

JANUARY 2024 VOLUME 18, NUMBER 4









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LETTER FROM THE EDITOR-IN-CHIEF

'What Happens If We Do Nothing?' Is Still the Right Question

t only hurts right here," Rich told me, pointing to a tender spot on his ribs under his arm pit.

I palpated his chest wall and observed as he winced when I hit the spot.

"I just need to make sure I'm okay to go back to work."
Rich was middle-aged and had a mustache with hints
of grey. He was a large man, but his potbelly was overshadowed by his towering height. He had a polite, unassuming demeanor and came in wearing his uniform for
the mechanic shop he worked in, complete with his
name embroidered on the chest and a collage of grease
stains. He'd left work to come to urgent care (UC) to get a
note clearing him for work after slipping and falling on

some steps the night before. It was clear he didn't want to be here.

"How's the pain? Have you taken anything for it?" I asked.

"Just some ibuprofen. It's manageable," he said.

I recommended we get a chest x-ray to make sure he hadn't punctured his lung. He somewhat reluctantly agreed. It was clear anything I suggested was going to seem like overkill to him.

Not surprisingly, his x-ray showed no pneumothorax, hemothorax, or lung contusion. I thought I might be

able to make out a single rib fracture, but I didn't see any reason to keep him any longer. I knew he was more eager for the discharge conversation than I was.

As I got ready to discuss the "good news," with him, I reviewed his vitals. His blood pressure (BP) was 197/115. Maybe it was just the pain, I thought. So, I looked back at his pressures from infrequent prior visits over the last 5 years or so: 175/108; 182/101; 173/99. It was clear this

was more than just the adrenaline from his rib pain driving this. Looking through his chart further, I found no mention of his elevated blood pressure or any documented history of hypertension. He was only taking metformin for diabetes. Then I saw his last HbA1c; it was over 10. It seemed like there was more than the rib fracture I needed to discuss with Rich.

I went back to the exam room and found him standing at the doorway with his coat on. He was clearly only waiting for his note for work. "How often do you check your blood pressure and blood sugar?" I asked.

"I don't check either. They check them for me if I go to the doctor's," he said. It turned out this wasn't very often.

We see patients like Rich every day in UC, and we find ourselves in similar situations as this almost as frequently. He was in a hurry, I was in a hurry. The immediate issue had been assessed, and we both had other things to do.

I imagine if you polled a group of UC clinicians about how they'd address his undiagnosed hypertension and poorly controlled diabetes, many would say they wouldn't. Perhaps some would comment on his high BP and that he should see his primary care provider about it. However, I am certain that most UC practitioners would spend several minutes—likely the vast majority of the interaction—discussing the suspected rib fracture and things like bracing, incentive spirometry, pain control, and cautions around developing pneumonia. After all, it's why he came in that day. But while it's undeniable Rich presented for his rib injury, it was arguably the least important topic to discuss.

My October 2023 editorial entitled "What Happens If We Do Nothing?" presented an argument for doing *less* rather than more for the majority of the acute issues that land on our doorsteps. I contended that most UC patients are at higher risk of adverse outcomes by us ordering questionably indicated tests and medications. This position, while potentially controversial, is based on the undeniable premise that most UC presentations represent minor, self-limited conditions (eg, lumbar strains,



Our greatest
perpetual duty is
to spend each
moment in the
most meaningful
way possible.

minor skin infections, sinusitis etc.). Appreciating the self-resolving nature of these issues alongside the prospect of doing harm though intervention, I alluded to the important and juxtaposed concepts of natural history and iatrogenic potential. For minor, self-limited problems, the natural history is full recovery, and therefore, the potential risks of most testing and treatment are not justified because our patients are typically very likely to recover fully regardless. An isolated rib fracture from minor chest trauma in a middle-aged patient is another example of such a condition.

However, while most patients elect to visit UC for acute issues, undiagnosed or inadequately managed chronic conditions commonly become apparent through the course of our assessments. This was the case with Rich. Additional issues that present high-yield opportunities for affecting our patients' future health outcomes include obesity, overdue cancer screening, safer sex practices, and substance use patterns (eg, tobacco and alcohol consumption). Although these issues are rarely the sole impetus for UC visits, we ignore them at our patients' peril, and we know what happens if nothing is done about them. Cardiovascular disease and cancer are the two leading causes of death in the U.S. Stroke, diabetes, liver failure, lung disease, and dementia also make the top 10 list. Whereas dying from sinusitis, urinary tract infection, or a rib fracture, unsurprisingly, aren't.2 We know, with as much certainty as is possible in medicine, that these chronic health conditions and lifestyle choices, however, are clearly major contributors to premature morbidity and mortality.

Our primary duty in UC is indeed to address patients' proximate concerns and exclude immediate life threats. But to be honest, we can do this for most patients in a matter of a few moments. This is, however, when we reach the critical decision point: Do we stop there and move onto the next patient, or do we invest an extra moment and a bit more effort to do something that can really make a difference in a patient's life?

Addressing Versus Managing

When we take our cars in for an oil change, it's common practice for the service technician to comment on the overall "well-being" of our vehicle. In addition to changing the oil and filter, we may be told that the brake pads are wearing thin or the timing belt is fraying. This information is incredibly valuable, even though it isn't especially relevant to the reason we stopped in for service, because these mechanical issues are looming disasters for our car's mechanical function and our safety. While we don't hold the technician solely responsible for reme-

dying every problem they find then and there, most of us would feel betrayed if these issues were to be identified but not communicated with us. With less expertise in automotive maintenance and repair, we become accustomed to the way our cars handle and are insensitive to small changes that accrue over time. It often takes an objective and expert eye to recognize impending disasters.

Similarly, our patients rarely present to UC to discuss chronic health conditions. Rather, they present with what they feel is a discrete need: a new symptom needs evaluation, a medication needs to be refilled, or they feel they should have a specific test. Increasingly, fewer of our patients have a primary care clinician, and we may be their only contact with the healthcare system for months or years.3 Like the auto mechanic, we often quickly identify looming trouble for our patients' health (eg, uncontrolled hypertension, severe obesity, etc.). But this undeniable reality does not imply that we are obliged to "fix" these chronic issues (nor should that be our patients' expectation). However, we are as remiss as a reticent repairman if we do not at least draw the patient's attention to the concerning nature of what we observe and convey what's likely to happen if the problems are ignored.

Many UC clinicians may balk at the idea of having any responsibility in such scenarios. "This isn't our job," is a common refrain. Yet, if we are concerned about the wellbeing of our patients, that argument doesn't really hold water. There are many cracks in the American healthcare system—and indeed most nation's healthcare systems—however, focusing on these deficiencies does little to protect the health of our patients.

There is also a common sentiment that counseling about health behaviors and lifestyle changes in the acute care setting is overly time consuming and futile.⁴ However, we often underestimate the effect of these brief (ie, 1-2 minute) interventions.⁵ This is likely largely because without continuity with our patients, we don't see the effects of our efforts. We plant the seeds, but we don't get to see them grow. It's worth remembering however, as Warren Buffet said, "Someone is sitting in the shade today because someone planted a tree a long time ago."

Conversely, if we ignore these chronic situations that we know pose significant risks for longer term outcomes, we send an implicit message that they're really not so important. If you're a parent and you catch your teenager with a beer, not calling it out sends the message that "drinking is okay." Our patients, whether either of us realize it, look to us for guidance and therefore, saying nothing when an unmitigated chronic problem is apparent is meaningful.

Ticking Time Bombs

As UC is increasingly becoming patients' lone interface with healthcare practitioners, it is worth scrutinizing how we approach these obvious "ticking time bomb" situations.

Again, the question, "what happens if we do nothing?" becomes critical. Since we've all chosen UC because we care for our patients, we must offer prescient warnings when we see where their stories are heading. In an ideal world, these responsibilities wouldn't fall on our shoulders, but we practice in world and healthcare environment that is tragically short of perfect.

The reality of UC practice is that we have precious little time with each patient, so our greatest perpetual duty is to spend each moment in the most meaningful way possible. Had I focused only on Rich's rib fracture, he would have been perfectly content to continue on with his day and life. He may have even given me a 5-star review for getting him in-and-out so quickly. However, I believe we are called to look beyond asking ourselves, "What do I need to do for the issue this patient came in for?" Instead, we should consider the natural history of whatever long-standing medical issues we inadvertently

uncover and again ask ourselves, "What happens if I do nothing?" Because if we don't, then who will?

References

- 1.. Russell J. What Happens if We Do Nothing? J Urgent Care Med. 2023;18(1):1-5 2. Centers for Disease Control and Prevention Website. Leading Causes of Death, 2021. https://www.cdc.gov/nchs/fastats/leading-causes-of-death.htm. Accessed November 28, 2023.
- 3. Levine DM, Linder JA, Landon BE. Characteristics of Americans With Primary Care and Changes Over Time, 2002-2015. *JAMA Intern Med.* 2020;180(3):463-466. doi:10.1001/jamainternmed.2019.6282
- 4. Tong EK, Strouse R, Hall J, Kovac M, Schroeder SA. National survey of U.S. health professionals' smoking prevalence, cessation practices, and beliefs. *Nicotine Tob Res.* 2010 Jul;12(7):724-33. doi: 10.1093/ntr/ntq071. Epub 2010 May 27. PMID: 20507899; PMCID: PMC6281036.
- 5. Pelletier JH, Strout TD, Baumann MR. A systematic review of smoking cessation interventions in the emergency setting. *Am J Emerg Med.* 2014 Jul; 32(7):713-24. doi: 10.1016/j.ajem.2014.03.042. Epub 2014 Apr 2. PMID: 24768666.



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1. Abbott. Data on file. ID NOW™ Influenza A & B 2 clinical trial data.

 $2. Abbott.\ Data\ on\ file.\ ID\ NOW^{\tiny{\mbox{\scriptsize TM}}}\ Strep\ A\ 2\ clinical\ trial\ data.$

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CLINICAL

1 ? Charting with Purpose: Precision Strategies for Accurate Coding and **Malpractice Defense**

Medical malpractice claims are an unfortunate reality, but a purposeful thought process during patient encounters will help clinicians capture the elements required for accurate coding that improves malpractice defense should allegations occur. Ieff Willis, MD

CLINICAL

The Importance of **Providing Clinical** History for Radiology **Studies in the Urgent Care Setting**



Providing relevant clinical history for radiology orders ensures that radiologists are able to provide high-quality reports that contribute to

appropriate patient care.

Morgan P. McBee, MD, CIIP; Leah S. McBee, MD

CASE REPORT

Quadriceps **Pyomyositis After Aspiration of Patellar Bursitis: A Case Report**



When a diabetic patient presented to urgent care with worsening thigh muscle pain, deep tissue infection became a serious consideration

once the clinician discovered the patient recently had bursal aspiration.

Benjamin Mati, MD

CASE REPORT

Does This Finger **Laceration Need** Immediate Vascular **Surgery Consultation?** Perspectives Based on an Urgent Care Patient **Experience**



Clinicians can mitigate excessive emergency department referrals with a clear understanding of hand anatomy while also applying best-practice

wound-closure techniques and principles. Patrick O'Malley, MD

PRACTICE MANAGEMENT

Thinking Outside the **Box to Bring Urgent** Care to the Patient



This Q&A with Gregory LaFontaine, PA, founder of Mobile Med, provides an inside look at the telehealth and homecentered model.

Alan Ayers, MBA, MAcc

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JUCM The Journal of Urgent Care Medicine (ISSN 19380011) supports the evolution of urgent care medicine by creating content that addresses both the clinical pracby creating content that addresses both the clinical prac-tice of urgent care medicine and the practice manage-ment challenges of keeping pace with an ever-changing health care materiplace. As the Official Publication of the Urgent Care Association and the College of Urgent Care Medicine, IUCM seeks to provide a forum for the exchange of ideas regarding the clinical and business best-prac-tices for running an urgent care ender tices for running an urgent care center.

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URGENT INTERACTIONS



LETTERS TO THE EDITOR

In response to the November 2023 Letter from the Editor in Chief, "Broader Issues Surround 'Work Note Seeking"

I was completely shocked with the statistics on the potential cost in healthcare for work note visits...What has really shocked me the most is that employers have sent home their employee because "the cough sounded bad" and expected treatment, proof of treatment, and a work note...Employers are seeking guidance for recommendations and regulations ever since COVID-19 as they do not want to be held liable for an outbreak of any kind at their company. My suggestion would be to have more rights as a patient and the freedom on whether they want to seek medical care or provide a note to their employer....Thanks for a great read.

