. Although you may want to recognize your operations director as a chief operating officer or senior vice president, the title "practice administrator" or "center manager" may be more appropriate in a single-center operation.

Job Summary

The header for the job description should contain just a few sentences (fewer than four) that summarize the main points of the job, which may include key responsibilities, functions, and duties; education and experience requirements; and any other pertinent information. This summary can be used when you post the position on the Internet. This part of the job description is also an ideal spot to add—if needed in a larger organization such as a hospital or integrated health system—a brief description of the department, its mission, and how it fits within the larger entity. The summary will be easiest to write after completing the entire job description when you have firmly defined all the details of the position.

Essential Job Functions

At the outset, the hiring manager should determine the essential job functions, which are the foundation of the job description. This component of the job description should be

- Complete with all the functions and duties that were the incumbent's responsibility
- Concentrated on key tasks that are mandatory for getting the job done
- Specific as to the tasks and duties needed to fulfill the responsibilities of the job
- Concisely written in brief sentences for a general audience with little to no knowledge of the job, the department (if applicable), or the medical practice
- Written in terms of the position's requirements, not based on the capabilities of any one individual

Start by creating a list of all the duties, tasks, responsibilities, and activities required by the particular job. Do not include minor or occasional tasks. Some organizations will add the percentage of time for each essential job function. If you do this, make sure that each task is at least 5% of the total job. Functions that amount to less than 5% of the total job should be removed if they are deemed to be *nonessential tasks* or are grouped with another job function.

In addition to estimating the percentage of time, some experts divide the essential job functions into two other areas: key accountabilities and duty statements. The *key accountabilities* are the main areas of responsibility within a position, much like essential job functions. *Duty statements* provide more information about the tasks associated with the key accountability. It is another way to organize your thoughts and collect the significant facts about a position to better convey the complexity, scope, and level of responsibility of the job.

Employers often think that the phrase "and other duties as assigned" at the end of the list is a convenient catch-all for unanticipated tasks or for anything they have forgotten to include in the job description. But this statement should be avoided because any additional tasks should be reasonably related to the job. For example, asking the phlebotomist in Detroit to shovel snow off the center's walkway at 7:00 a.m. before the office opens may not be the best idea. If these other duties appear to be a larger component of the position, the job description should be updated to reflect their importance.

If you are having problems with the specifics of a particular job description, ask yourself, "If this job did not exist, what work *would not* get done?" This is a way to thoroughly examine the particular job on its own and as it fits into the entire medical practice.

When you have completed the essential job functions, examine the description to ensure that it includes any other pertinent information so that details on the duties and responsibilities of the position is complete and accurate. Further, you should edit this description to ensure that it is complete and easy to understand. Read the duties and responsibilities of the position as an outsider and not as a person who is familiar with the inner workings of an urgent care center.

Job Qualifications

The *job qualifications* include the level of education and experience necessary, the supervision received, and the analytical and reasoning skills and ability required for the position.

The education and experience requirements should be spelled out by the specialty and level of schooling (e.g., "bachelor of science degree in nursing"), again without a bias toward a particular person's background. Examine the position in the practice to determine whether specific educational requirements are truly necessary, or whether previous experience, internships, or volunteer work would suffice. The education and experience requirements should be *essential* to the performance of the daily tasks of the position, rather than merely things that are nice to have.

If the education requirement is placed too high, you may exclude some very qualified candidates when hiring. State any acceptable substitutes, such as a specific number of years of experience in a similar setting in lieu of a college degree or other certification. Say, for example, "two years of experience as an medical office assistant," or rather than saying "a bachelor's degree in finance," say "a bachelor's degree in accounting, finance, business, or related field" when defining the qualifications for a business manager.

Preferred Qualifications

Keep in mind that a job description can include preferred qualifications. These are qualifications that the hiring manager would like the individual currently in the position to possess but are not essential to fulfilling the day-to-day functions of the job.

Working Conditions

The working conditions should describe the location in the prac-

Table 2. Summary of Job Description Components

A job description need not account for every task that might ever be done. The basic format of a job description should include the following items stated in simple form:

1. Heading information: This should include job title, pay grade or range, reporting relationship (by position, not individual), hours or shifts, and the likelihood of overtime or weekend work.

2. Summary objective of the job: List the general responsibilities and descriptions of key tasks and their purpose, relationships with customers, coworkers, and others, and the results expected of incumbent employees.

3. Qualifications: State the education, experience, training, and technical skills necessary for entry into this job.

4. Special demands: This should include any extraordinary conditions applicable to the job (e.g., heavy lifting, exposure to temperature extremes, prolonged standing, travel).

5. Job duties and responsibilities: Only two features of job responsibilities are important: identifying tasks that comprise about 90% to 95% of the work done and listing tasks in order of the time consumed (or sometimes in order of importance). The first task listed should be the most important or time-consuming one, and so on. Employers can cover 90% to 95% of most tasks and responsibilities in a few statements. It is more important to list what must be performed and accomplished than how, if there is more than one way to do it. Being too specific on how to accomplish a duty could lead to issues regarding the Americans with Disabilities Act when an employee asks for an accommodation.

tice where the majority of the work will be conducted (e.g., front office or laboratory), the actual physical position of the individual when performing the work (e.g., sitting, standing), and the extent of any physical labor involved (e.g., assisting patients onto and off an x-ray table).

