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LETTER FROM THE EDITOR-IN-CHIEF

The Power of Innocence in Medicine

Medicine, from time to time, calls for reflection. The hangover from arduous shifts, the mind-numbing regulatory “whack-a-mole,” the technology treadmill and the career second-guessing, all contribute to an epidemic of lost perspective in our profession. In an effort to manage an avalanche of competing interests, physicians often sacrifice themselves to the point of burnout and self-destructive behavior.

Without perspective, these burdens soon overwhelm even the hardest among us. We become bitter and angry and defensive coping sets in. In an effort to protect ourselves from the knock-out punch, we shield ourselves and adopt avoidant behaviors. And nothing is more destructive to the doctor-patient relationship than that. A drought of rewarding encounters follows, further distancing us from the joys of medicine. Our defensive practice even paradoxically, and unwittingly, exposes us to an increased risk of bad outcome and liability. Are we all doomed to endure a permanent discontent, a promising career overcome by negativity and regret?

Well, it turns out that our salvation may require a paradigm shift away from the calculated and judgmental toward that of openness and even innocence. We spend our careers learning through experience, building lasting and sometimes painful memories from our encounters in life and practice, all in an effort to protect ourselves, and theoretically our patients, from future harm. But, in so doing, we seem content to dispose of our innocence, deeming it not very useful in a knowledge- and experience-driven profession like medicine.

Phillip Berry, the CEO of Northwind Pharmaceuticals, in a post on LinkedIn, made an eloquent and persuasive argument that the key to professional satisfaction and joy lies in a “return to innocence.” One of Mr. Berry’s main tenets deserves close exploration: “Innocence is (about) embracing the idealist in you,” unleashing the “hopeful side of your mature mind” to the “youthful possibilities in the more static elements of your existence.”

Without it, he proposes, our relationships are limited by negativity and overwhelmed by worst-case-scenario thinking. It is here where the analogies to clinical practice are most compelling. Consider this: In an effort to shield and protect ourselves from being blindsided, physicians notoriously assign patients to preconceived categories based on historical behavior. At the expense of open-mindedness and trust, we apply labels like “drug seeker,” “histrionic,” and “hypochondriac.” The outcome is almost predetermined and the care is premeditated. In so doing, we tragically ostracize hope and discovery, the concepts at the very core of the doctor-patient relationship and of medicine itself. And I would suggest, sadly, that we abandon all chance of feeling the joy of practice again.

By reversing course, we can recover the joy, but only if we are willing to take a few youthful chances again. Embrace your patients, regardless of your preconceptions about their intentions and agendas. Forgive them for demonstrating immature coping mechanisms and focus instead on the root cause of their problems. Do not allow the potential for failure to barricade you. Remind yourself that failure is a fact of life, because when you grant yourself permission to fail, you open up endless opportunities for learning. And, as Mr. Berry concludes, it is innocence that allows for “believing in the good intentions of people” and opens the gate to BOTH “disappointment” and “delight.”

The practice of medicine is a collision of fact and failure. In between are the daily realities of a busy practice. Each day is filled with a multitude of opportunities for “disappointment” and “delight.” Perhaps we can apply a little bit of innocence to our own practices, by discarding our shields and banishing stereotyped “profiles” and “labels.” Maybe then we can rediscover the joy of practice and re-energize our careers for years to come.

Lee A. Resnick, MD, FAAFP
Editor-in-Chief
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An Urgent Care Approach to Joint and Soft-Tissue Injection/Aspiration: Part 2

Injection/aspiration therapy for selected musculoskeletal complaints is becoming more common in urgent care practice. Part 2 of this series offers step-by-step guidance on treatment of conditions from “tennis elbow” to bursitis and cysts.

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

Head in the Game: Cultivating the Mindset of a Successful Urgent Care Operator

Just because you build it, patients won’t necessarily come. As entrepreneurs, successful urgent care center owners must market their services to the community, innovate with new services to fill excess capacity, and create positive patient experiences that spur repeat visits and positive word-of-mouth.

Alan A. Ayers, MBA, MAcc

ST Elevation Myocardial Infarction

Chest pain in a young adults is often benign but it’s important to always consider conditions that increase risk of cardiovascular disease when evaluating these patients.

Rafael Ilyayev, MD, FACP, Mohamed A. Mohamed, MD, and Hassan Farhat, MD

IN THE NEXT ISSUE OF JUCM

Acute, uncomplicated cystitis and pyelonephritis are common complaints in healthy, non-pregnant premenopausal women who present for urgent care. Timely diagnosis and appropriate antibiotic treatment are important to avoid serious complications and provide patients with symptom relief. Next month’s cover story reviews the Infectious Disease Society of America practice guidelines for treatment of uncomplicated cystitis and pyelonephritis in premenopausal, non-pregnant women who have no known underlying urogenital anatomical problems or serious comorbidities.

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This month’s cover story concludes our two-part series on joint and soft-tissue injection with a step-by-step review of treatment of the most common musculoskeletal conditions, including lateral epicondylitis, olecranon and prepatellar bursitis, ganglion cyst, trochanteric bursitis, and knee injection and aspiration. The goal of this review, by Thomas V. Gocke, III, MS, ATC, PA-C, DFAAPA, is to highlight often-seen presenting symptoms and give urgent care providers the foundation of knowledge they need to successfully deliver rescue therapy.

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

In young adults, chest pain often is benign but this month’s case report underscores the importance of always considering conditions that increase risk of cardiovascular disease in these patients. In the report, authors Rafael Ilyayev, MD, FACP, Mohamed A. Mohamed, MD, and Hassan Farhat, MD, describe a 25-year-old African-American male with a past medical history of diabetes and hypertension and a 3-day history of shortness of breath and left-sided chest discomfort. The ultimate and unusual diagnosis, based on EKG and laboratory tests: ST elevation myocardial infarction.

Rafael Ilyayev, MD, FACP, is Medical Director at Refua Shlema Medical PC in Brooklyn, NY. Mohamed A. Mohamed MD, is a medical resident at Interfaith Medical Center in Brooklyn, NY. Hassan Farhat, MD, is Senior Assistant Director of the Emergency Department at NYCH/Cornell University in Brooklyn, NY.

Business and marketing concepts aren’t something that urgent care providers typically learn during their studies for a medical degree, yet having an entrepreneurial mindset is key for urgent care providers who want to be successful clinic operators. In this month’s practice management article, Alan A. Ayers, MBA, MACC, offers expert guidance on tapping your “inner entrepreneur” to market services to the community, innovate with new services, and foster patient experiences that encourage repeat visits and positive word of mouth.

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.

Also in this issue:
In Health Law this month, John Shufeldt, MD, JD, MBA, FACEP, discusses the challenges and responsibilities of using electronic health records.

Sean M. McNeely, MD, and The Urgent Care College of Physicians review new abstracts on literature germane to the urgent care clinician, including ultrasound vs x-rays for pediatric hand fracture, diagnosis of appendicitis with enteral contrast, and prevalence of C. difficile infection.

In Coding Q&A, David Stern, MD, CPC, discusses new CMS modifiers, urgent care codes, and supply codes.

Our Developing Data end piece this month looks at annual pay for full-time employed physicians and rates for those paid on an hourly basis.

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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In the past year, UCAOA has continued to connect with key decision-makers such as various third-party payors, The Centers for Medicare and Medicaid Services (CMS), state legislators and regulators, state departments of health, the National Committee for Quality Assurance (NCQA), the Veterans Administration (VA), the Department of Transportation, media outlets such as *Forbes*, *Modern Healthcare*, and *Reader’s Digest* as well as many other national and regional outlets, and “sister” medical associations such as the American Academy of Family Physicians. In each case, our goal is to represent you, your colleagues, your centers, and the urgent care industry as a whole; to educate the leaders of these groups and debunk the myths they may believe about urgent care; and to create opportunities for partnerships that will ultimately benefit urgent care.

In many of the discussions with organizations previously listed, and at least once a week in outreach to the media, we are asked to quantify various urgent care benchmarks. Some are relatively easy to extrapolate from current and past UCAOA Benchmarking Studies. Some are clinical or practice management in nature and can be addressed by our industry experts. In countless situations, however, we are asked to provide data regarding an incredibly healthy and growing industry and to offer expanded statistics that could significantly influence decision-makers in ways that would benefit you.

For example, last month, UCAOA commented on the barriers to successful participation in Medicare’s Physician Quality Reporting Program (PQRS) for physicians and other eligible professionals who practice in urgent care centers, including the lack of relevant PQRS measures, which would worsen if CMS finalizes its plans to eliminate the claims reporting mechanism for a number of measures. It would strengthen statements such as these to denote the number of physicians, nurse practitioners, and physician assistants working in urgent care. We ask that you voluntarily provide this information so that your national association can better represent you.

In the next month, you will receive special requests from UCAOA to update your personal and practice information. We may ask not only about the structure of your urgent care center, but also for rosters reflecting your staffing mix and for other practice and demographic information.

State “monitors” will also be recruited to serve as our eyes and ears at the state and regional levels and to help the national leaders of UCAOA help you. Knowing about issues that are or may be on the horizon will allow us to provide response templates, data, and other resources for you to convey to your state decision-makers. In the media and community outreach realm, UCAOA is developing toolkits and templates to assist you in creating relationships with and press releases and promotional information for use in your own communities.

Please note: You can keep up with progress on these dialogues and issues on the UCAOA website at [http://www.ucaoa.org/?Advocacy](http://www.ucaoa.org/?Advocacy) and [http://www.ucaoa.org/?page=HealthPolicy](http://www.ucaoa.org/?page=HealthPolicy); UCAccess, our monthly e-newsletter; and via the UCAOA Facebook page, Twitter account, and LinkedIn page. Please make sure that you are subscribed to these media to stay up to date!
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An Urgent Care Approach to Joint and Soft-Tissue Injection/Aspiration: Part 2

Urgent message: Injection/aspiration therapy for selected musculoskeletal complaints is becoming more common in urgent care practice. Part 2 of this series offers step-by-step guidance on treatment of conditions from “tennis elbow” to bursitis and cysts.

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

The focus of Part 1 of this series, in the September issue of JUCM, was on understanding the inflammatory response, use of corticosteroids and anesthetic agents (Table 1), pre- and post-aspiration/injection considerations, and the approach to injections for subacromial impingement syndrome. Part 2 reviews approaches to lateral epicondylitis, olecranon and prepatellar bursitis, ganglion cyst, trochanteric bursitis, knee injection and aspiration, and evaluation of joint infection. The overall objective is to highlight common presenting symptoms and successful approaches to injection or aspiration that urgent care providers can use in practice. As noted in the previous installment, any injection or aspiration procedure should be performed using sterile technique.

