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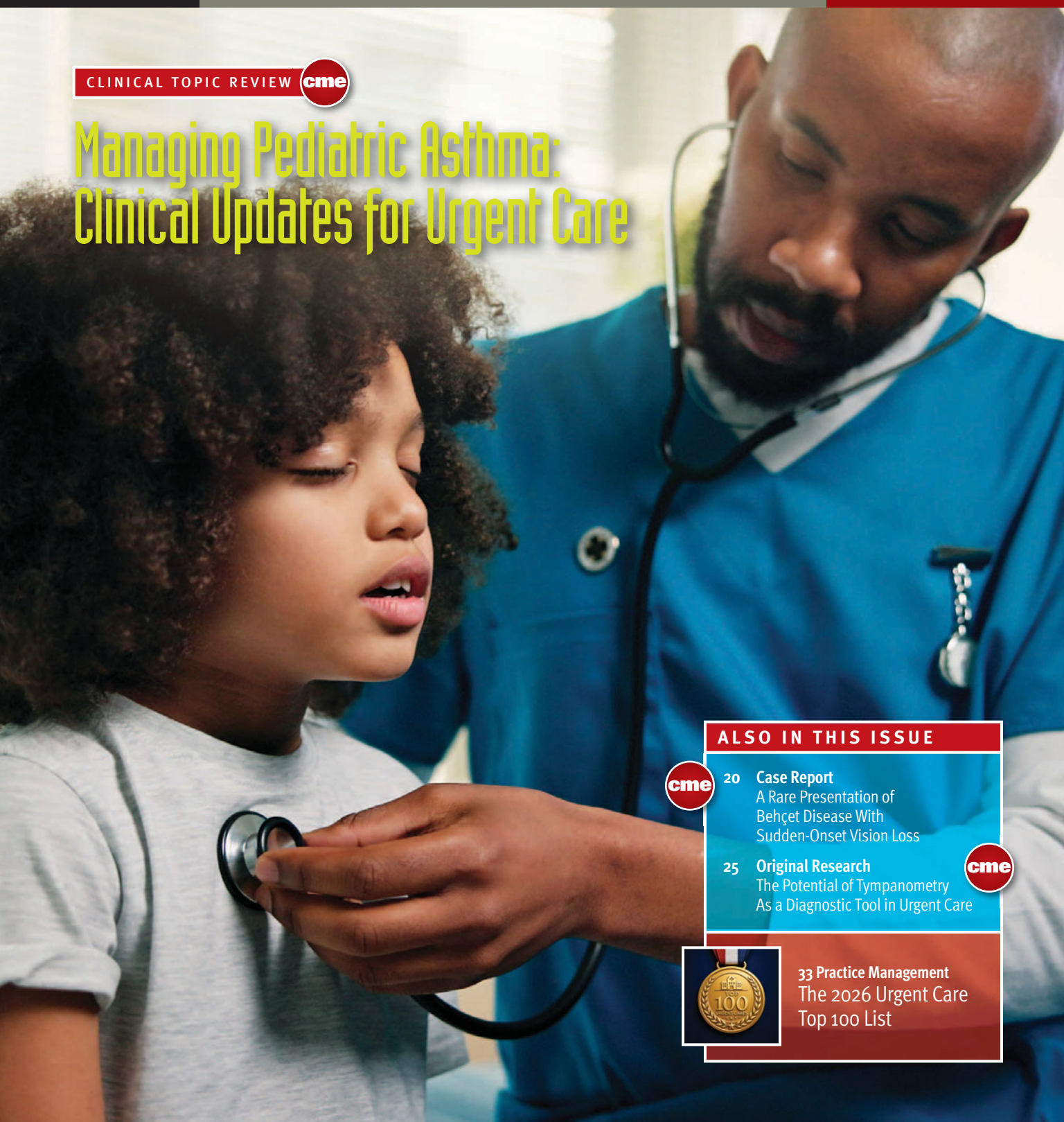

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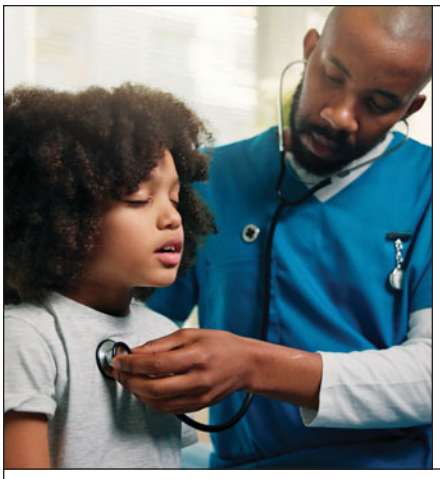

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A Call for Physician Specialty Recognition and Improved Training Pathways in Urgent Care

Cesar Mora Jaramillo, MD, FAAFP, FCUCM, DABFM

With more than 15,000 centers and 200 million visits a year, urgent care centers (UCCs) play a critical role in the U.S. healthcare ecosystem.[1] Despite its impact and rapid growth, urgent care (UC) remains a unique clinical field that has not yet been matched with a standardized training or certification pathway for physicians. This needs to change.

Practicing high-quality UC medicine requires a distinct skill set, including rapid clinical decision-making, procedural competence, and diagnosis and management of new-onset complex conditions as well as acute exacerbations of chronic conditions—all while ensuring the safe discharge of the patient or an appropriate escalation of care to the emergency department. These decisions are often made with limited diagnostic resources and under significant time pressure.

The lack of standardized training and the absence of a recognized certification pathway raise many challenges, including inconsistent clinical preparedness, scope degradation across specialties, variable quality of care and services provided, potential patient safety risks, and a lack of accountability. Addressing these gaps and challenges through formal recognition and structured pathways will lead to improved UC preparation and delivery of patient care for all who practice in the field.

Clinician Training

UC clinicians come from diverse backgrounds, creating variability in training and preparedness. Many clinicians enter UC with limited skill sets that are not tailored to the setting, leading to gaps in procedural confidence, performance, diagnosis and management, and disposition decision-making.[2]

Cesar Mora Jaramillo, MD, FAAFP, FCUCM, DABFM, is the Medical Director of Express at Blackstone Valley Community Health Care, a Federal Qualified Health Center in Rhode Island. He is a Clinical Assistant Professor at Brown University, Alpert Medical School. He is also the President, Board of Directors, College of Urgent Care Medicine and President, Board of Directors, Urgent Care College of Physicians.

"Despite its impact and rapid growth, urgent care remains a unique clinical field that has not yet been matched with a standardized training or certification pathway for physicians."

It is estimated that more than 55,000 clinicians practice UC in the United States, though this figure is not confirmed. For decades, family physicians (FPs) have represented the largest physician workforce in UC. Previously accounting for more than 75% of physicians in the field, they now represent 40–45%, while emergency medicine (EM) physicians make up 33–35%.[3,4] Notably, many FPs work alongside advanced practice clinicians, which means they are likely to be supervisors as well.[5] These data suggest that family-medicine-trained physicians should be very confident practicing in UC settings, both clinically and procedurally.

In 2022, the College of Urgent Care Medicine (CUCM) surveyed clinicians about their confidence with procedures commonly performed in UC. While confidence levels varied by specialty and procedure, the results revealed that clinicians of all backgrounds reported reduced confidence in several core procedures. For

instance, 20% of FPs lacked confidence in interpreting x-rays, while 13% of EM physicians were not confident managing IV lines. Similar gaps were identified across other backgrounds for procedures such as pelvic examinations, facial lacerations, anterior nasal packing, and fracture splinting. ECG interpretation represented another gap, as 13–29% of EM physicians and FPs said they do not feel confident interpreting ECGs. The survey authors found that a lack of training/knowledge is the most common reason for lack of confidence. Although the survey's response rate was only 7.9%, these eye-opening results underscore the need for structured, specialty-specific training.[6]

Increasing numbers of physicians are transitioning into UC. However, residency trainings remain variable, and many curricula have not been updated to reflect the needs of the field. As Green et al. note: "The need is clear. The design of today's family medicine residencies follows a template that is decades old. The result is an imbalance between the structure and content of residency education and the competencies required to meet the ever-evolving, widely diverse needs of patients, families, communities, health care systems, and family physicians themselves."[7]

A 2024 article reported a 33% decline in outpatient procedures among filed claims and a 36% decrease in the number of FPs submitting such claims from 2014 to 2021.[8] Ambulatory procedures remain a core component of primary care, yet this aspect of practice is seldom examined. Additionally, the Council of Academic Family Medicine mentions that clinically active FPs perform a wide range of procedures, but there is significant variability in their training.[8]

Furthermore, a recent analysis found that new family medicine (FM) graduates have a much narrower scope of practice. The authors conclude: "Although FM training programs have succeeded in teaching a broad range of physician skills, these results suggest we may need to consider ways to adapt current training to a new generation of practice realities and physician preferences."[9] Physician training variability is real, and it highlights that the knowledge and skills required to successfully practice in UC are sufficiently distinct to justify a defined pathway to certification and training.

Urgent Care Credentialing Pathway

From September 2025 to February 2026, CUCM surveyed its members on the need for certification. More than 70% of FPs and EM physician respondents supported ("yes" or "maybe" responses) UC certification, reflecting a loud call for a solution to address the concerns and challenges

"In 2024, the Urgent Care College of Physicians was accepted into the American Medical Association Specialty and Services Society—a significant milestone for the field of urgent care medicine."

of UC. The exclusive survey—which has not been published—has some limitations due to its response rate (5% participation out of 4,979 members), yet its findings clearly demonstrate support among clinicians to send a message to the American Board of Medical Specialties and its primary specialty boards to formally set standards for education, training, and certification. It's a call for physician urgent care specialty recognition.

Over the years, CUCM has emphasized the importance of collaboration with other medical societies to advance specialty recognition, improve training, and enhance professional development. In 2025, the American College of Emergency Physicians created an urgent care task force, and one of its objectives was to explore credentialing opportunities for physicians practicing in UC, including a possible path through the American Board of Emergency Medicine.[10] Similarly, members of the American Association of Family Physicians filed a resolution in late 2025 requesting the formation of an urgent care task force and encouraging the American Board of Family Medicine to investigate and consider instituting a credentialing pathway in urgent care. The resolution was referred to the Board of Directors and is currently under review.[11] As these efforts progress, other specialty entities should begin updating their training programs to better equip physicians for success in urgent care.

In 2024, the Urgent Care College of Physicians (UCCOP) was accepted into the American Medical Association (AMA) Specialty and Services Society—a significant milestone for the field of urgent care medicine. This achievement paves the way for UCCOP to apply for a seat in the AMA House of Delegates (HOD) in 2029. Participation in the AMA HOD provides specialty societies with significant benefits regarding recognition, influence, establishing professional standards, and advocacy.[12]

Many countries around the world are increasingly recognizing UC as a medical specialty. The Medical Council of New Zealand recognized UC as 1 of its 36 medical spe-

cialties. It ranks as the 12th largest specialty by number of fellows, who have been supporting the field's structure and setting the standards for success since 2000. This demonstrates the value of specialty recognition in fostering clinical excellence and quality care standards, an example that other countries can learn from.[13,14]

Conclusion

In the United States, although progress is being made toward physician UC specialty recognition, the work continues. Advocacy is crucial, not only for achieving formal recognition but also for elevating the standards of care across all UC settings. Ongoing efforts should focus on UC-specific training, certification options, collaboration between medical societies, and ensuring quality of care. By establishing a recognized physician specialty pathway or standardized certification, UC will have consistent, high standards of care from enhanced physician preparedness, thus strengthening urgent care's role within the healthcare system. ■

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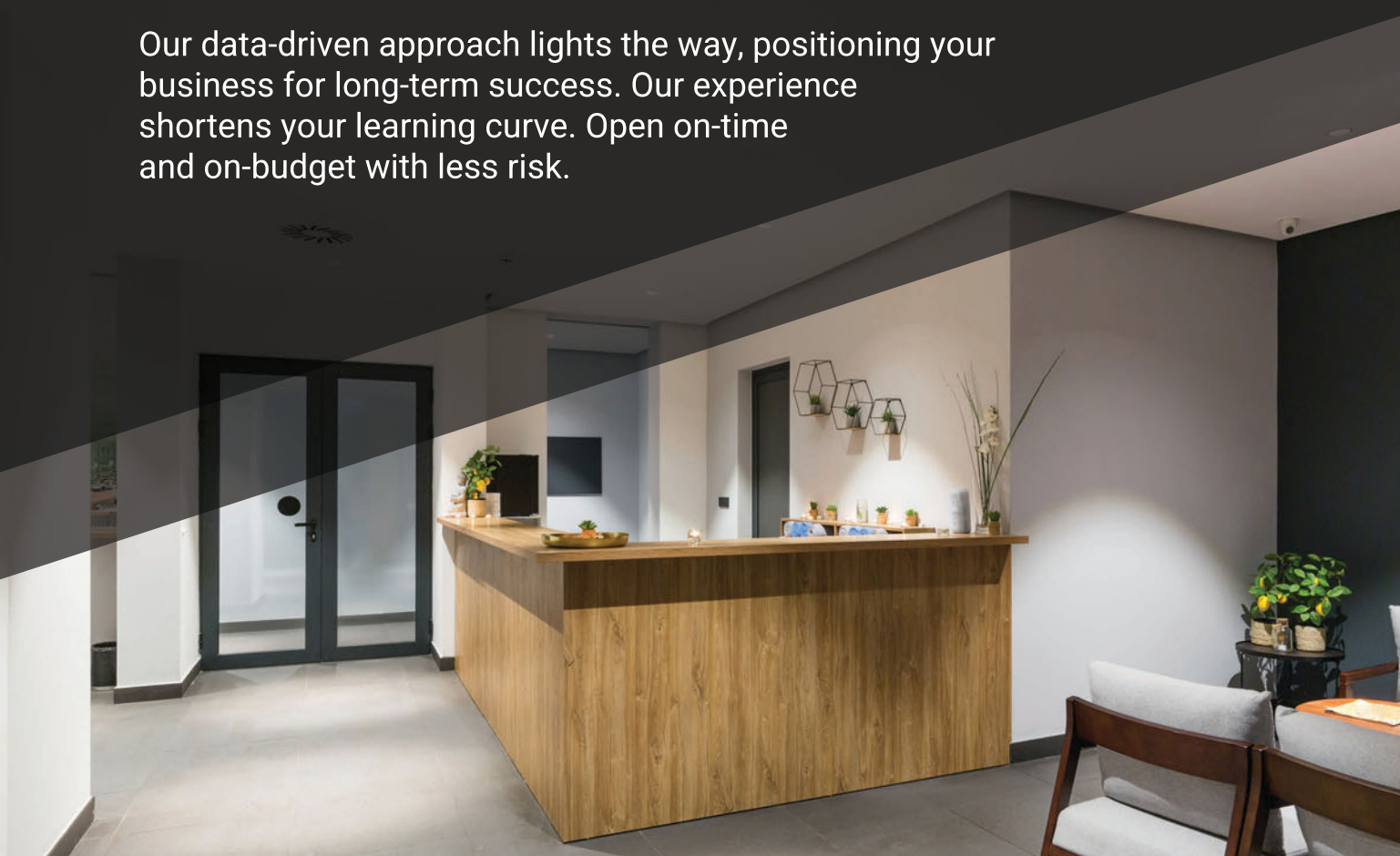

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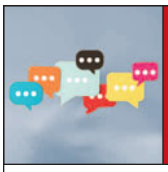

URGENT INTERACTIONS

"Urgent care continues to grow and evolve. Owners, operators, and clinicians need to collaborate in order to move the field forward and meet the changing landscape. The business and clinical sides of medicine must be balanced to ensure excellent patient care—because that is who we are here to serve."

— Lindsey E. Fish, MD, FCUCM
JUCM Editor in Chief

"The patient is a poor historian. They might not be able to give a good history, but we are the historians, the documentarians, and the investigative reporters."

— Michael Weinstock, MD
JUCM Senior Clinical Editor

"When we use a suboptimal tool every day, clinicians tend to get comfortable with a suboptimal status quo–regardless of how imperfect it may be. Ear pain is among the most common complaints we see in urgent care, and the otoscope is a highly imperfect diagnostic tool. Better tools exist–namely tympanometry–and we wanted to show that such a tool presents a viable option for improving how we assess ear complaints in urgent care."

— Joshua Russell MD, MSc, ELS, FCUCM, FACEP
author of "Application of an Algorithmic Prediction Model to Determine the Utility and Financial Viability of Tympanometry as a Diagnostic Tool in Urgent Care" (page 25)

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Our Voice Is Getting Stronger — Let's Use It

Steve Sellars

As we move into June, I've been reflecting on the momentum we've built and what we do with it next. Our Convention in Chicago brought our field together in a powerful way. The conversations were thoughtful, practical, and forward-looking. We saw alignment forming around some of the most important issues we face: advocacy, workforce, reimbursement, and the continued evolution of our care model.

Since then, that momentum has continued. Our work in Washington is advancing. Engagement at the state level is constantly expanding, and our focus on strengthening how we communicate the value of Urgent Care is becoming more intentional and more coordinated.

That last point matters. For years, Urgent Care has delivered real value. We improve access, reduce unnecessary emergency department utilization, and provide high-quality care in a cost-effective setting. But too often, that story is understood locally and not consistently told at scale.

That is changing. Across the Urgent Care Association (UCA) and our affiliated organizations, we are strengthening how we define, support, and communicate the value of Urgent Care. Through the College of Urgent Care Medicine and the Urgent Care College of Physicians, we're advancing clinical education and supporting the professionals who deliver care every day. Through the Urgent Care Foundation, we're elevating awareness of our role in communities and expanding understanding of the care we provide. And through the Commission on Ambulatory and Urgent Care Quality, we're reinforcing standards and accountability that strengthen credibility with patients, payers, employers, and policymakers.

Together, this work creates a more complete and credible picture of who we are as a field. This is where advocacy and communications come together. Advocacy is not just about policy. It's about positioning and ensuring our model is understood, respected, and appropriately valued. And that only happens when we're aligned, not just in what we do, but in how we talk about it.

We're beginning to see the impact of that alignment. When we show up in Washington with a clear message supported by data and experience, people listen. When we engage at the state level with consistency, we build credibility. When we align around clinical standards, education, and quality, we strengthen trust across the healthcare system. But our voice only carries weight when it represents the entire industry, not just a portion of it.

So let me be direct. If you are not engaged with UCA and the broader work of UCA and its affiliates, you're missing an opportunity to help shape the future of this field. We're seeing more leaders serving on committees, contributing to advocacy efforts, speaking at events, and engaging at the national and state level. That involvement is making a difference.

But we need more operators, more clinicians, and more organizations aligned around a common message. When we speak together, we're more credible with policymakers, more effective with payers, and stronger in our communities.

Policy changes will impact your reimbursement and your operations. The standards we define will influence how our care is measured and trusted. And the way we tell our story will shape how Urgent Care is understood and valued.

UCA is the platform to bring those voices together. Whether that means becoming a member, participating in advocacy, contributing data, engaging with your regional chapter, or supporting the work of our affiliates, your involvement matters.

As we look ahead, our priorities remain clear: advancing advocacy, proving value through data and outcomes, strengthening clinical excellence, and elevating how we communicate the role of Urgent Care in everyday healthcare. Now is the time to come together and ensure Urgent Care is not just part of the conversation but leading it. ■

Steve Sellars is Chief Executive Officer of the Urgent Care Association.

CONTINUING MEDICAL EDUCATION

Release Date: June 1, 2026
Expiration Date: May 31, 2028

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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.

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2. Review clinical guidelines wherever applicable and discuss their relevance and utility in the urgent care setting
3. Provide unbiased, expert advice regarding the management and operational success of urgent care practices
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Updated Evidence-Based Pediatric Asthma Management for the Urgent Care Provider (page 13)

1. Which organization provides guidelines for pediatric asthma management?
a. General Asthma Committee
b. Global Initiative for Asthma
c. Northwest Asthma Group
d. Georgia Asthma Board

2. Which of these is *not* an asthma subtype?
a. Allergic asthma
b. Non-allergic asthma
c. Adult-onset asthma
d. Cardiac asthma

3. Asthma severity-level evaluation is typically based on what?
a. Level of treatment required to achieve and maintain symptom control
b. Number of biomarkers found
c. Number of comorbidities
d. Age and weight

Behçet Disease: Atypical Presentation in a Non-Endemic Geographical Region (page 20)

1. Behçet disease is a multisystemic inflammatory disease affecting which of these?
a. Muscles
b. Blood vessels
c. Bones and teeth
d. All of the above

2. What percentage of patients with Behçet disease may develop blindness after 5 years of ocular involvement?
a. 1–2%
b. 10–20%
c. 12–25%
d. 25–50%

3. Which of these symptoms is typically the primary presentation of Behçet disease?
a. Recurrent oral aphthous ulcers on an erythematous base
b. Shortness of breath
c. Acute gastroenteritis
d. Myopia

Application of an Algorithmic Prediction Model to Determine the Utility and Financial Viability of Tympanometry as a Diagnostic Tool in Urgent Care (page 25)

1. What does a tympanometer measure?
a. Pulmonary function
b. Movement of the tympanic membrane
c. Joint range of motion
d. Arterial pressure

2. Tympanometry may be valuable for which condition?
a. Acute otitis media
b. Acute otitis media with effusion
c. Acute hearing loss
d. All of the above

3. In this study of 10,000 urgent care encounters, what percentage of encounters were predicted to warrant tympanometry evaluation?
a. 10%
b. 18%
c. 20%
d. 28%

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See CME post-test questions on page 11.

Updated Evidence-Based Pediatric Asthma Management for the Urgent Care Provider

Urgent Message: Acute asthma exacerbations commonly present to urgent care, and providers must be well-equipped to recognize asthma exacerbations and be familiar with management recommendations.

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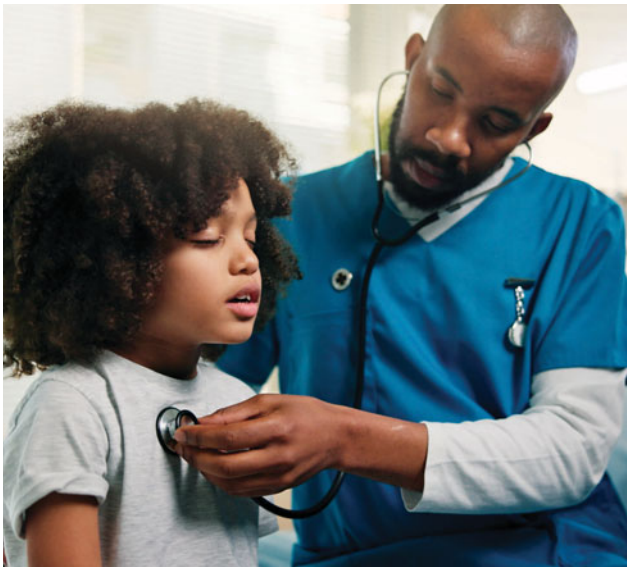
Keywords: pediatric asthma; asthma exacerbation; spirometry; inhaled corticosteroids; bronchodilator therapy; urgent care

Abstract

Overview: Asthma affects nearly 10% of children globally, with an estimated 95.7 million cases reported in 2021. This review discusses updates from the 2025 Global Initiative for Asthma (GINA) guidelines, emphasizing diagnostic and management considerations relevant to the urgent care setting.

Diagnosis: In children under 5 years old, diagnosis remains primarily clinical, requiring recurrent wheezing episodes and symptomatic improvement with bronchodilator therapy. For children over age 6, spirometry or peak expiratory flow testing confirms variable airflow limitation in combination with symptoms. The 2025 GINA update highlights the emerging role of biomarkers, such as blood eosinophil count, fractional exhaled nitric oxide, and serum immunoglobulin E, in identifying type 2 inflammation.

Management: Patients with acute asthma exacerbations in the urgent care should be treated with repeated courses of short-acting beta-2-agonists and systemic corticosteroids. Adjunctive ipratropium is recommended for moderate to severe cases. Patients should be transferred to the nearest emergency department if they require advanced management and/or oxygen supplementation. Urgent care discharge planning should include reassessment of inhaler technique, initiation of controller therapy when indicated, education on asthma action plans, and prompt follow-up.



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Conclusion: To improve pediatric outcomes, urgent care providers can play a crucial role in acute asthma management, reinforcing adherence, optimizing inhaler technique, and initiating evidence-based therapy in alignment with the GINA 2025 recommendations.

Introduction

The global prevalence of asthma in children aged 1–21 years is approximately 10%.[1] In 2021, there were 95.7 million cases of childhood asthma worldwide.[2] This clinical review article aims to highlight the updates in care for pediatric asthma, as well as provide an overview of asthma management based on the most recent Global Initiative for Asthma (GINA) guidelines released in May of 2025.[3]

Pathophysiology

Asthma is a form of lung disease characterized by bronchial hyperresponsiveness and airflow obstruction, resulting from an overactive response to environmental triggers and allergens, which then leads to bronchoconstriction.[3] The GINA 2025 guidelines arrived at a consensus that asthma is a heterogeneous disease with chronic airway inflammation.[4] The asthma subtypes classified by GINA include:[3]

- Allergic asthma
- Non-allergic asthma
- Cough-variant asthma and cough-predominant asthma
- Adult-onset (late-onset) asthma
- Asthma with persistent airflow limitations
- Asthma with obesity

Recent classifications also include T-helper type 2 (Th2)-high and Th2-low asthma. Th2-high asthma receives its name from Th2-cells which originate from CD4+ T-cells. Th2-high asthma is highly responsive to inhaled glucocorticoids. Testing of Th2-high type shows increased eosinophilia and fractional exhaled nitric oxide (FENO).[5] Importantly, several novel biologic therapies that target immunologic components such as immunoglobulin E (IgE) are being utilized more in recent years in the pediatric population with Th2-high asthma. The GINA 2025 guidelines recommend add-on biologic therapy for patients with Th2-high asthma who remain uncontrolled, despite optimizing all other therapies. This type of therapy can be recommended with referral upon discharge from urgent care clinics, depending on the clinical scenario.[4] On the other hand, Th2-low asthma is characterized by increased interleukin-17, which is not currently a target of available biologic therapies.[5]

Diagnosing Asthma in the Urgent Care Setting

The GINA 2025 guidelines include a dedicated section on the diagnosis of asthma in children ages 5 years and younger, emphasizing that diagnosis in this age group is primarily clinical.[3] For diagnosis in this age group, all 3 of the following criteria must be met:

1. At least 2 episodes of acute wheezing, or at least 1 episode of acute wheezing with dry cough, or post-exertion wheezing in between episodes
2. No other likely alternative that better explains the symptoms with the exception of known triggers such as viral infections
3. Clinical improvement with appropriate asthma treatment

The guidelines recognize that asthma may still be suspected in cases where all criteria were not met. In such cases, a therapeutic trial may be initiated with timely reassessment by a primary care provider focused on the effectiveness of the treatment to support or refute an asthma diagnosis.[3]

For children ages 6 and older, the diagnostic approach is the same as in adolescents and adults per the 2025 GINA guidelines and requires both of the following: characteristic respiratory symptoms of asthma; and objective evidence of expiratory airflow limitation.[3] Symptoms may include recurrent wheeze, cough, shortness of breath, or chest tightness that vary over time and are often triggered by exercise, viral infections, allergens, or cold air. Objective confirmation is commonly obtained by spirometry demonstrating significant bronchodilator reversibility or by excessive peak expiratory flow (PEF) variability. When spirometry is normal, variability may be demonstrated through repeat testing over time or exercise challenge testing.[3]

Across all age groups, the 2025 GINA guidelines continue to highlight the importance of assessing the history of the patient's typical asthma symptoms, regardless of the setting of presentation.[3]

In urgent care, history of symptoms and previous asthma treatment response, family history of atopy, and physical exam findings of wheezing, cough, and/or increased expiratory phase should increase suspicion for asthma.

The guidelines now suggest a role for biomarkers of type 2 inflammation in asthma evaluation, particularly when spirometry or PEF are unavailable or inconclusive. These labs could be coordinated through primary care physicians if feasible, as they may assist in guiding treatment decisions. These biomarkers include blood eosinophil count (BEC), elevated fractional exhaled nitric oxide (FeNO), serum total IgE, and allergen-specific IgE.

IgE-related markers are being used to identify allergic asthma in all ages. Confirmatory testing is a crucial aspect of diagnosing asthma to avoid unnecessary treatment and avoid overlooking critical differential diagnoses that may impact quality of life and increase healthcare utilization.[6]

Evaluation of asthma severity should be based on the level of treatment required to achieve and maintain symptom control, often referred to as the "difficulty to treat" approach.[3] This method is further supported by the American Thoracic Society/European Respiratory Society.[7] This shifts the paradigm from "how bad are the symptoms *now*?" to "what is the minimum treatment required to keep this patient controlled?" This approach also applies to acute exacerbations and can therefore be applied in urgent care medicine.

For example, if a patient arrives to the urgent care in distress and reports that they are managed with multiple controller medications yet still have frequent exacerbations, this signals a possible "difficult to treat" or severe asthma phenotype. This history should signal providers that these patients may require a high-intensity of therapy just to maintain control of their exacerbation. It is critical to identify other factors that may make control more difficult including the patient's inhaler technique and adherence, modifiable trigger exposure (eg, smoking, allergen/occupational exposures) and comorbidities (eg, obesity, sleep apnea, gastroesophageal reflux disease, smoking).

Conditions considered in the differential diagnosis **(Table 1)** highlight the importance of a detailed history, careful examination, and selective use of diagnostic tools when possible. Careful consideration of differential diagnoses helps avoid misdiagnosis of asthma and prevents unnecessary exposure to corticosteroids, while ensuring that appropriate management is directed toward the true underlying condition.

Management in the Urgent Care

Management of acute pediatric asthma exacerbations in the urgent care setting relies on 3 primary interventions: controlled oxygen supplementation; repetitive administration of rapid-acting inhaled bronchodilators; and early initiation of systemic corticosteroids. These interventions aim to reverse airway obstruction, reduce airway inflammation, and prevent progression to respiratory failure.

Oxygen Therapy

Oxygen therapy should be titrated based on continuous pulse oximetry, with target oxygen saturations according to GINA 2025 recommendations, using standard sea-level values, 94–98% for children under 11 years of age, and 93–95% for those aged 11 years and older.[3] Oxygen saturation targets should be adjusted for altitude where appropriate. Those with hypoxia will require transfer to the emergency department for escalation of care. Children receiving oxygen therapy should be observed for signs of deterioration, including somnolence or fatigue.[3] Of importance, in hypoxic conditions, the oxygen saturations of those with dark skin color may be overestimated by pulse oximeters.[26]

Bronchodilator Therapy

Inhaled short-acting beta-2-agonists remain the cornerstone of therapy during acute asthma exacerbations. Delivery through a metered-dose inhaler (MDI) with spacer provides similar efficacy to nebulizer therapy while being more cost-effective and having a lower side effect profile.[27,28] For children older than 6 years, albuterol should be administered in doses of 4–10 puffs via MDI with spacer every 20 minutes during the first hour of treatment. Beyond the first hour, doses may be repeated every 3–4 hours or increased to 6–10 puffs every 1–2 hours for persistent symptoms. In children younger than 6 years, recommended dosing is 2–6 puffs of albuterol via spacer, or 2.5 mg by nebulizer, every 20 minutes for the first hour. If symptoms persist or recur, 2–3 additional puffs per hour can be administered.[27,28]

Proper inhaler use is important to assess known asthmatics with recurrent visits to urgent care. Both witnessed administration of maintenance inhalers at school and telemedicine follow-ups are associated with decreased urgent care visits and increased symptom-free days.[29] This supports the notion that proper use of maintenance inhalers is crucial for reducing healthcare system burden and improving patient quality of life.[29] For those under 12 months of age or for those who cannot effectively utilize MDI inhalers, nebulizers are effective and remain appropriate for urgent care settings.

Anticholinergics

In moderate to severe cases, ipratropium bromide may be added in the first hour, at a dose of 1–2 puffs via inhaler or 250 mcg via nebulization every 20 minutes up to 3 doses, as it provides additional bronchodilation and reduces hospitalization rates.[3,30] Some research suggests that in certain age groups, MDI administration with mask is more effective, however, the consensus at this time is to provide the nebulized form for moderate to severe cases.[3,31]

Table 1. Differential Diagnosis for Wheezing in Urgent Care

Primarily in Infants (<1 year)			
Diagnosis	**Key History**	**Physical Exam**	**Diagnostic Testing and Treatment**
Bronchiolitis[8]	Increased work of breathing, intermittent wheezing, minimal response to bronchodilators	Suprasternal or intercostal retractions, nasal flaring, head bobbing	Dx: Clinical Tx: Suctioning, oxygen support (HFNC preferred)
Bronchopulmonary dysplasia[9]	Prematurity, history of neonatal respiratory distress, history of prolonged oxygen or ventilator support	Tachypnea, retractions, grunting, hypoxia	Dx: CXR and history Tx: oxygen supplementation, inhaled bronchodilators, inhaled steroids
Primary ciliary dyskinesia[10]	Unexplained neonatal respiratory distress, early-onset persistent nasal congestion, early infancy onset of chronic wet cough	Wet cough, nasal congestion, dextrocardia	Dx: CXR with situs inversus Tx: Suction, antibiotics, oxygen supplementation, hospital transfer
Congenital heart disease[11]	Exertional dyspnea, growth failure	Tachypnea, cyanosis, murmur	Dx: Hospital evaluation Tx: Hospital transfer
Tracheomalacia and vascular rings[12]	Noisy breathing, minimal response to bronchodilators	Noisy breathing	Dx: Hospital evaluation Tx: Oxygen supplementation with HFNC, hospital transfer
Toddlers and Preschoolers (1–5 years)			
Diagnosis	**Key History**	**Physical Exam**	**Diagnostic Testing and Treatment**
Inhaled foreign body[13]	Sudden onset of cough, shortness of breath, wheezing, or inspiratory stridor	Unilateral wheezing, focally decreased air entry	Dx: CXR or low-dose CT Tx: Oxygen supplementation, hospital transfer for bronchoscopy
Viral respiratory tract infections[14]	History of recent upper respiratory infection	Nasal congestion, dry cough, wheezing	Dx: Clinical Tx: Bronchodilators; if influenza, consider antivirals
Pertussis[15]	Paroxysmal cough, post-tussive emesis, history of apneic events	Paroxysmal cough, facial petechiae or subconjunctival hemorrhages from forceful coughing	Dx: PCR test Tx: Macrolide antibiotics, supportive management
Gastroesophageal reflux disease[16]	Chronic cough, airway symptoms worse after feeding	Back arching, dry cough	Dx: Clinical Tx: Antiacids, reflux precautions, liquid thickeners
Tuberculosis[17]	History of TB exposure, weight loss, cough	Wet cough, fever, signs of extrapulmonary TB	Dx: CXR (hilar or mediastinal lymph node enlargement or consolidation in upper lobes) Tx: Contact public health, medication regimen (rifampin, isoniazid, pyrazinamide, ethambutol)
Cystic fibrosis[18]	Recurrent pulmonary infections, poor weight gain, steatorrhea, meconium ileus	Cough, nasal polyps	Dx: Sweat chloride testing Tx: Antibiotics for pneumonia (cover pseudomonas), referral to pulmonologist

α1A—alpha1-antitrypsin deficiency; CT—computed tomography; CXR—chest x-ray; Dx—diagnostic testing; HFNC—high-flow nasal cannula; PCR—polymerase chain reaction; TB—tuberculosis; Tx—treatment

Corticosteroids

Systemic corticosteroids should be introduced promptly in children who have clinical deterioration, have already escalated their reliever and controller therapy before presentation, or who fail to respond adequately to initial bronchodilator treatment. Oral prednisolone remains the preferred option due to its efficacy, rapid onset of action, non-invasive administration, and low cost.[32] It

Table 1. Differential Diagnosis for Wheezing in Urgent Care (continued)

School-Age Children (6–12 years)			
Diagnosis	**Key History**	**Physical Exam**	**Diagnostic Testing and Treatment**
Bacterial bronchitis[19]	Chronic wet cough	Rattling, wet cough	Dx: CXR normal or nonspecific findings Tx: Supportive or, if prolonged, antibiotics
Chronic upper airway cough syndrome[20]	Persistent cough >8 weeks, allergic rhinitis, postnasal drip	Edematous nasal turbinates, rhinorrhea, post nasal drip, no signs of lower airway obstruction	Dx: Clinical Tx: Supportive management
Bronchiectasis[21]	Productive cough, recurrent infections	Productive cough, coarse crackles	Dx: High-resolution CT scan Tx: Referral to pulmonologist
Adolescents and Young Adults (13+ years)			
Diagnosis	**Key History**	**Physical Exam**	**Diagnostic Testing and Treatment**
Pneumothorax[22]	Sudden onset pleuritic chest pain, shortness of breath	Unilateral decreased breath sounds, hyperresonance	Dx: CXR with absence of lung markings Tx: Oxygen via simple face mask, hospital transfer
Inducible laryngeal obstruction / vocal cord dysfunction[23]	Athletic patient, exercise-induced symptoms, does not respond to bronchodilators	Inspiratory stridor, dyspnea	Dx: Laryngoscopy Tx: Speech-language therapy
Hyperventilation / dysfunctional breathing[24]	Episodes related to anxiety or stress	Frequent sighing or yawning, accessory muscle use	Dx: Clinical Tx: Diaphragmatic breathing
Alpha1-antitrypsin deficiency[25]	Unexplained or difficult-to-control asthma symptoms, recurrent respiratory symptoms	Wheezing, respiratory distress	Dx: Reduced serum α1A levels Tx: Bronchodilators, inhaled corticosteroids, and antibiotics for infection

α1A—alpha1-antitrypsin deficiency; CT—computed tomography; CXR—chest x-ray; Dx—diagnostic testing; HFNC—high-flow nasal cannula; PCR—polymerase chain reaction; TB—tuberculosis; Tx—treatment

is given at 1–2 mg/kg/day: for children ages 6 to 11 years, a maximum dose of 40 mg/day, for children ages 2–5 years, a maximum dose of 30 mg/day, for children less than 2 years, a maximum dose of 20 mg/day. Corticosteroid therapy is typically continued for 3–5 days. Dexamethasone is another steroid recommended due to its long duration of action of 48 hours. Dosing is typically 0.6 mg/kg via intramuscular, oral, or intravenous routes (maximum dose 16 mg/day). In situations where oral therapy is not tolerated due to dyspnea or vomiting, intravenous methylprednisolone may be administered at 1 mg/kg prior to transfer to ED, and then continued there if necessary.[3]

Disposition and Escalation of Care

Children who present with signs of severe or life-threatening exacerbation, or fail to respond to treatment, require transfer to an emergency department or inpatient unit. Severe signs at presentation include altered mental status, oxygen saturation <92%, inability to speak more than single-word sentences, respiratory rate >40 breaths/minute, central cyanosis, or a "quiet chest."[3] Additional criteria for transfer also include a lack of monitoring capabilities at home or at the urgent care center, recurrence within 48 hours, concerns for dehydration, or prior severe exacerbations in combination with their current clinical presentation.

Criteria for Discharge

For safe discharge, patients should have improved respiratory effort and stable oxygenation on room air. Patients should also demonstrate independent ambulation and an ability to tolerate oral intake, especially for those under 5 years old. Before leaving the urgent care center, families should be counseled on early warning signs of recurrence, and inhaler technique should be reviewed and corrected if necessary. A follow-up visit with the primary care provider should be arranged within 1–2 days.[3]

"For safe discharge, patients should have improved respiratory effort and stable oxygenation on room air. Patients should also demonstrate independent ambulation and an ability to tolerate oral intake, especially for those under 5 years old."

Medications at Discharge

For most children over 4 years of age, albuterol delivered via MDI with a spacer is generally preferred, as it is as effective as nebulized therapy for acute exacerbations, providing comparable improvements in lung function and symptoms, shorter treatment times, and fewer side effects.[33] For younger children, particularly those under 4 years who may be unable to coordinate inhalation through a spacer, nebulized delivery remains appropriate to ensure adequate drug delivery. Controller therapy with inhaled corticosteroids (fluticasone or budesonide) should be initiated in children of any age with recurrent symptoms or frequent exacerbations, defined as 3 or more wheezing episodes in a season, or in those with uncontrolled symptoms between episodes. For adolescents, the preferred regimen is maintenance-and-reliever therapy (MART) with inhaled corticosteroid formoterol.[3]

Referral and Specialist Consultation

Referral to pediatric pulmonology is indicated from urgent care providers for children with persistent or severely uncontrolled asthma, frequent exacerbations, or risk factors for asthma-related mortality, including a history of intensive care admission or mechanical ventilation. Additional referral indications include significant treatment-related side effects, poor control despite medium-dose inhaled corticosteroids with correct technique and adherence, and suspected occupational or unusual triggers.[3]

Asthma Action Plan

Patients should receive a personalized asthma action plan upon discharge from the urgent care clinic. It should be tailored to the child's age, current treatment regimen, reliever inhaler, level of asthma control, and the family's health literacy. Providing clear, written instructions enables patients and caregivers to recognize early signs of deterioration and respond appropriately, thereby reducing the risk of future severe exacerbations.[4,34]

Takeaway Points

- Pediatric asthma is characterized by variable, reversible airway obstruction and airway hyperresponsiveness, with significant morbidity worldwide.
- Diagnosis relies on a combination of clinical history, physical examination, and diagnostic tests (spirometry, biomarkers)
- Acute exacerbation management requires oxygen if the patient is hypoxic, bronchodilator treatment, and systemic corticosteroids.
- Chronic management is centered on inhaled corticosteroids as first-line controller therapy, with stepwise escalation. ■

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Case Report

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See CME Quiz Questions on page 11.

Behçet Disease: Atypical Presentation in a Non-Endemic Geographical Region

Urgent Message: Behçet disease may present atypically in non-endemic regions, and ocular involvement requires urgent specialty evaluation to prevent irreversible vision loss.

James McClellan, BS; Kimberly M. Rathbun, MD, PhD, MPH

Citation: McClellan J, Rathbun KM. Behçet Disease: Atypical Presentation in a Non-Endemic Geographical Region. *J Urgent Care Med.* 2026;20(9):20-24

Keywords: vision loss; retinal vasculitis; panuveitis; Behçet disease; branch retinal artery occlusion; branch retinal vein occlusion

Abstract

Introduction: Behçet disease is a multisystemic inflammatory disease affecting large, medium, and small blood vessels that has an unpredictable and recurrent pattern. Behçet disease has a wide variation in prevalence and severity depending on geographic location. Many patients present with ocular involvement, most commonly seen as panuveitis with coexisting retinal vasculitis.

Clinical Presentation: A 23-year-old man with no past medical history presented to urgent care with sudden onset cloudy vision and loss of the inferior visual field in his left eye.

Exam: The physical exam was within normal limits with no obvious findings of vasculitis. Same-day ophthalmologist-performed eye exam revealed panuveitis and retinal vasculitis with a branch retinal artery occlusion and branch retinal vein occlusion. The patient was sent to the emergency department for further evaluation.

Case Resolution: The patient was diagnosed with Behçet disease following serology results of HLA-B51 positivity, and he was referred to a rheumatologist. The patient improved with oral prednisone therapy. Several months later, after discontinuing his prednisone, he presented and was found to have a new onset vitreous hemorrhage and neovascularization in the left eye.

Conclusion: Atypical presentations of Behçet disease are common in North America, and patients may not meet all of the diagnostic criteria for Behçet disease. Ocular involvement can lead to irreversible structural damage and blindness; thus, prompt recognition and management is necessary.

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Introduction

Visits to emergency departments (EDs) in the United States for an ophthalmic complaint comprise approximately 1.5% of all visits.[1] The most commonly seen diagnoses are conjunctivitis, corneal abrasions, dry eye, posterior vitreous detachments, and chalazions.[2] Most presentations are mild with trauma comprising only 2% of those visits and only 13% of cases being classified as true ocular emergencies.[3] While most diagnoses are mild, sudden, and painless, unilateral loss of vision can suggest a severe underlying pathology, including:

- Central retinal artery occlusion (CRAO)
- Central retinal vein occlusion (CRVO)
- Retinal detachment
- Giant cell arteritis
- Transient ischemic attack

However, a more rare but equally severe presentation in younger patients that clinicians should consider is Behçet disease.

Behçet disease is a multisystemic inflammatory disease affecting large, medium, and small blood vessels, characterized by unpredictable phases of recurrence and remission. The highest disease prevalence is seen in countries that lie along the Old Silk Road (an ancient network of land and sea routes connecting the Mediterranean, the Middle East, and East Asia). Another name for Behçet disease is Silk Road disease. The largest prevalence is seen in Turkey with a rate of 370 per 100,000 individuals, while rates in the United States are around 5.2 per 100,000.[4]

There is a wide spectrum of clinical presentations including mucocutaneous, ocular, vascular, articular, neurologic, and gastrointestinal manifestations. Specifically, ocular involvement is seen in about 50% of patients and is the first sign of disease in about 20% of patients. Ocular disease is more frequent and more severe in males.[4] Ocular manifestations usually present as chronic unilateral or bilateral relapsing panuveitis and retinal vasculitis. Given that blindness typically occurs in 10-20% of patients after 5 years of ocular involvement, early recognition is crucial.[4]

Case Presentation

A 23-year-old man with no past medical history presented to urgent care with sudden onset cloudy vision and the inability to see the bottom half of his visual field in his left eye. He reported that he had floaters in the left eye 5 years ago but none recently. Additionally, he stated that he had flashes with rings around them in his left eye first thing in the morning and while driving that same day. He stated that he wears contact lenses daily.

He had a family history of asthma and Hashimoto's thyroiditis but no history of eye diseases. The patient denied any smoking and alcohol use and said he worked moving goods in a warehouse. Review of symptoms was otherwise negative.

The patient's vital signs were normal, and he appeared in no acute distress. Visual acuity was 20/20 in the right eye and 20/20 in the left eye. Extraocular movements were intact, and pupils were equal and reactive to light bilaterally. Visual field exam showed loss of the inferior visual field in the left eye. Intraocular pressure was 11 mmHg in the right eye and 7 mmHg in the left eye. A brief fundoscopic exam did not show a CRAO (pale retina with a cherry red spot) or CRVO ("blood and thunder" appearance). A fluorescein exam was not performed. The patient had a few oral ulcers, but otherwise the physical exam was unremarkable.

Differential Diagnosis

Given the patient's sudden onset of vision loss with a history of floaters, the diagnoses of retinal detachment, posterior vitreous hemorrhage, optic nerve compression, and autoimmune diseases were considered most likely. With the absence of pain and no history of trauma, clinicians believed corneal abrasion, globe rupture, acute angle closure glaucoma, and infectious processes like uveitis, iritis, and endophthalmitis were of lower suspicion. Due to the patient's young age, lack of chronic medical conditions, and absence of the physical exam findings of pale retina, cherry red spot, or a blood and thunder appearance, central retinal artery and vein occlusion and giant cell arteritis were also of lower suspicion. Lack of focal neurological deficits also reduced concern for stroke.

Medical Decision Making and Final Diagnosis

With the patient's complaint and ocular exam findings in urgent care, he was referred the same day to ophthalmology. Ophthalmology consultation revealed 1–2+ cells in the anterior chamber with 2+ cells in the anterior vitreous, retinal whitening, a branch retinal artery occlusion (BRAO), a branch retinal vein occlusion (BRVO), vascular sheathing along the superior arcades, intraretinal hemorrhages along the vascular arcades, and mild inferior vitreous haze in the left eye.

Fundus imaging demonstrated retinal hemorrhages, retinal whitening, tortuosity of veins, and vascular sheathing in the left eye **(Figure 1 A, B, C).**

Ophthalmology referred the patient to the ED where he was admitted for further workup. Complete blood count (CBC), comprehensive metabolic panel (CMP),

erythrocyte sedimentation rate (ESR) and C-reactive protein (CRP) were all within normal limits. Syphilis screen and blood cultures were negative. Computed tomography (CT) of the head, magnetic resonance imaging (MRI) of the head, computed tomography angiogram (CTA) of the head and neck, echocardiogram, and electrocardiogram were all normal. The patient was admitted for further evaluation. Hypercoagulability and autoimmune workups were performed but were pending at the time of discharge. In the hospital, he was given 1 dose of acetazolamide for concerns of elevated intraocular pressure, aspirin 324 mg for headache, and atorvastatin 40 mg for suspected ocular inflammation. The patient was discharged on aspirin 81 mg/day and valacyclovir 1 g/day for concerns of herpes simplex ophthalmicus.

The patient was seen in the ophthalmology clinic a few days later and stated that his vision was unchanged. Visual acuity and intraocular pressure were within normal limits, and fundoscopic imaging was unchanged since the previous visit. Repeat ophthalmological examination revealed 1–2+ cells in the anterior chamber and 2–3+ cells in the anterior vitreous.

A few days later, autoimmune serologies for HLA-B51 and -B54 were positive, so the patient was started on 40 mg of oral prednisone and referred to rheumatology. He returned a few days later and reported that vision in his left eye was greatly improved after taking the prednisone. Ophthalmologic exam showed no cells in the anterior chamber, 2-3+ cells still present in the anterior vitreous, and improvement of the centrally sparing retinal whitening. At this point, the patient was given a preliminary diagnosis of Behçet disease.

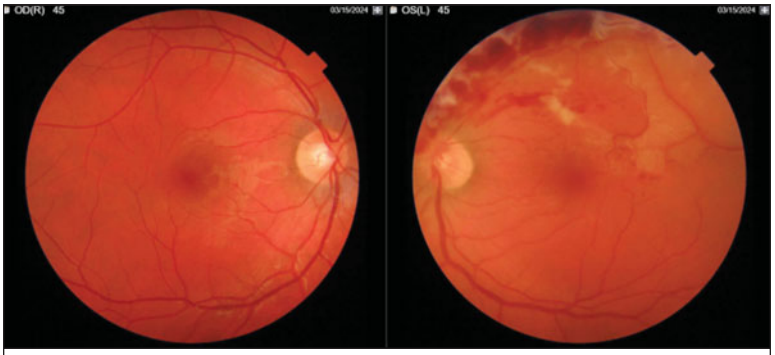

Figure 1 A. Bilateral Fundus Photography
OD (R): normal macula; OS (L): retinal hemorrhages, retinal whitening, tortuosity of the veins, vascular sheathing

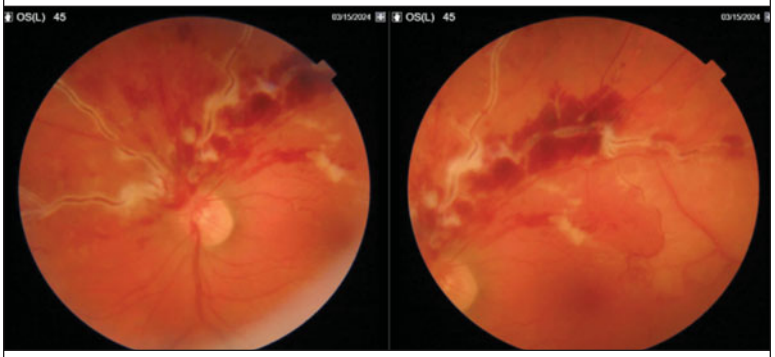

Figure 1 B. Left Eye Fundus Photography
Retinal hemorrhages, vascular sheathing, branch retinal artery and vein occlusion

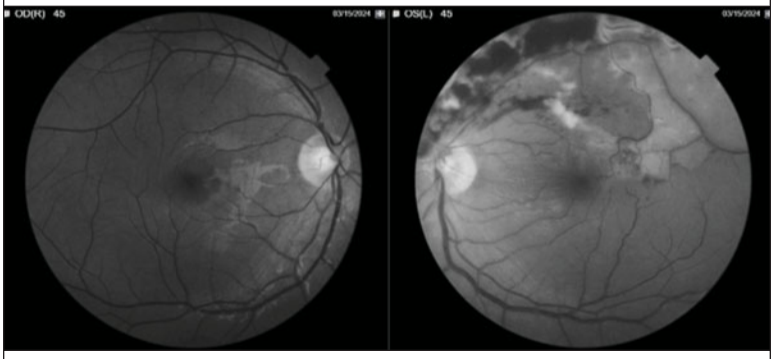

Figure 1 C. Bilateral Red Free Fundus Photography
OD (R): normal macula; OS (L): retinal hemorrhages, branch retinal artery and vein occlusion, retinal ischemia

Discussion

Epidemiology

Behçet disease usually presents between the ages of 20–40 years. The prevalence and disease severity is higher in males in the Middle East and Mediterranean regions, and higher in females in North America, Northern Europe, and East Asia.[4] The pathophysiology of the disease is not fully understood but shares some similarities with other autoimmune diseases given its autoinflammatory, autoimmune, and spondyloarthropathy-like features that can coexist.

Clinical Presentation

In most patients with Behçet disease (~95%), the primary presentation is recurrent oral aphthous ulcers on an erythematous base, located primarily on the lips,

Table 1. International Criteria for Behçet Disease[8]	
Oral ulcers	2 points
Genital ulcers	2 points
Ocular lesions	2 points
Skin lesions	1 point
Neurological manifestations	1 point
Vascular manifestations	1 point
Positive pathergy test	1 point
A score of at least 4 points is needed for diagnosis.	

gingiva, cheeks, and tongue. Genital ulcers are primarily located on the scrotum or labia and are present in 65–75% of patients.[5] However, this patient only presented with very few small oral ulcers. Ocular manifestations can be found in ~50% of patients and generally include anterior, intermediate, posterior, or panuveitis with a relapsing-remitting course.[5] Retinal vasculitis is seen in about half of patients with uveitis and can be complicated by retinal or vitreous hemorrhage, retinal ischemia, neovascularization, and secondary neovascular glaucoma. Macular edema, papillitis, and retinitis can also develop. Ocular involvement is the first sign of Behçet disease in about 20% of patients.[5] Other extraocular manifestations of Behçet disease include: neurologic involvement (5%) presenting as parenchymal lesions; articular involvement (50–80%) presenting as recurrent inflammatory mono or oligoarthritis; gastrointestinal involvement presenting as diarrhea, hemorrhage, or perforation (4–38%); and cardiovascular involvement (2.2–50%) presenting as venous and arterial thrombosis and aneurysm.[5] Gastrointestinal and cardiovascular involvement varies with geographical differences in prevalence.[6]

Workup

During the diagnostic workup, the patient in this case was found to be HLA-B51 positive, which has a high correlation with Behçet disease. The overall risk for developing Behçet disease is 5-10 times greater in patients who are HLA-B51 positive.[7] HLA-B51 positivity is seen in ~57% of patients globally with Behçet disease.[7] However, HLA-B51 positivity is seen in only 20–30% of Behçet patients in North America.[4] Other diagnostic tests to help rule in Behçet disease include the pathergy test. However, diagnosis varies heavily based on geographic location. In Middle Eastern patients with Behçet disease, 60% will test positive on a pathergy test, while only 5% of North American patients will have a positive result.[6]

Diagnostic Criteria

The diagnostic criteria for Behçet disease are based on clinical and laboratory findings. There are 3 accepted criteria: the International Criteria created in 2014,[8] the International Study Group Criteria created in 1990,[9] and the Japanese Criteria created in 1988.[10] While the International Study Group Criteria is the most widely used, the International Criteria is more sensitive. The patient in this case had a score of 4 points (2 points for oral ulcers and 2 points for ocular lesions). A score of at least 4 points is needed for diagnosis.[8]

Case Conclusion

While the patient was a young male with HLA-B51 positivity, he lacked the oral and genital ulcers that are most often seen in Behçet patients. Ocular involvement is a major cause of morbidity in patients. It is the first sign of disease in ~20% of patients and is more frequent and more severe in males.[4] Given this, clinicians must have a high degree of suspicion for Behçet disease with atypical presentations. Like most autoimmune conditions, Behçet disease responds well to initial high-dose steroids. As seen in this case, the patient's condition stabilized after being on regular oral prednisone and his retinal vasculitis resolved. High-dose steroids can also be given along with azathioprine at the direction of the ophthalmology consult.[11]

Per the European Alliance of Associations for Rheumatology, monoclonal anti-TNF alpha antibodies, preferably infliximab, should be given in combination with other immunosuppressives. Glucocorticoids generally are not recommended as monotherapy. However, glucocorticoids help provide rapid control of inflammation, and the addition of immunosuppressives soon after is recommended.[12]

Bilateral involvement is the most common manifestation of ocular Behçet's seen in ~80% of patients with ocular symptoms.[4] However, in most patients with unilateral disease, bilateralization will usually occur within 2 years after the initial presentation.[13] Furthermore, about half of patients with uveitis will have coexisting retinal vasculitis as seen in this patient.[4] Blindness will also occur in 10-20% of patients at 5 years with ocular involvement despite treatment.[14]

Disposition

Due to his sudden vision loss, the patient was referred to ophthalmology from urgent care. From there, the patient was referred to the ED for further evaluation. Initial CBC, CMP, ESR, and CRP were all within normal limits. Syphilis screen, blood cultures, CT head, MRI

head, CTA head and neck, echocardiogram, and electrocardiogram were also negative. Based on his clinical symptoms and HLA-B51 positivity, he was diagnosed with Behçet disease.

Ethics Statement

The Helsinki Ethical Principles were met, and all criteria were followed regarding patient confidentiality and autonomy. The patient provided verbal consent for publication of this case.

Takeaway Points

- While eye complaints in urgent care are frequently non-emergent, providers should be aware of the potential presentation of Behçet disease.
- Behçet disease commonly presents in young men with recurrent oral and genital ulcers with possible systemic inflammation.
- One serious complication is monocular and binocular vision-threatening uveitis, which is the initial presentation in about 20% of patients.
- Initial management includes high-dose prednisone and urgent ophthalmology referral to avoid permanent vision loss. ■

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Original Research

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Application of an Algorithmic Prediction Model to Determine the Utility and Financial Viability of Tympanometry as a Diagnostic Tool in Urgent Care

Urgent Message: The prediction model developed for this study suggests that tympanometry may have value in evaluating cases of possible acute otitis media or acute hearing loss in urgent care centers.

Jeff Lacour, MD; John Weissert; Dan Frankowski; Demetrio Aguila III, MD; Joshua Russell, MD

Citation: Lacour J, Weissert J, Frankowski D, Aguila D, Russell J. Application of an Algorithmic Prediction Model to Determine the Utility and Financial Viability of Tympanometry as a Diagnostic Tool in Urgent Care. *J Urgent Care Med*. 2026;20(9):25-31

Keywords: tympanometry; acute otitis media; otitis media with effusion; sudden sensorineural hearing loss; conductive hearing loss; urgent care

Abstract

Introduction: Tympanometry is a well-validated and rapid tool for assessment of tympanic membrane mobility. Despite American Academy of Pediatrics and American Academy of Otolaryngology guidelines endorsing tympanometry's value in cases of possible acute otitis media and acute hearing loss, most urgent care (UC) centers do not offer tympanometry. This study used UC data and statistical modeling to predict tympanometry use and its financial implications in UC.

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Methods: This was a retrospective cohort study of 140,894 de-identified, real-world UC encounters collected via Intellivisit (IV) software between May 2024–March 2025. A regularized linear regression model was developed to predict encounters in which tympanometry use would be indicated. Two board-certified otolaryngologists independently validated the model's predictions. Then, the model was used to estimate tympanometry use across 10,000 random, real-world UC encounters. A financial analysis was conducted to estimate the expected revenue associated with tympanometry implementation in UC.

Results: The final model achieved a median F1 score of 0.80 (95% confidence interval [CI] 0.65–0.95) with a sensitivity of 0.55 (95% CI 0.38–0.80), a specificity of 1.00 (95% CI 0.99–1.00), and near-perfect inter-rater agreement between human experts (κ=0.9). Among 10,000 UC encounters, 1,819 (18.2%) were predicted to warrant tympanometry. The financial modeling analysis predicted an average UC center would break-even after 214 tympanometry exams and could generate $4,862 in monthly recurring revenue.

Conclusion: The regression model was able to reasonably identify UC encounters where tympanometry would be clinically indicated. The model suggested that tympanometry would be useful in over 18% of UC cases and, therefore, would quickly be financially viable in an average UC setting. Given the frequency with which ear and hearing complaints were seen among this real-world UC encounter set, tympanometry has the potential to meaningfully affect the quality of care and resource utilization for many UC patients.

Introduction

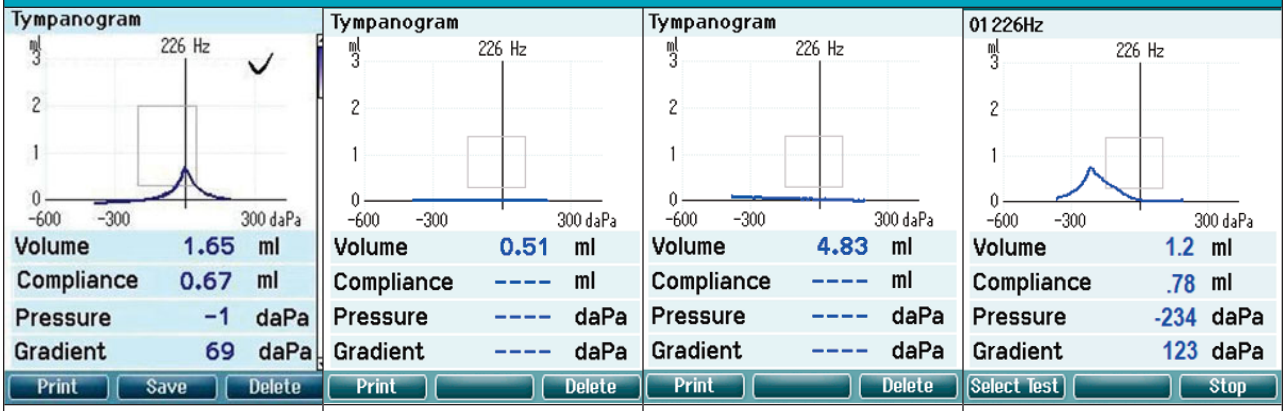
Tympanometry was first introduced in clinical use in the mid-1970s as a novel method to assess movement of the tympanic membrane (TM).[1] Tympanometry involves the use of pressurized air in the external auditory canal (EAC) to assess TM mobility.[2] The device outputs a graphic representation called a tympanogram, which may be one of several types, termed type A, B, or C.[3] A type A tympanogram indicates normal TM movement and absence of a middle ear effusion. A type B (flat) tympanogram indicates no movement of the TM and suggests a middle ear effusion. A type C tympanogram indicates retraction of the TM and negative pressure in the middle ear. A large volume, flat type B tympanogram indicates either a patent ear (P/E) tube or TM perforation **(Figure 1)**.[3,4]

Historically, tympanometry use was limited to otolaryngologists and audiologists; however, advances in technology have made tympanometry accessible to general practitioners. Modern tympanometers are compact, affordable, and require little training to use.[5,6] Clinicians (ie, physicians, physician assistants, and nurse practitioners) can perform tympanometry themselves or delegate it to medical assistants in most U.S. states.[7] Modern tympanometers are hand-held devices, similar in size to an otoscope, which provides results within seconds, and non-otolaryngologist clinicians can quickly be trained to interpret the results **(Figure 2)**.[5,6] Additionally, when used appropriately, tympanometry can be billed separately from evaluation and management (E/M) codes with an average reimbursement of $22–25 United States Dollars (USD) per exam.[8]

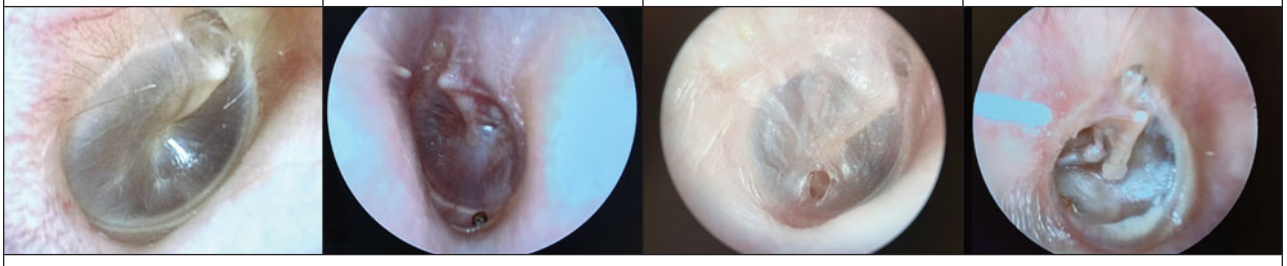
Acute otitis media (AOM) is among the most common diagnoses where antibiotics are prescribed in ambulatory settings, particularly in children.[9] In children aged 15-27 months, otalgia accounts for 35.5% of urgent care (UC) and 19.5% of emergency department (ED) encounters.[10] The American Academy of Pediatrics (AAP) guidelines state that AOM cannot be diagnosed without the presence of a middle ear effusion confirmed by assessment of tympanic membrane (TM) mobility with either tympanometry or pneumatic otoscopy.[11] Without adjuncts, the sensitivity of otoscopy for middle ear effusion is as low as 61% with myringosclerosis frequently being mistaken as a middle ear effusion.[12] The addition of tympanometry to otoscopy increases the sensitivity of middle ear effusion detection to greater than 90%–94%. While pneumatic otoscopy has similar sensitivity to tympanometry and slightly better specificity, its use and interpretation require considerable training and experience.[12] Despite the above AAP guideline, clinicians rarely assess TM mobility.[13] Reliance on otoscopy alone could explain the high variability in the odds of children being diagnosed with AOM, which has been shown to vary by up to 300% between clinicians seeing similarly matched patients.[14]

Additionally, the American Academy of Otolaryngology (AAO-HNS) guidelines strongly recommend the use of tympanometry when uncertainty exists regarding the presence of otitis media with effusion (OME) in children.[4] The justification for this recommendation centers around conductive hearing loss associated with OME (an average deficit of 28 dB) which, if unresolved or untreated (with pressure equalization [PE] tubes) within 3 months, can increase the risk of speech, language, and developmental delay.[15] While no peer

Figure 1. Tympanogram Tracings



Type A	Type B	Type B - Large	Type C



A tympanogram graph shows tympanic membrane (TM) compliance on the Y-axis and ear canal pressure on the X-axis. This creates a curve showing how easily the TM vibrates in response to varying air pressure in the ear canal.

Type A tympanogram: Intact TM with normal TM movement. Clinical significance: No middle ear fluid or purulence.

Type B normal volume (<2mL) tympanogram: Intact TM with no TM movement. