

#### THE JOURNAL OF URGENT CARE MEDICINE®

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### Part 1

# An Urgent Care Approach to Joint and Soft-Tissue Injection/Aspiration



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Psychiatric treatment as an urgent care model

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It can pay to take a leap. More clinics are offering both OM and UC services at one location. Expanding your healthcare ecosystem is a sure way to catch more flies, but it takes the right tools to keep things from getting too sticky. AgilityUC is perfectly fitted for both. Facilitate all visits from one patient record. Give employers only the limited access they need. Manage payer and employer billing within a single solution. Glide through your day.

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# Security Risk Assessment: Protecting Patients and Practice



Securing protected health information (PHI) is a goal we all share. Collectively, however, we are relatively clueless about how to achieve this, largely because of the massive amount of technology that almost all of us have adopted. A simple understanding begins

with the most basic categorization of the technology that we use to store, transfer, and manage PHI: Software and hardware.

*Hardware* includes all devices (desktops, laptops, routers, EKGs, and mobile devices) that store or are used to communicate and transfer PHI.

Software includes all programs used to manage PHI. Electronic Health Records and practice management software are the most obvious, but "bolt on" software increasingly is being adopted in the urgent care setting to assist with things like remote registration, patient flow, and patient satisfaction.

Inventorying all the software and hardware that interfaces with PHI is a good place to start. Again, including all mobile devices in this list is crucial because their portability creates significant risk of a PHI breach.

The next step is to diagram the human interaction with your technology collective and identify all the steps in the process. Below is an example:

- 1. Sign-on 2. Access/Permissions
- 3. Editing rights 4. Exchange of PHI
- 5. E-mail 6. Texting
- 7. Travel 8. Use of devices outside of practice setting
- 9. Access to EHR/PM software from remote locations and devices

The final step is to perform a "Security Risk Assessment" (SRA). An SRA is a great way to audit your practice to ensure compliance with HIPAA and HITECH. Breaches are subject to significant fines, exposing the practice and individual employees to considerable risk. Your best bet is prevention.

The steps and process for a Security Risk Assessment are outlined at www.healthit.gov.

What about "mitigation"? Many of the steps necessary to reduce your organization's security risk are self-explanatory and beyond the scope of this column. One area of risk mitigation that remains a challenge for all organizations is mobile security. Mobile security includes protection of all sensitive information that is stored on mobile devices like laptops and Smartphones. Lost or stolen mobile devices are by far the largest source of potential security breaches today, and for health care practices, which deal with sensitive patient data, the risk is even more acute. In addition to common-sense approaches, here's how technology can help protect your mobile devices:

*Smartphones.* The good news is that all data on most Smartphones and some tablets can be erased in the case of theft. On Android devices, download the Google Sync and/or the Google Device Policy and choose the "Remote Wipe" option to erase all files, email and other data in the device's internal storage and most files stored on the SD card. Users whose devices (including iPads) run on the Apple iOS can download the "Find My Phone" app and either "remote wipe" or "activation lock" their devices.

Laptops. The bad news is that wiping data from a laptop is far more difficult. Limiting access to the device is the best bet. In many cases, the simple password protection on most laptops is insufficient to prevent access to files, email, and other sensitive data. Emerging technology can help bridge the security gap: "Two factor authentication" is a method of security analogous to a "master lock" system. Access to devices requires a "second factor" access code (the Master Lock). This code is something only you could possibly know, or is something randomly chosen by the security vendor and sent to you via SMS text message. The technology can also be applied to most Smartphones. If your laptop is stolen, some of these programs can encrypt all of your files and make them unreadable to anyone without the second-factor identification.

Other emerging technologies for device protection include fingerprint and retinal identification, deemed "mostly" foolproof. But, if you've ever seen "Minority Report" with Tom Cruise, hang on to your eyeballs! Ouch!

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



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### 8 An Urgent Care Approach to Joint and Soft-Tissue Injection/ Aspiration: Part 1

Injection/aspiration therapy for selected musculoskeletal complaints is becoming more common in urgent care practice. Providers need a thorough understanding of injection/aspiration procedures and associated risks to be equipped to deliver rescue therapy to patients.

Thomas V. Gocke, III, MS, ATC, PA-C, DFAAPA

#### PRACTICE MANAGEMENT



### **20** Psychiatric treatment as an urgent care model

Offering mental health services in an urgent care setting could facilitate treatment for conditions such as depression and help eliminate the stigma associated with psychiatric care. *Alan A. Ayers, MBA, MAcc, and Ora Frankel, MD* 

#### CASE REPORT

### **26** Splenic Laceration

Visceral injury is possible in association with the seemingly minor trauma seen in urgent care, underscoring the importance of remaining alert for "red flag" signs and symptoms and judiciously using advanced diagnostics.

JULIE KAFKA, MD, and ABBAS AL-SARAF, MD



#### IN THE NEXT ISSUE OF JUCM

In next month's cover story, we conclude our twopart series on joint and soft-tissue injection/aspiration with a step-by-step review of treatment of the most common musculoskeletal conditions. The article presents approaches to lateral epicondylitis, olecranon and prepatellar bursitis, ganglion cyst, trochanteric bursitis knee injection and aspiration, and evaluation of joint infection. The goal is to highlight often-seen presenting symptoms and give urgent care providers the foundation of knowledge they need to successfully deliver rescue therapy.

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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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Patients are increasingly presenting to urgent care centers seeking immediate relief of joint pain, joint effusion, and recurrent soft-tissue trigger point irritation. To administer rescue ther-



apy for these musculoskeletal complaints, urgent care providers need a thorough understanding of pertinent anatomy and the procedure for injections and aspiration. This month's cover story—the first in a two-part series by Thomas V. Gocke, III, MS, ATC, PA-C, DFAAPA—provides an overview of the inflammatory response, use of corticosteroids and anesthetic agents, pre- and post-aspiration/injection considerations, and the approach to injections for subacromial impingement syndrome.

Thomas V. Gocke, III, MS, ATC, PA-C, DFAAPA, is President/ Founder of Orthopaedic Educational Services, Inc., Boone, NC.



The patient in this month's case report was a teenage basketball player who presented after taking what appeared to be a relatively

minor hit to the abdomen from another player's shoulder. His history of fatigue for the past few weeks coupled with a syncopal episode while standing for an x-ray pointed to the need for a higher level of care. According to authors Julie Kafka, MD, and Abbas Al-Saraf, MD, additional diagnostic tests revealed the ultimate diagnosis: Splenic laceration secondary to blunt abdominal trauma and underlying mononucleosis.

Julie Kafka, MD, is an urgent care fellow at Rockford Memorial Hospital in Rockford, IL. Abbas Al-Saraf, MD, is the director of Convenient Care at Rockford Memorial Hospital in Rockford, Il. This month's practice management article is *JUCM*'s first interview with an expert—on psychiatric treatment as an urgent care model. In it,



Alan A. Ayers, MBA, MAcc talks to psychiatrist Ora Frankel, MD, about her practice, which offers care for mental health issues in an urgent care setting. At The Couch, patients are seen by appointment or on a walk-in basis and a comprehensive evaluation takes about an hour.

Alan A. Ayers, MBA, MAcc, is on the Board of Directors, Urgent Care Association of America, Associate Editor, *Journal of Urgent Care Medicine*, and Vice President, Concentra Urgent Care. Oral Frankel, MD, is a psychiatrist and owner of The Couch Immediate Mental Health Care in Louisville, KY.

#### Also in this issue:

In Health Law this month, **John Shufeldt, MD, JD, MBA, FACEP**, discusses the dangers of relying on a patient's prior diagnosis even when presented with new information.

Sean M. McNeeley, MD, and The Urgent Care College of Physicians review new abstracts on literature germane to the urgent care clinician, including research on antibiotics and middle ear effusion, EMRs and ER productivity, and predicting cellulitis treatment failure.

In Coding Q&A, **David Stern, MD, CPC**, discusses Workers' Compensation, Medicare, and S codes.

Our Developing Data end piece this month looks at provider models used by urgent care centers.

#### To Submit an Article to JUCM

**JUCM,** The Journal of Urgent Care Medicine encourages you to submit articles in support of our goal to provide practical, up-to-date clinical and practice management information to our readers—the nation's urgent care clinicians. Articles submitted for publication in **JUCM** should provide practical advice, dealing with clinical and practice management problems commonly encountered in day-to-day practice.

Manuscripts on clinical or practice management topics should be 2,600–3,200 words in length, plus tables, figures, pictures, and references. Articles that are longer than this will, in most cases, need to be cut during editing. The information you provide should be of practical use to our readers, who have come to practice in an urgent care setting from a variety of clinical backgrounds. Your article should take their perspective into account by considering several key issues, such as: What immediate management is indicated? What labs or diagnostics are required? What are the next steps; with whom should the patient follow up? Who should be admitted or referred to the emergency room? Imagine yourself in the reader's shoes and ensure your article includes the answers to questions you'd be asking.

We prefer submissions by e-mail, sent as Word file attachments (with tables created in Word, in multicolumn format) to *editor@jucm.com*. The first page should include the title of the article, author names in the order they are to appear, and the name, address, and contact information (mailing address, phone, fax, e-mail) for each author.

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### The Urgent Care Association of America congratulates the following centers that recently earned their Certified Urgent Care designation.

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### FROM THE UCAOA PRESIDENT

## UCAOA – Members Working for You!

To better meet the needs of our members and industry, UCAOA has created a new committee structure, welcoming many new volunteers. We would like to highlight several committees and their recent activities over the next few issues of *JUCM*. Please visit www.ucaoa.org/?Committees for more in-depth coverage and information.

The Health & Public Policy Committee has drafted UCAOA position statements that have successfully defended the urgent care industry at state and federal legislative and regulatory agencies, which focus on critical urgent care issues such as limiting patient access to urgent care centers, restrictions on urgent care center scope, and urgent care center mandates for care provision. This committee also communicated to the Centers for Medicare and Medicaid Service about potential barriers to successful participation in Medicare's Physician Quality Reporting Program and physician Value-Based Modifier Program to prevent potential penalties to urgent care providers. Recently, Committee Chair Laurel Stoimenoff addressed more than 200 attendees representing 18 states at the National Conference of State Legislatures' Legislative Summit, sharing how urgent care centers can be an integral part of the healthcare reform solution and should be recognized as a key component of "network adequacy."

The **Education Committee** is finalizing plans for our Fall Conference in Denver. The practice management and clinical sessions offer focused courses to aide all members' practice of urgent care. The keynote speaker, Mr. Scott Friedman, will discuss, *Connecting with Customers* and *The Best Way to Predict the Future is to Create It*. Also, due to increasing demand, we are evaluating conducting regional meetings in between our conference and convention.

The **Accreditation/Certification Committee** reports there are now more than 750 UCAOA-Certified Urgent Care Centers. And, with the recent rollout of the UCAOA Accreditation Program, eight organizations have been designated UCAOA Accredited and on-site surveys for 10 additional organizations are scheduled. Also, informational letters were sent to over



**Nathan Newman** is president of the Urgent Care Association of America. He may be contacted at *info@ucaoa.org.*  "There are now more than 750 UCAOA-Certified Urgent Care Centers. And, with the recent rollout of the UCAOA Accreditation Program, eight organizations have been designated UCAOA Accredited."

600 third party payors announcing the Accreditation Program. UCAOA has renewed its partnership with The Joint Commission, which continues to serve as an option for UCAOA members.

The **Strategic Development Partnerships Committee** has developed a subcommittee, the Exhibitor Advisory Committee, composed of diverse members from our exhibiting vendors and Corporate Support Partners. This committee reviews opportunities to enhance the experience for the Spring Convention and Fall Conference exhibitors and attendees. At the Fall Conference, we will be introducing private appointments in the exhibit hall (when the hall is otherwise closed) to ensure that attendees and vendors have quality time together. Watch your pre-conference emails to learn how you can make an appointment. Also new from this committee, opportunities for vendors now include educational grants for courses allowing businesses to align their names with related topics as well as a new Diamond Level Corporate Support Partner option offering increased visibility and communications opportunities.

We are also partnering with allied organizations. I was invited to address the AAFP Board of Directors, discussing key opportunities for integration and reviewing urgent care support for the Patient Centered Medical Home model.

Thank you to all of the hard-working members of these committees.  $\blacksquare$ 

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# Clinical

# An Urgent Care Approach to Joint and Soft-Tissue Injection/Aspiration: Part 1

**Urgent message:** Injection/aspiration therapy for selected musculoskeletal complaints is becoming more common in urgent care practice. Providers need a thorough understanding of injection/aspiration procedures and associated risks to be equipped to deliver rescue therapy to patients.

THOMAS V. GOCKE, III, MS, ATC, PA-C, DFAAPA

oint pain, joint effusion, and recurrent soft-tissue trigger point irritation are common presentations in urgent care. As more and more patients present seeking immediate relief of such symptoms, it's important that urgent care providers know how to perform injections into soft tissue. Although the skills required are not demanding, introducing needles into joint spaces can be painful and a thorough understanding of the pertinent musculoskeletal anatomy is necessary.

This article provides an overview of the inflammatory response, use of corticosteroids and anesthetic agents, pre- and post-injection/aspiration considerations, and the approach to injections for subacromial impingement syndrome. Part 2 of this series, in a future issue, will review approaches to lateral epicondylitis, olecranon and prepatellar bursitis, ganglion cyst, trochanteric bursitis knee injection and aspiration, and evaluation of joint infection.

The objective of this series is to focus on common musculoskeletal conditions for which urgent care providers might consider injection or aspiration. The

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list of conditions presented is not exhaustive but it highlights common presenting symptoms and successful approaches for injection or aspiration in frequently encountered clinical scenarios. Keep in mind that any



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Table 1. Injectable cortic	osteroids					
Steroid solution	Potency	Half-life	Onset	Duration	Dose	Volume
Hydrocortisone	Low	8-12 hr	Short	Short	50 mg/mL	mL
Triamcinolone acetonide (Kenalog)	Intermediate	12-36 hr	Intermediate	Intermediate	4 mg/mL	mL
Triamcinolone hexacetonide (Aristospan)	Intermediate	12-36 hr	Intermediate	Intermediate	40 mg/mL	g/mL
Methylprednisolone acetate (Depo-Medrol)	Intermediate	12-36 hr	Intermediate/ long	Intermediate/ long	40 mg/mL	mL
Betamethasone acetate (Celestone)	High	26-54 hr	Longer	Longer	6 mg/mL	mL
Dexamethasone acetate (Decadron-LA)	High	26-54 hr	Longer	Longer	8 mg/mL	mL

injection or aspiration procedure should be performed using sterile technique.

#### **The Inflammatory Response**

An acute inflammatory response occurs when bodily injury triggers a non-specific immune response that causes proliferation of leukocytes and increase in blood flow secondary to trauma. The increased blood flow brings polymorphonuclear leukocytes (which facilitate removal of the injured cells/tissues), macrophages, and plasma proteins to the injured tissues. As a result of this process, redness occurs at the injury site, tissue warmth occurs as result of increased cellular activity, swelling results from increased fluid, and pain ensues from tissue injury and stretching of nerve structures. The accumulation of fluid/edema at the injury site can limit the healing process by reducing joint range of motion (ROM), thus facilitating the formation of scar tissue. Therefore, limiting bleeding/edema at an injury site and initiating ROM activities when appropriate (non-fracture trauma) is important to the tissue healing process. Corticosteroids limit release of leukocytes, macrophages, and vasoactive substances, and the formation of prostaglandins that contribute to the inflammatory process.1

#### Corticosteroids

Performing an injection is a simple procedure with few complications. Selection of the injection site is important, taking into consideration skin integrity, potential for infection, underlying medical conditions and intended use of the steroid injection. Having a good understanding of the musculoskeletal anatomy, nerve and vascular anatomy in a particular joint or musculoskeletal region is important to avoid unintended injection or post-procedure complications. As with any procedure, corticosteroid injections, regardless of location, should be performed under sterile technique.

A thorough understanding of surface anatomy usually is enough to adequately deliver a steroid injection into a joint or soft tissue structure. Some providers may elect to use ultrasound to confirm needle placement in the intended joint space or soft-tissue structure, which requires additional training. Whether steroid injections are guided by anatomic landmarks or ultrasound, their number should be limited to reduce risk of premature destruction of joint articular cartilage or tendon rupture associated with repeat injection.<sup>2-5</sup> No more than one injection every 3 to 4 months is a sound rule of thumb, taking into consideration the patient's age, level of arthritic changes, comorbidities, and eligibility for other therapies. In rare cases, patients can be given steroid injections more frequently than 3 to 4 times per year.<sup>2-5</sup>

Many corticosteroids are available for injection and the simplest way to choose is based on desired speed of onset and duration of action (**Table 1**). Like anesthetic agents, corticosteroids have short-onset/short-duration and long-onset/long-duration components. Longeronset/longer-duration steroids take effect in 2 to 3 days and their effects may last for several weeks to months or completely resolve a patient's problem. However, relief of pain and inflammation is not always predictable. Some patients will respond, others will not, and the occasional patient will have a reaction to the steroid itself. Such a "flare reaction" may cause increased local redness and rather severe pain for 12 to 24 hours and can happen for several reasons. One is local injury secondary to the needlestick that triggers a

# LET ENIT BE ENIT MOXEZA



Not actual patient

AGE: 4 DIAGNOSIS: "PINK EYE" (BACTERIAL CONJUNCTIVITIS) FAVORITE ACTIVITY: HIDE-AND-SEEK AT RECESS

### "PINK EYE" IS A **PARTY POOPER**



Twice-daily dosing for seven days<sup>1</sup>

Approved for patients four months and older

#### A MOBILE RESOURCE

MOXIFLOXACIN HCI

OPHTHALMIC SOLUTION)

0.5% AS BASE

OVER 93% OF COMMERCIALLY INSURED PATIENTS COVERED<sup>6</sup>

 Proven effective against common bacterial conjunctivitis pathogens<sup>2,3</sup> Formulated with increased viscosity to enhance retention on the eye<sup>4,5</sup>

- Offers eligible patients instant savings at the pharmacy\*
- Educational information
- Helpful dosing information plus an instructional video
- Fun games kids can play from smartphone or tablet a great incentive when administering drops \*Eligibility Terms and Conditions Apply. See DROPS101.com

been reported, some following the first dose. If an allergic reaction to moxifloxacin occurs, discontinue use of the drug.

Prolonged Use - Prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. If superinfection occurs, discontinue use and institute alternative therapy.

Contact Lens Wear - Patients should be advised not to wear contact lenses if they have signs or symptoms of bacterial conjunctivitis.

#### **Adverse Reactions:**

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The most common adverse reactions reported in 1-2% of patients were eye irritation, pyrexia, and conjunctivitis.

#### For additional information about MOXEZA® Solution please see brief summary of Prescribing Information on adjacent side.

References: 1. MOXEZA® Solution package insert. 2. Tauber S, Cupp G, Garber R, Bartell J, Vohra F, Stroman D. Microbiological efficacy of a new ophthalmic formulation of moxifloxacin dosed twice-daily for bacterial conjunctivitis. *Adv Ther.* 2011;28(7):566-574. 3. Tasman W, Jaeger EA, eds. *Duane's Ophthalmology.* Philadelphia, PA: Lippincott Williams & Wilkins; 2012. 4. Lindstrom R, Lane S, Cottingham A, et al. Conjunctival concentrations of a new ophthalmic solution formulation of moxifloxacin 0.5% in cataract surgery patients. *J Ocul Pharmacol Ther.* 2010;26(6):591-595. 5. Data on file, Alcon, a Novartis Company. 6. Formulary data provided by Pinsonault Associates, LLC, PathfinderRx, March 2013.

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#### INDICATION AND USAGE

MOXEZA® Solution is indicated for the treatment of bacterial conjunctivitis caused by susceptible strains of the following organisms: Aerococcus viridans\*, Corynebacterium macginleyi\*, Enterococcus faecalis\*, Micrococcus luteus\*, Staphylococcus arlettae\*, S. aureus, S. capitis, S. epidermidis, S. haemolyticus, S. hominis, S. saprophyticus\*, S. warneri\*, Streptococcus mitis\*, S. pneumoniae, S. parasanguinis\*, Escherichia coli\*, Haemophilus influenzae, Klebsiella pneumoniae\*, Propionibacterium acnes, Chlamydia trachomatis\* (\*efficacy for this organism was studied in fewer than 10 infections.)

#### **Dosage and Administration:**

Instill 1 drop in the affected eye(s) 2 times daily for 7 days.

#### **IMPORTANT SAFETY INFORMATION** Warnings and Precautions:

Topical Ophthalmic Use Only - NOT FOR INJECTION. MOXEZA® Solution is for topical ophthalmic use only and should not be injected subconjunctivally or introduced directly into the anterior chamber of the eve.

Hypersensitivity Reactions - In patients receiving systemically administered quinolones, including moxifloxacin, serious and occasionally fatal hypersensitivity (anaphylactic) reactions have

(moxifloxacin HCl ophthalmic solution) 0.5% as base

#### BRIEF SUMMARY OF PRESCRIBING INFORMATION. FOR ADDITIONAL INFORMATION REFER TO THE FULL PRESCRIBING INFORMATION.

#### INDICATIONS AND USAGE

MOXEZA® solution is indicated for the treatment of bacterial conjunctivitis caused by susceptible strains of the following organisms: Aerococcus viridans\*, Corvnebacterium macginlevi\*, Enterococcus faecalis\*, Micrococcus luteus\*, Staphylococcus arlettae\*, Staphylococcus aureus, Staphylococcus capitis, Introductus interes , stapinytocucus anetae , stapinytocucus aneta, stapinytocucus tapins, Staphylococcus epidermitis, Staphylococcus haemohyticus, Staphylococcus hominis, Staphylococcus saprophyticus\*, Staphylococcus ameni\*, Streptococcus mitis\*, Streptococcus pneumonia, Streptococcus parasanguinis\*, Escherichia coli\*, Haemophilus influenzae, Klebsiella pneumoniae\*, Propionibacterium acnes, Chlamydia trachomatis\*

\*Efficacy for this organism was studied in fewer than 10 infections.

#### DOSAGE AND ADMINISTRATION

Instill 1 drop in the affected eye(s) 2 times daily for 7 days.

#### DOSAGE FORMS AND STRENGTHS

4 mL bottle filled with 3 mL of sterile ophthalmic solution of moxifloxacin hydrochloride, 0.5% as base.

#### CONTRAINDICATIONS

None

#### WARNINGS AND PRECAUTIONS

Topical Ophthalmic Use Only NOT FOR INJECTION. MOXEZA® solution is for topical ophthalmic use only and should not be injected subconjunctivally or introduced directly into the anterior chamber of the eye

#### Hypersensitivity Reactions

In patients receiving systemically administered quinolones, including moxifloxacin, serious and occasionally fatal hypersensitivity (anaphylactic) reactions have been reported, some following the first does. Some reactions were accompanied by cardiovascular collapse, loss of consciousness, angloedema (including laryngeal, pharyngeal or facial edema), airway obstruction, dyspnea, urticaria, and itching. If an allergic reaction to moxifloxacin occurs, discontinue use of the drug. Serious acute hypersensitivity reactions may require immediate emergency treatment. Oxygen and airway management should be administered as clinically indicated

#### Growth of Resistant Organisms with Prolonged Use

As with other anti-infectives, prolonged use may result in overgrowth of non-susceptible organisms, including fungi. If superinfection occurs, discontinue use and institute alternative therapy. Whenever clinical judgment dictates, the patient should be examined with the aid of magnification, such as slit-lamp biomicroscopy, and, where appropriate, fluorescein staining.

#### Avoidance of Contact Lens Wear

Patients should be advised not to wear contact lenses if they have signs or symptoms of bacterial conjunctivitis.

#### ADVERSE REACTIONS

Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in the clinical trials of a drug cannot be directly compared to the rates in the clinical trials of another drug and may not reflect the rates observed in practice. The data described below reflect exposure to MOXEZA® solution in 1263 patients, between 4 months and 92 years of age, with signs and symptoms of bacterial conjunctivitis. The most frequently reported adverse reactions were eye irritation, pyrexia and conjunctivitis, reported in 1-2% of patients.

#### USE IN SPECIFIC POPULATIONS

#### Pregnancy

Pregnancy Category C. Moxifloxacin was not teratogenic when administered to pregnant rats during organogenesis at oral doses as high as 500 mg/kg/day (approximately 25,000 times the highest recommended total daily human ophthalmic dose); however, decreased fetal body weights and slightly delayed fetal skeletal development were observed. There was no evidence of teratogenicity when pregnant Cynomolgus monkeys were given oral doses as high as 100 mg/kg/day (approximately 5,000 times the highest recommended total daily human ophthalmic dose). An increased incidence of smaller fetuses was observed at 100 mg/kg/day. Since there are no adequate and well-controlled studies in pregnant women, MOXEZA® solution should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

#### **Nursing Mothers**

Moxifloxacin has not been measured in human milk, although it can be presumed to be excreted in human milk. Caution should be exercised when MOXEZA® solution is administered to a nursing mother.

#### Pediatric Use

The safety and effectiveness of MOXEZA® solution in infants below 4 months of age have not been established. There is no evidence that the ophthalmic administration of moxifloxacin has any effect on weight bearing joints, even though oral administration of some quinolones has been shown to cause arthropathy in immature animals

#### Geriatric Use

No overall differences in safety and effectiveness have been observed between elderly and younger patients.

#### CLINICAL PHARMACOLOGY

Microbiology The antibacterial action of moxifloxacin results from inhibition of the topoisomerase II (DNA gyrase) and topoisomerase IV. DNA gyrase is an essential enzyme that is involved in the replication, transcription and repair of bacterial DNA. Topoisomerase IV is an enzyme known to play a key role in the statistic of the observement DNA during bacterial cell division. The mechanism of action for the partitioning of the chromosomal DNA during bacterial cell division. The mechanism of action for quinolones, including moxifloxacin, is different from that of macrolides, aminoglycosides, or quintonies, including monitoxacin, is uniterent from that of matchines, anticopies antiogycosties, or tetracyclines. Therefore, movifloxacin may be active against pathogens that are resistant to these antibiotics and these antibiotics may be active against pathogens that are resistant to movifloxacin. There is no cross-resistance between movifloxacin and the aforementioned classes of antibiotics. Cross-resistance has been observed between systemic movifloxacin and some other quinolones. In vitro resistance to moxifloxacin develops via multiplestep mutations. Resistance to moxifloxacin occurs in vitro at a general frequency of between 1.8 x 10<sup>-9</sup> to < 1x 10<sup>-11</sup> for Gram-positive bacteria

#### NONCLINICAL TOXICOLOGY

#### Carcinogenesis, Mutagenesis, Impairment of Fertility

Long-term studies in animals to determine the carcinogenic potential of moxifloxacin have not been performed. Moxifloxacin was not mutagenic in four bacterial strains used in the Ames Salmonella reversion assay. As with other quinolones, the positive response observed with moxifloxacin in strain reversion assay. As with other quinoiones, the positive response observed with moxitoxacin in strain TA 102 using the same assay may be due to the inhibition of DNA gyrase. Moxifioxacin was not mutagenic in the CHO/HGPRT mammalian cell gene mutation assay. An equivocal result was obtained in the same assay when v79 cells were used. Moxifioxacin was clastogenic in the v79 chromosome aberration assay, but it did not induce unscheduled DNA synthesis in cultured rat hepatocytes. There was no evidence of genotoxicity in vivo in a micronucleus test or a dominant lethal test in mice. Moxifloxacin had no effect on fertility in male and female rats at oral doses as high as 500 mg/kg/day, approximately 25,000 times the highest recommended total daily human ophthalmic dose. At 500 mg/kg orally there were slight effects on sperm morphology (head-tail separation) in male rats and on the estrous cycle in female rats.

#### PATIENT COUNSELING INFORMATION

Avoid Contamination of the Product Patients should be advised not to touch the dropper tip to any surface to avoid contaminating the contents.

#### Avoid Contact Lens Wear

Patients should be advised not to wear contact lenses if they have signs and symptoms of bacterial conjunctivitis

#### Hypersensitivity Reactions

Systemically administered quinolones, including moxifloxacin, have been associated with hypersensitivity reactions, even following a single dose. Patients should be told to discontinue use immediately and contact their physician at the first sign of a rash or allergic reaction.

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AAA2650-0512

local inflammatory response. The steroid crystallizes and deposits into the soft tissues or synovial lining, resulting in a secondary synovitis in a joint with pain and swelling. A corticosteroid's solubility also has an impact on likelihood of flare reaction. The more soluble a steroid (Betamethasone acetate®) the

Table 2. Injectable anesthetic agents <sup>14,15</sup>			
Anesthetic agent	Onset	Duration	Maximum dose
Lidocaine 1% (Xylocaine)	<2 min	1-2 hr	4 mg/kg (30 mL) <sup>a</sup>
Lidocaine 1% w/epinephrine (Xylocaine)	<2 min	1-2 hr	7 mg/kg (50 mL) <sup>b</sup>
Mepivacaine 1% (Carbocaine)	3-5 min	1-2 hr	4 mg/kg (28 mL) <sup>b</sup>
Prilocaine 1% (Citanest)	<2 min	>1 hr	7 mg/kg (50 mL) <sup>b</sup>
Bupivacaine 0.125%, 0.25%, 0.5% (Marcaine)	5 min	2-12 hr	2.5 mg/kg (50 mL-0.25%) <sup>b</sup>
Bupivacaine 0.25% w/epinephrine (Marcaine w/epi)	5 min	2-12 hr	3 mg/kg (75 mL-0.25%) <sup>b</sup>

(Total milliliter [mL] max dose based on 70-kg patient.)

<sup>a</sup>http://dailyem.wordpress.com/2012/11/13/quick-er-math-max-dose-lidocaine-for-local-anesthesia/

<sup>b</sup>http://lifeinthefastlane.com/education/procedures/local-anaesthetic

shorter the duration (faster onset) and thus, the lower the risk of flare reaction. The less soluble a steroid (methylprednisolone acetate injectable suspension) the longer the onset and duration but the higher the risks of flare reaction. It should be noted that in a 2009 study, Seshadri et al reported that lidocaine 1% combined with methylprednisolone had a toxic effect on joint chondrocytes in an in vitro model.<sup>6</sup> When selecting a steroid agent for injection, the goal is to maximize antiinflammatory effects and minimize adverse effects.<sup>2-5</sup>

#### **Anesthetic Agents**

Before selecting an agent for soft-tissue injection, urgent care providers should be meticulous about reviewing and documenting a patient's allergy history. Occasionally, for example, patients report that they cannot have lidocaine because of an allergy to dental Novocain. In some cases, the allergy may be to the preservative in the solution rather than to a medication itself. In susceptible individuals, metabisulfite, a sulfite that acts as a preservative, can cause allergic-type reactions ranging from asthmatic episodes to life-threatening anaphylaxis. The overall prevalence of such sensitivity in the general population is unknown but probably low. It is more common in asthmatics than in those who do not have asthma. Mixing epinephrine with an anesthetic agent is not recommended, particularly for joint injections, because in the intra-articular space, it can lead to constriction of the synovial lining, resulting in increased pain.

An anesthetic agent's effectiveness also is a consideration when performing soft-tissue vs. intra-articular injections. For soft-tissue injections, a shorter-onset anesthetic agent may give more immediate pain relief but the duration of pain relief will be shorter. Likewise, a longer-onset anesthetic agent will take longer to provide pain relief but it usually will last for a longer period of time. Regardless of which anesthetic agent you select, being aware of its indications, contraindications, and adverse effects-and particularly its toxic range-is important. Keep in mind that while the toxic dose is calculated based on weight, factors such as age, medical conditions, and overall nutritional status should be taken into consideration when choosing an anesthetic and determining the amount of solution to inject. Patients with hepatic or cardiovascular disease warrant special attention when administering lidocaine injections. Lidocaine is metabolized via the liver and any impairment could lead to toxic adverse effects. Patients with cardiovascular disease may not be able to accommodate the prolongation of A-V conduction associated with use of the drug.

Selection of anesthetic injectable solutions varies widely among urgent care providers (Table 2). High concentrations of bupivacaine have been proven to result in degenerative changes to the articular cartilage with prolonged infiltration of joint structures.7-10 Therefore, use of lower concentrations of bupivacaine 0.125% or 0.25% are recommended for repetitive intra-articular injections. Lower concentrations of bupivacaine 0.25% or 0.125% are beneficial for repetitive intra-articular injections. A similar issue exists regarding use of lidocaine for intra-articular injection. In a study by Dragoo et al in 2012, lidocaine 1% was found to have toxic effects on joint chondrocytes in an in vitro model. Commenting on their in vitro model of lidocaine 1% combined with methylprednisolone, however, Seshadri and colleagues nevertheless noted that "physicians (surgeons) have been injecting patients' joint with these agents for years without any significant adverse effects in human subjects."2-16

Particular attention should be paid to maximal toxic dosing of bupivacaine and lidocaine in patients who are elderly or patients with medical complications that put them at risk for adverse effects with administration of these medications.

#### Pre- and Post-Injection/Aspiration Considerations

Before administering an aspiration or injection, as with any procedure, it is important to perform a thorough physical and history. Assessment of involved musculoskeletal structures to determine the extent of musculoskeletal injury is important and can be done with radiographs, and in some cases, magnetic resonance imaging. A patient's symptoms may range from dull persistent aches to pain with range of motion, to discomfort with resistive motion to pain that is constant and unaffected by motion or rest. Patients with acute injuries will generally experience more severe pain while those with repetitive use or chronic injuries will report a persistent dull achy quality to their pain. For example, some patients with rotator cuff tendinitis may experience some pain with certain ROM but others may experience only general soreness with activity but no pain at rest. Patients who have a tear in the rotator cuff tendon may have acute pain that is present regardless of their activity or shoulder motion. Keep in mind that not all patients experience pain in the same way. A thorough understanding of a patient's activities can help to localize the structures that are either acutely or chronically inflamed. In cases when conservative measures fail, intra-articular corticosteroid or local trigger point injection may provide symptom relief.<sup>2,3,11,17-31</sup>

Needle selection. Needle selection should be based on the intended injection surface/site. Intra-articular injections, for example, require a 1 <sup>1</sup>/<sub>2</sub>- to 2-inch hypodermic needle to penetrate the skin structure in order to enter the joint space. In a patient who has larger surface area and body girth, a spinal needle and/or injection under ultrasound or fluoroscopic guidance may be needed to ensure that the needle is introduced into the intraarticular space. For trigger-point injections, a shorter hypodermic needle should be used. For a para-scapular trigger-point injection, for example, use of a 2-inch needle would risk piercing the pleura, resulting in pneumothorax. For knee and shoulder injections, a 21-gauge or 22-gauge 1 <sup>1</sup>/<sub>2</sub>-inch hypodermic needle is preferable. For injection of smaller joints such as the AC joint or trigger point injections (epicondyle), a 25-gauge or 26gauge 1/2–inch hypodermic needle can be used. For an aspiration, the needle gauge should be of sufficient size to allow fluid to be aspirated out of the joint, ganglion or bursae; a 16-gauge or 18-gauge 1 <sup>1</sup>/<sub>2</sub>-inch hypodermic needle can be used. A 22-gauge spinal needle is preferable for trochanteric bursitis injections and can be used to reliably penetrate to the depth necessary to deliver an injection to the bursae region.<sup>2,11,15</sup>

*Skin preparation.* A variety of solutions are available that can create a sterile skin field in preparation for any procedure. Because introducing a needle into a sterile joint has the potential to cause an infection, as a general rule, joint injection/aspiration and trigger point injections should be performed under sterile technique. That means prepping the skin with an antiseptic solution and using sterile gloves to palpate the injection site while delivering the injection.

Povidone-iodine (or its equivalent) is the default for skin prep prior to injection but chlorhexidine can be used for patients who are allergic to povidone-iodine. Before the prep, the location of the injection entry point should marked on the patient's skin using the hollow end of a pen, skin marking pens, or the capped end of the needle. The mark helps the clinician guide the needle into its intended location. Once the marking is completed, the patient's skin should be prepped. Starting at the marked injection point and going out 3 cm all around it, povidone-iodine sticks or sterile gauze pads soaked in chlorhexidine can be painted on the skin in a circular motion three times. Next, put on sterile gloves and palpate the injection entry point again to confirm that the entry point mark is in the correct position. Just prior to the injection, have an assistant use cold spray to deaden the skin.

With a sterile gloved hand, confirm the entry point again and then introduce the needle into the intended injection site. Deliver the solution with a steady even flow until the solution is completely deposited. Afterwards, withdraw the needle and clean the skin with alcohol to remove the povidone-iodine (or chlorhexidine) and apply an adhesive bandage to minimize bleeding. For patients who are on aspirin or anticoagulant medication, a compression bandage should be used to minimize bleeding at the injection site.

Discharge Instructions. A discharge instruction sheet should be provided and reviewed with the patient who has undergone a joint aspiration or intra-articular/trigger point corticosteroid injection (**Table 3**). It should outline the intended effects of the injection and potential adverse effects, and provide instructions for pain management and a call-back phone number to answer





# THE SOLUTION YOU'VE TURNED TO, SEASON AFTER SEASON AFTER SEASON<sup>1</sup>

# Your allergic conjunctivitis patients can rely on PATADAY<sup>®</sup> Solution for proven ocular itch relief<sup>2</sup> with excellent payer coverage and affordability

- Broad Tier 2 formulary coverage for both commercial and Medicare Part D plans<sup>3</sup>
- Patient Rebate Programs for eligible patients\*

\*This offer is not valid for patients who are enrolled in Medicare Part D, Medicaid, Medigap, VA, DOD, Tricare, or any other government run or government sponsored healthcare program with a pharmacy benefit. Please refer to complete terms and conditions on the rebate materials.

#### **INDICATION AND DOSING**

PATADAY<sup>®</sup> Solution is a mast cell stabilizer indicated for the treatment of ocular itching associated with allergic conjunctivitis. The recommended dose is one drop in each affected eye once a day.

#### **IMPORTANT SAFETY INFORMATION**

PATADAY<sup>®</sup> Solution is for topical ocular use only. It is not for injection or oral use.

To prevent contaminating the dropper tip and solution, care should be taken not to touch the eyelids or surrounding areas with the dropper tip of the bottle. Keep the bottle tightly closed when not in use.

References: 1. IMS Health, IMS National Prescription Audit<sup>™</sup>, August 2010 to November 2013, USC 61500 OPHTH ANTI-ALLERGY. 2. PATADAY<sup>®</sup> Solution package insert. 3. Formulary data provided by Pinsonault Associates, LLC, PathfinderRx, November 2013. Patients should be advised not to wear contact lenses if their eyes are red.

PATADAY<sup>®</sup> Solution should not be used to treat contact lens-related irritation. The preservative in PATADAY<sup>®</sup> Solution, benzalkonium chloride, may be absorbed by soft contact lenses. Patients who wear soft contact lenses and **whose eyes are not red** should be instructed to wait at least ten minutes after instilling PATADAY<sup>®</sup> Solution before they insert their contact lenses.

Symptoms similar to cold syndrome and pharyngitis were reported at an incidence of approximately 10%.

For additional information about PATADAY<sup>®</sup> Solution, please refer to the brief summary of prescribing information on adjacent page.







### BRIEF SUMMARY OF PRESCRIBING INFORMATION.

### FOR ADDITIONAL INFORMATION REFER TO THE FULL PRESCRIBING INFORMATION.

#### INDICATIONS AND USAGE

**PATADAY**<sup>®</sup> Solution is indicated for the treatment of ocular itching associated with allergic conjunctivitis.

#### DOSAGE AND ADMINISTRATION

The recommended dose is one drop in each affected eye once a day.

#### **DOSAGE FORMS AND STRENGTHS**

Ophthalmic solution 0.2%: each ml contains 2.22 mg of olopatadine hydrochloride.

#### CONTRAINDICATIONS

None.

#### WARNINGS AND PRECAUTIONS

For topical ocular use only. Not for injection or oral use.

#### Contamination of Tip and Solution

As with any eye drop, to prevent contaminating the dropper tip and solution, care should be taken not to touch the eyelids or surrounding areas with the dropper tip of the bottle. Keep bottle tightly closed when not in use.

#### **Contact Lens Use**

Patients should be advised not to wear a contact lens if their eye is red.

**PATADAY®** (olopatadine hydrochloride ophthalmic solution) 0.2% should not be used to treat contact lens related irritation.

The preservative in **PATADAY®** Solution, benzalkonium chloride, may be absorbed by soft contact lenses. Patients who wear soft contact lenses **and whose eyes are not red**, should be instructed to wait at least ten minutes after instilling **PATADAY®** (olopatadine hydrochloride ophthalmic solution) 0.2% before they insert their contact lenses.

#### **ADVERSE REACTIONS**

Symptoms similar to cold syndrome and pharyngitis were reported at an incidence of approximately 10%.

The following adverse experiences have been reported in 5% or less of patients:

*Ocular:* blurred vision, burning or stinging, conjunctivitis, dry eye, foreign body sensation, hyperemia, hypersensitivity, keratitis, lid edema, pain and ocular pruritus.

*Non-ocular:* asthenia, back pain, flu syndrome, headache, increased cough, infection, nausea, rhinitis, sinusitis and taste perversion. Some of these events were similar to the underlying disease being studied.

#### USE IN SPECIFIC POPULATIONS

#### Pregnancy

Teratogenic effects: Pregnancy Category C Olopatadine was found not to be teratogenic in rats and rabbits. However, rats treated at 600 mg/kg/day, or 150,000 times the maximum recommended ocular human dose (MROHD) and rabbits treated at 400 mg/kg/day, or approximately 100,000 times the MROHD, during organogenesis showed a decrease in live fetuses. In addition, rats treated with 600 mg/kg/day of olopatadine during organogenesis showed a decrease in fetal weight. Further, rats treated with 600 mg/kg/day of olopatadine during late gestation through the lactation period showed a decrease

in neonatal survival and body weight. There are, however, no adequate and well-controlled studies in pregnant women. Because animal studies are not always predictive of human responses, this drug should be used in pregnant women only if the potential benefit to the mother justifies the potential risk to the embryo or fetus.

#### **Nursing Mothers**

Olopatadine has been identified in the milk of nursing rats following oral administration. It is not known whether topical ocular administration could result in sufficient systemic absorption to produce detectable quantities in the human breast milk. Nevertheless, caution should be exercised when **PATADAY**<sup>®</sup> (olopatadine hydrochloride ophthalmic solution) 0.2% is administered to a nursing mother.

#### **Pediatric Use**

Safety and effectiveness in pediatric patients below the age of 2 years have not been established.

#### Geriatric Use

No overall differences in safety and effectiveness have been observed between elderly and younger patients.

#### NONCLINICAL TOXICOLOGY

### Carcinogenesis, Mutagenesis, Impairment of Fertility

Olopatadine administered orally was not carcinogenic in mice and rats in doses up to 500 mg/kg/day and 200 mg/kg/day, respectively. Based on a 40 µL drop size and a 50 kg person, these doses were approximately 150,000 and 50,000 times higher than the MROHD No mutagenic potential was observed when olopatadine was tested in an in vitro bacterial reverse mutation (Ames) test, an in vitro mammalian chromosome aberration assay or an in vivo mouse micronucleus test. Olopatadine administered to male and female rats at oral doses of approximately 100,000 times MROHD level resulted in a slight decrease in the fertility index and reduced implantation rate; no effects on reproductive function were observed at doses of approximately 15,000 times the MROHD level.

#### Rx only

Reference: 1. IMS Health, IMS National Prescription Audit, August 2010 to October 2013, USC 61500 OPHTH ANTI-ALLERGY.

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#### INJECTION/ASPIRATION: PART 1

"The posterior approach is the most common and the easiest way to enter the subacromial space and the glenohumeral joint."

patient questions or concerns. Failure to provide such information may cause anxiety in patients who have unexpected reactions following an injection/ aspiration. <sup>2-5, 11</sup>

#### **Subacromial Impingement Syndrome**

Shoulder pain is a common complaint that causes patients to present for examination. Rotator cuff tendonitis, shoulder bursitis, inflammation of the intra-articular portion of the biceps tendon, and osteoarthritis of the shoulder are conditions that can cause shoulder pain. When conservative treatments are not effective or a patient wants more immediate relief of shoulder pain a corticosteroid injection can be beneficial.

The three approaches for delivery of injections to the subacromial space are anterior, lateral, and posterior. The posterior approach is the most common and the easiest way to enter the sub-acromial space and the glenohumeral joint (**Figure 1**). It is also the safest way to avoid nerve, artery or vein during introduction of a needle into the shoulder. The lateral approach is more difficult to master and requires a thorough understanding of the shoulder anatomic land-

#### Table 3. Discharge Instruction Example

Corticosteroids are a class of medications related to cortisone – a steroid. Medications in this class of anti-inflammatory drugs are powerful and can reduce inflammation quickly. Corticosteroids are not pain medications but when they reduce inflammation, they can have a direct impact on pain relief. While the inflammation for which corticosteroids are given can recur, in most cases, patients experience relief of their symptoms for many months and possibly for years. Steroid injections are intended to relieve inflammation from conditions such as tendonitis, bursitis, arthritis, and painful spinal cord/nerve root conditions. Steroid injections should be limited to three to four times per year because of the potentially harmful changes seen in tissue/joint structures in patients who receive too many steroid injections.

#### **Side Effects**

- Flare Reaction An unintended increase in pain or swelling following a corticosteroid injection. This can occur as a result of needle trauma to the joint or a crystallization of the steroid solution within the joint. This reaction usually resolves within 48 to 72 hours of onset.
- Elevated Blood Sugar Follow your primary care provider's recommendations on blood sugar elevation. Check your blood sugar frequently over the next 3 days because it could rise as a result of your injection.
- Facial Flushing
- Pain
- Infection
- Skin Pigment Changes
- Loss of Fatty Tissue
- Tendon Rupture

#### Instructions

- Apply an ice pack to the injection site twice (2x) daily for 20 to 30 minutes.
- Take anti-inflammatory medication or pain medications if you need something for injection site soreness.
- Limit activities for at least 24 hours to minimize increased injection site pain and to maximize the benefits of the steroid medication.
- If you have hives, rashes, difficulty breathing, facial swelling or anaphylactic symptoms, go to the closest Emergency Room or call 911 IMMEDIATELY.
- If you get a red, swollen knee or run a fever >101.5°F for 24 hours after the injection, call our office at 000-000-0000 or go to the Emergency Room.
- If you experience a flare reaction call our office or the on-call provider at XXX-XXX-XXXX
- Your follow up appointment will be on (date)\_\_\_\_\_- at \_\_\_\_\_AM/PM

marks. Less skilled urgent care providers will deliver a sub-muscular injection if they fail to enter the subacromial space. The anterior approach is used less often and is recommended only for skilled practitioners.<sup>2,3,17, 23, 32,33</sup>

The best patient position for a shoulder injection is with the patient seated and regardless of the approach, the appropriate body landmarks should be identified prior to injection to ensure that the injection is delivered into the subacromial space appropriately (**Figure 2**). Mark the posterior injection site and then prep the

### Urgent Care Medicine Medical Professional Liability Insurance

The Wood Insurance Group, a leading national insurance underwriter, offers significantly discounted, competitively priced **Medical Professional Liability Insurance** for **Urgent Care Medicine**. We have been serving the Urgent Care community for over 25 years, and our UCM products were designed specifically for Urgent Care Clinics.

#### Our Total Quality Approach includes:

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- Per visit rating (type & number)
- Prior Acts Coverage
- Defense outside the limit
- Unlimited Tail available
- Exclusive "Best Practice" Discounts
- Protects the Clinic and Providers
- Exceptional Service Standards
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"Once the needle enters the subacromial space, there is little resistance when the cortisone– anesthetic solution is injected."

skin with antiseptic solution. As a guide for injection, place your index finger on the coracoid process and your thumb adjacent to the injection portal. When the needle is introduced into the subacromial space, follow the path toward the coracoid process and angle slightly cephalad to slide beneath the acromial spine. Once the needle enters the subacromial space, there is little resistance when the cortisone–anesthetic solution is injected. Most patients report no pain associated with the procedure.

Patients should be advised to take it easy for 24 hours after a subacromial injection to allow the medication to have its intended affect in reducing inflammation and to reduce the risk of postinjection pain. Slings should not be used after injection because prolonged immobilization can reduce motion and promote stiffness rather than encouraging use of the shoulder. If patients are not discharged with ice on the shoulder, they should be instructed to apply it as soon as they are able. Cryotherapy

# has proven to help reduce post-injection soreness and pain.<sup>1-5, 11</sup> Patients should be instructed to apply ice to the injection site for 20 to 30 minutes two or three times the day of injection, at 1- to 2-hour intervals.

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# **Practice Management**

# Psychiatric treatment as an urgent care model

**Urgent message:** Offering mental health services in an urgent care setting could facilitate treatment for conditions such as depression and help eliminate the stigma associated with psychiatric care.

#### Introduction

Onsumers value urgent care for its on-demand access to medical treatment without waiting to schedule a doctor's appointment and for its cost savings over hospital emergency rooms (ERs). While urgent care centers have historically focused on treating coughs, sniffles, cuts, scrapes, sprains and strains, the convenience and affordability of urgent care can apply to other medical specialties.

This interview with an expert focuses on the provision of psychiatry services as an emerging business model in urgent care and it also addresses how urgent care providers can raise their awareness of mental health issues and develop referral relationships in their communities.

#### The Couch's Business Model

*Alan Ayers:* The Couch has a unique business model. Please describe the services that you offer.

**Ora Frankel:** At The Couch, we see patients by appointment or on a walk-in basis. They can receive a full psychiatric evaluation, as they would in a private practice, with one of our psychiatric nurse practitioners (NPs). The comprehensive evaluation, which is our main service, takes approximately 1 hour and, if appropriate, a patient will be referred to therapy or started on medication. If, for example, a patient already has a psychiatrist in the community but can't get into that practitioner in short order, we would see the individual



and perhaps evaluate medications. We would then fax a record of the individual's visit to the psychiatrist of record and recommend follow up with that provider. In essence, we can be an on-call service for psychiatrists.

The second scenario is the patient who has not yet seen a psychiatrist and wants to but is experiencing a delay getting a first appointment. We have quite a few Medicaid patients who pay out of pocket to see us just to get started because they have to wait several months to get an appointment with a psychiatrist in the community. At the conclusion of the evaluation, we promptly fax our evaluation and treatment plans to the patient's

AUTHORS: **Alan A. Ayers, MBA, MAcc** (interviewer), is a member of the Board of Directors, Urgent Care Association of America, Associate Editor, *JUCM*, and Vice President, Concentra Urgent Care. **Ora Frankel**, **MD** is a psychiatrist and owner of The Couch Immediate Mental Health Care in Louisville, KY.

### Consider CIPRODEX® Otic

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• The power of an anti-inflammatory and antibiotic in each drop<sup>2</sup>

#### FIGHTS AGAINST KEY AOE-CAUSING PATHOGENS:

• Staphylococcus aureus and Pseudomonas aeruginosa<sup>2</sup>

#### FIGHTS AGAINST KEY AOMT-CAUSING PATHOGENS:

 Staphylococcus aureus, Streptococcus pneumoniae, Haemophilus influenzae, Moraxella catarrhalis, and Pseudomonas aeruginosa<sup>2</sup>

#### Established Safety Profile

- No clinically relevant changes in hearing function in pediatric patients testing for audiometric parameters<sup>2</sup>
- The most commonly reported treatment-related adverse reactions in clinical trials in AOE patients: ear pruritus (1.5%), ear debris (0.6%), superimposed ear infection (0.6%), ear congestion (0.4%), ear pain (0.4%) and erythema (0.4%)<sup>2</sup>
- The most commonly reported treatment related adverse reactions in AOM patients with tympanostomy tubes: ear discomfort (3.0%), ear pain (2.3%), ear residue (0.5%), irritability (0.5%) and taste perversion (0.5%)<sup>2</sup>

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CIPRODEX<sup>®</sup> Otic is the **#1** presribed otic antibiotic drop among otolaryngologists and pediatricians since 2007<sup>1</sup>.

**INDICATIONS AND USAGE:** CIPRODEX® Otic is indicated for the treatment of infections caused by susceptible isolates of the designated microorganisms in the specific conditions listed below: Acute Otitis Media (AOM) in pediatric patients (age 6 months and older) with tympanostomy tubes due to Staphylococcus aureus, Streptococcus pneumoniae, Haemophilus influenzae, Moraxella catarrhalis, and Pseudomonas aeruginosa. Acute Otitis Externa (AOE) in pediatric (age 6 months and older), adult and elderly patients due to Staphylococcus aureus and Pseudomonas aeruginosa.

Dosage and Administration: The recommended dosage is four drops of CIPRODEX® Otic suspension into the affected ear twice daily for seven days.

#### **IMPORTANT SAFETY INFORMATION**

**Contraindications:** CIPRODEX<sup>®</sup> Otic is contraindicated in patients with a history of hypersensitivity to ciprofloxacin, to other quinolones, or to any of the components in this medication. Use of this product is contraindicated in viral infections of the external canal including herpes simplex infections.

Warnings: FOR TOPICAL OTIC USE ONLY; NOT FOR INJECTION. This product is not approved for ophthalmic use. CIPRODEX® Otic should be discontinued at the first appearance of a skin rash or any other sign of hypersensitivity. Serious and occasionally fatal hypersensitivity (anaphylactic) reactions, some following the first dose, have been reported in patients receiving systemic quinolones.

**Precautions:** Use of this product may result in overgrowth of non-susceptible organisms, including yeast and fungi. If the infection is not improved after one week of treatment, cultures should be obtained to guide further treatment. The systemic administration of quinolones, including ciprofloxacin at doses much higher than given or absorbed by the otic route, has led to lesions or erosions of the cartilage in weight-bearing joints and other signs of arthropathy in immature animals of various species.

Adverse Reactions: The most commonly reported treatment-related adverse reactions in AOM patients with tympanostomy tubes: ear discomfort (3.0%), ear pain (2.3%), ear residue (0.5%), irritability (0.5%) and taste perversion (0.5%). The most commonly reported treatment-related adverse reactions in clinical trials in AOE patients: ear pruritus (1.5%), ear debris (0.6%), superimposed ear infection (0.6%), ear congestion (0.4%), ear pain (0.4%) and erythema (0.4%).

For additional information about CIPRODEX® Otic, please refer to the accompanying Brief Summary of full prescribing information on adjacent page.

References: 1. IMS Health, IMS National Prescription Audit, 2007 to March 2014, USC 62320 OTIC ANTNFCT W/ GLUCOCORT. 2. CIPRODEX® Otic package insert. 3. Formulary data provided by Pinsonault Associates, LLC, PathfinderRx, March 2014.







(ciprofloxacin 0.3% and dexamethasone 0.1%)

#### 

For additional information refer to the full Prescribing Information

DESCRIPTION CIPRODEX® (ciprofloxacin 0.3% and dexamethasone 0.1%) Sterile Otic Suspension contains the synthetic broad-spectrum antibacterial agent, ciprofloxacin hydrochloride, combined with the anti-inflammatory corticosteroid, dexamethasone, in a sterile, preserved suspension for otic use. Each mL of CIPRODEX® Otic contains ciprofloxacin hydrochloride (equivalent to 3 mg ciprofloxacin base), 1 mg dexamethasone, and 0.1 mg benzalkonium chloride as a preservative. The inactive ingredients are boric acid, sodium chloride, hydroxyethyl cellulose, tyloxapol, acetic acid, sodium acetate, edetate disodium, and purified water. Sodium hydroxide or hydrochloric acid may be added for adiustment of pH.

#### CLINICAL PHARMACOLOGY

Microbiology: Cross-resistance has been observed between ciprofloxacin and other fluoroquinolones. There is generally no cross-resistance between ciprofloxacin and other classes of antibacterial agents such as beta-lactams or aminoglycosides.

INDICATIONS AND USAGE: CIPRODEX® Otic is indicated for the treatment of infections caused by susceptible isolates of the designated microorganisms in the specific conditions listed below:

Acute Otitis Media in pediatric patients (age 6 months and older) with tympanostomy tubes due to Staphylococcus aureus, Streptococcus pneumoniae, Haemophilus influenzae, Moraxella catarrhalis, and Pseudomonas aeruginosa.

Acute Otitis Externa in pediatric (age 6 months and older), adult and elderly patients due to Staphylococcus aureus and Pseudomonas aeruginosa

#### CONTRAINDICATIONS

CIPRODEX® Otic is contraindicated in patients with a history of hypersensitivity to ciprofloxacin, to other quinolones, or to any of the components in this medication. Use of this product is contraindicated in viral infections of the external canal including herpes simplex infections

#### WARNINGS

FOR OTIC USE ONLY (This product is not approved for ophthalmic use.)

#### NOT FOR INJECTION

HYPERSENSITIVITY: CIPRODEX® Otic should be discontinued at the first appearance of a skin rash or any other sign of hypersensitivity. Serious and occasionally fatal hypersensitivity (anaphylactic) reactions, some following the first dose, have been reported in patients receiving systemic quinolones. Serious acute hypersensitivity reactions may require immediate emergency treatment.

#### PRECAUTIONS

General: As with other antibacterial preparations, use of this product may result in overgrowth of nonsusceptible organisms, including yeast and fungi. If the infection is not improved after one week of treatment, cultures should be obtained to guide further treatment. If otorrhea persists after a full course of therapy, or if two or more episodes of otorrhea occur within six months, further evaluation is recommended to exclude an underlying condition such as cholesteatoma, foreign body, or a tumor.

The systemic administration of quinolones, including ciprofloxacin at doses much higher than given or absorbed by the otic route, has led to lesions or erosions of the cartilage in weight-bearing joints and other signs of arthropathy in immature animals of various species.

Guinea pigs dosed in the middle ear with CIPRODEX® Otic for one month exhibited no drug-related structural or functional changes of the cochlear hair cells and no lesions in the ossides. CIPRODEX® Otic was also shown to lack dermal sensitizing potential in the guinea pig when tested according to the method of Buehler.

No signs of local irritation were found when  ${\rm CIPRODEX}^{\otimes}$  Otic was applied topically in the rabbit eye.

Information for Patients: For otic use only. (This product is not approved for use in the eye.) Warm the bottle in your hand for one to two minutes prior to use and shake well immediately before using. Avoid contaminating the tip with material from the ear, fingers, or other sources. Protect from light: If rash or allergic reaction occurs, discontinue use immediately and contact your physician. It is very important to use the ear drops for as long as the doctor has instructed, even if the symptoms improve. Discard unused portion after therapy is compeled.

Acute Otitis Media in pediatric patients with tympanostomy tubes: Prior to administration of CIPRODEX® Otic in patients (6 months and older) with acute otilis media through tympanostomy tubes, the suspension should be warmed by holding the bottle in the hand for one or two minutes to avoid dizziness which may result from the instillation of a cold suspension. The patient should lie with the affected ear upward, and then the drops should be instilled. The tragus should then be pumped 5 times by pushing inward to facilitate penetration of the drops into the middle ear. This position should be maintained for 60 seconds. Repeat, if necessary, for the opposite ear (see dosage and administration).

Acute Otitis Externa: Prior to administration of CIPRODEX® Otic in patients with acute otitis externa, the suspension should be warmed by holding the bottle in the hand for one or two minutes to avoid dizziness which may result from the instillation of a cold suspension. The patient should lie with the affected ear upward, and then the drops should be instilled. This position should be maintained for 60 seconds to facilitate penetration of the drops into the ear canal. Repeat, if necessary, for the opposite ear (see dosage and administration).

**Drug Interactions:** Specific drug interaction studies have not been conducted with CIPRODEX® Otic.

Carcinogenesis, Mutagenesis, Impairment of Fertility: Longterm carcinogenicity studies in mice and rats have been completed for ciprofloxacin. After daily oral doses of 750 mg/ kg (mice) and 250 mg/ kg (rats) were administered for up to 2 years, there was no evidence that ciprofloxacin had any carcinogenic or tumorigenic effects in these species. No long term studies of CIPRODEX® Otic have been performed to evaluate

carcinogenic potential.

Eight *in vitro* mutagenicity tests have been conducted with ciprofloxacin, and the test results are listed below:

Salmonella/Microsome Test (Negative),

E. coli DNA Repair Assay (Negative),

Mouse Lymphoma Cell Forward Mutation Assay (Positive),

Chinese Hamster V79 Cell HGPRT Test (Negative),

Syrian Hamster Embryo Cell Transformation Assay (Negative),

Saccharomyces cerevisiae Point Mutation Assay (Negative), Saccharomyces cerevisiae Mitotic Crossover and Gene Conversion Assay

ccharonnyces cerevisia

(Negative),

Rat Hepatocyte DNA Repair Assay (Positive). Thus, 2 of the 8 tests were positive, but results of the following 3 in vivo test systems gave negative results: Rat Hepatocyte DNA Repair Assay, Micronucleus Test (Mice),

Dominant Lethal Test (Mice).

Fertility studies performed in rats at oral doses of ciprofloxacin up to 100 mg/kg/day revealed no evidence of impairment. This would be over 100 times the maximum recommended clinical dose of ototopical ciprofloxacin based upon body surface area, assuming total absorption of ciprofloxacin from the ear of a patient treated with CIPRODEX® Otic twice per day according to label directions.

Long term studies have not been performed to evaluate the carcinogenic potential of topical otic dexamethasone. Dexamethasone has been tested for in vitro and in vivo genotoxic potential and shown to be positive in the following assays: chromosomal aberrations, sister-chromatid exchange in human lymphocytes and micronuclei and sister-chromatid exchanges in mouse bone marrow. However, the Ames/Salmonella assay, both with and without S9 mix, did not show any increase in His+ revertants.

The effect of dexamethasone on fertility has not been investigated following topical otic application. However, the lowest toxic dose of dexamethasone identified following topical dermal application was 1.802 mg/kg in a 26-week study in male rats and resulted in changes to the testes, epididymis, sperm duct, prostate, seminal vessicle, Cowper's gland and accessory glands. The relevance of this study for short term topical otic use is unknown.