Lateral Epicondylitis
Also known as “tennis elbow,” lateral epicondylitis can be a source of elbow pain for many patients. Previous injury, repetitive motions, weight lifting, heavy lifting and carrying and trauma are all common causes. Corticosteroid injection to the lateral epicondyle can be a technical challenge because of difficulty identifying the point of maximal tenderness and delivering an injection to the appropriate anatomic location. Remember that the radial nerve (posterior interosseus and sensory branches) lies close to the origin of the common extensor tendons (CET) and, in some cases, infiltration of this nerve structure can lead to numbness and eventually rebound pain and burning in the proximal elbow.1-8

The best patient position for injection for tennis elbow is seated with the elbow supported on the exam...
table, which facilitates access to the lateral elbow and the origin of the CET (Figures 1A and 1B). The best way to isolate the CET tendon origin is to flex the elbow maximally. The lateral flexor crease formed in this max flexed position allows the provider to specifically palpate the extensor carpi radialis brevis (ECRB) origin of the common extensor tendon. This is also usually the point of maximal tenderness.

Once the appropriate landmarks are identified, prep and palpate as described in Part 1 of this series. As a guide for injection, place your index finger next to the injection site and ensure that the syringe is perpendicular to the site to prevent an unintended injection into the radial nerve structures. Most patients report no pain with the procedure; those with pain and numbness of the arm should be brought back for a follow-up exam. Because the injection is intended to deliver medication at the tendon-bone interface, only a small volume of injection solution is necessary. Use of a 26-G ½-inch needle is appropriate to introduce 0.5 mL of 0.25% bupivacaine, 0.5 mL of 1% lidocaine, and 1 mL of triamcinolone acetonide 40 mg/mL. In rare cases when a patient has muscle hypertrophy of the forearm muscles, a 1-inch or 1 ½-inch hypodermic needle can be used for injection.1-3, 6-10

As with shoulder injection, patients treated for tennis elbow should be discharged with instructions to rest for 24 hours after injection. A wrist splint is appropriate for those who have severe range of motion (ROM) decreases or pain at the CET that intensifies with wrist motion. Post-injection cryotherapy also should be recommended. At 3 to 5 days post-injection, encourage patients to start a gentle stretching program for their affected wrist and elbow.1-3,11-13

Olecranon and Prepatellar Bursitis
Olecranon and prepatellar bursitis are common conditions associated with acute injury and chronic recurrent pressure

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Table 1. Injectable corticosteroids

<table>
<thead>
<tr>
<th>Steroid solution</th>
<th>Potency</th>
<th>Half-life</th>
<th>Onset/Duration</th>
<th>Dose/Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrocortisone</td>
<td>Low</td>
<td>8-12 hr</td>
<td>Short/Short</td>
<td>50 mg/mL</td>
</tr>
<tr>
<td>Triamcinolone acetonide (Kenalog)</td>
<td>Intermediate</td>
<td>12-36 hr</td>
<td>Intermediate/Intermediate</td>
<td>4 mg/mL</td>
</tr>
<tr>
<td>Triamcinolone hexacetonide (Aristospan)</td>
<td>Intermediate</td>
<td>12-36 hr</td>
<td>Intermediate/Intermediate</td>
<td>40 mg/mL</td>
</tr>
<tr>
<td>Methylprednisolone acetate (Depo-Medrol)</td>
<td>Intermediate</td>
<td>12-36 hr</td>
<td>Intermediate/Long</td>
<td>40 mg/mL</td>
</tr>
<tr>
<td>Betamethasone acetate (Celestone)</td>
<td>High</td>
<td>26-54 hr</td>
<td>Longer/Longer</td>
<td>6 mg/mL</td>
</tr>
<tr>
<td>Dexamethasone acetate (Decadron-LA)</td>
<td>High</td>
<td>26-54 hr</td>
<td>Longer/Longer</td>
<td>8 mg/mL</td>
</tr>
</tbody>
</table>

---

Figure 1A. Lateral epicondylitis injection site

Picture Courtesy Tom Gocke, PA-C

Figure 1B. Lateral epicondylitis injection

Picture Courtesy Tom Gocke, PA-C
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 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 dose. If an allergic reaction to moxifloxacin occurs, discontinue use of the drug.

Prolonged Use - Prolonged use may result in overgrowth of non-susceptible 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:
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:

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

INDICATIONS AND USAGE

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

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

DOSE 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 dose. Some reactions were accompanied by cardiovascular collapse, loss of consciousness, angioedema (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
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 prostatic 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 enzyme complex 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 partitioning of the chromosomal DNA during bacterial cell division. The mechanism of action for quinolones, including moxifloxacin, is different from that of macrodilens, aminoglycosides, or tetracyclines. Therefore, moxifloxacin may be active against pathogens that are resistant to these antibiotics and these antibiotics may be active against pathogens that are resistant to moxifloxacin. There is no cross-resistance between moxifloxacin and the aforementioned classes of antibiotics. Cross-resistance has been observed between systemic moxifloxacin and some other quinolones. In vitro resistance to moxifloxacin develops via multiple mutations. Resistance to moxifloxacin occurs in vitro at a general frequency of between 1.8 x 10^-9 to < 1 x 10^-11 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 quinolines, the positive response observed with moxifloxacin in strain TA102 using the same assay may be due to the inhibition of DNA gyrase. Moxifloxacin 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. Moxifloxacin 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 estrus 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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on the elbow and knee. Regardless of the mechanism of injury, the inflammatory response in the bursae results in swelling, warmth, and pain over the affected area. In most cases, olecranon and prepatellar bursitis are not a result of bacterial infection but there are cases in which bacteria penetrate skin lesions and can lead to infection (Figure 2). Therefore, it is important for providers to pay attention to skin injuries, especially when they are attempting to aspirate and/or inject the olecranon/prepatellar bursae (or any joint or other bursae).1-3,9,14-18

The best patient position for an aspiration and/or injection of the olecranon/prepatellar bursae is the semi-sitting or recumbent position. This allows the elbow to be flexed across the body or the knee to be flexed 15 degrees on a rolled up towel, thus facilitating better access to the inflamed bursae. Because of the prominence of the bursae, it is easy to identify the fluid/swollen area. Pick a dependent entry point on the bursae to allow for better drainage during aspiration and pay particular attention to the color and consistency of the fluid. If the aspirated fluid is clear and infection is not a concern, the hub of the syringe can be changed sterilely and the corticosteroids injected into the bursae thru the aspiration needle. If there is any suspicion or concern about infection or the fluid is turbid, the fluid should be sent to the lab for appropriate analysis. If there is any question about the possibility of infection, administration of corticosteroids into the bursae is contraindicated. (See the section on evaluation of joint infection at the end of this article.)

As a guide for aspiration or injection, use your sterile, gloved index finger and thumb to squeeze the swollen bursae and force fluid closer to the skin surface. Once the needle enters the bursae, there should be little resistance with aspiration of fluid or injection of cortisone-anesthetic solution. In most cases, patients report little pain with the procedure. A 22-G needle can be used for injection into the bursae and an appropriate solution is 1 mL 0.25% bupivacaine, 1 mL 1% lidocaine, and 1 mL of triamcinolone acetonide 40 mg/mL. If aspiration is planned before injection, 3 mL of 1% lidocaine can be used to anesthetize the skin and then the skin can be prepped a second time prior to aspiration. A 16- or 18-G needle is appropriate for aspiration of fluid. If there is no concern for infection (clear bursae fluid, no skin manifestations and negative exam and history), after aspiration, the hub of the syringe can be changed steriley and a steroid injection delivered into the bursae.1-3,9,15,17,18

Ganglion Cyst
Ganglion cysts of the dorsal wrist are common and occur as a result of injury to the dorsal carpal joint capsule. A defect in the lining of the wrist joint allows a portion of the synovium to extrude through the defect and as it fills with synovial fluid, a liquid-containing sack is formed. Ganglion cysts in the dorsal wrist area often grow and shrink depending on wrist motion and repetitive activity. Patients typically present for treatment because of significant wrist pain caused when the fluid or the ganglion cyst fails to decompress and distension occurs.

Transillumination is a simple way to determine if the swollen area over the dorsal wrist is a fluid-filled mass. Solid masses do not light up whereas fluid-filled masses transmit light. Some ganglion cysts resolve with aspiration and injection. In most cases, however, this form of treatment is temporary and frequent recurrences necessitate surgical excision. Aspiration and injection with corticosteroids can provide a relatively long duration of symptom relief and therefore are a great first-line treatment. As with other areas for injection or aspi-
The provider should pay particular attention to skin structures and the possibility of infection, either to the skin or the joint. Any suspicion that the patient has an infection should cause the provider to rethink the treatment decision-making process.1-3,19-21

The best position for aspiration and/or injection of a ganglion cyst is with the patient seated. Support the wrist with a small roll of towels and have the patient flex it slightly to expose the ganglion dorsally and make it more prominent (Figure 3). Pick a dependent entry point on the ganglion to allow for better drainage during the aspiration process and pay particular attention to the color and consistency of the aspirated fluid. In most cases, the ganglion fluid is a gelatinous substance that can be difficult to draw through a needle and syringe. If there is any suspicion or concern about infection, the fluid should be sent to the lab for appropriate analysis. (See the section on evaluation of joint infection later in this article). In the case of possible infection, administration of corticosteroids into the ganglion is contraindicated. If the aspirated fluid is clear/gelatinous and infection is not a concern, change the hub of the syringe using a sterile technique and inject corticosteroids into...
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AN URGENT CARE APPROACH TO JOINT AND SOFT-TISSUE INJECTION/ASPIRATION: PART 2

The guides and techniques for injection/aspiration of a dorsal wrist ganglion also can be used when attempting to aspirate/inject bursae, including the same anesthetic/corticosteroid injection solutions.

A word of caution about aspirating or injecting volar wrist ganglions. It is not recommended that any urgent care provider attempt to aspirate or inject a volar wrist ganglion, particularly if it overlies the radial artery. In most cases, such fluid-filled sacks are, indeed, ganglions, but radial artery aneurysms also can have a similar presentation. Attempting to aspirate and inject a radial artery aneurysm can lead to severe consequences for the patient and the provider. Urgent care providers who do not have color duplex Doppler ultrasound should refer these patients to an experienced provider who is capable of managing complications, should a fluid-filled cyst turn out to be an aneurysm.1-3,19-21

Discharge instructions for aspiration/injection are the same as for the other anatomical sites and as described in Part 1. Placement of a bulky dressing and an elastic wrap over the dorsal hand helps maintain pressure over the ganglion and reduces the chance of reaccumulation of fluid. A wrist brace also can be used to minimize wrist motion, particularly in patients who perform manual labor. The bulky dressing and/or wrist brace should be worn for 3 to 5 days before it is removed and normal activities are resumed. Remind patients that despite aspiration and or injection of their dorsal wrist ganglion, there is still a chance that the ganglion fluid could return.1-3,11-13

Trochanteric Bursitis

Acute and chronic injury, altered gait, change in activity levels, obesity, and acute/chronic back pain all can cause trochanteric bursitis. The trochanteric bursa is located adjacent to the bony prominence of the lateral hip joint, between the iliotibial band and the greater trochanter. The tendons of the gluteus medius and maximus also overlie this area (Figure 4). Regardless of the mechanism of injury, the inflammatory response in the bursa results in swelling, warmth and pain over the affected area. This distends and “overstuffes” the native anatomy, resulting in increased pressure over the bursa, from the iliotibial band, on flex/extension of the knee or hip joint. Patients with trochanteric bursitis will complain of pain with getting in or out of a car/chair and lateral hip pain when sleeping on the affected side. Lateral hip pain when walking on level ground or climbing stairs or inclines also is common. Back pain can occur secondary to an altered gait as a result of trochanteric bursitis. Septic bursitis in the trochanteric region is rare but does occur so it is important to be observant for skin injuries before injecting the trochanteric bursae.1-3,10,22,23

The best patient position for an injection of the trochanteric bursae is the lateral decubitus, which allows for direct visualization of the lateral hip/greater trochanter and palpation of the area of maximal tenderness. The point of maximal tenderness is usually the spot where the bursa lies beneath the iliotibial band and greater trochanter. Palpation multiple times may be necessary in patients with extra tissue over the trochanter, to ensure that the needle is guided toward the greater trochanter. A key point with guiding the needle into the bursae is to keep it perpendicular to the trochanter. That helps ensure that the sciatic nerve is avoided during your injection (Figure 5).

Antiseptic soap should be used to prep the skin for trochanteric injection because the lateral hip is not far from the anus and there is a possibility of contamination with enteric bacteria. After prepping the skin, use a sterile, gloved index finger to ensure injection of the area of maximal tenderness, advancing the needle until bone is contacted. If injection without resistance is not possible, withdraw the needle slightly and again attempt to inject. To confirm that the sciatic nerve has been avoided, always ask patients during injection whether they are experiencing pain or burning sensations radiating down their leg. If that is the case, abort the injection and withdraw the needle. Most patients report no pain with injection. A 22-G spinal needle is preferable.
INDICATION AND DOSING

PATADAY® 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® 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.

Patients should be advised not to wear contact lenses if their eyes are red.

PATADAY® Solution 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® 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® 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® 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.

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ADVERSE REACTIONS
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® (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 63500 OPHT ANTI-ALLERGY.

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Knee Injection and Aspiration
Nonsteroidal anti-inflammatory drugs (NSAIDs) are typical first-line therapy for reduction of inflammation and pain associated with the reactive synovitis seen in patients who have arthritis in their knees. However, not all patients respond well to NSAIDS; some develop adverse reactions/side effects that preclude use of these drugs, and others want faster “rescue” relief of symptoms than NSAIDs produce. In these cases, a local corticosteroid injection may be beneficial. Patients with tense joint effusion also may benefit from aspiration prior to corticosteroid injection. Inflammation due to trauma or a degenerative condition also can result in knee pain.

In most patients, knee pain is not a result of bacterial infection but in some cases, bacteria can penetrate a skin lesion, leading to infection. Attention
to skin injuries and to the characteristics of fluid aspirated from the knee is important to determine whether to proceed with injection. Clear to yellowish fluid (looks like lemonade) is usually consistent with synovial fluid and typically has a low probability of infection. Bloody, dark, turbid fluid, however, should significantly raise a provider’s suspicions for infection, particularly when a patient’s history includes comorbidities such as diabetes or immune compromise. If fluid aspirated from the knee is questionable, it should be sent for analysis before the joint is injected because proceeding with a corticosteroid injection could greatly increase risk of infection.\textsuperscript{1-3,15,16,24}

The best patient position for knee injection is sitting or semi-sitting. Having a patient lie down with the affected knee hanging over the edge of the bed is an alternative for those who are anxious about getting an injection or have a history of fainting during injection.

After examining the skin and associated joint structures, identify the lateral joint window and use it as the injection site. This lateral joint window is bordered medially by the patellar tendon, inferiorly by the proximal tibia, superiorly by the lateral patella and laterally by the articulation of the lateral femoral condyle and proximal tibia (Figure 6). Imagine the aiming point as the femoral notch when introducing the needle into the joint. Do not plunge the needle to the hub because that might result in contacting the articular surface of the lateral femoral condyle, thus causing pain.

Once the needle has advanced past the infrapatellar fat pad (Hoffa’s fat pad), the injection should flow freely with little or no resistance, however, if resistance is encountered or contact is made with the bone, simply reposition the needle. Patients commonly report a full feeling in the knee after the injection is complete. A 22-G needle should be used for injection. An appropriate injection solution is 3 mL of 0.25% bupivacaine and 2 mL of triamcinolone acetonide, both without epinephrine.\textsuperscript{1-3,15,16,25}

**Knee Aspiration**

The best position for knee aspiration (with or without injection) is with the patient supine, which works very well for those who are anxious about having a needle inserted into their knee or who have a history of fainting during injection. The aspiration and injection site is the superior lateral arthroscopic portal region, which is approximately one thumb width cephalad to the superior edge of the patella and one thumb width inferior (toward the floor) (Figure 7). Imagine the aiming point superior and parallel to the top border of the patella. The entry angle should neither be parallel to the floor nor too steep because an angle too flat will cause the needle to strike the lateral femoral condyle and plunging the needle to the hub could result in contacting the articular surface of the lateral femoral condyle, thus causing pain. Skin prep for a knee aspiration is the same as for the other anatomical sites and as described in Part 1.

Some providers elect to introduce the aspiration needle into the joint without use of local anesthesia but that can be very painful and make a patient more apprehensive. If anesthesia is chosen, 10 mL of 1% lidocaine is appropriate. After the local anesthetic agent has taken effect, the skin at the aspiration site should be prepped a second time before the needle is introduced.
Once the needle has been introduced into the suprasynovial pouch, aspirate should flow freely without resistance and little effort should be needed to withdraw fluid from the knee. In the case of resistance or contact with the bone, the needle should be repositioned. Patients commonly report a quick, sharp pain as the needle passes through the joint capsule. If it is difficult to get the fluid to flow out of the knee, a sterile, gloved hand can be used to milk fluid out of the suprasynovial pouch, forcing it closer to the aspiration needle (Figure 8).

To administer a steroid injection after aspiration, leave the aspiration needle in the suprasynovial pouch, change the hub of the aspiration syringe and attach the injection syringe. Then inject the knee and withdraw the needle from the knee joint. An appropriate injection solution is 3 mL 0.25% bupivacaine and 2 mL triamcinolone acetonide 40 mg/mL, both without epinephrine.\(^1\)\(^-\)\(^3\)\(^,\)\(^15\)\(^,\)\(^16\)\(^,\)\(^25\)

Discharge instructions are as for the other anatomical sites, including rest and cryotherapy. A bandage and an elastic wrap should be applied to the knee prior to discharge to minimize reaccumulation of fluid and it should remain in place for 24 hours.\(^1\)\(^-\)\(^3\)\(^,\)\(^11\)\(^-\)\(^15\)

**Evaluation of Joint Infection**

Patients who present with one or more hot, swollen, erythematous, painful joint(s) should make a provider suspicious of a septic joint until proven otherwise. A patient’s history and physical examination should help the provider to gain more insight into why a patient is presenting with a swollen joint.

Patients who have a history of rheumatoid arthritis (RA) and any joint with structural irregularities (traumatic/arthritic/surgical) are at increased risk of developing septic arthritis. Important risk factors to consider are history of total joint arthroplasty (hip and knee most common), intravenous drug use, diabetes, previous corticosteroid injection history, skin ulcers/dermatitis and alcoholism. In cases in which clinical suspicious of infection is high, necessary steps should be taken to help confirm or refute that the patient has a joint infection. In our facility, we routinely obtain laboratory studies—complete blood cell count with differential, basic metabolic panel, erythrocyte sedimentation rate (ESR-sed) and C-reactive protein (CRP)—to determine baseline values for infection. These tests provide a general overview of a patient’s systemic reaction to a possible joint infection. It is important to remember that in the early presentations of a joint infection, the white blood cell (WBC) count, ESR and CRP may be low or in normal range but that does not completely rule out a joint infection. (Note: we do not routinely order blood cultures on patients we suspect of having a joint infection. However, the overall past medical and clinical history may make this a necessity, particularly in patients who have chronic illness or autoimmune diseases, who are taking immune-suppressing medications, or who have overwhelming sepsis).\(^24\)\(^,\)\(^26\)\(^-\)\(^30\)

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References: 1. Data on File.

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aside from the patient’s history, is the analysis of joint fluid. Analysis of joint fluid can not only help to confirm the diagnosis it also will help to identify organisms/crystal associated with joint infection/inflammation. That is why it is so important to aspirate the affected joint(s) prior to starting any patient on antibiotic therapy. We routinely order the following labs and cytology on any aspirated fluid from a joint: Gram stain, cell count, crystals and cultures (aerobic/anaerobic/acid-fast bacillus [AFB]). The Gram stain, we hope, will give us an idea about the potential organism that is causing a joint infection while we await final culture results. *Staphylococcus aureus* and *Streptococcus* are the two most common pathogens found in septic joints (91%). However, with methicillin-resistant *S. aureus* (MRSA) on the rise, it should be considered a common pathogen as well. Gram-negative enteric bacteria can be associated with joint infections and may result from hematogenous spread. Urinary catheters, feeding tubes, and IV devices also can contribute to infection. Final cultures for aerobic and anaerobic organisms are typically completed after 3 days of incubation. Although routine culture for AFB is not common, providers should take into consideration a patient’s nationality, living situation, world travel and potential tuberculosis exposure risk when deciding whether to include this test on the culture request.

Controversy surrounds the cell count analysis of joint fluid. Several studies looking at joint fluid cell counts to determine a threshold for establishing joint sepsis indicate that for WBC counts >25,000 and good clinical correlation, the likelihood of joint sepsis is increased. A comprehensive review of the medical literature confirms that joint fluid WBC >25,000 in native joints and WBC >10,000 in prosthetic joints are consistent with joint sepsis. A higher percentage of polymorphic neutrophils in the joint fluid analysis is considered supportive but not necessarily a deciding factor in determining joint sepsis. Patient history, fever presentation, comorbid factors, joint fluid analysis, ESR, and CRP all aid in the determination of joint infection.

**Conclusion**

Injection therapy for patients with selected musculoskeletal complaints is becoming more common in urgent care practice. Although performing these procedures is not technically demanding, they do require that an urgent care provider have a thorough understanding of the pertinent musculoskeletal anatomy. Discharge instructions should be procedure-specific and detailed to help guide patients through their recovery process. They should briefly answer a patient’s potential questions, alert a patient to potential adverse effects or complications, and offer guidance on what to do in the case of problems following an injection. Taking the extra time to discuss with patients the intended effects and benefits of injection therapy, general risks, and what to expect in the post-procedure course will go a long way in allaying fears and improving customer service in urgent care.

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One needn’t look further than the 20,000+ physicians already practicing in urgent care centers nationwide to grasp just how attractive this business model has become. Consumers fed up with lengthy emergency room waits—for non-emergencies, no less—and an ongoing lack of timely primary care access have fueled demand for the convenient, efficient, and affordable style of health care that’s become urgent care’s brand. In addition, the promise of career autonomy coupled with financial independence make venturing into urgent care an often irresistible lure for many of the former family and emergency medicine physicians who dominate the field.

That said, it’s the “inner entrepreneur” stirring within many physicians that may actually be the strongest motivator to strike out and head up (or partner in) an urgent care venture. A physician can run the show without, say, a hospital administrator dictating how he/she practices medicine. As an added bonus, bankers, private equity firms, and the Small Business Administration have stepped up with the capital to get centers up and running. In short, it’s your business, potential earnings are substantial, and expansion is a possibility, should things go well. With the Affordable Care Act ushering in approximately 30 million new health coverage enrollees over the next few years—most without regular providers—urgent care is brimming with potential.

**Urgent message:** Just because you *build it*, patients won’t necessarily come. As entrepreneurs, successful urgent care center owners must *market* their services to the community, *innovate* with new services to fill excess capacity, and create positive patient *experiences* that spur repeat visits and positive word-of-mouth.

ALAN A. AYERS, MBA, MAcc
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If You Build It, Will They Simply Come?

A bit of charming but old-school advice to medical graduates has been “hang your shingle and patients will find you”—meaning that when a practice opens its doors, its patients will naturally follow. While perhaps apropos in specialties facing critical shortages, as it relates to urgent care, nothing could be further from the truth. In fact, the entire “build it and they will come” concept is a certain plan for failure in businesses possessing a strong retail element. Hence, urgent care owner/operators have to accept—embrace, actually—that they’re squarely in the business of consumer-driven medicine.

For example, it used to be that clinical aptitude was by far the most important factor in earning revenue. Physicians who focused solely on delivering strong clinical outcomes rarely wanted for referrals. Urgent care, by contrast, is decidedly retail in that it views patients as essentially customers who choose to use the center versus other options. These “customers” have to be courted not only through targeted marketing and advertising, but sufficiently pleased with the overall service delivery—including the expected great clinical outcome—that they’ll recommend the center to others and return whenever future needs arise.

Granted, most of these “retail,” “marketing,” and “patient-as-customer” concepts run contrary to time-honored precepts ingrained by a medical school education, but they’re nonetheless critical for an urgent care center to thrive. Fail to embrace and assimilate this entirely new paradigm of volume-driven, “entrepreneurial” medicine, and the financial independence you so doggedly sought could end in bankruptcy. You simply can’t sit back and wait for patients to spontaneously appear in your lobby. Opening and ramping up a center can require between $500,000 and $1 million in capital so the financial stakes are high.

You, as an urgent care physician/owner, likely accustomed to a background focused on the clinical side of medicine, must now become comfortable wearing two hats: That of a skilled and dedicated health care provider, and an enterprising entrepreneur with the vision, strategy, and desire to lead and energize a business and care team. Quite simply, it’s time to get your head in the urgent care game.

Think and Act Like an Entrepreneur

Raise the Visibility of Your Center in the Community

Due to its focus on high-visibility locations, extended operating hours, and customer service orientation, urgent care is often described as “retail medicine.” Thus, the goal is to drive consumers to your center in the same manner that retailers drive customers to their stores. Every center is a brand, and as an urgent care entrepreneur, one of your tasks is to find creative and cost-effective ways to market your brand to the surrounding community. Here are examples of common, low-cost marketing tactics proven very effective at getting the word out about your center:

■ Erect a tent and do drive-thru flu shots in the parking lot. This is a great way to get out in front of the eyes and ears...
of your community during flu season, particularly if your center is located in a retail strip with lots of vehicle traffic. Vaccinations only take 1 to 2 minutes to complete, and customers don’t ever have to leave their vehicle. You simply have the patient sign a consent form, and then administer the shot (typically in the arm or shoulder) right through the open car window. The entire process typically saves the customer 15 to 20 minutes that they’d otherwise have to actually spend inside the clinic for the same service.

■ **Contact the local media for an interview when a hot medical topic is in the news.** Print and TV reporters want “experts” to interview whenever a hot health topic is in the news. Let the local press know you’re available for interviews when a flu outbreak, obesity study, diabetes awareness campaign, etc. is making headlines. When giving an interview, be sure to request that the name of your urgent care center is either mentioned in the interview or displayed on screen. Later, you’ll be astounded by how many people remember you or your center from the interview, and you’ll be positioned as a community “health expert”—and primed for an increase in patient visits.

■ **Participate in community events.** By making your brand a ubiquitous presence around town, your center will instantly spring to mind when folks are sick but can’t see their personal doctor right away. Especially at events that allow tables, tents, or booth setups, bring signage, literature, refrigerator magnets, and treats to give away. To engage event patrons even further, employ a prize wheel or some other fun game with sights and sounds that attract interest and attention.

**Market Occupational Medicine Services to Employers**

Occupational medicine entails the treatment of work-related injuries; pre-employment, fitness-for-duty and compliance physicals; and substance abuse screening. Each occupational medicine contract an urgent care center can nail down is worth its weight in gold, yet many centers focus strictly on walk-in patients. This is definitely a mistake to avoid, considering how potent a revenue source the local workforce can be for your clinic:

■ **Increased patient volume.** The most obvious benefit to handling a company’s occupational medicine is the resulting patient influx it’ll provide. Companies who require ongoing medical services such as pre- and post-offer exams, drug screens, and Workers’ Compensation injury care can provide a steady stream of patients. Workers’ Compensation often reimburses at a premium to group health contracts while physicals and drug screens are a “cash” business. With enough contracts, occupational medicine can account for a significant portion of your total patient revenue.

■ **Free marketing.** Employers are seeking ways to reduce employee health care expenditures and absenteeism so human resource departments can be invaluable when it comes to
instilling your brand in the mind of a company’s employees, even when the need to see a physician isn’t work-related. For instance, when a sick employee informs the Human Resources (HR) staff that she’s feeling ill, but can’t get an appointment with her normal doctor that day, where is HR most likely to recommend she go for immediate care? The urgent care clinic that handles their occupational medicine. Also, it makes perfect sense that employees who first visit your urgent care for a company drug test will later think of your clinic when the kids or they come down with the flu, cut a finger, etc.

Co-Locate High-Margin Ancillary Services
Co-locating high-margin ancillary services is a great way for any practice to prop up flagging revenues and boost profits, not to mention improving overall patient care, utilizing excess capacity, flattening the ebb and flow of walk-in traffic, and diversifying the center’s revenue base. You’ll have to do your due diligence beforehand in regards to the feasibility of offering certain services, such as those listed in Table 1, which collectively can boost profit margins by 50% to 70%.

This list is not intended to be exhaustive, but rather, to highlight the many proven ways that enterprising urgent care physicians are adding additional revenue streams to their practices. Simply put, the line between business and medicine is blurring, and urgent care owner/operators must be both health care providers and savvy entrepreneurs forever on the lookout for opportunities to maximize revenue.

**Lead and Energize Your Staff**
You may have undergone rigorous medical training and aced your boards, but all that clinical know-how won’t exactly come in handy when you are faced with the task of managing a full urgent care center staff of administrative and health care professionals, all with diverse personalities and skill sets. In fact, the more hierarchical and structured a physician’s former work environment (especially true of Emergency Room physicians), the more difficulty they seem to have in managing a team in the type of social atmosphere a successful urgent care center demands.

The good news is that, regardless of your clinical background, you can indeed implement several simple strategies that go a long way towards creating a true “community” in your practice—one where the clinic’s entire staff is aligned with the ultimate goal of stellar patient care and clinic success. Several well-known, proven methods for workplace team-building are described in Table 2.

**Be Vigilant Towards Broken Business Processes**
A large part of running a successful urgent care center is ensuring that your patients/customers are so happy with your service delivery that they tell their friends and family good things about their experiences. The

| Table 1. Common Ancillary Services in Urgent Care |
|---|---|---|
| Ancillary Service | Description | Benefit |
| **Point-of-care Medication Dispensing** | Because urgent care physicians typically write many prescriptions for the same medications, dispensing directly from the clinic can enhance patient visit revenue. | Patients appreciate the convenience of not having to make a separate trip to the pharmacy. Clinical outcomes improve as patients are more likely to adhere to their treatment plan when they start dosing immediately and leave the clinic with medication in hand. |
| **Imaging** | Urgent care can aggregate demand for imaging in a community by taking referrals from other providers. Ultrasound, MRI, x-ray, and CT scan equipment can be leased rather than purchased outright if the cost lies outside the clinic budget. | Timely and accurate diagnoses prevent delayed medical intervention and allow physicians to prescribe the proper course of treatment sooner. |
| **Physical Therapy and Rehabilitation** | Work with patients in developing a treatment regimen designed to maintain, restore, or improve physical abilities. | Same-day referral to therapy can improve clinical outcomes in musculoskeletal cases. Especially for clinics that already do occupational medicine, this service works well in conjunction with rehabilitating Workers’ Compensation employees/patients. |
| **Weight Loss and Diabetes Management** | Counseling, diet and nutrition/menu planning, and personalized treatment plans for diabetic and overweight/obese patients. | Low start-up cost source of additional revenue that leads diabetic patients to consider/adopt the clinic as their “one-stop shop” for additional health services. |
| **Cosmetic and Anti-Aging Services** | Skin rejuvenation, aesthetic laser treatments, laser hair removal, and/or cosmetic skin injections. | High-margin services that also work to position the clinic as a “one-stop shop” and utilize center capacity during off-peak times. |

**Table 2. Workplace Team-Building Strategies**

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Communication</strong></td>
<td>Regular team meetings, open-door policies, and clear communication channels.</td>
</tr>
<tr>
<td><strong>2. Recognition</strong></td>
<td>Acknowledging and rewarding team members for their contributions and achievements.</td>
</tr>
<tr>
<td><strong>3. Training and Development</strong></td>
<td>Providing ongoing training and opportunities for professional development.</td>
</tr>
<tr>
<td><strong>4. Flexibility</strong></td>
<td>Offering flexible schedules and work arrangements to accommodate team members’ needs and preferences.</td>
</tr>
<tr>
<td><strong>5. Collaboration</strong></td>
<td>Encouraging teamwork and collaboration among team members from different departments and levels.</td>
</tr>
<tr>
<td><strong>6. Supportiveness</strong></td>
<td>Creating a supportive and inclusive workplace environment where team members feel valued and respected.</td>
</tr>
</tbody>
</table>

**Table 3. Patient Satisfaction Surveys**

<table>
<thead>
<tr>
<th>Question</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. How satisfied are you with the overall service you received?</strong></td>
<td>Rating on a scale of 1 to 5, with 1 being very dissatisfied and 5 being very satisfied.</td>
</tr>
<tr>
<td><strong>2. Would you recommend this clinic to a friend or family member?</strong></td>
<td>Rating on a scale of 1 to 5, with 1 being very unlikely and 5 being very likely.</td>
</tr>
<tr>
<td><strong>3. How likely are you to return to this clinic for future visits?</strong></td>
<td>Rating on a scale of 1 to 5, with 1 being very unlikely and 5 being very likely.</td>
</tr>
<tr>
<td><strong>4. How satisfied are you with the quality of care you received?</strong></td>
<td>Rating on a scale of 1 to 5, with 1 being very dissatisfied and 5 being very satisfied.</td>
</tr>
<tr>
<td><strong>5. How satisfied are you with the timeliness of your care?</strong></td>
<td>Rating on a scale of 1 to 5, with 1 being very dissatisfied and 5 being very satisfied.</td>
</tr>
<tr>
<td><strong>6. How satisfied are you with the cleanliness and organization of the clinic?</strong></td>
<td>Rating on a scale of 1 to 5, with 1 being very dissatisfied and 5 being very satisfied.</td>
</tr>
</tbody>
</table>

**Table 4. Customer Service Excellence**

<table>
<thead>
<tr>
<th>Standard</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Professionalism</strong></td>
<td>Treating patients with respect and courtesy.</td>
</tr>
<tr>
<td><strong>2. Communication</strong></td>
<td>Communicating clearly and effectively with patients.</td>
</tr>
<tr>
<td><strong>3. Reliability</strong></td>
<td>Meeting约定s and providing timely service.</td>
</tr>
<tr>
<td><strong>4. Expertise</strong></td>
<td>Demonstrating knowledge and skills in providing care.</td>
</tr>
<tr>
<td><strong>5. Empathy</strong></td>
<td>Showing understanding and concern for patients’ needs and feelings.</td>
</tr>
</tbody>
</table>

**Table 5. Employee Engagement**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Commitment</strong></td>
<td>Employees are committed to the mission and values of the clinic.</td>
</tr>
<tr>
<td><strong>2. Loyalty</strong></td>
<td>Employees are loyal to the clinic and its leadership.</td>
</tr>
<tr>
<td><strong>3. Participation</strong></td>
<td>Employees are actively involved in the clinic’s decision-making processes.</td>
</tr>
<tr>
<td><strong>4. Pride</strong></td>
<td>Employees are proud of their roles and accomplishments at the clinic.</td>
</tr>
<tr>
<td><strong>5. Achievement</strong></td>
<td>Employees are satisfied with their work and the outcomes achieved.</td>
</tr>
</tbody>
</table>
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HEAD IN THE GAME: CULTIVATING THE MINDSET OF A SUCCESSFUL URGENT CARE OPERATOR

Table 2. Methods for Team-Building in an Urgent Care Center

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross Training</td>
<td>Cross training staff to perform each other’s job functions has many benefits:</td>
</tr>
<tr>
<td>• Allows the clinic to run smoothly, and balances out uneven workflows when employees are absent because cross-trained team members can help pick up the slack. For example, a nurse can answer phone calls, or a billing employee can greet patients and take basic vitals when the clinic is super busy.</td>
<td></td>
</tr>
<tr>
<td>• Provides variety in the clinic staff’s daily routine and alleviates boredom, which boosts overall morale.</td>
<td></td>
</tr>
<tr>
<td>• Fosters teamwork, empathy, communication, and camaraderie between departments, since staff members gain a better understanding and appreciation of each other’s role in clinic operations. It also places an emphasis on staff interrelationships; neglected front-desk collections result in extra work for billing, overbooking by the scheduler strains the nursing staff and the front desk with patient overflow, etc.</td>
<td></td>
</tr>
<tr>
<td>Rewards/Incentives</td>
<td>Let your clinic staff know the importance of attaining specific performance goals/metrics, and offer rewards/incentives for individuals, departments, and even the clinic as a whole. Some examples of achieved benchmarks you can reward include:</td>
</tr>
<tr>
<td>• Increased number of patients seen per week</td>
<td></td>
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<tr>
<td>• Lowered patient wait times in exam rooms, waiting areas, check in times, etc.</td>
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<tr>
<td>• Increased number of outstanding collections accounts brought current in a given time period</td>
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<tr>
<td>• Perfect attendance</td>
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<tr>
<td>Implementing such a reward system serves to energize the entire care team, and keeps everyone focused on the clinic’s big-picture goals. Furthermore, rewards don’t necessarily have to be paid in cash. Paid time off, event tickets, gift cards, electronics, and spa/salon outings are also excellent options for both front-line staff and mid-level providers who show a consistent dedication to patient care and to the clinic reaching its benchmarks.</td>
<td></td>
</tr>
<tr>
<td>Regular Staff Meetings</td>
<td>Regular staff meetings are often neglected in busy centers focused on serving heavy patient loads. However, they’re important for building a sense of community, discovering below-the-radar issues, and reinforcing clinic goals. Key here is not simply turning these meetings into boring lecture sessions, but instead allowing a relaxed and open setting where problems, concerns, and issues can be addressed in an attentive and nonjudgmental forum. Order pizzas or bring in donuts, let front-line staff report their tales from the front line, and require each meeting attendee to present one or two ideas that would help their department (or the clinic as a whole) run better. Also ensure that the meeting coordinator adheres to the oft-quoted 80/20 rule: 20% of the meeting time devoted to past issues, while the remaining 80% is dedicated to present and future concerns.</td>
</tr>
<tr>
<td>Management Open-Door Policy</td>
<td>The importance of having and maintaining an open-door policy really can’t be overstated. When your staff believes that if they come to you with a problem or concern you’ll work diligently toward a resolution, employee loyalty increases markedly. Care team members will feel that management respects and cares about them, which in turn invests them more fully in the clinic’s success. Letting staff know you’re always available also helps foster communication that keeps you in the loop on happenings on the front line. You’ll have your fingers on the “pulse” of the clinic, so to speak, which is crucial in a fast-paced environment like an urgent care center.</td>
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</table>

The economic effect of this positive word-of-mouth is real and quantifiable, and one of the main fiscal drivers of the urgent care business model. On the other hand, patients experiencing service failure—caused by excessively long waits, inaccurate diagnoses, payor/billing issues, wrong prescriptions, and poor overall service—become angry and disgruntled “avengers” who can seriously damage a practice’s reputation (and revenue) in the absence of a swift and decisive “service recovery.” At the root of this service failure are broken, outdated, and dysfunctional business processes, the foundation upon which the entirety of many centers’ operational and clinical activities are built. What’s more, the economic damage of service failure invariably trickles down to your staff, as demoralized front-line employees bearing the brunt of relentless customer complaints buckle under the weight of excess emotional labor. Low morale, chronic absenteeism, and terminations are the inevitable and unfortunate end result, which does its own, separate damage to a clinic’s bottom line.

As the urgent care physician/owner, you must remain ever-vigilant in rooting out, identifying, and repairing every broken or inefficient process you or your staff uncover, no matter the financial costs. You’re in this business to make money, and while you may believe you’re saving money by ignoring dysfunctional work processes, there’s an abundance of data available that proves conclusively just how staggering the economic damage associated with ongoing service failures (directly caused by these process failures) can be. In fact, the eventual direct and indirect losses will far outweigh the savings realized by forgoing the necessary upgrades/fixed. In sum, if you “bite the bullet” now and allocate capital towards fixing/upgrading broken processes, the resulting influx of clinic revenue that will indirectly result will far exceed the capital outlay, and leave you, your staff, and your “customers” grateful that you did.

Roll Out the Red Carpet

On the strength of your marketing and advertising efforts, positive word-of-mouth, occupational medicine contracts, or just plain happenstance, patients/customers have shown up at your urgent care center. Now is the time to roll out the proverbial red carpet and deliver an outstanding service experience they won’t soon forget. The opposite of an aforementioned “avenger” are happy “evangelists”—highly coveted and powerful marketing allies who’ll help spread the “gospel” of your wonderful center, provided that your service delivery is top-notch. You most definitely want your patients to become your
evangelists, and giving them the royal treatment is the way to make it happen. Table 3 provides several effective tips and strategies for making a lasting, positive impression on the visitors to your center.

**Conclusion**

Running a successful and profitable urgent care center requires fully embracing the very entrepreneurial spirit that leads many physicians to urgent care in the first place. Although you most likely didn’t learn business and marketing concepts while pursuing your medical degree, you must still cultivate the mindset of an enterprising entrepreneur willing to capture and retain patients through concerted marketing and a dedicated customer service philosophy. Urgent care is indeed retail medicine, patients are customers, and they come to your clinic with expectations unlike those of a traditional medical patient; they’re instead discerning consumers with choices as to who they’ll patronize for their urgent medical needs. Learn to compete for customer business and resolve to transform your clinic into the best in your community. Go to association conferences, attend local management seminars, read literature on entrepreneurship and marketing, and network with professionals who already run thriving clinics for valuable insights and knowledge on how it’s really done.

In addition to learning the ins and outs of customer retention, you must also learn how to successfully manage, lead, and motivate a staff of health care professionals to work as a collective toward patient care and clinic success. Create a community where your entire staff is a valued and essential member of the care team, and reward those who go above and beyond in the name of outstanding service delivery. Provide an open door policy for team members to address concerns, and have regular meetings so that staff can vent frustrations, share stories, and suggest improvements to the clinic in a supportive and caring environment. This will do wonders to get your staff fully on board and dedicated to the clinic operating at a high level.

In sum, your urgent care clinic is a substantial financial investment. Roll up your sleeves, and get to work on making it thrive. Commit yourself fully to the urgent care “game” and watch your clinic take off beyond what you may have believed was possible.

**Reference**


<table>
<thead>
<tr>
<th>Table 3. Making a Lasting, Positive Impression on Urgent Care Patients</th>
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<tr>
<td><strong>Be extremely time-conscious</strong> – Long waits are by far the top complaint of patients/customers across the entire health care spectrum. When patients visit your center, it’s your job to let them know you value every second of their time, and you’re working to get them in and out (with a correct diagnosis and great clinical outcome, of course) as soon as possible. Assign someone on the clinic staff to monitor how long each patient has been in the clinic, and have someone address them at regular time intervals (i.e., provide a status update every 10 minutes). You can also offer patients the following little perks if the clinic is busy and wait times begin to creep up:</td>
</tr>
<tr>
<td>• If the center is in a strip mall and patients feel up to it, offer to let them window-shop next door and promise to send a text message as soon as a clinician become available.</td>
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<tr>
<td>• Have patients go next door and grab complimentary coffee and donuts as a “thank you” for waiting.</td>
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<tr>
<td><strong>Provide amenities galore</strong> – Your patients are already uncomfortable and anxious due to sickness or injury. Make their wait as comfortable as possible by providing amenities in the lobby area, and they’ll definitely appreciate it. A few common waiting area amenities include:</td>
</tr>
<tr>
<td>• Complimentary Wi-Fi access</td>
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<td>• Complimentary liquid refreshment (coffee, hot cocoa, bottled water)</td>
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<tr>
<td>• Complimentary snacks (e.g., granola bars)</td>
</tr>
<tr>
<td>• Flat-screen TV in the waiting area</td>
</tr>
<tr>
<td>• Play area for children (tables, toys, coloring books, etc.)</td>
</tr>
<tr>
<td><strong>Personalized service</strong> – Let your patients/customers know that they’re welcomed guests at your center, and that you intend to make their visit as satisfying as possible. A couple inventive ways that you can pour on the personal touch are as follows:</td>
</tr>
<tr>
<td>• Wear a name tag that clearly expresses your customer service orientation such as, “At your service.”</td>
</tr>
<tr>
<td>• For patients who express concerns with billing, medications, doses, or are anxious about some other issue, give them your personal cell phone number and tell them to call you directly if there’s a problem, and you’ll work through it (an NP, PA, or other physician extender can rotate on who takes after-hours calls). Of course you can’t do this with every patient for obvious reasons, but for the few who require that extra reassurance, you’ll endear your clinic to them forever.</td>
</tr>
<tr>
<td><strong>Timely follow-ups</strong> – Make timely patient follow-ups a clinic priority. Patients will appreciate that you’re closely monitoring the status of their condition (even after they’ve left the clinic), confirming that the prescribed medication was accurate and effective, and ensuring that they’ve received a successful clinical outcome.</td>
</tr>
<tr>
<td><strong>Service Recovery</strong> – Proactively seek out patient complaints and concerns through direct inquiry, surveys, suggestion boxes, and follow-up phone calls. Studies show that many patients don’t complain about service failures because they don’t believe the issues will be remedied, so you can imagine how pleasantly surprised they’ll be when the clinic actually invites them to point out service delivery shortcomings. These and similar gestures have the powerful effect of letting patients know that their opinion is valued, and that their satisfaction is foremost in the minds of center staff.</td>
</tr>
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</table>
Overview
This case illustrates the importance of considering and ruling out rare causes of coronary artery disease (CAD) in young patients who present with chest pain. One of these rare causes is a hypercoagulable state secondary to homocysteinemia, which can be associated with other vascular events including stroke. The case presented here illustrates the approach to management and work up of chest pain in young patients to identify the underlying cause of CAD.

Case Presentation
A 25-year-old African-American male with a past medical history of diabetes mellitus and hypertension presented with a complaint of left-sided chest discomfort associated with some shortness of breath for 3 days. His pain score was 10/10 and the pain was constant, pressure-like, and radiated to the left shoulder. He denied palpitations, lower extremity swelling, orthopnea, cough, fever, chills or dizziness.

Observations and Findings
Physical examination revealed a patient in moderate distress with the following vital signs:
Temp: 98.5°F
Pulse: 123
RR: 22
BP: 136/90
O₂ Sat: 98%

The patient’s chest was clear with bilateral air entry. Tachycardia was present but no murmurs, gallop or rub. The patient’s abdomen was soft, non-tender and bowel sounds were normal. Neurological exam also was normal.

Laboratory and Test Results
Urine toxicology was negative for cocaine. Figure 1 shows the patient’s electrocardiogram (EKG).

ST Elevation Myocardial Infarction
Urgent message: Chest pain in young adults is often benign but it’s important to always consider conditions that increase risk of cardiovascular disease when evaluating these patients.

RAFAEL ILYAYEV, MD, FACP, MOHAMED A. MOHAMED, MD, AND HASSAN FARHAT, MD
Diagnosis
ST elevation myocardial infarction (STEMI) as demonstrated on EKG by ST elevation in leads I & aVL, V2-3-4-5-6 (Acute Anterolateral STEMI) and old inferior MI (Q waves in lead III, aVF). Upon further questioning, the patient revealed that he had an acute MI 5 years ago with stent placement in the proximal left anterior descending (LAD) coronary artery.

Additional laboratory tests, including complete blood count, complete metabolic profile, and coagulation profile were normal but cardiac enzymes were elevated, with troponin 12.3 ng/mL.

Course and Treatment
The patient was transferred to a nearby facility and percutaneous coronary intervention was performed, which showed a patent proximal LAD stent and 100% distal LAD occlusion (Figure 2) due to thrombus. Thrombectomy was performed with about 30 mL of blood and the thrombus was aspirated. Echocardiogram showed left ventricular apical thrombus with ejection fraction 40%.

This was a very unusual case in that the patient was a young man who had experienced two MIs.

The patient’s diabetes, while certainly a risk factor for premature CAD, was thought to be a less likely cause given that it had been well-controlled for some time. (His HbA1C was 5.6 g/dL 2 months prior). Therefore, further work up for additional risk factors was done, including C-ANCA, P-ANCA, antiphospholipid antibodies, and anticardiolipin antibodies. All results came back negative. Additional investigations were done and revealed an elevated homocysteine level at a value of 34.4 g/dL (normal = 0 to 15 g/dL).

Upon further questioning the patient revealed that he had a cerebrovascular accident at age 19. Review of previous records confirmed the history as evidenced by presence of a thrombotic cerebellar stroke on CT and MRI (Figures 3 and 4).

Discussion
Homocysteinemia appears to be an independent risk factor for cerebrovascular, peripheral arterial, and coronary heart disease (CHD) and for venous thromboembolic disease. Homocysteine has primary atherogenic and prothrombotic properties. Histopathologic hallmarks of homocysteine-induced vascular injury include

**Figure 1.**
intimal thickening, elastic lamina disruption, smooth muscle hypertrophy, marked platelet accumulation, and the formation of platelet-enriched occlusive thrombi. Sensitive assays allow quantification of the total plasma homocysteine concentration, with the following values: Moderate (15 to 30 μmol/L), intermediate (30 to 100 μmol/L) and severe (>100 μmol/L).

Hyperhomocysteinemia has been linked to the following vascular events:
- MI, other acute coronary syndromes, and recurrent coronary events;
- Premature CHD;
- Cardiovascular and total mortality;
- Adverse outcomes after angioplasty; and
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Acute pericarditis is an inflammation of the sac surrounding the heart, the pericardium, which usually lasts <6 weeks. It is by far the most common condition affecting the pericardium. That is evident on ECG as diffuse, positive, ST elevations with reciprocal ST depression in aVR and V1.3

Brugada Syndrome is a genetic disease that is characterized by abnormal EKG findings and an increased risk of sudden cardiac death. EKG shows ST elevations in leads V1-V3 with a right bundle branch block appearance with or without the terminal S waves in the lateral leads. A prolongation of the PR interval (a conduction disturbance in the heart) is also frequently seen.4

EKG changes of hyperkalemia include peaked T waves, widening of the QRS complex in severe hyperkalemia, and the EKG complex can evolve to a sinusoidal shape.5

Conclusion
It is crucial to consider a hypercoagulable state as a cause of CAD in young patients who present with chest pain. Patients with a hypercoagulable state, such as the homocysteinemia seen in our case, are at risk of vascular events including CAD and stroke. Although acute coronary syndrome is rare in those ages 18 to 35, some conditions significantly increase the risk and should always be explored carefully before concluding that their chest pain has a benign, non-cardiac cause.

References
Don’t Drink the Kool-Aid

JOHN SHUFELDT, MD, JD, MBA, FACEP

I did and not just a little. I guzzled the entire Jim Jones carafe full of it. I was an early electronic health record (EHR) adopter and I loved it! In fact, I still do; however, as with any Kool-Aid (particularly when it’s served in Guyana), you can’t just guzzle it and hope for the best. You have to know what is in it or else it can bite you. Here’s how you can be bit.

Improper Result Queuing
Say, for example, that you order a lab test on a patient that comes back abnormal—a serum potassium of 6.3. The EHR is set up such that abnormal results are first routed to the back office technician, who has to click on the result and then enter an action such as “referred to the provider.” What happens if the software has a bug or glitch and the queuing to the technician fails or the result is not labeled as abnormal? Most providers would incorrectly opine that, “the EHR vendor is to blame.”

The Health Insurance Portability and Accountability Act very specifically lays challenges related to maintenance of the integrity of the EHR on the health care provider, not the EHR vendor, consultant or integrator. A careful review of your vendor’s contract likely states that the vendor has no liability for medical malpractice issues related to the EHR.

From the perspective of a plaintiff’s attorney, if you purchased the EHR, you own the responsibility as well as any bad outcomes that result from its use. The take-home point is this: If you find errors, bugs, glitches, document them, report them, and keep a record of it. At the very least, you will be able to show a track record of identifying and trying to resolve the problem. Knowing about a problem and not trying to address it makes you complacent at best and complicit at worst.

Macros
Macros are the tool that was supposed to make our lives better. When you have a patient who presents with a headache and you have a “headache macro,” with one click of the button, a complete history and physical can appear, as if by magic. “This well appearing gentlemen presents with a gradual onset of mild headache which is not the worst in his life. He has no other symptoms including visual changes, stiff neck,Photophobia, thunderclap onset or weakness.” The macro goes on to detail a normal physical including the lack of meningeal signs and a non-focal neuro exam. This is all great and will be applicable 99% percent of the time – until it isn’t.

The nurse notes the following: “48 year old female in acute distress secondary to pain. She reports an acute onset of 10/10 head pain after defecating. She states that her neck is sore and feels ‘stiff.’” In addition, she complains about double vision and she feels like her R foot is dragging.

The patient goes on to have an acute subarachnoid “sentinel” bleed with a very large SAH 8 days later. A review of the medical record shows the discrepancies in the notes and, given the patient’s outcome, the jury believes the nurse’s documentation. What went wrong? In your haste to move patients in your busy center, you forgot to make the changes to your macro and instead simply clicked on the stored version of the macro and moved on.

You may have obtained the correct history and done the actual exam, however, your note reflects a completely different patient and scenario. Despite your testimony to the contrary, the medical record reflects the charting discrepancies. What happens next? Your med mal carrier writes a check.

Cutting and Pasting
In an effort to spend more time with patients and less time with our noses in our computers, many providers have turned to cutting and pasting from a previous encounter to a current encounter or from one patient to another. It’s understandable;
after all, how logical is it to simply type the same thing over and over? Cutting and pasting makes intuitive sense. The challenge, of course, is if you cut and paste something incorrectly or that is not an accurate reflection of the current encounter. I have seen a number of charts that were clearly not reflective of the current patient encounter or even of the correct patient.

When this happens and a medical misadventure occurs, the provider and his or her attorney have an incredible uphill battle. The provider is always the responsible party for failing to completely review the medical record and make decisions about care based off the medical record. In Short v. United States the court held that the physician violated the standard of care by failing to review the patient's past visit notes, which, had the provider done, revealed the complete nature of his medical problem.

Less Face Time
Generally, inputting data into an EHR takes up more provider time, which means providers may be spending less “face time” with patients. Patients complain about the depersonalization of inserting a computer into the physician – patient encounter. Providers who spend less time with patients and more time during encounters with their heads down typing may be perceived as not caring, which could lead to patients filing suit when they are dissatisfied with their outcomes.

Meta Data
Generally speaking, EHRs track every key stroke, erased or pasted text and who was in the record and when. If you are notified about a bad patient outcome on a patient who was treated yesterday and you go into the chart to “make an addendum or add additional documentation” it is easily tracked and traced. If you do go into a record, date and time the addition or deletion in an actual note so that it does not appear that you are trying to manipulate the information to paint your care in the best light.

Plaintiff’s attorneys always subpoena the metadata and typically retain an expert to evaluate that information in order to impeach the provider who attempts to alter the record.

Meaningful Use
For an EHR to qualify as meeting Meaningful Use, it has to meet a number of criteria. One criterion is that drug–drug interactions and drug–allergy interactions are checked. If hundreds of thousands of providers are now, because of their EHR, automatically checking these, does a failure to do so mean that the provider who is not using an EHR certified as meeting Meaningful Use or who does not check for interactions has fallen below the standard of care?

For example, suppose you have a patient who presents after an ankle injury and you correctly diagnose an ankle strain. The patient has a history of depression and is on a selective serotonin reuptake inhibitor (SSRI). You place the patient on a nonsteroidal anti-inflammatory drug (NSAID). One week later the patient has a massive gastrointestinal (GI) bleed and dies. Did you know that the risk of GI bleeding is increased in patients on SSRIs and NSAIDs? Or, let’s say that you see a patient who is complaining of vomiting and diarrhea. You check the individual’s electrolytes and notice that the patient’s potassium is 5.0. You correctly believe that the patient is not losing a significant amount of electrolytes and does not require aggressive intervention. You fail to find out that the patient was recently placed on an angiotensin-converting enzyme inhibitor along with their spironolactone. Are you aware that patients on this combination of drugs can develop severe or fatal hyperkalemia?

Was it below the standard of care that you didn’t know about these interactions and thus did not inform the patient? What if hundreds of thousands of providers would have made the connection because their EHR was Meaningful Use certified and warned of the interaction? All of a sudden your failure to inform the patient about a relatively rare interaction falls below the standard.

Conclusion
EHRs are here to stay – thankfully. With technology, however, comes additional challenges and responsibilities. For all the great things technology adds to patient care, it also adds some new wrinkles. Here are some take-home points to avoid simply guzzling the Kool-Aid:

1. Understand how your EHR works, its limitations and bugs.
2. If you identify a bug or glitch, notify the vendor and keep a record of the interaction.
3. If your EHR does have some pitfalls, identify them and develop work-around processes — even if they are manual.
4. Don’t cut and paste from one record to the other or one patient to the other.
5. If you use macros for charting, make sure you review them prior to signing the record.
6. If your program does come with “best practice” suggestions and you ignore them, simply address the reason why in the medical record.
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 wrist injury.

View the images taken (Figure 1) and consider what your diagnosis would be.

Resolution of the case is described on the next page.
Diagnosis: The x-rays reveal a scapholunate dissociation (arrow).

Scapholunate dissociation is a significant ligamentous wrist injury. Findings on x-ray can be subtle, but are important to identify. There is disruption of the scapholunate ligament with resultant instability. AP radiographs may demonstrate a widened scapholunate space (>3 mm), known as the Leon Spinks sign (gap-tooth appearance) (yellow line). This is best seen in clenched-fist views and PA views with the wrist in ulnar deviation.

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

CLINICAL CHALLENGE: CASE 2

This x-ray was taken on a young basketball player with foot pain and no specific injury.

View the image taken (Figure 1) and consider what your diagnosis would be.

Resolution of the case is described on the next page.
Diagnosis: The x-ray reveals a stress fracture of the fifth metatarsal (arrow).

Most diaphyseal (shaft) fifth metatarsal stress fractures are caused by chronic overloading in a young athlete (usually from jumping and pivoting activities). Treatment is dependent on time to diagnosis, age, and level of future physical activity desired. Initial management is a splint, non-weight bearing with orthopedic consultation.

Acknowledgement: Case presented by Teleradiology Specialists (http://www.teleradiologyspecialists.com)
CODING Q & A

New CMS Modifiers, Urgent Care Codes, Supply Codes

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.

Q. What will be the impact of use of the new HCPCS modifiers related to modifier -59 beginning January 1, 2015?

A. CMS recently announced the creation of four new HCPCS modifiers that will further refine modifier -59, “Distinct procedural service.” According to CMS, modifier -59 is the most widely used modifier, and it is being used inappropriately in most cases.

Adding modifier -59 indicates that a code represents a service that is separate and distinct from another service with which it would usually be considered to be bundled. It is also used in circumstances that identify different encounters and different anatomic sites. CMS established the new modifiers to define the following specific subsets of the -59 modifier, which are referred to collectively as –X{EPSU} modifiers:

- XE Separate Encounter, A service that is distinct because it occurred during a separate encounter;
- XS Separate Structure, A service that is distinct because it was performed on a separate organ/structure;
- XP Separate Practitioner, A service that is distinct because it was performed by a different practitioner; and
- XU Unusual Non-Overlapping Service, The use of a service that is distinct because it does not overlap usual components of the main service.

CMS will continue to recognize modifier -59, but be prepared to have claims returned that require a more specific –X{EPSU} modifier. Under CPT guidelines, modifier -59 should not be used when a more descriptive modifier is available. CMS may designate a particular NCCI code pair as payable only with the –XE (Separate Encounter) modifier and not the -59 or other –X{EPSU} modifiers. However, these modifiers are valid modifiers even before the national edits are in place. Thus, Medicare Approved Contractors (MACs) are not prohibited from requiring the use of selective modifiers in lieu of the general -59 modifier when necessitated by local program integrity and compliance needs.

Q. Are there certain diagnosis codes (ICD) that are not covered when billed with POS 20 (Urgent Care)?

A. An urgent care center can bill any diagnosis code, but coverage will most likely be determined by the payor based on what services were performed and medical necessity.

However, payors usually deny payment for a procedure if the procedure is not linked to a supporting ICD code. An example of this would be a provider submitting a claim for a chest x-ray, but linking the chest x-ray code only to a diagnosis of strep throat (034.0). If the chest x-ray is linked to the diagnosis of cough (786.2), then the payor is much more likely to reimburse for the procedure.

Another common source of denials is a payor-specific denial on a claim or a line item based on the CPT/HCPCS code that is used. Sometimes a denial may be for a specific
combination of provider (or provider credentials) and the CPT/HCPCS codes. Examples of these scenarios include:

A payor in New Jersey that will not pay for x-ray studies at some urgent care centers.

A payor in Mississippi that will not pay for an x-ray of the spine, a strep test, or a urine pregnancy test if that test was ordered by a nurse practitioner or physician assistant unless the patient also had a direct face-to-face encounter with a physician on that visit.

Q. I have a question about billing supplies (L-codes) with fracture codes. More specifically, if a patient has a finger fracture and you provide a finger splint, can you bill HCPCS code L3927 with CPT code 26720?

A. Because there are several descriptions in HCPCS for a finger splint, you will want to verify with your supplier the HCPCS code they recommend you use or review the descriptions in HCPCS to determine the one that best describes what you are using. If you search HCPCS for “finger,” you will see choices for “orthotic” and “splint.” The code provided for a finger splint is simply A4570, “Splint.” You are also directed to ortho codes, or “L” codes.

With just a few exceptions, if the device is described in HCPCS as “orthotic,” then fitting and adjustment is included and would not be billed in addition to the fracture care code. If the device is described as “orthosis,” then fitting and adjustment is typically not included because it involves strapping, which is considered separate work from the fracture care. Because HCPCS code L3927, “Finger orthosis, proximal interphalangeal (PIP)/distal interphalangeal (DIP), without joint/spring, extension/flexion, may include soft interface material, prefabricated, off-the-shelf” does not include the fitting and adjustment, it would be appropriate for you to bill it with your fracture care code.

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Timing of concussion symptoms
Key point: Symptoms of concussion such as sleep disturbance, forgetfulness, and fatigue are late in onset.
Citation: Eisenberg MA, Meehan WP 3rd, Mannix R. Duration and course of post-concussive symptoms. Pediatrics. 2014;133(6):999-1006.

Estimates of the duration of concussion symptoms in children vary from 1 week to months. This study looks at previous cohorts where the median time to recovery was 13 days and considers symptoms, their duration, and clinical course. The original prospective cohort was patients ages 11 to 22 seen in an emergency room within 72 hours of a concussion. The Rivermead Post-Concussion Symptoms Questionnaire (RPSQ) was used to evaluate symptoms. This study included data from 235 patients who filled out at least 2 surveys. The authors noted that “Although headache, fatigue, dizziness, and taking longer to think were the most common symptoms encountered at presentation, sleep disturbance, frustration, forgetfulness, and fatigue were the symptoms most likely to develop during the follow-up period that had not been present initially after the injury.” For urgent care providers, this new information should prompt a discussion of possible late onset of concussion symptoms and the significant duration of symptoms with patients and family. The article contains a complex table with symptoms and percent present at onset, evaluation, 7, 28, and 90 days that providers may find helpful to explain symptoms and duration.

Emesis and blunt head trauma
Key point: Clinically important brain injury is uncommon in patients who present with emesis only after minor blunt head trauma.

Isolated emesis is a frequent presentation after mild blunt head trauma. Authors in this study attempted to determine the likelihood of clinically important brain injury in patients with only emesis. Patients presenting to the emergency room (ER) with head injury were evaluated by physicians and the standard history and physical was used to determine if the emesis was isolated. Of 5,557 with emesis, 815 were determined to qualify as having isolated emesis. The definition of clinically important traumatic brain injury was similar to other studies (death, neurosurgical procedure, intubation for more than 24 hours, or hospital stay greater than 2 days). Of the patients
with isolated emesis, 0.2% had clinically important brain injury compared to 2.5% of the remainder of patients presenting with emesis. Interestingly only 37% of the isolated emesis group had computed tomography (CT) performed versus 82% with other symptoms. From an urgent care perspective, the low risk of significant brain injury and low rate of CT performed in the ER can be shared with patients and families when considering CT or transfer to an emergency department.

**Levofloxacin safety in children**

**Key point:** Levofloxacin may be safer in children than previously thought.


Musculoskeletal toxicity associated with fluoroquinolones has been a concern for many years now and has limited use of these drugs in children. Previous studies looked at children for 1 year after exposure and identified children with possible toxic effects. This study takes another look at this issue with a 5-year window to determine if the effects lasted or not. The authors enrolled the patients from the prior study who were believed to have had musculoskeletal effects at 1 year. Of these patients, 124 (9%) were exposed to levofloxacin and 83 (6%) were exposed to the comparator antibiotic. Only 49% of each of these groups completed the study. Similar 5-year data were found for both groups. This study is small and not prospective but may be the beginning of changes in recommendations for children. From the urgent care perspective, this obviously does not “green light” the use of fluoroquinolones but can be discussed with parents when other options are not available.

**Secondary reactions after an ER visit for an allergic reaction**

**Key point:** Biphasic allergic reactions seem rarer than previously thought.


Concern about biphasic or second reactions has prompted long emergency room (ER) stays for patients with allergic reactions. This study looks at the incidence of this type of reaction in two ERs in Canada. During the study 428,634 patients presented to the ER. Of these cases, 2,819 were reviewed (496 anaphylaxis and 2,323 allergic reactions). A total of 185 patients returned for at least one extra visit. Only five patients had clinically significant biphasic reactions within 7 days of their original visit. Two occurred in the ER and three after discharge. Two patients were in the anaphylaxis group and three in the allergic reaction group. There were no deaths or serious morbidity. From an urgent care perspective, providers still need to discuss the possibility of a biphasic or repeat reaction but can reference the small likelihood noted in this study. If further studies confirm these findings, the length of recommended observation may become shorter.

**Ultrasound vs x-ray in pediatric hand fracture**

**Key point:** Ultrasound is an alternative to x-ray in diagnosis of hand fractures in children.


Ultrasound has been used to diagnose fractures mostly in the long bones of adults. The uncertain long-term effects of radiation continue to be a concern for parents and providers. The authors of this study attempt to show that ultrasound can be used to diagnose hand fractures in children.

A convenience sample of 204 patients with possible hand fractures were evaluated with standard radiographs and ultrasound. The tests were performed and read independently. The ultrasounds were performed and read by the emergency room providers. A total of 72 fractures were found. Sensitivity and specificity of x-ray were 91.1% and 97.6%, respectively. Ultrasound was similar at 91.5% and 96.8%, respectively.

For urgent care providers, this study is of limited interest, but as the number of indications for ultrasound increase, it may become a modality that urgent care centers might consider adopting if reimbursement covers the cost of equipment and training.

**Impact of symptoms at presentation on post-concussion syndrome**

**Key point:** More severe symptoms at presentation do not indicate longer symptom duration, but do correlate with risk for post-concussion syndrome.


Concussion continues to be a hot topic in both professional sports and medicine in general. Delayed resolution of symptoms has great importance when considering advice and follow up for patients diagnosed with concussion. It would seem logical that concussion might take longer to resolve in patients who have more symptoms at presentation.

In this study, 179 patients were reviewed in a longitudinal cohort fashion to determine if more severe symptoms at pres-
entation resulted in delayed symptom resolution (DSR). The analysis showed that DSR was not related to more severe symptoms evaluated by a graded symptom inventory. However, post-concussion syndrome (PSC) was related to more severe symptoms at presentation. PCS is probably more concerning than DSC and its relation to more severe symptoms at presentation needs to be considered.

For the urgent care provider, this information can be used when discussing the importance of follow up and the potential for both DSR and PCS.

**Diagnosis of appendicitis with enteral contrast**

**Key point:** Enteral contrast does not appear to improve diagnosis of appendicitis.


Previous studies have shown that enteral contrast does not improve diagnostic accuracy of computed tomography (CT) scans for appendicitis. The authors noted that these studies were mostly at tertiary hospitals and may not be generalizable to other populations. This study examined the diagnostic accuracy of CT scan including intravenous (IV) contrast with and without enteral contrast.

The authors retrospectively reviewed more than 8,000 charts of patients who underwent appendectomy. A total of 54% had only IV contrast. Oral contrast was provided in 28.5%. Pathology correlated with CT findings in 90% of those in whom both IV and enteral contrast was used and 90.4% of those with only IV contrast.

From an urgent care perspective, providers with access to CT scan might discuss skipping the oral contrast with those who are reading imaging studies. Because oral contrast takes time to get through the bowels, eliminating it may decrease the time to get study results and improve throughput. Ill patients also are likely to appreciate not having to swallow the contrast.

**Alternative greetings and infection control**

**Key point:** Fist bump could reduce transfer of infections.

**Citation:** Mela S, Whitworth DE. The fist bump: A more hygienic alternative to the handshake. *Am J Infect Cont.* 2014;42:916-917.

The authors of this study wanted to see how the fist bump compared to hand slap or handshake for risk of spreading infection. Concern continues about the spread of infection through contact with others but providers also are concerned about losing the traditional greeting.

“From an urgent care perspective, providers with access to CT scan might discuss skipping the oral contrast with those who are reading imaging studies.”

In this study, two methods were used to determine the location of contact and amount of bacteria spread. All participants used gloves covered in either non-pathogenic *Escherichia coli* or paint. Nearly twice as much transfer was found with the handshake versus the hand slap, and even less with the fist bump. Length of contact also increased the amount of transfer.

Although the environment in this study was somewhat artificial, the results are interesting. For the urgent care provider, considering alternative forms of greeting may be appropriate if they are acceptable to patients.

**C. difficile infection prevalence**

**Key point:** Clostridium difficile infections are more common than thought in general practice but the percentage is still small.

**Citation:** Hensgens MPM, Dekkers OM, Demeulemeester A, et al. Diarrhoea in general practice: When should a *Clostridium difficile* infection be considered? Results of a nested case control study. *Clin Microbiol Infect.* 2014 Jul 7. doi: 10.1111/1469-0691.12758

Diarrhea caused by *Clostridium difficile* infection (CDI) is generally considered to have a relationship to hospital or nursing home exposures and antibiotic use. Authors in Holland looked at the incidence of CDI in stool samples from patients that were sent to three laboratories by primary care physicians for any type of infection testing. All unformed stools were tested for CDI toxin whether that was requested or not.

A total of 12,714 samples were tested with 194 (1.5%) samples testing positive for CDI. Only 7% of stool samples had orders for CDI testing, which identified 40% of positive specimens. The authors note that testing based on guidelines (hospitals and antibiotic exposure) would have detected 61% of infections.

From an urgent care perspective this study is interesting. However, considering the low percentage of patients with CDI, further study needs to be done to help identify appropriate patients to test for it. In an era where reducing health care cost is emphasized, testing everyone may not be the best option.
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These 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: How Much Pay are Physicians Earning?

There is a broad range of physician salaries among respondents, typically depending on the clinical background and experience of the physician, as well as the local market rates. The more frequent mid-range category ($150-159k) had a similar frequency in 2010’s results, but the higher category of $190k+ has increased from 27.6% in 2010 to 37.6%. Hourly compensation, however, has remained steady since 2010, being almost evenly split above and below the $90/hour mark, likely due to the same variations as in salary determination (n=130).

Acknowledgement: The 2012 Urgent Care Industry Benchmarking Study was funded by the Urgent Care Association of America and administered by Anderson, Niebuhr and Associates, Inc. The full report can be purchased at www.ucaoa.org/benchmarking.
The UCAOA National Urgent Care Convention is the anticipated event of the year for urgent care professionals and clinicians worldwide. Well regarded for its basic and advanced clinical and practice management courses, the National Convention also provides quality networking and career development opportunities and an expansive exhibition hall showcasing the industry’s most innovative products, technologies and services.

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