The working conditions should include the geographic location of the job, because some positions may be home-based or in new urgent care center locations that have not yet opened. Consider that job seekers who see a job posting for your clinic on the Internet may live some distance away.

List any specialized equipment or technology that must be used in the position. Urgent care centers (particularly those that practice occupational medicine) utilize numerous medical instruments, including blood alcohol testers and pulmonary function testers, that require training and, in some instances, certification. Likewise, list any software used (such as Veloci-Doc² or SYSTOC³) if you are looking for individuals skilled with a specific application. Otherwise, anticipate investing more time and effort into training.

² http://www.practicevelocity.com/urgent-care-emr-software/ ³ http://www.ulworkplace.com/products/systoc/

Table 3. Additional Components of the JobDescription

- Employee benefits: This is the list of benefits the medical practice offers to its employees, such as vacation, sick time, a 401(k) plan, retirement plan, and insurance. Also, include any unique benefits, such as college tuition reimbursement, paid fitness club fees, or discounted medical services.
- **Performance standards:** A performance standards section is a preference if you have included the key indicators of job performance and the expectations of the job. This section gives the grounds for measuring performance. A performance standard should be tied to each key accountability or essential job function, so that there is information about the expectations of that particular area of responsibility.
- Organization chart: To help everyone understand the role in relation to team members' roles, include a pictorial of the groupings of work, people, and superior-subordinate relationships for all the people involved in the organization.
- **Comparable positions:** This section may be used to list any positions in the department that have similar responsibilities. Similar positions should be classified consistently to help with financial forecasting and budgets.
- **Pay range:** Pay is always a sensitive subject. If a pay range is included, make sure that it is indeed a range. Again, keep this consistent with the office structure and prepare to revisit this on the basis of a number of factors, including the economy, the target candidate pool when hiring, competing practices, and industry standards.

One final item is the nature of the relationships and roles within the office, including the reporting structure, whether the position is part of a team, and other working relationships (e.g., interactions with vendors, hospitals, and other medical service providers). **Table 2** provides a summary of essential job description components.

Some human resource experts advocate including several other components in the job description, such as those listed in **Table 3**. These may be helpful in larger organizations, such as a university hospital or for an online job posting. However, for the practicalities of a smaller medical practice, they may be omitted from the job description and reserved for offer letters and job postings.

Job Description Language

The writing in a job description should be kept clear and concise. Do not use the narrative form when writing a job description. Instead, structure the sentences in standard verb-object form with explanatory phrases. The person in the position is the subject of the sentence, so the subject (e.g., "Medical assistant prepares. ..") can be eliminated, like this: "Prepares patients for physician examination by conducting preliminary physical measurements of blood pressure, weight, and temperature, and reporting summary of patient history." Note that the sentence uses the present tense.

The job description is not intended to be a step-by-step guide on how to do a job, but when you find it necessary, you can add explanatory phrases that detail more parameters about a function (such as why, how, where, or how frequently), and add substance and clarity (e.g., "Responsible for all biweekly collection, review, and submission of medical staff time sheets to the Payroll Department").

The job description may leave out unnecessary articles, like *a*, *an*, and *the*, and other words that are not vital to understanding. It should be gender neutral, so use unbiased terminology (e.g., *he or she*) and construct sentences so that gendered pronouns are not needed.

Finally, refrain from using nebulous adverbs, adjectives, or words that are subject to interpretation, like *frequently*, *numerous*, *complex*, and *occasionally*, as well as imprecise language like *operates*, *prepares*, *handles*, and *is responsible for*. Job description language should clearly express the purpose and skills of the job.

Challenges or Pitfalls in Writing Job Descriptions

When someone is not performing as expected on the job, the first place a supervisor and human resources representative should look is the job description. The manager may believe that an employee is not meeting performance standards for the position; hopefully that manager has a clear understanding of the required job functions. If the employee either is not meeting the requirements laid out in the job description or the job description does not describe the task that manager wants fulfilled, there is a problem. The job description failed to achieve its purposes and must be revised with the manager's input. At that point, the manager and employee should review the job description so that both have a clear understanding of the expectations of the position.

A job description is only as good as the extent to which it accurately conveys the content of the job. Research shows that job descriptions are typically deficient in one of the following areas:

- The importance of the job is either exaggerated or downplayed. The job description is worth little and is an ineffective tool if the job is not accurately characterized.
- The job description does not state the essential elements that distinguish a job performance that is successful from one that is not, causing the employee confusion as to expectations and creating no accurate guideline for reviewing job performance.

"When someone is not performing as expected on the job, the first place a supervisor and human resources representative should look is the job description."

- There is a lack of focus on any decision-making aspects of a job, which can cloud the scope of the employee's responsibility and accountability.
- Similar to the other deficiencies described here, frequently a job description lacks detailed job behaviors, failing to specify exactly what the employee is to do and in quantifiable terms.
- Some job descriptions do not genuinely convey the qualifications that are truly necessary for success in the position. This can keep bona fide candidates from applying for a posting, which means that the practice may lose out on potentially great employees and also may be exposed to charges of discrimination. (See the section "The Potential for Litigation.")
- The description talks about the employee instead of the job.
- The description designates identical responsibilities to two different jobs. This can be an issue especially in a smaller practice where productivity is at a premium and duplication of effort can cause a major snag.

The Potential for Litigation

Given the multitude of laws that protect employees in the workplace, it is important to have job descriptions that do not discriminate or lend themselves to discriminatory potential.