#### Pregnancy: Teratogenic Effects; Pregnancy Category C.

Reproduction studies have been performed in rats and mice using oral doses of up to 100 mg/kg and IV doses up to 30 mg/kg and have revealed no evidence of harm to the fetus as a result of ciprofloxacin. In rabbits, ciprofloxacin (30 and 100 mg/kg orally) produced gastrointestinal disturbances resulting in maternal weight loss and an increased incidence of abortion, but no teratogenicity was observed at either dose. After intravenous administration of doses up to 20 mg/kg, no maternal toxicity was poduced in the rabbit, and no embryotoxicity or teratogenicity was observed.

Corticosteroids are generally teratogenic in laboratory animals when administered systemically at relatively low dosage levels. The more potent corticosteroids have been shown to be teratogenic after dermal application in laboratory animals.

Animal reproduction studies have not been conducted with CIPRODEX® Otic. No adequate and well controlled studies have been performed in pregnant women. Gaution should be exercised when CIPRODEX® Otic is used by a pregnant woman.

Nursing Mothers: Ciprofloxacin and corticosteroids, as a class, appear in milk following oral administration. Dexamethasone in breast milk could suppress growth, interfere with endogenous corticosteroid production, or cause other untoward effects. It is not known whether topical otic administration of ciprofloxacin or dexamethasone could result in sufficient systemic absorption to produce detectable quantities in human milk. Because of the potential for unwanted effects in nursing infants, a decision should be made whether to discontinue nursing or to discontinue the drug, taking into account the importance of the drug to the mother. Pediatric Use: The safety and efficacy of CIPRODEX® Otic have been established in pediatric patients 6 months and older (937 patients) in adequate and well-controlled clinical trials. Although no data are available on patients less than age 6 months, there are no known safety concerns or differences in the disease process in this population that would preclude use of this product (see dosage and administration). No clinically relevant changes in hearing function were observed in 69 pediatric patients (age 4 to 12 years) treated with CIPRODEX® Otic and tested for audiometric parameters.

ADVERSE REACTIONS In Phases II and III clinical trials, a total of 937 patients were treated with CIPRODEX® Otic. This included 400 patients with acute otitis media with tympanostomy tubes and 537 patients with acute otitis externa. The reported treatment-related adverse events are listed below:

Acute Otitis Media in pediatric patients with tympanostomy tubes: The following treatment-related adverse events occurred in 0.5% or more of the patients with non-intact tympanic membranes.

Adverse Event	Incidence (N=400)
Ear discomfort	3.0%
Ear pain	2.3%
Ear precipitate (residue)	0.5%
Irritability	0.5%
Taste perversion	0.5%

The following treatment-related adverse events were each reported in a single patient: tympanostomy tube blockage; ear pruritus; tinnitus; oral moniliasis; crying; dizziness; and erythema.

Acute Otitis Externa: The following treatment-related adverse events occurred in 0.4% or more of the patients with intact tympanic membranes.

Adverse Event	Incidence (N=537)
Ear pruritus	1.5%
Ear debris	0.6%
Superimposed ear infection	0.6%
Ear congestion	0.4%
Ear pain	0.4%
Erythema	0.4%

The following treatment-related adverse events were each reported in a single patient: ear discomfort; decreased hearing; and ear disorder (tingling).

#### DOSAGE AND ADMINISTRATION

#### CIRPODEX<sup>®</sup> OTIC SHOULD BE SHAKEN WELL IMMEDIATELY BEFORE USE.

Acute Otitis Media in pediatric patients with tympanostomy tubes: The recommended dosage regimen for the treatment of acute otitis media in pediatric patients (age 6 months and older) through tympanostomy tubes is: Four drops (0.14 mL, 0.42 mg ciprofloxacin, 0.14 mg dexamethasone) instilled into the affected ear twice daily for seven days. The suspension should be warmed by holding the bottle in the hand for one or two minutes to avoid dizziness, which may result from the instillation of a cold suspension. The patient should lie with the affected ear upward, and then the drops should be instilled. The tragus should then be pumped 5 times by pushing inward to facilitate penetration of the drops into the middle ear. This position should be maintained for 60 seconds. Repeat, if necessary, for the opposite ear. Discard unused portion after therapy is completed.

Acute Otitis Externa: The recommended dosage regimen for the treatment of acute otitis externa is: For patients (age 6 months and older): Four drops (0.14 mL, 0.42 mg ciprofloxacin, 0.14 mg dexamethasone) instilled into the affected ear twice daily for seven days. The suspension should be warmed by holding the bottle in the hand for one or two minutes to avoid dizziness, which may result from the instillation of a cold suspension. The patient should lie with the affected ear upward, and then the drops should be instilled. This position should be maintained for 60 seconds to facilitate penetration of the drops into the ear canal. Repeat, if necessary, for the opposite ear. Discard unused portion after therapy is completed.

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psychiatrist to ensure continuity of care. Some patients choose to continue their care at The Couch, however, we also refer to numerous clinicians in the community, according to a patient's needs. "To probe for mental health concerns, urgent care providers can ask questions about a patient's work and family."

Ora Frankel, MD

#### **Differentiating the Couch**

*Alan Ayers:* What differentiates The Couch from other mental health providers in your community?

**Ora Frankel:** The main difference is our availability when a patient or their family is in crisis. About 3 years ago when I first started working on this project, we did an informal survey of patient wait time for mental health appointments in our area. We called 42 different offices in the community, including private practices and university clinics, some of which were fee-for-service and others that took insurance. On average, 4 to 6 weeks was the earliest that a patient could be seen for a first appointment. The number one thing about The Couch is that if a patient calls in the morning, they can come in that day.

The other thing that differentiates us from an ER is that if a patient needs treatment right away, we provide it. ERs that see patients with mental health issues tend to make a determination as to whether inpatient or intensive outpatient care is warranted. Patients who only need outpatient services don't usually get treated at an ER. They may get a couple of days of medication to damp down anxiety, but they don't actually get mental health care.

The reason that most people seek psychiatric services is because they are in a crisis and need to be seen right away so that treatment can be initiated. We do the triage of an ER but at the same time, also provide patients with the treatment that they need.

#### Why and How the Couch Operates

*Alan Ayers:* What led you as a clinical psychiatrist to create The Couch?

**Ora Frankel:** During my career, I've had the opportunity to work with different types of clientele and in a lot of different models of psychiatric care. I have worked in academics as well as private practice. I trained at the Cleveland Clinic as well Washington University where I stayed on faculty as director of the Child Guidance Clinic. I worked in state hospitals, community mental health clinics, as well as private practice. The one thing that all

patients have in common is that they usually only seek psychiatric care when they are in crisis. However, very often, they may start in counseling rather than receiving a comprehensive psychiatric evaluation. This is akin to treating a diabetic

with a blood sugar of 300 with nutritional counseling and exercise before providing them with insulin.

It isn't unusual for patients with mania or severe depression to receive weeks of counseling before ever seeing a psychiatrist where they could be stabilized with the appropriate medications. Counseling is hugely important, but unlikely to be beneficial until the patient is stabilized.

For some patients, especially those who are poor, elderly, working, or in school, issues of transportation or being able to take time off work or school often lead to missed appointments and noncompliance with medications. I saw a need for a mental health practice where a patient could come with or without an appointment for a quick medication check up when she or her child has the day off, or in the evening, or on a Saturday. It would facilitate getting help to individuals when they are really in crisis and when it is convenient for a patient rather than the clinician or the health care system.

*Alan Ayers:* Why and how do you utilize psychiatric NPs?

**Ora Frankel:** There are two main reasons: cost and the type of training NPs receive. It is more cost-effective to have a NP rather than an MD on duty for 10 hours. But more importantly, I am impressed by the holistic approach of NPs. Their training emphasizes not only diagnostic skills and pharmacotherapy, but I am impressed by the importance they place on hearing and communicating respectfully with a patient.

*Alan Ayers:* Do you accept both cash and insurance from walk-in patients?

**Ora Frankel:** No. We only take cash. We provide patients with a form they can submit to an insurance company to request reimbursement for out-of-network care or at least have the cost of the visit applied towards their deductible. We walk them through the steps they need to take to file with their insurance company and we also provide a Notice of Privacy Practices in compliance with the Health Insurance Portability and Accountability Act (HIPAA). Because The Couch doesn't accept insurance, we don't have the overhead associated with the staff that would be required to bill insurance companies.

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Contact us today! Elitebandc@gmail.com 800-680-9915 *Alan Ayers:* What types of mental health presentations are you seeing in the Louisville suburbs where The Couch operates?

**Ora Frankel:** We see the same presentations as in private practice or the ER, including depression, bipolar illness, attention deficit disorder (ADD), obsessive compulsive disorder (OCD), family conflict, and substance abuse. One patient with HIV was referred to us by a university program because he was having difficulty getting mental health care. It's a compliment to us that the head of the university program wants to send us more referrals because the initial patient received such good care. At The Couch, we provide care in essentially the same way as a private practice and we treat patients with respect.

#### **Urgent Care Providers and Mental Health Care**

**Alan Ayers:** Are there medical complaints that an urgent care physician might see that could be manifestations of an underlying, undiagnosed mental health condition?

**Ora Frankel:** Yes. The classic presentation is the patient with OCD, depression or panic attacks who shows up with recurring, multiple medical complaints for which an underlying medical cause cannot be found. It's important for a physician is to take a few minutes and just listen to a patient and allow the individual to list all of his or her concerns. An anxious patient feels the need to give great detail in order to be sure that the physician won't "miss" something. When a patient is depressed, you can sometimes sense the heaviness, sadness, and lack of animation. It almost takes an effort for that patient to speak.

To probe for mental health concerns, urgent care providers can ask questions about a patient's work and family. When physicians are busy, they often avoid these types of queries for fear of opening Pandora's Box.

**Alan Ayers:** What kind of mental health conditions would you expect patients to commonly present with at urgent care centers? **Ora Frankel:** Children with ADD are known to be frequent visitors to ERs because of falls, accidents, and broken bones and likely would also come to urgent care centers. Medication-seeking patients with chemical dependency also may present. When I was a very naive intern, I treated an agitated, elderly manic woman who was convinced that she had a contact lens stuck on her eye. I spent an hour trying to suction out a lens that was not there (she did have arcus senilis) and the result of that treatment was a raging corneal abrasion. Urgent care providers should be aware that patients in manic phase can sometimes be very convincing!

**Alan Ayers:** What strategies can you suggest to urgent care providers to help them better identify, assess, and provide referral for patients with mental health conditions?

**Ora Frankel:** I think it would be beneficial for urgent care centers to have a psychiatric NP on staff, or a social worker who has been trained in diagnosis of psychiatric conditions and could meet with patients who needed somebody to talk to. It may not be realistic for urgent care providers to do more than a superficial psychiatric assess-

ment due to time constraints. But an NP or well-trained social worker could spend the time needed to listen to patients with mental health issues and get them to really open up about their problems.

#### **Fostering Connections with Mental Health Professionals**

*Alan Ayers:* How would you recommend that urgent care operators identify and cultivate referral relationships with mental health professionals?

**Ora Frankel:** I would suggest that an urgent care provider have a nurse call several local psychiatry offices and ask if they have a clinician who would be willing to take an immediate referral, should the need arise. Most psychiatrists have the capacity to add on a patient at the end of the day or to bring a patent in on an urgent basis. But that call needs to come from a physician not the patient. I think urgent care providers need to be proactive in reaching out to local psychiatrists so they know who is likely to take a patient with a mental health issue.

The other option would be to hire a psychiatrist or a psychiatric nurse to work at an urgent care center one day a week. Patients could then be encouraged to come back on that day to be seen for mental health care.

*Alan Ayers:* Is there anything else you'd like to share with our readers?

**Ora Frankel:** The four major hospital ERs in the Louisville area see 10,000 patients per year who leave with a psychiatric diagnosis and the cost for each of those visits is approximately \$2,000. A study in Kentucky identified 4,500 patients who had used the ER more than 10 times in a year.<sup>1,2</sup> Of those, 80% had a mental health disorder and 45% were substance abusers. To me, it is a waste of time and resources to use the ER to see patients with psychiatric issues that are best treated on an outpatient basis. I think that models like The Couch can free up ERs for treatment of patients with true medical emergencies and help save money in the long run.

The other issue we need to address is the stigmatization of psychiatric care. The Couch is located in a strip mall, next to a high school and we've had students come by who say they've been feeling suicidal. They can literally look in our window and see a welcoming waiting room with friendly staff. No straight jackets or padded rooms in sight. That kind of accessibility normalizes psychiatric treatment. I think that we as physicians should make it more comfortable for patients to get the mental health care that they need.

*Alan Ayers:* The things you have mentioned—reducing ER visits and creating a venue that is accessible, convenient, and welcoming—are exactly what urgent care is about.

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# Case Report Splenic Laceration

**Urgent message:** Visceral injury is possible in association with the seemingly minor trauma seen in urgent care, underscoring the importance of remaining alert for "red flag" signs and symptoms and judiciously using advanced diagnostics.

JULIE KAFKA, MD, and ABBAS AL-SARAF, MD

#### Introduction

lunt abdominal trauma occurs in 10% to 15% of binjured children.<sup>1</sup> History and specifically mechanism of injury, and physical exam are important when a patient presents to the clinic with a suspected blunt abdominal trauma. Usually, injuries to the intra-abdominal organs are caused by an isolated injury such as a direct blow to the upper abdomen or by high-energy mechanisms, such as a motor vehicle crash or a fall from a height.<sup>1</sup> The most commonly effected organs are the liver and spleen. A common pitfall of treating patients with blunt abdominal trauma is the failure to recognize potentially life-threatening complications. This case highlights a presumably benign injury that can lead to worrisome complications. The urgent care practitioner should remain alert to the possibility of visceral injury with the more routine and seemingly minor trauma typically seen in our setting, especially when contributory risk factors are present. Looking for red flag signs and symptoms followed by judicious use of advanced diagnostics can also help.

#### **Case Presentation**

A 17-year-old male basketball player presented to the urgent care center with his mother. Earlier that day he had been practicing with his team when he was injured. He was positioned to take a charge when the shoulder of the opposing player hit his upper abdomen. The patient did not lose consciousness but he did have to

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come out of the inter-squad game due to abdominal pain. He was sitting on the bench when he started to feel weak and clammy. A teammate led him to the bathroom, where he proceeded to vomit three times. He started to feel lightheaded and had to sit down. His mother was called and they proceeded to the urgent care center.

In the office he still felt nauseated and lightheaded. He complained of soreness in his epigastric region.

#### **Observations and Findings**

- PMHx: Gastroesphageal reflux disease, constipation
- PSHx: Open reduction, internal fixation of right 5<sup>th</sup> metatarsal
- Meds: Ibuprofen
- Allergy: Penicillin, sulfa

- Social Hx: Denies smoking, alcohol, or illicit substances.
- Family Hx: None
- ROS: Positive for fatigue for the past few weeks, chest pain

#### Physical Exam

- BP: 107/76
- Pulse: 63
- Temp: 98.2°F
- RR: 20
- SpO<sub>2:</sub> 95%
- Glucose: 120
- Constitutional: Oriented x 3, no distress, clammy, pale
- CV: S1, S2, no murmurs, rubs or gallops.
- Resp: Effort and breath sounds normal.
- Abdominal: Normal appearance. Bowel sounds decreased. Tenderness at the epigastric area and left upper quadrant. No rigidity, rebound, or guarding.
- Skin: Warm and clammy

#### **Differential Diagnosis**

 Rib fracture, peptic ulcer, splenic injury, diaphragmatic injury

#### **Diagnostic Testing**

An abdominal series and blood work were ordered. While the patient was standing for the x-ray he had a fainting episode lasting several seconds. Because of the syncopal episode, the abdominal series and blood work could not be completed and it was deemed that the patient would benefit from a higher level of care. The patient was sent directly to the hospital by ambulance.

#### **Additional Tests**

- CBC: WBC 15.1, hemoglobin 12.6, HCT 38.1, platelets 118
- CMP: Na 138, K 4.6, CO<sub>2</sub> 26, Tot Protein 7.1, Albumin 4.3, Calcium 8.9, Gluc 103, BUN 16, Creat 1.0, Tot Bili 0.5, Alk Phos 187, AST 149, ALT 131, Anion Gap 13.6
   Lipase: 24
- Lipase: 24

Computed tomography of the abdomen and pelvis with contrast revealed a 4-cm laceration in the mildly enlarged spleen anterior to the hilar vessels with evidence of active bleeding in the laceration. A large amount of hemoperitoneum was visible, particularly in the pelvis.

#### Treatment

The patient was admitted to the hospital for further

evaluation. Because he remained hemodynamically stable, the plan was to observe him overnight in the pediatric intensive care unit and make a determination the next day about surgery. Serial hemoglobin and hematocrit measurements initially were ordered every 6 hours. Intravenous (IV) fluids and IV pain medications were started. Oral foods and fluids were withheld during this time period. The patient's lowest hemoglobin and hematocrit were 11.6 and 35.5, respectively, with noted platelets of 105. Over the next 24 hours, his pain continued to improve. His liver enzymes were again checked and continued to be elevated (AST 98, ALT 113). By Day 2, a general diet was initiated. The next morning the patient was transferred to a regular room and allowed to walk around the floor. He noted good pain control with hydrocodone. Prior to discharge on Day 4 of admission, a Monospot test was completed, and was positive.

#### **Final Diagnosis**

Grade 3 splenic laceration secondary to blunt abdominal trauma and underlying mononucleosis.

#### Outcome

At discharge the patient was instructed to refrain from contact sports or physical activity for 6 weeks. On follow-up with the trauma service 1 week after discharge, repeat hemoglobin was 13.7. He denied any pain or nausea. Full recovery was expected from the injury.

#### Significance

This case reaffirms that potential complications can and do occur secondary to the splenomegaly associated with mononucleosis. This rare, but potentially lifethreatening complication should be discussed with patients and underscores the importance of the recommendation of return to sport when diagnosed with infectious mononucleosis.

#### Discussion

The management of a hemodynamically stable splenic injury patient typically requires admission to an acute care floor with monitoring of vital signs, hematocrit, urinary output and restricted activity.<sup>2</sup> Fewer than 5% of patients with spleen injuries require a blood transfusion.<sup>3</sup> A grading system for isolated splenic injuries has been developed by the American Pediatric Surgical Association. According to these guidelines, stable children with isolated spleen injuries, grades I – IV, should receive non-operative management.<sup>4</sup> (Grades I and II laceration involve <1 cm and 1-3 cm of parenchymal depth,

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respectively. Grade III injury is >3 cm of parenchymal depth, whereas a Grade IV injury tends to involve >25% of the spleen.) Most often, children who do require operative management tend to declare themselves within the first 12 hours after injury.<sup>2</sup>

Regarding splenic enlargement in association with mononucleosis, more than 50% of individuals with this diagnosis develop enlargement within the first 2 weeks after experiencing symptoms. Thus, the current consensus from literature is that light, noncontact activities may begin 3 weeks from symptom onset.<sup>5</sup> If the patient remains symptomatic with fever, fatigue, or pharyngitis, however, return-to-activity should not be initiated. That is equally true if, upon re-examination, the spleen appears enlarged. Controversy still exists regarding discussions about return to play when contact activity is involved. Usually splenic ruptures occur within the first 3 weeks after an individual contracts mononucleosis, but cases have been described in which rupture occurred as long as 7 weeks after the illness began.<sup>4</sup> Therefore, return-to-play decisions should be discussed with the patient and the risks and benefits should be reviewed.

#### Conclusion

At some point in their careers, urgent care providers will be called upon to evaluate a patient with blunt abdominal trauma. A high degree of suspicion for intraabdominal injury is necessary during such a clinical examination. History and physical examination are key components for accurate diagnosis in such cases, particularly when more specific diagnostic imaging, such a CT scan, are not available in the urgent care setting.

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# CLINICAL CHALLENGE

In each issue, *JUCM* will challenge your diagnostic acumen with a glimpse of x-rays, electrocardiograms, and photographs of dermatologic 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*.



This patient presented with a jammed thumb.

View the images 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



Diagnosis: The x-rays reveal a Bennett fracture (arrows).

Bennett fractures are caused by an axial loading of a flexing thumb, often from a fall or blow from an object like a soccer ball or football. Closed reduction and thumb spica immobilization are indicated, but these injuries frequently re-displace and should always be managed in consultation with an orthopedic surgeon. Open reduction and fixation for persistent displacement is required.

Acknowledgement: Case presented by Teleradiology Specialists (http://www.teleradiologyspecialists.com)



HEALTH LAW

# Bayes' Theorem and Urgent Care Medicine: Why it Matters

JOHN SHUFELDT, MD, JD, MBA, FACEP

ow many times have you encountered a patient who presents with an issue and tells you about a previously diagnosed condition with which he or she is having ongoing symptoms? It happens to me nearly every shift.

A 35-year-old male presents with chronic back pain. He has been to your urgent care center a number of times in the past and presents again with a variation of the same complaint. You review the past record, noting that one of your predecessors labeled him a "drug seeker." This time his back pain radiates down both legs but he has no reported weakness, saddle anesthesia or incontinence. Your findings on physical exam, however, demonstrate a slight 4+/5 weakness on right leg extension.

At this point, what do you do? Do you take a step back, reevaluate, and come up with a new plan to ensure the appropriate diagnosis? Or do you "kick the can down the road" and simply treat the symptoms, sending the patient away for the next provider to sort out the diagnosis when the symptoms become more severe? In summary, did you change your beliefs (drug seeker) in light of the additional information (pain radiating down the legs and slight weakness)?

Enter Bayes. Thomas Bayes was an 18<sup>th</sup> century English statistician and minister known for a theorem that bears his name, which was unpublished until after his death. Bayes' theorem seems to be a straightforward, one-line rule: By updating our initial beliefs with objective new information, we get a new and improved belief. Or as John Maynard Keynes said, "When the facts change, I change my opinion..."

Bayes' theorem is credited in cracking of the Enigma code, which allowed the Allies to track down German submarines; in DNA decoding; spam filters; the Google search engine; and



**John Shufeldt** is CEO of Urgent Care Integrated Network and sits on the Editorial Board of *JUCM*. He may be contacted at *Jshufeldt@Shufeldtconsulting.com*. in improvements in homeland security.

Bayes' theorem depends upon a clever pivot: If you want to assess the strength of your assumption given the evidence, you must also assess the strength of the evidence given your assumption.

Regarding the patient above, Bayes would ask three questions:

- How confident are you in the veracity of the diagnosis of drug seeker?
- On the assumption that your original diagnosis is correct, how confident are you that the new history and physical is accurate?
- And, whether or not the original diagnosis is accurate, how confident are you that the new information is accurate?

Make sense? A prior diagnosis can impede our current interpretation of the patient's condition and bias us to not seek an alternative diagnosis.

Now let's flip to our patient's alleged drug-seeking behavior. Refusing to simply kick the can, you ask the patient for a urine sample to test your predecessor's hypothesis. The high-quality drug test your center uses is 99% sensitive and 99% specific. This means the test will produce 99% true-positive results for drug users and 99% true-negative results for non-drug users. Our patient (selected somewhat randomly) tests positive, not for opioids (prescription pain meds) but for methamphetamines. What do you do now?

Do you throw this patient's drug-seeking ass out of your urgent care center? Not so fast. Despite the obvious accuracy of the test, if he tests positive, it is more likely that he does not use the drug than that he does. Okay, now you think I'm on drugs.

Let me prove it to you. If 1000 individuals are tested for methamphetamines, we expect to find 995 non-users and five users. From the 995 non-users, 0.01 (99% specificity) x 995, 10 false positives are expected. From the 5 users, 0.99 (99% sensitivity) x 5, 5 true positives are expected. Thus out

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#### HEALTH LAW

### "Do not be wedded to a prior diagnosis when presented with new information."

of 15 positive drug tests, only five or 33% are genuinely positive. Even if the sensitivity was 100% and the specificity 99%, the probability would still be 33%.

Using Bayes: P = 33.2 = 0.99

0.99 X 0.005 0.99 X 0.005 + 0.01 X 0.995

If specificity was increased to 99.5% and the sensitivity decreased to 99%, the probability rises to nearly 50%. These results arise because the number of non-users is very large compared to the number of users, which means that the number of false positives (0.995%) outweighs the number of true positives (0.495%).

Here is another example. Remember when merthiolate was used in vaccines and was thought to cause autism? It made sense at the time that this seemingly causal relationship was linked to the disease of autism. Then came evidence that despite the removal of merthiolate, the rate of autism did not decline. Yet, despite this posterior knowledge (after the outcome of the study), some individuals remain convinced that their prior hypothesis (merthiolate causes autism) is correct.

Back to our patient. You have convinced yourself that the urine drug screen was a false positive and the patient is not abusing or diverting prescription narcotics. Now, your prior hypothesis needs to be altered. More likely than not, the patient is not, as your predecessor decreed, a "drug seeker." And you have new historical and physical data that the patient may, in fact, have a pathological reason for his symptoms.

Here is where we get ourselves in trouble. A nurse tells us that a patient has new findings or complaints yet we blindly continue down the same diagnostic path we were on before the new symptoms. Or, like the people who still attribute autism to vaccines, we fail to update our new hypothesis when presented with new facts.

Here is the take-home point: Do not be wedded to a prior diagnosis when presented with new information. This happens ALL THE TIME and is a leading contributor to medical misadventures and untoward patient outcomes.

Be fluid. Conditions change, people change and the facts change. Update your analysis when presented with new data and do not fail into the "Well, he DID have a history of XYZ and I went along with what my predecessor determined was the best plan of action" or you may find yourself on the wrong end of an 18<sup>th</sup> century minister's theorem.



- Antibiotics and middle ear effusion
- EMRs and ER productivity
- Predicting cellulitis treatment failure
- Ultrasound for detection of MRSA
- Clinical gestalt for PE and ACS
- 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.

#### Antibiotics and middle ear effusion

Key point: Treatment with antibiotics seems to reduce the duration of middle ear effusion.

Citation: Tapiainen T, Kujala T, Renko M, et al. Effect of antimicrobial treatment of acute otitis media on the daily disappearance of middle ear effusion: A placebo-controlled trial. *JAMA Pediatr.* 2014;168(7):635-641.

Authors in this randomized, double blind, placebo-controlled trial compared 84 children aged 6 months to 15 years with acute otitis media who were either given amoxicillin clavulanate (40 mg/kg) or placebo for 7 days. The primary outcome observed was the length of time to resolution of middle ear effusion. Patients were examined by otoscopy and tympanometry on days 3, 7, and once weekly until effusion cleared. The results showed a 2-week difference between placebo and antibiotic groups (4 weeks versus 2 weeks, respectively). The data also showed a much smaller number of ear effusions at 60 days. The treatment group had no bilateral effusions at 60 days. From the acute care perspective, further research is needed to confirm these results as well as to decide if this is only present when amoxicillin is combined with clavulanic acid or if plain amoxicillin would suffice. The current recommendation for un-



Sean McNeeley 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 founding board member of UCCOP and vice chair of the Board of Certification of Urgent Care Medicine. He also sits on the *JUCM* editorial board. complicated otitis media is amoxicillin 90 mg/kg. If this study is replicated on a larger scale and the decreased effusion time is found to be clinically relevant to patients, this may reverse the wait-and-see trend that is currently advised for many patients with mild otitis media. For now, the difference in resolution of effusion is interesting but based on the small number of patients, a change in current practices may be premature.

#### **EMRs and ER productivity**

*Key point: Surprisingly this study shows that electronic medical records (EMR) do not reduce productivity in the emergency room setting.* 

Citation: Ward MJ, Landman AB, Case K, Berthelot J, Pilgrim RL, Pines JM. The effect of electronic health record implementation on community emergency department operational measures of performance. *Ann Emerg Med.* 2014;63(6):723-730.

Authors in this study attempted to see if implementation of an electronic medical record (EMR) reduced efficiency. This study took place in a retrospective manner and compared several metrics including arrival to provider, admitted, discharged, and length of stay times. Although the timeframes 1 year after EMR implementation were slightly increased as much as 6 minutes due to the EMR, the authors felt that it was insignificant. The study reviewed the operation statistics before and 1 year after an EMR was implemented at 23 community hospitals. It produced a few interesting points that might benefit those who work in urgent care. First, the EMR was optimized for the emergency room (ER) setting. Although the time to efficiency was not specifically measured, 1 year is a long time to be potentially less

efficient in the competitive urgent care market. The shorter length of stay in an urgent care center compared with an ER makes a few minutes per patient, a more significant issue. Two extra minutes per patient in a center that sees 30 patients per day would potentially create 60 minutes of extra wait time for the last patient. Also, the difference from the mean performance was significant between the 23 sites. As the authors noted, understanding the factors that were different between those becoming more efficient and those becoming less efficient would be helpful information.

#### Predicting cellulitis treatment failure

Key point: Fever and historical information help predict cellulitis treatment failure.

Citation: Peterson D, McLeod S, Woolfrey K, McRae A. Predictors of failure of empiric outpatient antibiotic therapy in emergency department patients with uncomplicated cellulitis. *Acad Emerg Med.* 2014;21(5):526-531.

In this prospective cohort study of patients presenting to the emergency room with new onset of cellulitis and no previous antibiotics, the author looked for factors that predicted treatment failure. Treatment failure was defined as need for admission or change of antibiotics. Once cellulitis was diagnosed, patients were either admitted, given oral antibiotics, or given intravenous (IV) antibiotics and asked to return the following day. Multiple characteristics of patients were documented by a questionnaire. A total of 497 patients were reviewed in this study. Of those, 185 received oral antibiotics, 81 IV and then oral antibiotics and 231 just IV antibiotics. The number of patients failing treatment were 39 (21%), 22 (27%), and 41(18%), respectively. The most common treatment failure was a need to change oral antibiotic. Of the many potential risk factors for failure, fever at triage (odds ratio [OR] = 4.3), chronic leg ulcers (OR = 2.5), chronic edema (OR = 2.5), prior cellulitis in the same area (OR 2.1), and cellulitis at a wound site (OR = 1.9) were noted to be statistically significant. From an urgent care perspective, this preliminary study can at least point to a subgroup of patients who may need stronger antibiotics or consideration of IV antibiotics. Further research including prospective confirmation of these risk factors and inclusion of patients presenting to urgent care with cellulitis would be beneficial.

#### Ultrasound for detection of MRSA

### Key point: Ultrasound differences may help predict presence of methicillin-resistant Staph infections.

Citation: Gaspari RJ, Blehar D, Polan D, Montoya A, Alsulaibikh A, Liteplo A. The Massachusetts abscess rule: A clinical decision rule using ultrasound to identify methicillin-resistant *Staphylococcus aureus* in skin abscesses. *Acad Emerg Med.* 2014;21(5):558-567. The authors in this study noted that an increased failure rate for abscess treatment was likely due to increased community-acquired methicillin-resistant Staphylococcus aureus infections (CA-MRSA) and they attempted to differentiate CA-MRSA on ultrasound from other infections. A decision rule for likely presence of CA-MRSA was developed by looking at possible predictors of CA-MRSA on ultrasound and confirmation by culture. Ultrasound was performed on an abscess before incision and drainage (I&D) and abscess content was sent for culture. Two physicians blinded to the culture results reviewed the images with a focus on a list of predictors of CA-MRSA. The study included 605 patients, 50% of whom were found to be infected with CA-MRSA and 26% with methicillin-sensitive S. aureus infections. Three sonographic factors—well-defined edge, small volume, and irregular or indistinct shape—were found to predict CA-MRSA. Abscesses with these characteristics were 7 times more likely to grow CA-MRSA. Once again, this study is preliminary without prospective confirmation of these results. Although most urgent care centers do not have access to ultrasound, this study provides one more reason to consider adding this option. Obviously the uncertainty of reimbursement and whether a physician would choose a different antibiotic based on this information would also need to be considered.

#### Clinical gestalt for PE and ACS

Key point: Clinician gestalt is likely more accurate in pulmonary embolism pretest possibility than acute coronary syndrome. Citation: Kline JA, Stubblefield WB. Clinician gestalt estimate of pretest probability for acute coronary syndrome and pulmonary embolism in patients with chest pain and dyspnea. Ann Emerg Med. 2014;63(3):275-280.

Many studies have shown that clinician gestalt may be as good as algorithms and computer models. In this study, patients with undifferentiated chest pain and dyspnea after exam and EKG were evaluated for risk of acute coronary syndrome (ACS) and pulmonary embolus (PE). This study took place in the emergency department and clinicians were faculty, third-year residents, and physician assistants. The clinicians' gestalt was compared to an attribute-matching computer program which included 8 attributes for ACS and 10 for myocardial infarction. A total of 840 patients were enrolled who had complete data including physician prediction using a visual analog scale. The final diagnosis was ACS in 23 patients and PE in 17 patients. When clinicians chose zero possibility of PE and ACS, no patient had an event in the following 90 days. Much better performance by physicians was noted with PE than ACS due to poor specificity. Overall clinicians had higher pretest possibility than attribute matching. From an urgent care perspective, clinical gestalt performs best with PE suspicion, but also overestimates chances of ACS, which would be preferred to underestimating.

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### CODING Q&A

# Workers' Compensation, Medicare and S Codes

DAVID STERN, MD, CPC

The following example is a common occurrence in our urgent care center when billing workers compensation (WC) claims: Patient A comes to the urgent care center for treatment of injuries sustained while on the job with Employer B. Patient A says, "My boss sent me here because it was close." Now, Patient A has no insurance, no claim number, and no authorization for treatment, just his employer's name and a supervisor's name. Who is responsible to pay the bill? How do we secure payment?

A. This is a common scenario in urgent care centers. One method for handling this would be to hand a phone to the patient and have the patient get the employer on the phone for you. This will allow you to get the information directly from the employer. If the patient is unable to get the employer on the line:

- You might decline to treat (assuming that it is not an emergency); or
- You might look at your loss history and if losses are small, establish a policy in advance to go ahead and treat employees in these scenarios.

This is a great opportunity for your urgent care center to build a relationship with the employer to provide occupational medicine services for their employees.

How do you code for an urgent care visit and bill the urgent care portion to Medicare? Do you know how I can find Medicare reimbursement rates? If a Medicare patient is seen at an urgent care center, how do



**David E. Stern, MD** is a certified professional coder and 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), PV Billing and NMN Consulting, 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.

"For Medicare, there are no special rules for urgent care as Medicare does not recognize urgent care as separate from any other outpatient physician office."

I bill for the physician portion and the facility portion separately? Would I use E/M codes or can we only bill the S codes assigned for urgent care? I heard that Medicare does not pay for S codes.

A Urgent care billing and coding is unique. However, for Medicare, there are no special rules for urgent care as Medicare does not recognize urgent care as separate from any other outpatient physician office. If the patient is treated at an urgent care center, you bill E/M codes 99201-99215 as appropriate from the Office or Other Outpatient Services section of the CPT manual. You would also code (adding modifiers as appropriate) for any procedures performed during the visit.

S codes are never billed to Medicare. They have been requested by and are used exclusively by private sector payors.

To review reimbursement rates from Medicare, you can use the physician fee look up tool at http://www.cms.gov/ Medicare/Medicare-Fee-for-Service-Payment/PFSlookup/index.html, which provides help on how to navigate the site. There is also a link on that page that will provide you with even more information on how to use the search site at http://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/Downloads/How\_to\_ MPFS\_Booklet\_ICN901344.pdf as well as the link for the fee schedule itself http://www.cms.gov/apps/physician-feeschedule/overview.aspx.

#### CODING Q&A

"Case-rate coding is a good option for clinics that are prepared to care only for minor illnesses and injuries such as colds, insect bites, and minor bruises."

A. How do we bill the urgent care codes S9083 vs. S9088? Can we bill E/M codes with the S codes? HCPCS Code S9088, "Services provided in an urgent care center (list in addition to code for service)" can be billed to appropriate payors in an urgent care center. The S9088 code is billed in addition to the E/M code. As an add-on code, S9088 cannot be billed alone without an E/M code; therefore, you would bill E/M codes 99201-99215 as appropriate, along with any procedure codes if procedures were performed during the visit.

Some payors recognize that services rendered in an urgent care center cost significantly more than the services that are rendered in traditional primary care physician offices. This add-on code was designed to allow urgent care centers to be reimbursed for at least a portion of this increased cost of rendering service. You will want to check your contracts with other payors since this code might be bundled per your agreement with them.

HCPCS code S9083, "Global fee urgent care centers" is used in place of the E/M code. Depending on the specific payor contract, often it is the only code billed even when other services have been performed. This code is typically only used when it is required by a payor as a "case rate." It bundles all services rendered in an urgent care visit into a single code, regardless of the complexity or number of procedures.

Case-rate coding is a good option for clinics that are prepared to care only for minor illnesses and injuries such as colds, insect bites, and minor bruises. However, if the urgent care is equipped to take care of many moderate-acuity injuries and illnesses (e.g., dehydration requiring intravenous fluids, fractures, complicated lacerations, corneal rust rings, and others), the S9083 reimbursement option is not ideal. If an urgent care is always reimbursed the same flat rate per patient, regardless of the actual cost of treating the patient, the urgent care is not rewarded for staffing the clinic with skilled physicians who can perform complex procedures. In reality, however, a significant number of national payors do not listen to this argument and will not allow any other billing method for urgent care.

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# DEVELOPING DATA

hese data from the 2012 Urgent Care Industry Benchmarking Study are based on a sample of 1,732 urgent care centers; 95.2% of the respondents were UCAOA members. Among other criteria, the study was limited to centers that have a licensed provider onsite at all times; have two or more exam rooms; typically are open 7 days/week, 4 hours/day, at least 3,000 hours/year; and treat patients of all ages (unless specifically a pediatric urgent care).

In this issue: What Provider Models Are Used by Urgent Care Centers?





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