Miranda Langloss, DNP, FNP-C Taylorville Urgent Care

I agree that the incentives are complicated...Infectious disease is a straightforward process for the work note because of preventing costs of additional sick workers. I don't think we should view these visits as a sunk cost to urgent care. The economic benefit is achieved by the followon visit from the initial walk-in and word of mouth to [fellow] employees. If anything, these could be handled by the nurse practitioner for a highacuity urgent care environment. If the workplace is making people sick, our public health duty is to shine a light on the problem and assuage the worker.

Steven Bayer, MD Hwy 53 Urgent Health Care



"Efficient documentation under the updated American Medical Association quidelines for urgent care centers enhances coding accuracy and malpractice protection. Focus on meaningful patient history, relevant exams, and detailed medical decision-making to minimize risk."

- Jeff Willis, MD

Author of Charting with Purpose: Precision Strategies for Accurate Coding and Malpractice Defense (page 13)



"Research is an interesting area of medicine and new to urgent care. It's about being curious about why we do things in a particular way and whether things can be done differently and/or better. It's about the evolution of our practice. The key thing in research is to start with 'why."

-Ivan Koay, MD, MBChB, MRCS, FRNZCUC

JUCM Abstracts Editor (page 21)



Have a comment? Interested in sharing your perspective on a topic that appeared in JUCM? Not all letters will be published. Letters may be edited for length and clarity. **Send your letters to:** editor@jucm.com

The Urgent Care Convention April 13-17, 2024





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FROM THE UCA CEO

Recharge Your Batteries

■ Lou Ellen Horwitz, MA

riving Change" is our overarching convention theme that we build on each year. When you are busy "Driving Change" in healthcare delivery, there aren't a lot of breaks.

In just the normal day-to-day of Urgent Care, you are anticipating, meeting, and exceeding the needs of your patients. You are doing the same for your occupational medicine employer customers. You are doing the same for your colleagues. You are doing the same for your strategic partners.

Add onto that the internal calling that most of us have in Urgent Care: We want to make healthcare even better than it is now. It's the whole reason Urgent Care came to be. We saw gaps and saw ways to fill them, and we keep seeing gaps and keep working to fill them.

You also have a unique ability that most working in healthcare do not have, and that's the ability to quickly and skillfully adapt to change. You not only adapt to change, you see ways to make things better and—most importantly—you actively pursue making those changes. Most segments of healthcare take a long time to do that, which is why they look at Urgent Care and see a model.

These are the reasons why Urgent Care, and all of you working in Urgent Care, end up (or should end up!) in the driver's seat.

However, that isn't how it always happens. Sometimes, we are forced into the back seat, and we can end up being back seat drivers! It's hard to remain quiet when you can see the pathways forward so clearly, and it's important for patients and communities that we do not remain quiet.

These are the reasons why driving change is an essential requirement in Urgent Care and also the reasons why it requires a lot of energy—*a lot* of energy. This year at the Urgent Care Convention, April 13-17 in Las Vegas, we are



 ${\bf Lou~Ellen~Horwitz},\,{\bf MA}$ is the chief executive officer of the Urgent Care Association.

"You also have a unique ability that most working in healthcare do not have, and that's the ability to quickly and skillfully adapt to change."

making sure that your reserves are replenished and your batteries are recharged. Of course, how that looks will be different for different people, and as we're planning, we're taking it all into account.

Maybe for you it means restoring faith in yourself and what you know to be right. Maybe it means connecting with people who understand what you are trying to do at your organization and can give you a fresh perspective. It could mean going to an event you didn't have to plan and eating wonderful meals without having to worry about doing the dishes. Or it could mean having experts answer your questions so you can make sure you know your stuff and know it well. Perhaps it's finding a space that isn't "go, go, go," so you can pause and think about the hard questions. And maybe it means going to an awesome party and dancing it all out. You deserve all of this, and we want to give it to you. And we will. The more we thought about how we wanted to keep driving change this year, the more we realized that since 2019, you have not really had a break to truly recharge. We hope that the 2024 Urgent Care Convention will be where you give yourself that gift. I very much hope to see you in Las Vegas in April. Registration is open now, and if you take a few minutes to see what we have planned, I think you're going to like it. Happy new year and thank you, as always, for all of the energy you are giving to making healthcare better for everyone.



CONTINUING MEDICAL EDUCATION

Release Date: January 1, 2024 Expiration Date: December 31, 2024

Target Audience

This continuing medical education (CME) program is intended for urgent care physicians, primary-care physicians, resident physicians, nurse-practitioners, and physician assistants currently practicing, or seeking proficiency in, urgent care medicine.

Learning Objectives

- 1. To provide best practice recommendations for the diagnosis and treatment of common conditions seen in urgent care
- 2. To review clinical guidelines wherever applicable and discuss their relevancy and utility in the urgent care setting
- 3. To provide unbiased, expert advice regarding the management and operational success of urgent care practices
- 4. To support content and recommendations with evidence and literature references rather than personal opinion

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Charting with Purpose: Precision Strategies for Accurate Coding and Malpractice Defense (page 13)

- 1. What percentage of malpractice claims in urgent care are the result of significant injury or death?
 - a. 22%
 - b. 80%
 - c. 90%
 - d. 100%
- 2. Which of these serves as the determinant of the evaluation and management (E/M) level in a typical urgent care setting?
 - a. Time criteria
 - b. Differential diagnosis
 - c. Medical decision making
 - d. None of the above
- 3. E/M coding guidelines require an urgent care provider to document which of the following?
 - a. Medically appropriate history
 - b. Location
 - c. Duration
 - d. Severity

The Importance of Providing Clinical History for Radiology Studies in the Urgent Care Setting (page 17)

- 1. Clinical history provides context for radiology technologists to ensure which of these benefits?
 - a. Appropriate triage of exams
 - b. Correct study is performed
 - c. Correct body part is imaged
 - d. All of the above
- 2. Clinical history is important to generate what kind of code for billing purposes?
 - a. ICD-10
 - b. DSM-5
 - c. RSV
 - d. HCC

- 3. A useful mnemonic device for clinicians to remember the type of information best to include in radiology orders is:
 - a. Who-what-where
 - b. Who-where-how
 - c. What-when-where
 - d. None of the above

Quadriceps Pyomyositis After Aspiration of Patellar Bursitis: A Case Report (page 25)

- 1. Pyomyositis is an infection of skeletal muscle that is frequently associated with:
 - a. Abscess formation
 - b. Atopic dermatitis
 - c. Multiple sclerosis
 - d. Legionnaires' disease
- 2. Contiguous spread or local penetrating wounds in instances of pyomyositis are referred to as:
 - a. Atypical pyomyositis
 - b. Primary pyomyositis
 - c. Secondary pyomyositis
 - d. Prolonged pyomyositis
- 3. Risk factors for primary pyomyositis include which condition?
 - a. HIV/AIDS
 - b. Diabetes mellitus
 - c. Chronic kidney disease
 - d. All of the above



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Charting with Purpose: Precision Strategies for Accurate Coding and Malpractice Defense

Urgent Message: A well-told story explaining your thought process during a patient encounter should contain all the elements required for accurate coding. Attorneys are less likely to question care when a logical and complete story is clearly documented.

Jeff Willis, MD

Citation: Willis J. Charting with Purpose: Precision Strategies for Accurate Coding and Malpractice Defense. J Urgent Care Med. 2024; 18(4) 13-16.

s a medical legal consultant, I have learned medical malpractice claims are an unfortunate reality of prac-Iticing medicine. The good news is only 1% of paid malpractice claims are related to care provided in urgent care centers. The bad news is this number is expected to rise as we expand the number of urgent care facilities that provide resources for patients with limited primary care and emergency care access. As the number of urgent care centers increases, so might the complexity of conditions for which patients are seeking treatment. Currently, about 22% of urgent care paid malpractice claims are the result of significant injury or death. The increasing complexity of patients being seen in UC will certainly result in higher numbers of claims and higher settlements or verdicts.

Despite well-trained providers, carefully designed triage systems, and exceptional staff and technology, bad outcomes are inevitable. When patients suffer harm, the most relevant record of events is our provider note, which will be scrutinized by the patient, attorneys, expert witnesses, and juries. Even with the potential for such scrutiny, we typically spend only a few minutes to complete each encounter note.2

In addition to the legal implications, the provider



note also establishes the evaluation and management (E/M) level for our billing departments. The E/M level guidelines are published by the American Medical Association (AMA) and referenced by public and private payers to determine the reimbursement for provider services based on the complexity of the patient visit. If we want to complete our documentation at work and not spend time finishing up charts at home, we must efficiently document the patient encounter and satisfy the AMA guidelines. To make our lives easier (and help our coders produce quick and accurate E/M levels for

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billing), each of the electronic health record (EHR) vendors have systems optimized with checkboxes, macros, and complaint-specific templates.³ Providers, however, must use great care when using these methods of charting to avoid "mis-clicks" that might require an uncomfortable explanation during deposition or trial.

AMA's revision of the E/M guidelines in 2021 gives providers the opportunity to avoid this potential mishap. The previous guideline versions relied on a complex point system in the history of present illness (HPI), review of systems (ROS), physical exam, and medical decision making (MDM). The updated urgent care E/M levels are based entirely on the MDM or time spent on the visit.

These guidelines were revised again in January 2023, further solidifying AMA's commitment to the Centers for Medicare and Medicaid Services' (CMS) Patients over Paperwork Initiative.⁴ Since most urgent care visits are brief, time criteria are rarely used, and the MDM serves as the sole determinant of the E/M level. After spending years checking boxes and point-and-clicking our way to efficient charts, we now have the opportunity to change our approach. With the recent changes to the E/M coding guidelines, providers can now use our limited time to produce much higher quality charts.

While published for purposes of simplified and accurate coding and billing, the current AMA E/M guidelines have the added benefit of helping providers avoid successful malpractice claims. With the current guidelines almost entirely focused on medical decision making, providers now have more time available to focus on critical components of risk-mitigating documentation: describing the patient's clinical course and medical decision-making process. To realize the full opportunity offered by the current guidelines, providers should reconsider their approach to each section of the encounter note.

History of Present Illness

E/M coding guidelines require a provider to document only a "medically appropriate" history for any level of service. There are no requirements for location, quality, severity, duration, or any of these specific—but frequently not applicable—details. If checkboxes are still present in our EHR, we can likely disregard them for the purposes of coding and billing.

Checkboxes work well to generate narrative paragraphs outlining the basic components of a patient's HPI, but they generally require "yes/no" answers to specific questions or symptoms. If a patient tells the provider they have a burning sensation in the skin just

above their right breast, but the only checkbox available is "Chest Pain: Yes/No," an undisciplined "Yes" click might create a narrative that reads, "The patient has chest pain." A common strategy employed by plaintiff attorneys is the use of affirmative questions in depositions to force defendant providers to answer uncomfortable questions.⁶ In this strategy, an attorney will get an affirmative answer to a simple question such as, "Do patients having a myocardial infarction frequently present with chest pain?" Once the defendant provider agrees with this seemingly obvious assertion, the attorney will point out the narrative in the HPI that describes the patient as having chest pain. This forces the provider to now explain why they did not rule out or even consider a myocardial infarction. Had the provider not used checkboxes in the HPI and simply described the symptoms as a burning sensation, they could have avoided this uncomfortable situation.

Instead of using checkboxes, we can now use our time to document the actual history of present illness. Our patients tell us their story, and we should document that story. Were they running down the hall because they were late to math class when they tripped and landed on their wrist? Were they driving to the grocery store to pick up a few things to make a birthday cake for their 12-year-old's birthday when they got dizzy and almost passed out?

Why do these details matter? While generally unimportant to diagnosis and treatment considerations, documenting specific details of the HPI helps us remember the patient years down the road when a malpractice case unexpectedly arises. It is like leaving a little reminder to ourselves to differentiate between the 200 wrist injuries we have seen in the last few years. This can be important when a provider needs to recall specifics that might not have been documented. For example, if a plaintiff asserts they were never told to follow-up with an orthopedic surgeon, but the provider's note helps them recall the case more clearly, they might remember the patient asking them if the surgeon's cast could be in their school colors. While not as concrete as documented follow-up instructions, these details have the potential to help a provider out of a sticky situation in a deposition.

Review of Systems

We rarely elicit a full ROS, but we have historically documented a complete ROS to satisfy our perceived coding requirements.⁷ Since 2021, the AMA guidelines for E/M coding have dispensed with any requirement for documenting a ROS. However, a pertinent review of asso-

ciated systems should still be incorporated into the HPI. This approach is much more logical and helps tell a full story in one section of the chart rather than adding details in a completely separate area. Even better, it keeps the plaintiff attorneys from keying in on irrelevant documentation. It also prevents the provider from inadvertently checking the "negative" box in the system, which is clearly affected by the chief complaint. These discrepancies are easy targets to discredit us and our entire chart.

Past Medical History/Medication List

Just like ROS, there are no specific documentation requirements for past medical, surgical, or social histories. This data is typically auto-imported to our note and simply creates duplicate information from another user's prior documentation. This practice is so prevalent that a recent study found over 50% of documentation in one health system's records was actually duplicate content from a previous note.8 It is not uncommon for this data to be outdated or entered inaccurately,9 confusing the clinical picture and offering more opportunity for a plaintiff attorney to discredit us and our doc-

For EHRs that permit end-user template modification, we should take the time to remove these automatic import functions from our notes. If this feature is not available, medical directors should work with their information technology department to modify the standard note templates. If there is relevant past history, include it in the HPI where it makes more sense and provides more proof that we considered the patient's presentation in the context of their chronic illnesses.

Physical Exam

The current AMA E/M guidelines require a "medically appropriate" physical examination. Similar to ROS, we rarely complete a full head-to-toe exam, but our documentation frequently suggests otherwise.7 We do this based on our perceived necessity of a full exam to achieve an appropriate coding level. The current guidelines, however, allow us to focus on the appropriate body system and document only the exam we actually perform. This is critical for medical malpractice cases, as plaintiff attorneys can pick apart exam documentation, building their case around even a single errant or imprecise word.

For example, providers will often document a "normal neurologic exam" on patients who clearly did not require that portion of the exam. When pressed during a deposition on exactly what was done during the neurologic exam, providers could be stuck explaining why they did an unnecessary exam or why their documentation was fabricated. Instead of using valuable charting time to document a full exam, we should only document a detailed and focused exam without the use of checkboxes or macros. This supports your testimony in deposition or trial significantly more than a generic normal exam.

"The MDM becomes the primary location for providers to tell the story of a patient encounter. This is where we'd be wise to spend 90% of our charting time."

Medical Decision Making

The documentation strategy discussed above is focused on minimizing unnecessary information and replacing it with a focused and medically necessary history and physical examination. In other words, less is more. MDM is just the opposite. This section of our chart should be robust and detailed. The E/M level for an urgent care visit is primarily determined by our MDM. Equally important, with our elimination of unnecessary information in the remainder of the chart, the MDM becomes the primary location for providers to tell the story of a patient encounter. This is where we'd be wise to spend 90% of our charting time.

The AMA coding guidelines recognize four types of MDM: straightforward; low; moderate; and high. The MDM serves to establish diagnoses, assess the patient's status, and/or select management options. The E/M level is defined by three elements of the MDM:

- The number and complexity of problem(s) that are addressed during the encounter
- The amount and/or complexity of data to be reviewed and analyzed (tests, orders, independent historians, discussion with external providers, interpretation of tests, etc.)
- The risk of complications and/or morbidity or mortality of patient management (decision to refer patients to an emergency department (ED), presence of relevant co-morbidities, prescription drug management, need for surgery, etc.)

These are well-defined categories with several sub-

groups and details contained within each. As providers, we work through most of these elements for each patient, but we do not need to remember them to produce a chart maximized for both coding and medical malpractice protection. If we just tell the story of our patient evaluation, the coders have all they need to accurately assign an E/M level.

"A purposeful approach to documentation allows us to provide the best care, get appropriately reimbursed, and protect ourselves from medical malpractice allegations."

If we order and review labs or imaging, we simply document why we ordered them and how the results affected our diagnosis and treatment. If we obtain the history from a family member, we write down who they were and what they said. If we talk with the patient and use shared decision making to determine a course of treatment, we document our agreement or concern with the decision. If we consider referring the patient to the ED, but they decline, we document their specific objection for the refusal and our encouragement to seek further treatment if they change their mind. If we talk to a specialist on the phone to get guidance on timing of follow-up, we write it down. We simply need to document the story like we would tell it to a colleague at shift change. A well-told story will contain all the elements required for accurate coding mentioned above.

As a malpractice consultant, I work with attorneys to help them understand the medical aspects of their cases. Of all the notes I review for allegations of medical malpractice, those that clearly tell the provider's thought process in the MDM rarely get pursued beyond initial review. It is difficult for attorneys to question a provider's care when a logical and complete story of the patient encounter is clearly documented. Despite conventional wisdom in the medical field, plaintiff attorneys do not want to sue doctors unless they truly breached the standard of care. In fact, the majority of attorneys reject between 95-99% of cases they screen.¹⁰ If they read our MDM and it sounds logical on the surface, they will typically pass on the case and move on to the next. There are other factors that go into their decision, but the quality of our documentation is a main determinant.

Conclusion

Medical billing consultants offer charting strategies to maximize reimbursement. Risk managers provide guidance on how to avoid successful malpractice suits. Until recently, the Venn diagram of these documentation recommendations barely overlapped. With the simplified AMA E/M coding guidelines, this is no longer the case. A purposeful approach to documentation allows us to provide the best care, get appropriately reimbursed, and protect ourselves from medical malpractice allegations should a bad outcome occur. When we document only what is relevant in the history and exam and spend our precious charting time explaining our thought process in the MDM, we can quickly and efficiently produce a note which reflects the important elements of the encounter and which will be robust enough for adequate coding and billing. ■

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References

- 1. Burke A, Hanscom R, JD; Lambrecht A, Patel A, Small, M. Coverys. A Call for Action: Insights From a Decade of Malpractice Claims. October 19, 2020. https://www.coverys.com/knowledge-center/call-for-action-decade-of-malpractice-claims. Accessed September 8, 2023.
- 2. Overhage JM, McCallie D Jr. Physician Time Spent Using the Electronic Health Record During Outpatient Encounters: A Descriptive Study. Ann Intern Med. 2020 Feb 4;172(3):169-174. doi: 10.7326/M18-3684. Epub 2020 Jan 14. Erratum in: Ann Intern Med. 2020 Oct 6;173(7):596. PMID: 31931523.
- 3. Yu KT, Green RA. Critical aspects of emergency department documentation and communication. Emerg Med Clin North Am. 2009 Nov;27(4):641-54, ix. doi: 10.1016/j.emc.2009.07.008. PMID: 19932398.
- 4. American Medical Association website. https://www.ama-assn.org/system/ files/2023-e-m-descriptors-guidelines.pdf. Accessed September 8, 2023.
- 5. American College of Emergency Physicians website. Top 10 Principles on How to Avoid Getting Sued in Emergency Medicine. October 2013. https://www. acep.org/siteassets/uploads/uploaded-files/acep/clinical-and-practice-management/resources/medical-legal/top-10-principles-on-how-to-avoid-getting-suedin-em.pdf. Accessed September 8, 2023.
- 6. Relias Media Legal Letter. 'Gotcha' Deposition Questions Can Devastate Even Well-prepared EPs. February 1, 2018. https://www.reliasmedia.com/articles/ 142023-gotcha-deposition-questions-can-devastate-even-well-prepared-eps. Accessed September 11, 2023.
- 7. Berdahl CT, Moran GJ, McBride O, Santini AM, Verzhbinsky IA, Schriger DL. Concordance Between Electronic Clinical Documentation and Physicians' Observed Behavior. JAMA Netw Open. 2019;2(9):e1911390. doi:10.1001/jamanetworkopen.2019.11390.
- 8. Steinkamp J, Kantrowitz JJ, Airan-Javia S. Prevalence and Sources of Duplicate Information in the Electronic Medical Record. JAMA Netw Open. 2022;5(9): e2233348. doi:10.1001/jamanetworkopen.2022.33348.
- 9. Monte AA, Anderson P, Hoppe JA, Weinshilboum RM, Vasiliou V, Heard KJ. Accuracy of Electronic Medical Record Medication Reconciliation in Emergency Department Patients. J Emerg Med. 2015 Jul;49(1):78-84. doi: 10.1016/j.jemermed.2014. 12.052. Epub 2015 Mar 19. PMID: 25797942; PMCID: PMC4476907.
- 10. Shepherd J. Uncovering the Silent Victims of the American Medical Liability System, 67 Vanderbilt Law Review 151. 2019. https://scholarship.law. vanderbilt.edu/vlr/vol67/iss1/2



The Importance of Providing Clinical History for Radiology Studies in the **Urgent Care Setting**

Urgent Message: Providing clinical history for radiology orders ensures that the correct exam is performed, an accurate ICD-10 code is assigned for billing, and radiologists are able to provide high-quality reports that contribute to timely and appropriate patient care in the urgent care setting.

Morgan P. McBee, MD, CIIP; Leah S. McBee, MD

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Keywords: radiology, imaging, clinical history, coding

Abstract

n urgent care, providing a concise clinical history for radiology exams is essential, as it may be the only source of clinical information available to the radiologist and can increase their diagnostic accuracy of interpretation. Furthermore, a complete clinical history enables the generation of an accurate International Classification of Diseases, Tenth Revision (ICD-10) code, which is crucial for successful billing. For these reasons, providing a comprehensive clinical history can ultimately improve patient care.

Introduction

Radiology plays a pivotal role in the diagnosis and management of various conditions encountered in the urgent care setting. Between 5-11% of patients seen in urgent care have imaging performed. 1,2 Most urgent care centers have most or all of their radiology studies interpreted by a radiologist. 3 While these studies can provide valuable information, the radiologist's interpretation greatly relies upon the clinical history pro-



vided by the urgent care clinician.

Radiology technologists are healthcare professionals trained to operate different imaging modalities such as radiography (x-ray), ultrasound, computed tomography (CT), and magnetic resonance imaging (MRI) to aid in the diagnosis of pathology. In a study of pediatric urgent care centers, centers staffed with radiology technologists produced higher quality radiography exams compared to those that were not staffed with radiology technologists.4

Clinical history provides clinical context for radiology

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technologists to ensure that exams are appropriately triaged and that the correct study to answer the clinical question is performed. 5,6 Without this information, the incorrect body part or side may be imaged, or a study may be performed that does not answer the clinical question when another exam or even modality may be more appropriate. In a busy urgent care center, multiple imaging studies could be ordered nearly simultaneously. When provided with appropriate clinical indications, technologists can use this information to triage the order in which exams get performed. 7 For example, a patient in acute respiratory distress with low O2 saturation would require a more urgent chest radiograph compared to the patient with exertional dyspnea for 2 weeks, but this determination could not be made if the indication provided for both was only "shortness of breath."

"Accurate clinical history can impact the interpretation of radiology studies by providing essential information to form a differential diagnosis or localize disease."

Once the exam has been performed, accurate clinical history allows radiologists to tailor their interpretation to the specific clinical question at hand, leading to more clinically relevant reports. Several meta-analyses have shown that clinical history improves diagnostic accuracy. However, some studies have indicated a potential increase in false positives when radiologic findings are consistent with the provided symptoms. Nonetheless, these findings should not overshadow the overall value of clinical history in improving diagnostic accuracy. 8-10

In their recent metanalysis, Yapp et al. found that clinical history improved diagnostic performance in all metrics in the majority of the analyzed studies, and only a single study demonstrated decreased diagnostic performance. ¹⁰ Clinical history does have the ability to adversely affect specificity, especially when it fosters an elevated anticipation of abnormality. Radiologists might exhibit lower confidence in categorizing a study as normal, a phenomenon that could be ascribed to cognitive bias theory. ¹¹ In a study of 226 foot radiographs with 7

readers, Sarwar et al. found accuracy increased from 79% to 82%, sensitivity increased from 67% to 73%, degree of confidence increased from 8.1 to 8.4 (1-10 point scale), while specificity minimally increased from 93% to 94% for fracture detection when a graphic was used to indicate the site of pain, which serves as a visual form of clinical history. 12 Leslie et al. compared the effect of 3 radiologists interpreting 50 CTs with and without clinical history. Each CT was double read for a total of 100 reports. They found that 19% (19/100) of reports were changed after clinical history was provided with 11 major changes and 8 minor changes. However, the accuracy of the provided information is essential. When the provided clinical history was accurate, 83% (10/12) of those reports became more accurate and 17% (2/12) became less accurate. When the provided clinical history was inaccurate, 100% (3/3) of those changes resulted in less accurate reports. 13

In the urgent care setting, where patients frequently present with acute symptoms and may have limited medical records available, providing thorough clinical history becomes even more crucial as it may be the only source of clinical information for the radiologist. Jo et al. found that 24% (47/199) of major discrepancies of after-hours radiology resident and fellow preliminary reports could have been avoided if better clinical history was provided. 14 Accurate clinical history can impact the interpretation of radiology studies by providing essential information to form a differential diagnosis or localize disease. 15 For instance, in an extremity radiograph of a pediatric patient with a suspected fracture, knowing the time and mechanism of injury and location of pain can allow the radiologist to more accurately differentiate between a normal variant and fracture.

Billing Documentation

Accurate coding and billing for radiology studies rely on proper documentation of clinical information, specifically the clinical history provided by the urgent care clinician in the order. Since the conversion to International Classification of Diseases, Tenth Revision (ICD-10) in the United States, clinical history is even more important to generate an accurate ICD-10 code, which is required for billing. ICD-10 codes are typically generated based on findings made within the radiology report, but if a study is interpreted as normal or negative, codes that derive from the indication for the exam and patient's symptoms are used instead. ¹⁶ As a result, incorrect ICD-10 codes may be assigned if clinical history is incomplete or inaccurate, leading to potential billing errors and reimbursement issues. Furthermore, when

Table 1. Aspects of a Complete Clinical History Utilizing "What-When-Where"		
Element	Explanation	Example
What	Mechanism of injury and/or specific symptoms	Fall down stairs
When	How long ago injury happened and/or duration of symptoms	2 days ago
Where	Relevant location or injury and/or body part affected	Right shoulder pain

ordering an exam to "rule out" a condition, the signs and symptoms that prompted the order must also be included. For example, "rule out fracture" is not sufficient to produce an ICD-10 code, but "sharp lateral right ankle pain for 2 weeks, rule out fracture" is.

The provided clinical history does not need to be lengthy in order to be useful. The common generic indication of "pain" provides minimal to no actionable information and cannot generate a specific ICD-10 code. A useful mnemonic for what type of information to include in radiology orders is "what-when-where" to encompass what happened, when it happened, and where or to what body part it happened (**Table 1**).

An example of a complete history utilizing this method for a pediatric patient would be: "fell from monkey bars 2 weeks ago; pain along lateral wrist." ¹⁷ This history would clue the radiologist that if a fracture is found, it should be showing signs of healing given that the injury should have had sufficient time to start to heal. 18

Since radiologists in urgent care settings are rarely ever physically located at the same facility as the referring urgent care providers, they seldom have the opportunity to directly interact with the patients to obtain additional clinical information themselves. However, radiology technologists by necessity are physically present and can be utilized to obtain additional information directly from patients when the provided history is incomplete as this falls within their scope of practice. 6 Some institutions have implemented systems that provide this information directly to the radiologist. 5,17,16 However, without such mechanisms in place, the information must be provided by the urgent care clinician in the clinical information included with the study order.

Conclusion

Providing succinct but comprehensive clinical history is crucial for appropriate acquisition and meaningful interpretation of radiology studies in the urgent care setting. Clinical history provides context for radiology technologists to triage and perform the correct and appropriate exam to answer the clinical question; it also allows radiologists to interpret imaging findings with higher accuracy and for coders to accurately generate ICD-10 codes for billing. ■

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References

1. An Analysis of the Impact of Radiology in the Urgent Care Industry. Urgent Care Quarterly. 2020;(09). https://www.experityhealth.com/urgent-care-softwaresuite/teleradiology/?&utm_source=web_page&utm_medium=cta&utm_campaign=optimize&utm_content=link. Accessed April 22, 2023.

2. Ayers A. How Urgent Care Can Address Its Degrading Scope of Practice. Journal of Urgent Care Medicine. November 2022. https://www.jucm.com/how-urgentcare-can-address-its-degrading-scope-of-practice/. Accessed April 23, 2023.

3. Ayers A. Roundtable: Expert Perspectives on X-Ray Over- Read Strategies in Urgent Care. Journal of Urgent Care Medicine. April 2016. https://www.jucm.com/ roundtable-expert-perspectives-x-ray-read-strategies-urgent-care/. Accessed April 22, 2023

4. Kan JH, Orth RC, Yen TA, Schallert EK, Zhang W, Donnelly LF. Impact on Quality When Pediatric Urgent Care Centers Are Staffed With Radiology Technologists. Journal of the American College of Radiology. 2018;15(12):1717-1722. doi:10.1016/j.jacr.2017.12.018

5. Maizlin NN, Somers S. The Role of Clinical History Collected by Diagnostic Imaging Staff in Interpreting of Imaging Examinations. Journal of Medical Imaging and Radiation Sciences. 2019;50(1):31-35. doi:10.1016/j.jmir.2018.07.009

6. The ASRT Practice Standards for Medical Imaging and Radiation Therapy. https://www.asrt.org/main/standards-and-regulations/professional-practice/practice-standards-online. Accessed April 22, 2023.

7. Mohammed S, Molvin L, Spieler BM. Managing Radiology Requests to Support Effective Triage. Radiol Technol. 2023;94(3):228-230.

8. Loy CT, Irwig L. Accuracy of diagnostic tests read with and without clinical information: a systematic review. Jama. 2004;292:1602-1609. doi:10.1001/jama. 292.13.1602

9. Castillo C, Steffens T, Sim L, Caffery L. The effect of clinical information on radiology reporting: A systematic review. J Med Radiat Sci. 2021;68(1):60-74. doi:10.1002/imrs.424

10. Yapp KE, Brennan P, Ekpo E. The Effect of Clinical History on Diagnostic Imaging Interpretation – A Systematic Review. Academic Radiology. 2022;29(2):255-266. doi:10.1016/j.acra.2020.10.021

11. Littlefair S, Mello-Thoms C, Reed W, et al. Increasing Prevalence Expectation in Thoracic Radiology Leads to Overcall. Academic Radiology. 2016;23(3):284-289. doi:10.1016/j.acra.2015.11.007

12. Sarwar A, Wu JS, Kung J, et al. Graphic representation of clinical symptoms: a tool for improving detection of subtle fractures on foot radiographs. AJR Am J Roentgenol. 2014;203(4):W429-433. doi:10.2214/AJR.13.11932

13. Leslie A, Jones AJ, Goddard PR. The influence of clinical information on the reporting of CT by radiologists. The British Journal of Radiology. 2000;73(874):1031-1130. doi:10.1259/bjr.73.874.11271897

14. Jo SY, Scanlon M, Cook T. Preliminary Radiology Report Discordances and Patient Outcomes. Journal of the American College of Radiology. 2020;17(12):1621-1625. doi:10.1016/j.jacr.2019.12.033

15. Obara P, Sevenster M, Travis A, Qian Y, Westin C, Chang PJ. Evaluating the Referring Physician's Clinical History and Indication as a Means for Communicating Chronic Conditions That Are Pertinent at the Point of Radiologic Interpretation. J Digit Imaging, 2015;28(3):272-282. doi:10.1007/510278-014-9751-7

16. McBee MP, Laor T, Pryor RM, et al. A Comprehensive Approach to Convert a Radiology Department From Coding Based on International Classification of Diseases, Ninth Revision, to Coding Based on International Classification of Diseases, Tenth Revision. Journal of the American College of Radiology. 2018;15(2):301-309. doi:10.1016/j.jacr.2017.09.046

17. Hawkins CM, Anton CG, Bankes WM, et al. Improving the availability of clinical history accompanying radiographic examinations in a large pediatric radiology department. AJR Am J Roentgenol. 2014;202(4):790-796. doi:10.2214/AJR.13.11273 18. Prosser I, Lawson Z, Evans A, et al. A timetable for the radiologic features of fracture healing in young children. AJR Am J Roentgenol. 2012;198(5):1014-1020. doi:10.2214/AJR.11.6734

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ABSTRACTS IN URGENT CARE

Can Artificial Intelligence Be Used as a Behavioral Health Tool for Adolescents?

Take Home Point: Conversational Artificial Intelligence (CAI) may have potential as a tool to help address the unmet needs of adolescent behavioral health treatment.

Citation: Opel D, Kious B, Cohen I. Al as a Mental Health Therapist for Adolescents. *JAMA Pediatr.* doi:10.1001/jamapediatrics.2023.4215

Relevance: Mental health issues among adolescents have been rapidly increasing in prevalence. The increasing need for adolescent mental healthcare has led to the exploration of CAI as a possible adjunctive treatment via the use of various chatbots.

Study Summary: This was an editorial exploring the possible role AI may play in filling the demand gap for adolescent behavioral health care. The authors note that there has been a rapid increase in the development of CAI within this area specifically. Preliminary evidence suggests that CAI may be effective in decreasing symptoms among users with mild depression. The allure of CAI is accessibility with low expense for anyone with a smartphone and internet connection. This makes this option especially appealing for adolescents who nearly universally have constant access to technology and who are generally willing to embrace these new technologies when compared to traditional psychotherapy.

The authors do warn about the lack of accountability and transparency that currently exists with most CAI platforms. Two duties inherent to mental health services highlight the importance of accountability for CAI: the duty to protect confidentiality and the duty to warn. The quickly evolving AI landscape poses additional risks for children. Generative AI (GAI) is now being integrated into social media platforms. GAI differs from CAI as it can create new content in response to a user-generated prompt, not just provide responses using a rules-based system. How con-



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versations with CAI might be monitored for concerning patterns or warning signs for self-harm is also unknown.

Editor's Comments: The viewpoints expressed were those of the authors. In the ever-evolving landscape of AI, it is important for urgent care practitioners to be aware of these resources and their benefits and risks. Given the large unmet need for adolescent behavioral health care, CAI offers a promise for closing this gap. However, its implementation must be monitored with caution as there are likely to be unintended consequences.

Comparative Efficacy of Acne Treatments

Take Home Point: The most effective treatment for acne is oral isotretinoin, followed by triple therapies containing a topical retinoid, benzoyl peroxide (BPO), and an antibiotic.

Citation: Huang C, Chang I, Bolick N, et. al. Comparative Efficacy of Pharmacological Treatments for Acne Vulgaris: A Network Meta-Analysis of 221 Randomized Controlled Trials. *Ann Fam Med.* 2023 Jul-Aug;21(4):358-369. doi: 10.1370/afm.2995

Relevance: Acne is a common skin condition and the second highest cutaneous condition for disability-adjusted life years, with annual costs of \$3 billion in the US.

Study Summary: This was a meta-analysis of present literature comparing the common pharmacological treatments for acne, including oral and topical medications as single or combined treatments. The authors only included randomized controlled trials comparing efficacy of pharmacological therapies for acne vulgaris. Some 37 treatment modalities were reviewed in the meta-analysis, including 6 oral antibiotics, 5 topical antibiotics, oral isotretinoin, 5 topical retinoids, 6 combined oral contraceptives, topical clascoterone, 10 combination therapies, BPO, azelaic acid, and placebo. The primary end points were mean percentage reduction in total, inflammatory, and noninflammatory lesions.

The authors included 210 articles describing 221 trials comprising 65,601 patients for analysis. They found oral isotretinoin the most effective treatment, followed by combination therapies consisting of an oral or topical antibiotic, topical retinoid, and BPO. Local side effects or discontinuation due to adverse events were more commonly

observed for the topical adapalene with BPO combination group than other combinations. Common side effects of oral isotretinoin were mucocutaneous (eg, dry lip, dry skin, cheilitis), while oral tetracyclines caused nausea, vomiting, and abdominal pain.

Editor's Comments: It's important to note that oral isotretinoin, while more effective than other acne treatments, has a significant side effect profile and teratogenic potential. Prescription of this medication is typically limited to dermatologists or other practitioners with longitudinal follow-up with patients. Given delays in specialist care, particularly with dermatologists, and an increasing number of patients without primary care, it is likely UC practitioners will be seeing patients presenting with complaints of acne vulgaris with increasing frequency in the coming years.

A New Cutoff for Positive **Urine Cultures in Children?**

Take Home Point: In this study, a cutoff of 10,000 colony forming units (CFU) per mL provided the optimal balance between sensitivity and specificity for children undergoing bladder catheterization.

Citation: Shaikh N, Lee S, Krumbek J, et. al. Support for the Use of a New Cutoff to Define a Positive Urine Culture in Young Children. *Pediatrics*. 2023 Oct 1;152(4): e202306 1931. doi: 10.1542/peds.2023-061931

Relevance: The identification of urinary tract infection in young children requires different considerations given likelihood of disease progression and chronic complications which must be weighed against the risks of unnecessary antibiotic treatment.

Study Summary: This was a prospective cross-sectional study of children presenting to the emergency department at Children's Hospital of Pittsburgh, PA. The authors enrolled children aged 1 month to 3 years who had a fever (documented in the emergency department or by parental report) within 24 hours of presentation and also had a urine sample collected via catheter. Each child had a microscopic urinalysis in which white blood cells (WBCs) were counted as well as a colorometric dipstick test in which the leukocyte esterase test was reported semi-quantitatively (none, trace, 1+,2+,3+).

The authors included 341 children in the final analysis. They found 46 children with urinary tract infection (UTI). Using a cutoff of ≥10,000 CFU to define a positive urine culture, among these 46 children with UTI, 45 were correctly identified by conventional urine culture (sensitivity of 98%, confidence interval [CI]: 93% to 100%). Changing the cutoff to ≥50,000 CFU/mL decreased the sensitivity of urine culture to 80% (95% CI: 68%-93%) and had a negligible effect on specificity. Using a cutoff of 100,000 CFU/mL (the present adult range), resulted in a significantly inferior sensitivity as well 70% (95% CI: 55%-84%).

Editor's Comments: This study had several limitations. The total number of patients with UTI was only 46 and only included febrile patients <3 years of age. The use of bladder catheterization limits this study's generalizability to urgent care centers which frequently cannot obtain catheter urine specimens in infants. However, these findings do suggest that in reviewing urine culture results, a significantly lower cutoff has been used. This threshold of 10,000 CFU/mL would lead to significantly better sensitivity than 50,000 or 100,000 without sacrificing specificity. Perhaps most significantly, outcomes were not reported and therefore it is unclear if children with lower colony counts may be less susceptible to complications of UTI than patients with greater CFUs. Rather, sensitivity and specificity were simply reported based on the reference gold standard molecular test.

Does That Temperature Recorded Indicate Fever/Infection?

Take Home Point: Normal oral temperature varies in an expected manner based on sex, age, height, weight, and time of day.

Citation: Ley C, Heath F, Hastie T, et. al. Defining Usual Oral Temperature Ranges in Outpatients Using an Unsupervised Learning Algorithm. JAMA Intern Med. 2023;183(10):1128-1135. doi:10.1001/jamainternmed.20 23.4291

Relevance: The present definition of "normal" temperature of 37°C is based on historical data from over a century ago. Temperature measurement has tremendous implications in the evaluation of undifferentiated patients and oral temperature measurement is among the more common methods used in the outpatient setting.

Study Summary: This was a cross-sectional study based on adult outpatient encounters in the divisions of Internal



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Medicine and Family Medicine at Stanford University, California. Temperature measurements were obtained orally using annually calibrated digital thermometers (SureSigns Vs4; Philips). Temperature, date and time of the temperature measurement, age, sex, weight, height, body mass index, primary reason for the visit, prescribed medications, and all ICD-10 codes were identified from each encounter.

The authors collated 618,306 sets of complete data from 724,199 patient encounters. They found the chief determinants of temperature were the time of day, age, and gender of the patients. "Normal" (ie, mean) oral temperature among this data set was 36.64°C, with 95% of these normal temperatures ranging from 35.96°C to 37.32°C. Men had lower temperatures than women on average. Temperature varied with time of day, peaking at 16:00 (eg, late afternoon) and then decreasing rapidly in both men and women. Older patients had lower temperature and this age effect was more pronounced in men than women. Women younger than 50 years had higher oral temperatures than men of any age, with the oldest men aged 70 to 80 years having the lowest temperature. Increasing weight was associated with a linear increase in oral temperature for both sexes (0.001°C/kg among men and 0.0008°C/kg among women; P<.001 for both).

Editor's Comments: The authors were not able to assess non-healthcare related confounders like type of clothing worn, hot or cold beverage or food consumption, smoking, light exposure, activity prior to measurement, menstrual cycle phase, and waking time. There was also a lack of information regarding ethnicity in the data analyzed, and there were no pediatric data.

Another Option to Simplify Wound Closure, but How Well Does it Work?

Take Home Point: In this study, microMend appears to be an acceptable option for would repair.

Citation: Nizami T, Beaudoin F, Suner S, et. al. Evaluation of microMend wound closure device in repairing skin lacerations. *Emergency Medicine Journal*. 2023;40:564-568.

Relevance: The microMend™ device has been approved as wound closure deviceby the U.S. Food and Drug Administration (FDA). It offers the advantage over sutures in rapidity of closure and offers more tensile strength than tissue adhesive or conventional adherent skin strips.

"They found chief determinants of temperature were the time of day, age, and gender of the patients."

Study Summary: This was an open-label, single-arm study, conducted at a large tertiary academic medical centre and an affiliated community site in the US. Eligible participants were adults recruited via convenience sampling who presented to the emergency department with a laceration requiring skin closure. Each individual device is designed to close 1.5 cm of wound length, and healthcare providers were allowed to choose the number of devices to obtain satisfactory closure. Participants were followed prospectively for 3 months and participants with standardized digital photographs taken of each wound at each follow-up visit. Quality of wound healing and cosmetic results were rated independently by 2 plastic surgeons who reviewed the photographs digitally and were not involved in the patients care and were blinded to the closure technique used.

The authors included 31 participants for final analysis. They found the microMend device offered an acceptable alternative for skin closure. Participants had satisfactory cosmetic outcomes at 90 days. Just 5 patients reported device detachment, which the authors postulate could be due to failure to apply the device to dry skin. The interrater reliability of the 2 plastic surgeons represented fair agreement at the 90-day review.

Editor's Comments: This was single-centered study with a small sample size. The author also included participants that had deep dermal sutures placed followed by the application of the device to the skin, which limits the potential added utility of the device. This was also funded by the device manufacturer. With the potential limitations in mind, this device, like other similar non-suture closure devices, offers an appealing alternative for UC practitioners as many lacerations seen in UC centers are minor, and rapidity of closure is critical for clinical efficiency. As nonsuture closure techniques proliferate, it will be of interest how this affects provider skills and confidence in conventional suturing.

Use of 3D Printing to Teach Interphalangeal Joint Dislocation Reduction

Take Home Point: The 3D-printed dorsal and volar dislocation reduction models used in this study were easy to use and affordable. It improved perceived competency among the learners.

Citation: Lord S, Greary S, Lord G. Application of a Lowcost, High-fidelity Proximal Phalangeal Dislocation Reduction Model for Clinician Training. *West J Emerg Med*. 2023;24(5)839–846.

Relevance: Proximal interphalangeal joint (PIPJ) dislocations are a common UC presentation. Increasing UC clinician confidence in managing these injuries would be helpful to improve patient care and limit ED referrals.

Study Summary: This was a prospective observational study performed at a single, Level One trauma center in

the U.S. All study participants were EM resident trainees and physician assistants (PAs) who were given a live demonstration of how to perform a volar and dorsal reduction. Following the demonstration, participants were assessed for observed competency on the 3D-printed model.

The authors recruited 21 participants comprising 19 residents and 2 PAs. They found all participants agreed the dorsal proximal interphalangeal joint (dPIPJ) model improved their competency in dPIPJ reduction technique. Likewise, 81% participants either agreed or strongly agreed that the model mimicked a dPIPJ dislocation, and 17/21 (81%) agreed or strongly agreed it mimicked a volar proximal interphalangeal joint (vPIPJ) dislocation.

Editor's Comments: The 3D-model used in the study is not readily available commercially and therefore limits this study's generalizability. While this was a very small study which did not investigate competency among learners in the care of actual patients after the intervention, the study does demonstrate a novel and practical application for 3D printing as it pertains to medical education.





Quadriceps Pyomyositis After Aspiration of Patellar Bursitis: A Case Report

Urgent Message: Deep tissue infections are possible considerations for diabetic patients presenting to urgent care with muscle tenderness who recently have had joint or bursal aspirations or injections.

Benjamin Mati, MD

Citation: Mati M. Quadriceps Pyomyositis After Aspiration of Patellar Bursitis: A Case Report. J Urgent Care Med. 2024;18(4):25-27.

Key Words: quadriceps myositis, diabetes, patellar bursitis, infectious disease

Abstract

Introduction: Infectious myositis and pyomyositis are uncommon and therefore easily overlooked with serious potential complications of bursal aspirations.

Clinical Findings: A 56-year-old male with medical history of moderately controlled diabetes, dyslipidemia, and hypertension presented to urgent care (UC) with several weeks of worsening thigh pain. Two months prior to this presentation, he had a patellar bursal aspiration, was diagnosed with septic bursitis, and was treated with oral antibiotics. He had exquisite tenderness to palpation. Point of care ultrasound (POCUS) did not show signs of deep vein thrombosis (DVT), fluid collections, or evidence of cellulitis. Labs were remarkable for elevated white blood cell count (WBC) and C-reactive protein (CRP). A computed tomography (CT) scan showed concern for myositis.

Diagnosis: The patient was sent to the emergency department for magnetic resonance imaging (MRI) and



orthopedic consultation. He was admitted to the hospital, underwent surgical drainage and debridement, completed 4 weeks of IV antibiotics, and ultimately fully recovered.

Conclusion: Clinicians are encouraged to consider deep tissue infections in diabetic patients who recently have had joint or bursal aspirations or injection.

Author Affiliations: Benjamin Mati, MD, Ventura County Medical Center, Department of Emergency Medicine, Department of Critical Care Medicine. Author has no relevant financial relationships with any ineligible companies.



Introduction

his case illustrates an uncommon potential complication of joint or bursal aspiration: infectious myositis. It follows the trajectory of the patient, outlines data points that led to the diagnosis, and reminds the reader about the pitfalls of some cognitive biases.

Patient Information

A 56-year-old male with a past medical history of diabetes mellitus, hypertension, and hyperlipidemia presented to the urgent care (UC) with a contusion to his right knee with pain, swelling, and decreased range of motion. He underwent a prepatellar bursal aspiration, was diagnoses with septic bursitis, and was started on trimethoprim-sulfamethoxazole. Several days later, the aspirate cultures grew back methicillin-susceptible Staphylococcus aureus (MSSA). On follow up 3 weeks later, he

confirmed completion of the antibiotic course and resolution of symptoms.

He returned to the UC 7 weeks later with 7 days of worsening swelling, pain, and tenderness to his right anterior thigh. He went to his primary care provider who diagnosed a muscle strain and prescribed naproxen.

He was unable to bear weight on his right leg and had swelling to the anterior thigh. He denied pain to knee, groin, or lower leg. He denied fevers, chills, nausea, or vomiting. He did not experience recent long distance travel, recent surgery, or a personal or family history of blood clots. Likewise, he experienced no new traumatic events.

Clinical Findings

On exam, the patient was non-toxic appearing, afebrile, with a heart rate of 76 and blood pressure of 135/68. His right thigh appeared larger compared to his left without any erythema or skin changes (Figure 1). There was an area of approximately 4cm x 4cm of non-fluctuant induration on the anterior thigh that was very tender to touch. He had full range of motion. Sensation and pulses were intact. There was an enlarged, mildly tender inguinal region lymph node.

Diagnostic Assessment

Labs collected from urgent care were unremarkable other than a WBC of 10.4 x 103/uL and a CRP of 25 mg/dL. Point of care ultrasound showed no blood clots along the femoral vein into the popliteal, no knee joint effusion, however, a small suprapatellar effusion was noted. A large lymph node was noted in the inguinal area as well.

A CT scan was obtained, which showed a large region of intermediate density along the rectus femoris muscle and tendon with areas of fluid along the fascial planes throughout the thigh. The patient was sent to the emergency department for an MRI and admission. An MRI showed intramuscular abscess in the anterior compartment of the thigh with adjacent muscular edema.

The patient was diagnosed with pyomyositis, started on IV vancomycin after blood cultures were collected, and admitted to the hospital.

Therapeutic Intervention

In the operating theater, a large area of purulence was found in the anterior thigh which communicated with the prepatellar area. Ultimately, all cultures grew back MSSA. The patient was discharged with a peripherally inserted central catheter (PICC) and cefazolin for 4 weeks.

Follow-up and Outcomes

The patient completed his course of antibiotics without complications. Physical therapy helped him return to baseline functional status.

Discussion

Infectious myositis is inflammation of muscle caused by an infectious agent. Pyomyositis is an infection of skeletal muscle and is frequently associated with abscess formation.² Whereas primary pyomyositis refers to cases when there is no obvious local source of infection and hematogenous spread is assumed,3 secondary pyomyositis refers to instances when there is contiguous spread or local penetrating wound.4

This case is interesting in that the presumed inciting incident—the bursal aspiration—was many weeks prior to the onset of symptoms. This delay in onset raises the potential for a primary pyomyositis. Risk factors for primary pyomyositis include conditions where the immune system is suppressed such as HIV/AIDS, diabetes mellitus (DM), organ transplant, and chronic kidney disease; other risk factors include muscle overuse, blunt trauma, malnutrition, and skin conditions (eg, eczema or varicella).^{2,5–8}

In our case, MRI and surgical findings point to a secondary pyomyositis. The primary causative infectious agent in both primary and secondary pyomyositis is most commonly Staphylococcus aureus.9 In our case, all cultures grew back MSSA. There is often a 3-stage progression noted in pyomyositis: an insidious phase lasting days to weeks; abscess formation; and, if untreated, potential septic shock due to bacteremia.⁵ It is possible that our patient had an infectious myositis partially treated by his initial oral antibiotics then had a prolonged initial phase with eventual abscess formation.

The case illustrated the high index of suspicion often needed to make this diagnosis early, as exam findings can be subtle.6 Our patient had pain without evidence of cellulitis or DVT. It would have been easy to dismiss his complaints, as occurred with the primary care clinician, knowing muscle strain may trigger pyomyositis.¹⁰

However, given his comorbid DM, relatively recent bursal aspiration, enlarged lymph node, exquisite tenderness to palpation, and negative POCUS for DVT, cellulitis, or fluid collection, further workup was pursued. POCUS identification of fluid collecting within fascial planes is indicative of pyomyositis and a signal to further investigate with MRI.¹¹ In our case, POCUS was used to make other diagnoses on the differential less likely, specifically DVT, cellulitis, and subcutaneous abscess.

Obtaining labs and noting an elevated CRP further

"The presumed inciting incident—the bursal aspiration was many weeks prior to the onset of symptoms."

increased our suspicion for an underlying inflammatory process such as infection. Ultimately, recovery of purulent fluid in the operating room provided the definitive diagnosis, but CT scan with IV contrast was easily available in our urgent care and provided enough evidence to admit to the hospital and start IV antibiotics.

Patient Perspective

The patient was unhappy spending so much time in the hospital and rehabilitating from the surgical incision and debridement. But he was very appreciative of the care he received in the urgent care. Specifically, he was grateful for being listened to and having his symptoms taken seriously.

Ethics Statement

Consent to publish the case was verbally obtained over the phone by speaking to the patient directly. \blacksquare

Manuscript submitted September 11, 2023; accepted November 22, 2023.

References

- 1. Radcliffe C, Gisriel S, Niu YS, Peaper D, Delgado S, Grant M. Pyomyositis and Infectious Myositis: A Comprehensive, Single-Center Retrospective Study. Open Forum Infect Dis. 2021;8(4):ofabo98. doi:10.1093/ofid/ofabo98
- 2. Ngor C, Hall L, Dean JA, Gilks CF. Factors associated with pyomyositis: A systematic review and meta analysis. Trop Med Int Health. 2021;26(10):1210-1219. doi:10.1111/tmi.13669
- 3. Marath H, Yates M, Lee M, Dhatariya K. Pyomyositis. J Diabetes Complications. 2011;25(5):346-348. doi:10.1016/j.jdiacomp.2010.09.002
- 4. Stevens DL, Bisno AL, Chambers HF, et al. Executive Summary: Practice Guidelines for the Diagnosis and Management of Skin and Soft Tissue Infections: 2014 Update by the Infectious Diseases Society of America. Clin Infect Dis. 2014;59(2):147-159. doi:10.1093/cid/ciu444
- 5. Agarwal V, Chauhan S, Gupta RK. Pyomyositis. Neuroimaging Clin N Am. 2011;21(4):975-983. doi:10.1016/j.nic.2011.07.011
- 6. Habeych ME, Trinh T, Crum-Cianflone NF. Purulent infectious myositis (formerly tropical pyomyositis). *J Neurol Sci*. 2020;413:116767. doi:10.1016/j.jns.2020.116767 7. Maravelas R, Melgar TA, Vos D, Lima N, Sadarangani S. Pyomyositis in the United States 2002–2014. J Infect. 2020;80(5):497-503. doi:10.1016/j.jinf.2020.02.005 8. Small LN, Ross JJ. Tropical and Temperate Pyomyositis. Infect Dis Clin North Am. 2005;19(4):981-989. doi:10.1016/j.idc.2005.08.003
- 9. Bickels J, Ben-Sira L, Kessler A, Wientroub S. PRIMARY PYOMYOSITIS: J Bone Jt Surg-Am Vol. 2002;84(12):2277-2286. doi:10.2106/00004623-200212000-00024 10. Lovejoy JF, Alexander K, Dinan D, Drehner D, Khan-Assad N, Lacerda IRA. Team Approach: Pyomyositis. JBJS Rev. 2017;5(6):e4-e4. doi:10.2106/JBJS.RVW.16.00048 11. Levitt DL, Byer R, Miller AF. Point-of-Care Ultrasound to Diagnose Pyomyositis in a Child: Pediatr Emerg Care. 2019;35(1):69-71. doi:10.1097/PEC.00000000 00001711

Does This Finger Laceration Need Immediate Vascular Surgery Consultation? Perspectives Based on an Urgent Care Patient Experience

Urgent Message: Clinicians can apply best-practice care principles for lacerations of the hand in the urgent care setting by gaining a better understanding of the anatomy and wound repair techniques. Such competency can also help reduce nonindicated referrals to the emergency department.

Patrick O'Malley, MD

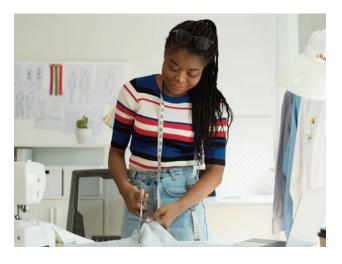
Citation: O'Malley P. Does This Finger Laceration Need Immediate Vascular Surgery Consultation? Perspectives Based on an Urgent Care Patient Experience. J Urgent Care Med. 2024;18(4):28-30

Key words: laceration, finger injury, suturing, urgent care

acerations are a common presenting complaint to urgent care (UC) clinics. Unfortunately, many UC Lclinicians have limited experience and confidence with suturing and laceration management. Better understanding of anatomy and basic wound care principles is important for increasing UC clinician confidence and minimizing non-indicated referrals to higher levels of care.

Introduction

Acuity degradation is an increasingly recognized issue facing urgent care in America. Acuity degradation refers to the trend demonstrating lower average complexity of presentations in UC centers. One manifestation of this phenomenon is that UC clinics are caring for fewer lacerations than in previous decades. The reasons for



acuity degradation are multifactorial and synergistic with one another.1

This case presentation illustrates how provider deficiencies in understanding of the anatomy of the hand and inadequate confidence in basic wound management resulted in a patient being referred to the emergency department (ED) for a 1.5 cm laceration of the finger. (**Figure 1**)

Author Affiliations: Patrick O'Malley, MD, Emergency Medicine, Newberry County Memorial Hospital. Author has disclosed a relevant financial interest in Medline Industries in the form of consulting and product/royalty licensing fees.







Case Presentation

The patient presented to urgent care shortly after accidentally lacerating her finger with a pair of scissors. The wound had continued oozing, but did not experience arterial pulsations.

Therapeutic Intervention

At the UC center, she received a tetanus vaccination, and the wound was bandaged. She was then sent to the local ED due to concern of a potentially severed artery and recommendation that she should see a vascular surgeon.

Upon arrival to the ED, there was no active bleeding. The ED clinician performed a transthecal digital block to provide anesthesia.2 The wound was irrigated with

tap water at the sink, and a finger tourniquet was applied, allowing for inspection and evaluation of the wound (Figure 2).3 Four simple interrupted nylon sutures were placed (Figure 3). There was a small amount of oozing after the tourniquet was removed. Bacitracin ointment and a bandage were applied, and the patient was discharged with routine wound care and suture removal guidance.

Ethics Statement

The patient provided verbal and written consent for case description and clinical images to be used for education purposes.

Discussion

Management of lacerations requires a fundamental knowledge of relevant regional anatomy, principles of acute wound care, and the technical skills necessary for wound repair. However, it is understandable that providers with limited exposure to laceration care may be overwhelmed in such scenarios. The expectation of some bleeding and tissue distortion is crucial to avoid panic in the urgent care setting and reflexive ED referrals.

A better understanding of finger anatomy (Figures 4-5) may have mitigated this patient's unnecessary referral. Her wound was not near any major artery—as the digital arteries are deeper and more lateral.

There is significant collateral and redundant circulation in the finger. Even if one of the small dorsal or volar arteries are injured, orthopedic or vascular surgery is not required unless there are signs of ischemia.4 Wound closure would be the primary treatment and is useful for achieving hemostasis.

This case demonstrates how the knowledge of relevant anatomy and the principles of acute wound care are perhaps more important than technical suturing skills in appropriate care for lacerations. The four interrupted sutures ultimately used for wound closure were simple as a repair technique, however, having the necessary knowledge of the anatomy, physiology, pharmacology, and applying it appropriately for a simple repair was equally requisite.

Additionally, hand injuries can result in important loss of function and subsequently disability, so it is critical for UC clinicians to be familiar with indications for immediate ED referral. These include:5,6

- High-pressure injection injury
- Open fracture/dislocation with bone protrusion or gross contamination
- Concerns for severe infection (eg, flexor tenosynovitis, necrotizing soft tissue infection)
- Animal or human bite wound with evidence of deep tissue involvement or infection
- Concerns for acute digital ischemia
- Partial amputation with visible bone or complete amputation

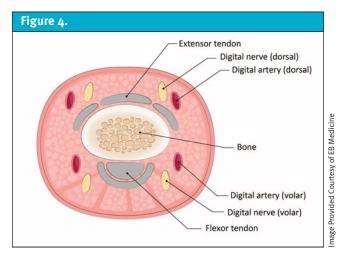
If immediate clinic or phone consultation with a hand specialist is available, this is reasonable (and often preferable as an alternative). Importantly, tendon injuries are commonly repaired in a somewhat delayed fashion, and ED referral can be deferred if follow-up with an orthopedist within 24-48 hours can be assured.⁷ In such cases, irrigation, loose skin approximation, and splinting in UC is a reasonable practice.

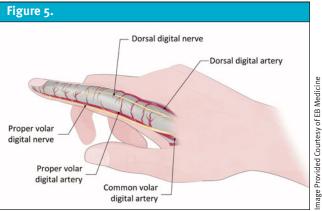
Patient Perspective

The patient presented in this case had an unfavorable opinion about her urgent care experience. From her perspective, she expected this small wound could be fully addressed in the UC center. Instead, she incurred significant additional hassle, wait time, and financial costs as a result of following the guidance of the UC provider.

Conclusion

While acuity degradation is an ongoing phenomenon in urgent care in the United States, patients with lacerations still present to UC centers frequently. UC clinicians can improve patient experience and mitigate excessive ED referrals by ensuring adequate understanding of relevant anatomy and wound care closure techniques and principles.





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References

- 1. Barlow B, Ayers A, Sadler, M. How Urgent Care Can Address Its Degrading Scope of Practice. November 30, 2022. Accessed June 12, 2023. https://www.jucm.com/ how-urgent-care-can-address-its-degrading-scope-of-practice/
- 2. Morrison WG. Transthecal digital block. Arch Emerg Med. 1993;10(1):35-38. doi:10.1136/emj.10.1.35
- 3. O'Malley, PM. Essential Tools for Urgent Care-Finger Tourniquet. June 30, 2022. Accessed June 12, 2022. https://www.jucm.com/essential-tools-for-urgent-carefinger-tourniquet/
- 4. Luczak BP, Maher R, Gurfinkel R, Teh LG. Closed digital artery injury. Ochsner J. 2011 Summer;11(2):139-42. PMID: 21734853; PMCID: PMC3119218.
- 5. Hunt TJ, Powlan FJ, Renfro KN, et al. Common Finger Injuries: Treatment Guidelines for Emergency and Primary Care Providers [published online ahead of print, 2023 Feb 3]. Mil Med. 2023;usado22. doi:10.1093/milmed/usado22
- 6. Vasdeki D, Varitimidis SE, Chryssanthakis C, Stefanou N, Dailiana ZH. Medicolegal risks associated to hand and wrist trauma. World J Crit Care Med. 2022 Jan 9;11(1):40-47. doi: 10.5492/wjccm.v11.i1.40. PMID: 35433308; PMCID: PMC878
- 7. Venkatramani H, Varadharajan V, Bhardwaj P, Vallurupalli A, Sabapathy SR. Flexor tendon injuries. J Clin Orthop Trauma. 2019 Sep-Oct;10(5):853-861. doi: 10.1016/j.jcot.2019.08.005. Epub 2019 Aug 19. PMID: 31528057; PMCID: PMC6739511.

Thinking Outside the Box to Bring Urgent Care to the Patient

Urgent Message: Urgent care is a consumer-driven phenomenon, and physician entrepreneurs continue to evolve the delivery of urgent care services in response to changing consumer preferences, both inside and beyond the brick-and-mortar facility.

Alan A. Ayers, MBA, MAcc

hile unregulated by most states, the term "urgent care" historically has come to mean a base offering of extended hours, on-site x-ray and lab, IV hydration, EKG, and procedures including laceration repair at a brick-and-mortar location. These standards are derived from the national Urgent Care Association Certification Criteria.¹

However, from a patient standpoint, "urgent care" is more commonly taken to mean an acuity of symptoms (ie, non-emergent cuts, fractures, fever), visit priority (walk-in or same day), or services offered (rapid lab testing, x-ray, minor procedures). This definition expands the use of urgent care beyond traditional delivery models. After all, from a clinical standpoint, diagnoses of otitis media, allergic rhinitis, or streptococcal pharyngitis are the same regardless of venue.

Alas, healthcare entrepreneurs continue to reinvent the urgent care model in response to patient demand. One such model is Mobile Med, founded in Columbus, Ohio, in April 2019 by Gregory LaFontaine, PA, and Ryan Cantzler, MD, both of whom I recently interviewed for this Practice Management exclusive in *The Journal of Urgent Care Medicine*.

Ayers: Mobile Med has a unique business model. Can you describe the services you offer?

LaFontaine: Mobile Med was started as an in-home option for patients to receive the same care and services they'd expect at an urgent care. We can treat anything normally seen at an urgent care, including suturing and draining



Gregory LaFontaine, PA

abscesses. Using telehealth, we can even triage their concerns before a visit and advise if they should be seen at an emergency department. We give patients the option to see us through a house call or virtual appointment.

We have also added Dr. Bethany Recker, a board-certified family practice physician, so we now offer primary care services through a monthly membership program.

Mobile Med is a direct-pay service, and we do not contract with insurance companies. Although patients pay out-of-

Author affiliations: Alan A. Ayers, MBA, MAcc is President of Experity Consulting and Practice Management Editor of *The Journal of Urgent Care Medicine*. The author has no relevant financial relationships with any ineligible companies.

Urgent Care Services and Pricing

Mobile Med offers urgent care Monday-Friday from 8AM to 8PM and Saturday-Sunday from 10AM to 6PM, consistent with "traditional" urgent care centers.

A housecall and medical assessment starts at \$175 plus \$125 for each additional family member.

If Mobile Med determines a patient needs to be seen at a brick-and-mortar urgent care or emergency room, the patient is only charged a \$50 travel fee.

Membership plans are offered at \$115/month for one person and \$275/month for a family of 3 or more.

Source: Mobile Med Website. https://mobilemed614.com/plans-pricing/ Accessed October 29, 2023.

pocket for our services, we are priced competitively to what they'd pay at an urgent care after co-pays, deductibles, and other fees. Patients can use funds from health savings accounts, which they have found to be a beneficial way to use these accounts.

Ayers: How do you handle x-rays, lab testing, and prescriptions?

LaFontaine: Currently, after evaluating a patient, we order imaging at a local outpatient imaging center or give recommendations on the next steps. We can order lab work or obtain blood and urine samples and send them directly to an outpatient lab. We send our prescriptions electronically using mobile electronic health records.

Patients can use their insurance at testing centers or outpatient labs, but we've found that many of these places can offer a reasonable and competitive rate for patients who pay directly.

Ayers: What is your clinical background and what led you to start Mobile Med?

LaFontaine: I have been practicing as a physician assistant for nearly 15 years in emergency departments and urgent cares throughout central Ohio. I also served in the United States Navy as a medical corpsman.

My co-founder, Dr. Ryan Cantzler, is a board-certified emergency medicine physician and has been practicing for 18 years in Columbus. Our newest partner, Dr. Bethany Recker, is a board-certified family practice physician with 19 years of experience. She completed her residency in Columbus and has been practicing here ever since.

Ryan and I came up with the idea for Mobile Med during a happy hour. We were both frustrated that many of the problems we were treating patients for in the clinical setting

didn't need to be seen at a brick-and-mortar healthcare facility. Patients shouldn't have to be exposed to additional diseases or spend excessive time waiting in a lobby for care. A mother shouldn't have to take all three of her kids to an urgent care before dinner because that's the only time she can get one child treated for an ear infection.

Plus, as providers, we get to spend more time talking with patients and explaining what's happening instead of rushing to get to the next bed.

Ayers: What gaps in care does Mobile Med address? Why do patients choose Mobile Med over other options?

LaFontaine: Mobile Med is healthcare that is centered on the patient. It's convenient for the patient because we travel to them, thereby cutting out travel time and time spent sitting in a waiting room. We also spend more time with each patient, ensuring we get a thorough history. This also gives the patient time to ask questions and make sure they understand the treatment plan.

We've found that the first-time patients choose Mobile Med it's often for convenience; however, they return because they're able to be seen and treated quickly and are impressed by the level of service they receive.

Ayers: How did the COVID-19 pandemic accelerate your business model?

LaFontaine: In previous generations, doctors made house calls. Around the time of the pandemic, more and more businesses began to deliver goods and services to your door, however, healthcare was not one of them. Mobile Med changed that. During the pandemic, we became popular for COVID testing, especially before at-home testing was readily available through government-supplied test kits. Patients appreciated our flexibility to come to their residence. Often, we did the tests outside a patient's home on the front porch or in the garage to accommodate social distancing. The pandemic also really solidified telehealth as an appropriate and accepted option for some health concerns.

Ayers: What is your revenue model? Do you bill insurance?

LaFontaine: Mobile Med is a direct-pay or fee-for-service provider. We do not contract with health insurance companies. However, we do accept HSA cards/funds and patients can use their insurance for reference lab work and other types of testing. Mobile Med also generates recurring revenue from members who pay monthly dues, with discounts for pre-paying for the quarter, semi-annually, or annually.

Ayers: How do you use technology to facilitate your business model?

LaFontaine: As a mobile-based business, we use technology in many ways. We use a HIPAA-compliant app to communicate with patients—including video and text/chat features. Patients really appreciate these options to send us questions, concerns, or even photos if we need to visually monitor their condition.

We're in the process of developing our own app that will combine some of the technologies we're currently using over several platforms (EMRs, telehealth, chat/text with providers, billing, plus more). We're also testing new ways to treat patients, like using a mobile ultrasound to diagnose fractures, start IVs, evaluate gallbladders, etc.

Ayers: A trend we're seeing in all urgent care is the convergence of urgent and primary care. Your model includes both. How do you define "primary care" and how is primary care synergistic to urgent care in your model?

LaFontaine: We started as an urgent care and found that many ailments we were seeing could be easily managed by a primary care provider (PCP). Also, patients were using urgent cares because they couldn't get an appointment with their PCP—and many aren't even established with a PCP. Continuity of care is so important, and Mobile Med supports that blending of urgent and primary care. Patients who have used us for urgent care have enjoyed our service so much that they've joined as primary care members with Dr. Recker. This provides personalized care for the whole patient.

Primary care is the ongoing care of your day-to-day health, including maintenance of chronic conditions and medication management. Urgent care should be used when you cannot wait to see your primary care provider or don't have lifethreatening symptoms that need to be treated in an emergency department. If patients are going to an urgent care frequently, they'd likely benefit from consistent care with a primary care provider who can address their issues.

Ayers: One of the criticisms of mobile urgent care services is that it's less efficient than brick-and-mortar in that a clinic provider can see more patients per hour going from exam room to exam room than from house to house. How do you overcome this challenge and drive efficiencies in your business?

LaFontaine: We're not an efficiency model—we're a patientdriven model. We gain cost advantages by using a lean staff, technology, and the fact that we don't staff a brick-andmortar urgent care clinic. The providers do a lot of things themselves instead of using support staff (taking vitals, sending prescriptions, sending referrals, doing paperwork for sports physicals, etc.). Because we don't contract with insurance, we also have less paperwork and billing needs than other practices or clinics.

Ayers: How do you see your business growing and evolving in the future?

LaFontaine: Our business model is constantly evolving. For example, we've already added services based on patient needs, like hormone replacement therapies, medical weight loss, and medical marijuana. We're adding innovative aesthetic treatments that will give patients new options for that type of care. We're meeting our patients where they want new or specialized care.

We are also constantly looking to technology and new ways to run our practice. We've seen patients respond positively to the technology they are already using in their everyday lives, so it makes sense for Mobile Med to use it, too. We're definitely reexamining healthcare business models to find ways to make our business patient-centered, not just about profitability.

Ayers: Is there anything else our readers should know? LaFontaine: As providers, we've had much more satisfaction in our jobs by spending more time with our patients. We feel like we're truly helping them instead of just "treating and street-ing" them. Often our patients don't actually need an appointment with us. We can text them to answer questions about their treatment plan and reassure them that they're doing the right things and recovering in the right timeframe. And instead of being affiliated with large healthcare groups or hospitals, we're making decisions that best fit our practice and patients. Spending time with our patients and improving their lives—isn't this why we all went into medicine in the first place?

Conclusion

Urgent care was born of physician-entrepreneurs who saw an opportunity to meet patients' episodic medical needs without the hassle and costs of emergency rooms or waiting for a primary care appointment. Urgent care grew as consumers loved the convenience and access of an on-demand, extended hours facility near where they work and play. Now that patients have acclimated to urgent care services, entrepreneurs continue to evolve the model in response to changing patient needs and preferences.

References

1. Urgent Care Association Website. Certification Criteria. https://urgentcare association.org/quality/certification. Accessed November 30, 2023.

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Challenge your diagnostic acumen: Study the following x-rays, electrocardiograms, and photographs and consider what your diagnosis might be in each case. While the images presented here are authentic, the patient cases are hypothetical. Readers are welcome to offer their own patient cases and images for consideration by contacting the editors at editor@jucm.com.

35-Year-Old With Heel Pain After a Fall





A 35-year-old man presents to urgent care complaining of severe posterior heel pain. He works for a local roofing company and fell a few feet from a ladder, landing on a hard surface.

View the images taken and consider what your diagnosis and next steps would be. Resolution of the case is described on the following page.





Differential Diagnosis

- Calcaneal spur
- Achilles tendon rupture
- Comminuted impacted posterior calcaneus fracture
- Heel bone contusion

Diagnosis

The patient was diagnosed with comminuted impacted posterior calcaneus fracture. The axial view image reveals a comminuted irregular cortical overlap of the posterior calcaneus, and the lateral view image reveals an oblique band of sclerosis of the posterior calcaneus.

What to Look For

- The mechanism of injury is most often heavy axial loading such as a big jump or fall
- Pain is usually severe, and patients are unable to bear weight on the heel
- The heel usually has tenderness to palpation, erythema, and swelling

Pearls for Urgent Care Management

- Initial management is with rest, ice, elevation, and pain management
- Extraarticular fractures generally heal well with conservative treatment
- Intraarticular fractures require surgical referral (podiatry or orthopedics)
- As this is the result of trauma, keep in mind other possible concomitant injuries

Acknowledgement: Images and case provided by Experity Teleradiology (www.experityhealth.com/teleradiology).

18-Year-Old With Painful, Eroded Lesions



An 18-year-old man presented to urgent care with fever, pain in multiple joints, and a back rash that had been progressive for the last few weeks. On examination of the back, there were multiple painful erythematous and violaceous papules and nodules as well as several large pustules. Some of the lesions were eroded and crusted. The patient reported that he recently started an intensive bodybuilding regimen with a 3 month use of anabolic-androgenic steroid/testosterone prior to lesion presentation.

View the image taken and consider what your diagnosis and next steps would be. Resolution of the case is described on the next page.



Differential Diagnosis

- Acne vulgaris
- Acne fulminans
- Folliculitis
- PAPA syndrome

Diagnosis

The correct diagnosis in this case is acne fulminans. Acne fulminans is a rare, highly inflammatory, immunologically induced form of acne that occurs most often in male patients between the ages of 13 and 22 years. While the pathogenesis of acne fulminans is not fully understood, the main inciting antigen is believed to be from Cutibacterium acnes (formerly known as Propionibacterium acnes). Risk factors include chronic, severe acne (mean duration of 2 years), isotretinoin use (usually in high doses), a positive family history, high testosterone levels, and history of anabolic steroid use.

What to Look For

- Lesions most commonly located on the trunk
- Lesions are large inflammatory nodules and friable plaques that may be associated with erosions, ulcers and hemorrhagic crusts
- Systemic symptoms may include fever, arthralgias, myalgias, fatigue, erythema nodosum and laboratory abnormalities

Pearls for Urgent Care Management

- Mainstays of treatment include several week course of prednisone and isotretinoin (for patients not on isotretinoin)
- If acne fulminans is caused by isotretinoin, discontinue isotretinoin
- If systemic symptoms are present, prednisone alone should be started initially
- Referral to dermatology should be considered

Acknowledgment: Image and case presented by VisualDx (www.VisualDx.com/jucm).

42-Year-Old With Facial Pain and History of Hypertension

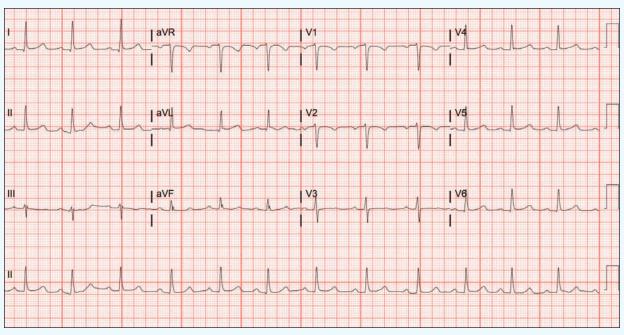


Figure 1: Initial ECG

A 42-year-old female with a history of hypertension presents with facial pain after being assaulted. The patient has pain over her right eye but denies any other injuries. She denies chest pain or shortness of breath but did complain of palpitations, so an ECG was obtained.

View the ECG captured above and consider what your diagnosis and next steps might be. Resolution of the case is described on the next page.

Case presented by Catherine Reynolds, MD, McGovern Medical School at UTHealth Houston.



Figure 2: (*) indicate prolonged PR interval

Differential Diagnosis

- Junctional Tachycardia
- First Degree Atrioventricular (AV) Block
- Hyperkalemia
- Second Degree Atrioventricular Block
- Sinus Arrhythmia

Diagnosis

The diagnosis is first degree AV block. The ECG reveals a normal sinus rhythm with a rate of 72 beats per minute. The axis is normal. The PR interval is prolonged at 240 msec. There are no signs of ischemia.

First degree AV block is a condition caused by an abnormally slowed conduction from atria to ventricles through the AV node. This is diagnosed on an ECG with a PR interval greater than 200 msec and is considered "marked" when the PR interval exceeds 300 msec. As seen in Figure 2, this interval is measured from start of the P wave to the beginning of the QRS complex. A normal PR interval is 120-200 msec.

First degree AV block can be caused by anything that slows the conduction from the atria to the ventricles. This includes AV nodal disease, enhanced vagal tone, ischemia such as inferior myocardial infarction, infection (eg, Lyme disease), inflammation, electrolyte abnormalities, and medications. Any medication that increases the refractory time of the AV node will slow the conduction through the AV node, such as calcium channel blockers, beta blockers, antiarrhythmics, and digoxin.2

In this patient's ECG, the conduction to the ventricles is clearly slowed, but every atrial impulse is transmitted to

the ventricles, in contrast to second or third-degree AV block. There are no other electrocardiographic abnormalities, making electrolyte abnormalities unlikely, and the rhythm appears to be regular, making sinus arrhythmia less likely. Classically, first-degree AV block, in isolation, is benign and asymptomatic, with no need for treatment or follow-up. However, if first degree AV block is seen in combination with other conduction deficits (eg, fascicular and/or bundle branch block), the patient is at higher risk of developing complete heart block. Therefore, recognition of first-degree AV block should prompt a focused history, physical, review of the patient's medications, and comprehensive analysis of the ECG.

What to Look For

- First-degree AV block is diagnosed when the PR interval is longer than 200 msec and is often an incidental finding.
- In patients with first-degree AV block, look for additional signs of conduction delay on ECG and any other abnormalities such as ischemia or inferior myocardial infarction.

Pearls for Initial Management, Considerations For Transfer

- Typically, first-degree AV block is benign and requires no treatment or follow-up.
- If additional conduction deficits coexist, consider more advanced conduction system disease, assess hemodynamic status, and, if the clinical presentation warrants, consider transfer.

References

- 1. Ogunlade O, Akintomide AO, Ajayi OE, Eluwole OA. Marked First Degree Atrioventricular Block: an extremely prolonged PR interval associated with Atrioventricular Dissociation in a young Nigerian man with Pseudo-Pacemaker Syndrome: a case report. BMC Res Notes. 2014 Nov 4;7:781.
- 2. Oldroyd SH, Quintanilla Rodriguez BS, Makaryus AN. First-Degree Heart Block. [Updated 2023 Jan 19]. In: StatPearls. Treasure Island (FL): StatPearls Publishing; 2023 Jan. https://www.ncbi.nlm.nih.gov/books/NBK448164/

Case courtesy of ECG Stampede (www.ecgstampede.com).

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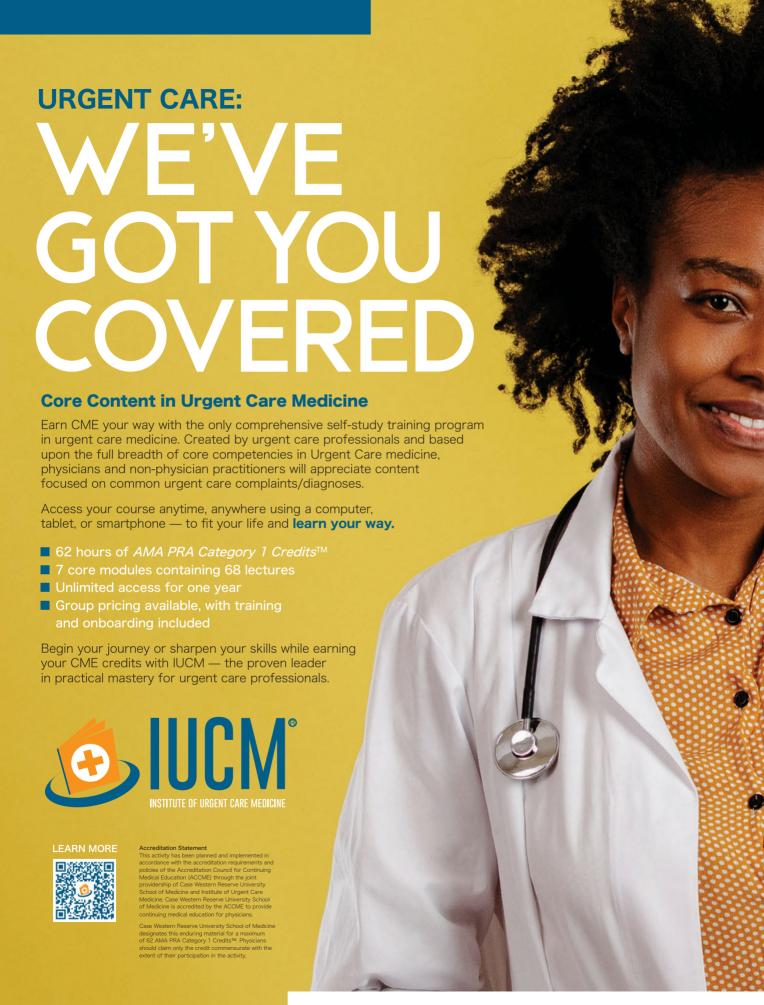
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REVENUE CYCLE MANAGEMENT

The Challenges of Billing Out-of-Network

■ Phyllis Dobberstein, CPC, CPMA, CPCO, CEMC, CCC

ne of the biggest challenges for an urgent care is billing U insurance as a non-participating provider.

When opening a new practice or adding a clinic, completed credentialing and contracting is essential and has a direct impact on the overall success for a new business.

Even when your practice is fully credentialed, the challenge continues as you bring on new providers. Contracting and credentialing remains an archaic process with little oversight to complete processes in a timely manner. A new practice can expect the process to take from nine up to 12 months. With new providers, it can take 90 to 120 days to add them to your contract when full credentialing is required. Full credentialing is when all claims must be billed under the rendering (ie, face-to-face) provider. Billing under a provider that is not the rendering provider when full credentialing is required is also the biggest compliance risk in urgent care with multi-million-dollar settlements with the Department of Justice in recent years. With private payers creating similar policies, it is no longer a gray area. Practices risk denial of claims, recoupments, and loss of contracts.

"Fee-for-time compensation arrangements" (formerly called "locum tenens") is not an option for physicians, as once credentialing starts, the physician becomes a member of your group practice. One member of a group practice cannot be a locum to another member of a group practice.

For non-physician practitioners, billing services under the incident-to guidelines is also not an option. "Incident-to" is for practices where the patient's condition requires followup. It is not for patients with new problems, which is almost all of what is seen in the urgent care setting. Even in the case of longitudinal care, incident-to billing is not an option as often as the industry would lead practices to believe. Once a treatment plan changes (ie, changing the dosage of a med-

Phyllis Dobberstein, CPC, CPMA, CPCO, CEMC, CCC, is RCM Compliance Manager, Experity

ication), it is no longer an incident-to service.

Generally, claims process in one of three ways:

- 1. Claim will pay to the patient: When this occurs, a payment is made to the patient directly from the payer. This does not guarantee that the practice will eventually get the payment.
- 2. Claim will process toward the patient deductible: This only occurs when the patient has out-of-network cov-
- 3. Claim will fully deny as out-of-network: Not all patients will have out-of-network coverage, and they may be responsible for the entire bill.

Asking the patient to pay cash at the time of the visit is not an ideal option. Even with excellent care, patient satisfaction can come down to the amount of the bill. The cashpay option will cause delays in the ability to become profitable due to lower patient volumes.

Start the contracting process at the beginning of your project to avoid delays. Do not wait until you are ready to open the doors. Once your business opens, your expenses will inevitably go up. Heather Real, a senior consultant at Experity, recommends having 75-85% of your credentialing completed prior to opening.

Require new hires to provide all the information required for credentialing during the onboarding process. The new hire should not start until all necessary items are received. The credentialing process cannot start until this information is obtained.

In the case of one non-participating provider when multiple providers are available, train your front office staff to direct patients to the in-network provider. Make sure the patient knows when they are seeing a non-participating provider and that they may be responsible for a large portion of the bill.

Provide your customer service team instructions on what to do if a patient calls to complain. This can be tricky as well. Be sure to check with your legal team to set up a policy that is compliant with all state and federal laws.

Bottom line: The best option for reducing the challenges of out-of-network billing is planning.

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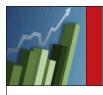
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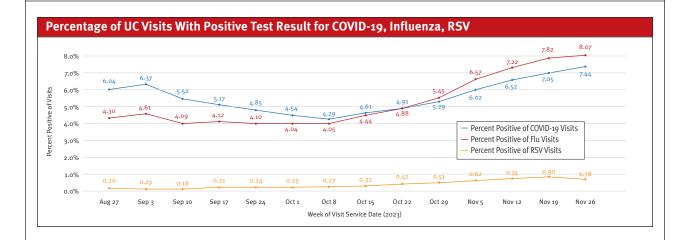




DEVELOPING DATA

Flu Season Begins For Urgent Care

■ Julie Miller



n late November, the Centers for Disease Control and Prevention (CDC) noted that the number of healthcare visits related to influenza, COVID-19, and respiratory syncytial virus (RSV) was particularly high among children, causing concern in communities about this "tripledemic" of respiratory illness.

According to Experity data, the first week of October ushered in flu season for urgent care, when positivity rates for the three viruses among all urgent care center visits began to rise. Since then, the trendlines have continued a steady climb, which is typical for this time of year, with peak season expected to occur between December and February.

For the 14 weeks observed by Experity, flu positivity recorded a low of 4.04% and a high of 8.07%—a near doubling in the number of positive cases over the time period. The week of October 22, 2023, was a turning point for positive flu cases as they surpassed the number of positive COVID-19 cases presenting to urgent care centers. Positive tests for SARS-CoV-2 among patient visits saw a low of 4.29% and a high of 7.44%—a 73% increase in the weeks



Julie Miller is Managing Editor of the Journal of Urgent Care Medicine.

observed. RSV demonstrated a low of 0.18% and a high of 0.90%, with the most recent week showing a slight downturn in positive cases. RSV is of particular concern because older adults and infants are more likely to develop severe cases that lead to hospitalization.²

To compare against national trends, urgent care operators can look to CDC data. The agency reports the percentage of positive results based on the number of specimens collected—not on the number of healthcare visits. Its data revealed influenza positivity at 6.8% of tests, COVID-19 positivity at 11.7%, and RSV positivity at 11.5% for the week ending December 2, 2023.3.4

For urgent care centers, the most important concern during respiratory illness season is the clinical decision to determine which patients are appropriate for referral to an emergency department for treatment and which patients are appropriate for recovery at home. ■

References

- 1. Experity data, accessed December 8, 2023.
- 2. Centers for Disease Control and Prevention Website. https://www.cdc.gov/rsv. Accessed December 11, 2023.
- 3. Centers for Disease Control and Prevention Website. Weekly U.S. Influenza Surveillance Report. https://www.cdc.gov/flu/weekly/index.htm. Accessed December 11, 2023.
- 4. Centers for Disease Control and Prevention Website. COVID-19 Update for the United States. https://covid.cdc.gov/covid-data-tracker/#datatracker-home. Accessed December 11, 2023.
- 5. Centers for Disease Control and Prevention Website. The National Respiratory and Enteric Virus Surveillance System. https://www.cdc.gov/surveillancenrevss/rsv/index.html. Accessed December 11, 2023.



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