Age, race, sex, gender identification, religion, disability, and national origin are the predominant "suspect classes" in employment law, meaning that people in those categories have historically faced discrimination. These categories are protected to different degrees from discrimination in the workplace. A medical practice cannot use any of those criteria (or others) as the basis for not considering or offering an individual a job, unless the requirement is reasonably related to the job. This is called a bona fide occupational qualification. For example, a person's religious beliefs may preclude them from wearing a certain style of scrubs or from working on specific holidays. In relation to the Americans with Disabilities Act, an employer must offer reasonable accommodation to those with disabilities—so again, a job description should focus more on outcomes than on specific methods of completing tasks.

An employer must have a certain number of employees to be covered by the U.S. Equal Employment Opportunity Commission (EEOC) laws. The number of employees varies depending on the type of employer (e.g., a private or public company, government agency, etc.) and the type of discrimination that

Table 4. Overcoming Dangers of Job Descriptions

- The urgent care organization's senior leadership team should start by writing their own job descriptions. There is a great deal of inequity in asking staff members to function under a job description when there are no guidelines or evaluation tools for the management team.
- Never ask a group to write a job description. Groups do not think conceptually, and their discussion of a job description will degenerate into one on mere duties rather than objectives.
- Job descriptions must be kept up to date. They should be reviewed and reworked at least once a year. Job descriptions are not to be left untouched in the file; they are working guidelines for an effective team.
- Each job description should be tailored to the specific culture, needs, and interactions of the center. Using a massproduced or borrowed job description may result in a mismatch among the employee's expectations, performance criteria, and the work environment.
- Job descriptions are tools—a general guideline for the that work one is expected to do—not an officially binding instrument that rules a person's activities.

is claimed. Generally, the EEOC laws cover businesses and private employers that have 15 or more employees who worked for the employer for at least 20 calendar weeks in the current or last year. This is the threshold if a complaint against a practice or other private employer concerns an allegation of discrimination based on race, skin color, religion, sex (including pregnancy), gender identification, national origin, disability, or genetic information.

If a complaint claims discrimination on the basis of age, the business is covered by the laws of the EEOC if it has 20 or more employees who worked for the company for at least 20 calendar weeks (in this year or last). However, practically every employer is subject to the Equal Pay Act. This law makes it illegal to pay different wages to men and women if they perform substantially equal work in the same workplace.

Table 4 provides some additional practical advice in overcoming common dangers associated with job descriptions.

Conclusion

After reading this article, owners and operators of urgent care centers should see the value of creating job descriptions and the perils of failing to do so. Remember, concise, complete, and up-to-date job descriptions for all employees in the practice will pay off with better role performance, fewer employment disputes, and hopefully a decreased possibility of legal action.

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Case Report Sudden-Onset Severe Headache

Urgent message: Patients with imminently life-threatening conditions can present to an urgent care appearing to be in good health or even with a viable alternative explanation for their symptoms. It is important to be vigilant for red flags of serious illness.

ARASH MIRZAIE, MS4, and MICHAEL WEINSTOCK, MD

Introduction

eadache is one of the most common presenting complaints in ambulatory settings. Urgent care providers must rapidly evaluate and diagnose a variety headache types in a time-limited environment. Subarachnoid hemorrhage (SAH), a potentially life-threatening condition, can simply present as a sudden-onset headache without abnormal vital signs or neurologic deficit, and thus misdiagnosis is not uncommon. Failure to be on the lookout for such an insidious condition can lead to devastating consequences.

Case Presentation

A 34-year-old healthy-appearing woman presents to the urgent care center, accompanied by her husband, and says that she has had an allergic reaction to chocolate. She reports that an hour earlier, she and her friends were playing volleyball. After the game, she ate a small piece of chocolate, and soon after, she developed severe nau-

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sea, vomiting, and a "bad headache" at the base of her skull. She has associated photophobia. There are no significant findings in the review of systems. Her past medical history reveals that she has had migraines. She has no history of allergies to medicines or foods, and she takes no chronic medications. She reports that she does not smoke and does not drink alcohol.

Physical Examination

At initial presentation, the patient's vital signs are as follows:

- Blood pressure: 138/84 mm Hg
- Respiratory rate: 16 breaths/min
- Temperature: 99.3°F (37.4°C)
- Pulse: 98 beats/min
- Body mass index: 24 kg/m²

The patient lies on the

examination table in the fetal position and asks that the room lights be dimmed. Findings on examination of her head, eyes, ears, nose, and throat are normal. A neurologic examination shows that she is alert and oriented to person, place, and time, and that function for cranial nerves III through XII are within normal limits. Her muscular strength is normal for flexion and extension in all extremities.

Urgent Care Course

Intramuscular administration of 8 mg of ondansetron was ordered. After 15 minutes, however, the patient still had severe nausea and periodically gagged and vomited. The patient was advised that further imaging studies were necessary because the cause of her illness was unknown. She consented to transportation to a local emergency department (ED) by paramedics.

Emergency Department Course

After providing her medical history and undergoing a physical examination and initial blood tests, the patient underwent a noncontrast computed tomography (CT) brain scan, which revealed SAH. Magnetic resonance angiography was performed to localize the source of bleeding, but findings were inconclusive. The patient did not undergo lumbar puncture. She was given nifedipine to prevent cerebral vasospasm. She underwent repeat brain-imaging studies, which showed resolution of her bleeding. After 5 days, she was discharged home in stable condition without any pain or headache. She did not develop any disabilities as a result of her SAH.

Discussion

Anatomy and Definition

The organs of the central nervous system are covered by

"Subarachnoid hemorrhage, a potentially life-threatening condition, can simply present as a sudden-onset headache without abnormal vital signs or neurologic deficit, and thus misdiagnosis is not uncommon. Failure to be on the lookout for such an insidious condition can lead to devastating consequences."

three protective membranes referred to as meninges. The order of the meningeal membranes, from deep to superficial, is pia mater, arachnoid mater, and dura mater. The space between the pia and the arachnoid mater is referred to as subarachnoid space, which is the location of the interface between the cerebrospinal fluid and the blood vessels. SAH is usually due to rupture of a saccular aneurysm, causing hemorrhaging in this space. SAH

leads to mixture of blood with cerebrospinal fluid.

Epidemiology

Headache is one of the most commonly reported symptoms in EDs, accounting for approximately 2% of chief symptoms. SAH, a potentially life-threatening and disabling condition, has been identified as a cause of headache in 1% of patients whose chief presenting symptom to EDs is headache. Almost 50% of patients with SAH will have normal findings on examination and normal vital signs at initial presentation. SAH has a high mortality rate; between 25% and 50% of patients with this condition die within 6 months of diagnosis, and about 25% of patients who live end up with a neurologic deficit.¹ That is why prompt diagnosis and awareness of the limitations of diagnosis are so important.

Clinical Presentation

SAH commonly presents as a sudden-onset headache that may or may not be accompanied by nausea, vomiting, and neck stiffness. In a prospective study of 109 patients with sudden-onset headache, SAH was the cause in 25%, of which 23% reported only headache without nausea, vomiting, or neck stiffness.² Many patients with SAH will have an altered level of consciousness; seizures occur during the first 24 hours in about 10% of these patients. Coma is uncommon; about 10% to 15% of patients die before reaching a hospital.³

The four strongest independent risk factors for SAH are⁴

- Smoking
- A family history of SAH
- Hypertension
- Hypercholesterolemia

The risk factors of genetic origin affect blood vessel

walls, commonly associated with autosomal-dominant polycystic kidney disease and Ehlers-Danlos syndrome.⁴

Diagnosis

It is easy to determine the need for further work-up when a patient presents with headache and a new neurologic deficit. However, when the only presenting symptom is headache, without neurologic deficit, as occurs in half of all patients with SAH, solving the mystery is much more difficult.⁵ If the diagnosis is missed in such patients, they are highly likely to have a poor outcome. A history of sudden-onset headache or a report of "the worst headache of my life," regardless of headache severity, should be enough cause for a clinician to suspect SAH and to seek a more detailed history and physical examination, specifically targeted for signs and symptoms of SAH, such as nausea, vomiting, mental status change, seizure, and a history of loss of consciousness.

Because nearly half of all patients with SAH will have normal examination findings and normal vital signs on initial presentation, misdiagnosis of SAH is not uncommon. Other reasons for misdiagnosis include

- Failure to recognize the wide spectrum of clinical presentations of SAH⁶
- Failure to obtain a CT scan or to understand its limitations in the diagnosis of SAH
- Failure to perform a lumbar puncture or, if the procedure is performed, failure to correctly interpret its results

In a hospital-based series of 482 patients admitted with SAH, initial misdiagnosis occurred in 12% and was mostly associated with small-volume SAH and normal mental status at presentation. Failure to obtain a head CT scan was the most common factor leading to misdiagnosis, accounting for 73% of patients with misdiagnoses and leading to a fourfold increase in mortality rate for those with SAH.⁶

Diagnostic Modalities

When SAH is suspected, the first test most commonly done is a noncontrast CT scan of the brain. If findings are negative, a lumbar puncture is performed to evaluate for the presence of red blood cells or xanthochromia. Lumbar punctures, however, are painful and may extend the duration of stay in the ED or can even lead to a post-procedure headache. The sensitivity of modern CT for identifying SAH in neurologically intact patients in the ED was evaluated in a recent prospective cohort study. The authors found that a CT scan performed within 6 hours of headache onset had a sensiFigure 1. Computed tomography image of a subarachnoid hemorrhage (*arrow*).



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tivity of 100% and specificity of 92.9% for pinpointing SAH.¹ **Figure 1** shows a CT scan of SAH (obtained for another case).

The American College of Emergency Physicians recommends that "in patients presenting to the ED with sudden-onset, severe headache and a negative noncontrast head CT scan result, lumbar puncture should be performed to rule out subarachnoid hemorrhage."⁷ This is a level B recommendation. The sensitivity of CT at 5 days after headache onset falls precipitously, to just over 50% in early studies.⁷

Urgent Care Evaluation

The case reported here was tricky, with the patient initially attributing her headache to an allergic reaction. The urgent care provider did not fall prey to anchoring bias⁸ and thus continued the evaluation in search of other causes.

Proper diagnosis is crucial because well-appearing patients sent home after a sentinel bleed have a high incidence of poor outcomes. About 50% of patients

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"It is easy to determine the need for further work-up when a patient presents with headache and a new neurologic deficit. However, when the only presenting symptom is headache, without neurologic deficit, as occurs in half of all patients with [subarachnoid hemorrhage], solving the mystery is much more difficult. If the diagnosis is missed in such patients, they are highly likely to have a poor outcome."

with SAH die within 6 months, and more than onethird who live have a major residual deficit.⁹

Take-Home Points

- Nearly half of patients with SAH will have normal findings on physical examination and normal vital signs on initial presentation.
- SAH is commonly misdiagnosed, most often because the clinician fails to obtain a CT scan of the brain or fails to understand the limitations of CT in the diagnosis of SAH.
- SAH is the cause of headache in 1% of patients whose chief presenting symptom is headache.
- The sensitivity at 6 hours of modern third-generation CT scanners in ED patients is reported to be 100%.¹

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ABSTRACTS IN URGENT CARE

- When Accuracy Is a Must, Go for Central Thermometers
- Inhaled Steroids Increase the Risk of Pneumonia
- Azithromycin May Cut Risk of Lower Respiratory Infection in Young Children
- Aging Makes It Harder to Recover from Upper Respiratory Infections
- Neisseria Gonorrhoeae Shows Increasing Resistance to Cefixime

- New Thinking on Diverticulitis Treatment Merits Review by Urgent Care Providers
- Bacteriuria: In Most Cases, If There Are No Symptoms, There Should Be No Treatment
- Evidence Increases That Influenza Vaccines Are Safe in Pregnant Women

SEAN M. MCNEELEY, MD

ach month the Urgent Care College of Physicians (UCCOP) provides a handful of abstracts from or related to urgent care practices or practitioners. Sean McNeeley, MD, leads this effort.

When Accuracy Is a Must, Go for Central Thermometers

Key point: Peripheral thermometers are not nearly as accurate as central thermometers.

Citation: Niven DJ, Gaudet JE, Laupland KB, et al. Accuracy of peripheral thermometers for estimating temperature: a systematic review and meta-analysis. *Ann Intern Med.* 2015; 163:768–777.

Temperature measurement is performed at most visits to urgent care centers. Although the data are not always important in clinical decision-making, sometimes they are at the center of treatment decisions. This study, using pooled data from 75 studies (42 studies of adults, 32 studies of children, 1 study of both), assessed the accuracy of peripheral temperature (oral, temporal, tympanic, and axillary) readings versus central temperature (rectal, esophageal, urinary bladder, and pulmonary artery) readings, focusing on the limits of agreement of these



Sean M. McNeeley, MD, is an urgent care practitioner and Network Medical Director at University Hospitals of Cleveland, home of the first fellowship in urgent care medicine. Dr. McNeeley is a board member of UCAOA, UCCOP, and the Board of Certification in Urgent Care Medicine. He also sits on the *JUCM* editorial board. measures. Initial findings showed concordance between central measures. For peripheral methods, temperatures detected in the febrile and hypothermic range were as far off as 1 or 2 degrees. The authors concluded that peripheral thermometers are not accurate enough to make important clinical decisions. From the urgent care perspective, this raises several questions. It is obviously impractical to get rectal or bladder temperatures for every patient. However, perhaps in those such as the very young or immunocompromised, using other methods to obtain temperature readings may be necessary if the result changes the indications for therapy.

Inhaled Steroids Increase the Risk of Pneumonia

Key point: Think twice about prescribing inhaled steroids. Citation: Suissa S, Coulombe J, Ernst P. Discontinuation of inhaled corticosteroids in COPD and the risk reduction of pneumonia. *Chest.* 2015;148:1177–1183.

Inhaled corticosteroids are a frequent treatment for chronic obstructive pulmonary disease. However, concerns about an increased risk of pneumonia with use of these inhalers have been documented. This study attempted to determine whether stopping these medications reduced the risk of serious pneumonia. The data for the study were obtained from the Québec Health Insurance database for more than 100,000 patients new to the use of inhaled steroids. Discontinuation of steroids, particularly fluticasone, was noted to decrease the risk of serious pneumonia by 37%. Considering that 14,000 patients had a pneumonia event, this finding was significant. It is unlikely that urgent care providers will stop prescribing these medications, because they are beneficial, but we must remain aware of the risk of pneumonia that they also present.

Azithromycin May Cut Risk of Lower Respiratory Infection in Young Children

Key point: Early use azithromycin may help prevent lower respiratory infection in some children at high risk of such illness. Citation: Bacharier LB, Guilbert TW, Mauger DT, et al; National Heart, Lung, and Blood Institute's AsthmaNet. Early administration of azithromycin and prevention of severe lower respiratory tract illnesses in preschool children with a history of such illnesses. JAMA. 2015;314:2034–2044.

Some preschool children have recurrent lower respiratory tract infections (LRTIs). Although many of these are viral infections, some are bacterial. This study attempted to discover whether early treatment with antibiotics could reduce the progression to more serious disease. This study, which was randomized, double-blinded, and placebo-controlled, took place at nine academic medical centers in the United States between April 2011 and December 2014. Over 600 patients between the ages of 12 and 71 months participated, receiving either 12 mg/kg of azithromycin for 5 days or a placebo when illness occurred. Azithromycin did reduce the occurrence of severe LRTIs. The number needed to treat to prevent LRTIs decreased on the basis of the number of LRTIs treated per patient, varying from 33 for one LRTI to 7 for four LRTIs. From the perspective of the urgent care provider, these findings are early and the subject needs further study, but they are another part of the puzzle. The number needed to treat was surprisingly small for multiple treated infections.

Aging Makes It Harder to Recover from Upper Respiratory Infections

Key point: Upper respiratory infections are harder on patients older than 60 years than on younger patients.

Citation: Gorse GJ, Donovan MM, Patel GB, et al. Coronavirus and other respiratory illnesses comparing older with young adults. *Am J Med.* 2015;128:1251.e11–11251.e20.

Upper respiratory infections are a common diagnosis in urgent care patients. A 2-year study of 100 adults older than age 60 years with heart or lung disease compared them with 101 younger, healthier patients, using illness diaries and virus tests. As expected, illnesses were more common in quarter 4 through quarter 2 of each year. Dyspnea was more common in the older adults, and severity was rated as worse in that group on two scores. Symptoms were also present longer in older adults than in younger adults. Although these findings are not surprising, they show that older patients experience a larger burden from viral illnesses than younger patients do. Of interest is the finding that the older patients also received more steroids and antibiotics. Further studies may help determine whether such prescriptions are necessary.

Neisseria Gonorrhoeae Shows Increasing Resistance to Cefixime

Key point: Cefixime may be a poor choice for treatment in some populations.

Citation: Kirkcaldy RD, Hook EW, Olesegun OS, et al. Trends in *Neisseria gonorrhoeae* susceptibility to cephalosporins in the United States, 2006–2014. *JAMA*. 2015;314:1869–1871. This report describes new trends in resistance patterns of *Neisseria gonorrhoeae* in relationship to cefixime, determined from the study of a large sample volume (51,144) representing data collected by the U.S. Centers for Disease Control and Prevention. With the study population originating from 31 cities, cefixime resistance varied from 0.2% to 4%. Much greater resistance was found in men who had sex with other men. From an urgent care perspective, continued use of intramuscular ceftriaxone combined with oral azithromycin appears to be the best treatment, particularly for certain populations.

New Thinking on Diverticulitis Treatment Merits Review by Urgent Care Providers

Key point: Health-care providers should review the new guidelines on diverticulitis.

Citation: Strate LL, Peery AF, Neumann I. American Gastroenterological Association Institute technical review on the management of acute diverticulitis. *Gastroenterology*. 2015; 149:1950–1976.

The new guidelines from the American Gastroenterological Association Institute provide evidence-based answers for 11 clinical questions. Of those, the following are relevant to the urgent care setting:

- Are antibiotics needed in acute uncomplicated diverticulitis?
- Should a high-fiber diet be advised?
- Should avoidance of corn, popcorn, and nuts be advised?
- Should aspirin be avoided?
- Should nonaspirin nonsteroidal anti-inflammatory drugs be avoided?
- Should probiotics be advised?
- Should exercise be advised?
- Unfortunately the answers to these questions are complex

ABSTRACTS IN URGENT CARE

and too long to discuss here. In addition, most answers are not firm, but the information behind them is valuable, so clinicians should review the new guidelines carefully.

Bacteriuria: In Most Cases, If There Are No Symptoms, There Should Be No Treatment

Key point: Treatment of asymptomatic bacteriuria may be harmful.

Citation: Cai T, Nesi G, Mazzoli S, et al. Asymptomatic bacteriuria treatment is associated with a higher prevalence of antibiotic resistant strains in women with urinary tract infections. *Clin Infect Dis.* 2015;61:1655–1661.

Recurrent urinary tract infections are common in women. This article reports on a study of the possible consequences of treating women with recurrent urinary tract infections and asymptomatic bacteriuria. Researchers assigned 550 patients into two groups: those who were treated with antibiotics, and those who were not, and then compared samples from the groups for resistance patterns. The infection recurrence rate for the treated group was 69.6%, versus 37.7% for the untreated group, findings that are somewhat counterintuitive but are likely explained by the resistance patterns noted. Isolated Escherichia coli from the treated group showed higher resistance to amoxicillin-clavulanic acid, trimethoprimsulfamethoxazole, and ciprofloxacin than did E. coli from the untreated group. For the acute-care provider, these findings reinforce the importance of treating only symptomatic disease in most patients. However, pregnant patients might not belong to this group.

Evidence Increases That Influenza Vaccines Are Safe in Pregnant Women

Key point: Researchers find more evidence of the safety of influenza vaccine in pregnant women.

Citation: Ludvigsson JF, Ström P, Lundholm C, et al. Maternal vaccination against H1N1 influenza and offspring mortality: population based cohort study and sibling design. *BMJ*. 2015;351:h5585.

A study from Sweden of 41,183 pregnant patients exposed to influenza vaccine A(H1N1)pdmo9 (Pandemrix) at any stage of pregnancy compared their birth statistics and mortality with those for a cohort of 234,317 unvaccinated patients. The researchers found a nonsignificant reduction in neonatal mortality in the vaccinated women. Although this finding may not exactly line up with results found for the vaccine given at U.S. centers, it does add to the evidence pool regarding risk of fetal mortality with influenza vaccination.

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CLINICAL CHALLENGE

This feature will challenge your diagnostic acumen with a glimpse of x-rays, electrocardiograms, and photographs of conditions that real urgent care patients have presented with.

If you would like to submit a case for consideration, please e-mail the relevant materials and presenting information to *editor@jucm.com*.



Shoulder Injury During Football Game

Case

An 11-year-old boy presents with pain over the right clavicle that developed the previous day while he was playing football and another player fell on him. He has pain with range of motion of the right shoulder as well as with movement of the torso. He has no shortness of breath, chest pain, dizziness, or numbness of the arm. View the image taken (**Figure 1**) and consider what your diagnosis would be.

Resolution of the case is described on the next page.

INSIGHTS IN IMAGES: CLINICAL CHALLENGE

THE RESOLUTION



Differential Diagnoses

- Pathologic fracture
- Acromioclavicular separation
- Shoulder dislocation
- Pneumothorax
- Pulmonary contusion

Physical Examination

The patient was afebrile, with a pulse of 103 beats/min, respirations of 16 breaths/min, and a blood pressure of 108/68 mm Hg. He was alert and oriented.

Both lungs were clear to auscultation. His heart rate and rhythm were normal and without murmur, rub, or gallop. His abdomen was soft and nontender, without rigidity, rebound, or guarding. His right shoulder was normal in appearance, without an empty sulcus sign. He had good range of motion of the shoulder, but he winced whenever he moved it. There was a bulge at the mid aspect of the right clavicle and pain with palpation at this site, but there was no evidence of cuts or breaks in the skin. The patient's neurovascular function was intact, with a normal right radial pulse. A clavicle x-ray was obtained, and it showed a mid-shaft, nondisplaced fracture.

Diagnosis

Right mid-shaft clavicle fracture (Figure 2).

Learnings

Clavicle fractures account for 3.3% of all adult fractures in one study, although those findings may underestimate the fre-

quency, because many of these injuries occur in children. The most common location is the mid aspect of the clavicle (69%– 81%), then the distal clavicle, and then—less than 5% of the time—the proximal clavicle. Fractures may be approximated or grossly displaced. As with every evaluation, consider other injuries while taking into account the mechanism of injury, including trauma to the elbow and wrist, head, and neck.

The clavicle approximates medially with the sternum and distally with the acromion. The clavicle provides stability to the upper extremity and protects the deep neurovascular structures:

- Subclavian vessels
- Brachial plexus
- The lung apex

If the mechanism was a fall, there may be other injuries. Inquire about pain in the elbow, shoulder, head, and neck. Differentiate a mechanical fall from a syncopal episode. If there was an altercation, inquire about other injuries and the possibility of abuse. Assess for neurovascular compromise.

The physical examination starts with inspection of the clavicle, because the location of the fracture (proximal, middle, or distal third of the clavicle) will can usually be approximated on visual inspection alone. Palpate for the area of greatest pain. Assess the range of motion of the shoulder, and document whether lung sounds are symmetric.

An x-ray is the initial test of choice to evaluate for fracture of the clavicle, dislocation of the shoulder, and injury to the lungs when there is any concern for pneumothorax or great vessel injury. Computed tomography and magnetic resonance imaging are rarely needed.

Treatment, even for significantly displaced fractures, is typically initiated with an arm sling, though multiple studies have shown lower rates of nonunion of displaced mid-shaft clavicle fractures with surgical repair. A figure-of-eight splint should not be used, because it results in significantly higher rates of patient dissatisfaction. Pain should be controlled with either hydrocodoneacetaminophen (Vicodin) or oxycodone-acetaminophen (Percocet) with the addition of over-the-counter nonsteroidal anti-inflammatory medications such as ibuprofen. Use caution with older patients.

Emergency department referral should be done immediately with the following:

- Open fractures
- Concerning mechanism of injury such as major trauma from a motor vehicle collision
- Possibility of abuse
- Associated pneumothorax or possibility of great vessel injury
- Unstable vital signs



Same or Similar Diagnoses for Follow-Up Visits

DAVID STERN, MD, CPC

Is there a global period for the diagnosis used for follow-up on an evaluation and management (E/M) code when there is not a change in the chief symptom? We had a patient with a skin irritation for which the provider prescribed a hydrocortisone cream for the diagnosis of "dermatitis, unspecified" (L30.9). The provider instructed the patient to return in 1 week if the condition did not clear up. The patient returned 3 days later when the condition had not completely cleared. The provider inspected the skin, stated that the skin was healing well, and told the patient to continue using the cream. What does the urgent care center bill for this recheck on the original condition?

A. There is no limit or global period established for using A. the same diagnosis code in regard to follow-up visits where only the E/M code was billed initially and there was no surgical procedure performed where global periods apply.

The Medicare Learning Network for Evaluation and Management Services Guide¹ states, "For presenting problem with an established diagnosis, the record should reflect whether the problem is

- Improved, well controlled, resolving, or resolved or
- Inadequately controlled, worsening, or failing to change as expected"

Unless the patient is rechecking within the specific global period for a previously billed *Current Procedural Terminology* (CPT) code, an E/M code should be used if the provider documents the medical history, physical examination, and medical decision-making. As long as your documentation meets the



David E. Stern, MD, CPC, is a certified professional coder and is board-certified in internal medicine. He was a director on the founding board of UCAOA and has received the organization's Lifetime Membership Award. He is CEO of Practice Velocity, LLC (www.practicevelocity.com), NMN Consultants (www.urgentcareconsultant.com), and PV Billing (www.practicevelocity.com/urgent-care-billing/), providers of software, billing, and urgent care consulting services. Dr. Stern welcomes your questions about urgent care in general and about coding issues in particular. "The provider instructed the patient to return in 1 week if the condition did not clear up. The patient returned 3 days later when the condition had not completely cleared.... What does the urgent care center bill for this recheck on the original condition?"

required components for assigning an E/M code, you can bill that E/M code with the ICD-10 (*International Classification of Diseases, 10th Revision, Clinical Modification*) codes, whether or not those same ICD-10 codes were coded in a recent visit.

The patient obviously had concerns that the rash had not cleared up. Documenting the location of the rash and the context in which the patient is presenting is considered, at minimum, a brief history of present illness (HPI). Just a question or two regarding the area where the rash is located and documenting the answer(s) suffice for the minimum requirement for the review of systems (ROS), and documenting one past medical, family, or social history (PFSH) item meets the minimum requirement for an established patient, resulting in a problem-focused medical history component.

Performing and documenting an examination of the area where the rash is located will suffice for a problem-focused examination, even if it is restricted to one body area or organ system.

The final and probably most important component of the E/M is the medical decision-making (MDM) component. There are two options listed under the number of diagnoses or treatment options for an established problem:

- Established problem stable or improved
- Established problem worsening
- ¹ https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/downloads/eval_mgmt_serv_guide-ICNoo6764.pdf

CODING Q&A

They both are assigned data points on the Marshfield Clinic audit tool. The other two areas under the MDM section are the "amount and/or complexity of data reviewed," which were not used in your scenario, and the "risk of complications, morbidity and/or mortality." Credit is given even for minor or selflimited problems. These three areas of MDM together would merit assigning a decision-making level of "straightforward complexity of MDM" at a minimum.

If you performed and documented the very minimum requirement for each component of the E/M, you would have a problem-focused medical history, a problem-focused examination, and a straightforward MDM. Thus, with minimum (but appropriate) documentation, you could code at least a level 2 office visit (99212) for the encounter. Use the same diagnosis code (L30.9, "dermatitis, unspecified") because the diagnosis has not changed.

Recently, a patient with stomach pains came to our urgent care clinic and was diagnosed with salmonellosis without having any laboratory tests performed. Several days later, the patient presented with diarrhea and bloody stool. A stool sample was sent to the laboratory, and tests revealed *Campylobacter*, requiring a new prescription. In addition to the laboratory tests, can a new E/M code be billed on the follow-up visit with the original chief presentation?

No. A new-patient E/M code would not be appropriate, because the patient is rechecking with a provider who had already provided face-to-face services to the patient within the last 3 years.

I do not believe that an accurate diagnosis of salmonellosis can be made without testing. However, in the unlikely case that a provider makes this unsupported diagnosis, this recheck would result in at least a level 2 office visit (99212) with just the minimum documentation for a problem-focused medical history and examination. The complexity of the MDM would be moderate because you are assigning a new diagnosis of Ao4.5 (*"Campylobacter* enteritis") for the "number of diagnoses or treatment options," and the laboratory test can be counted toward the "amount and/or complexity of data reviewed." The new prescription would constitute a moderate level of risk in the "risk of complications, morbidity and/or mortality" area. Therefore, with proper documentation of the medical history and physical examination for this ill patient, this new diagnosis would support a new E/M 99214 code.

A patient visited our clinic twice recently. The patient reported restlessness due to anxiety, so our provider prescribed Ambien, for with insomnia. The patient returned for evaluation by the same provider for food poisoning (new chief symptom), but the provider "[A] second visit would not support a new-patient E/M code, because the patient is rechecking with a provider who had already provided face-to-face services to the patient within the last 3 years....
Diagnosis selections require that close attention be paid to the coding instructions for each of the categories."

saw in the medical history that Ambien was prescribed for insomnia. Ambien's adverse effects include stomachache and diarrhea, which the unaware patient mistook for food poisoning. Our provider pointed out the adverse effects and recommended that the patient cease taking Ambien. Can this follow-up on the same original diagnosis of insomnia be billed as a new E/M code?

A. The second visit would not support a new-patient E/M code, because the patient is rechecking with a provider who had already provided face-to-face services to the patient within the last 3 years. In this case, your diagnosis selections require that close attention be paid to the coding instructions for each of the categories.

Because the patient was found to be experiencing adverse effects from the Ambien, you would search for benzodiazepine in the ICD-10's table of drugs and would find ICD-10 code T42.4X5A, "adverse effect of benzodiazepines, initial encounter." The guidelines at the beginning of the section state to "code first, for adverse effects, the nature of the adverse effect...." Because the patient presented with diarrhea caused by drugs, you search and find code K52.1, "toxic gastroenteritis and colitis." You will then be instructed that you must "code first (T51–T65) to identify toxic agent." Therefore, your primary diagnosis is T52.3X1A, "toxic effect of glycols, accidental, initial encounter." Your second diagnosis is K52.1, and your third diagnosis is T42.4X5A.

There was medical necessity with at least the very minimum of documentation required for a level 2 established-patient office visit (99212) and up to a level 4 established-patient office visit (99214), assuming that the physician documentation supported this level.

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DEVELOPING DATA

ata from the 2014 Urgent Care Chart Survey of 1,778,075 blinded visits by patients to more than 800 different urgent care clinics, conducted by the *Journal of Urgent Care Medicine*, reveal that for 2014, the top three medication classes by volume projected to be prescribed at U.S. urgent care centers were, in descending order:

- Oral antibiotics, 72.9 million
- Corticosteroids, 20.5 million
- Narcotic analgesics, 14.9 million

The survey's methodology and data abstraction forms were initially designed in 2008 by researcher Robin M. Weinick, PhD, then an assistant professor at Harvard Medical School and a senior scientist at the Institute for Health Policy at Massachusetts General Hospital, and now associate director of RAND Health.





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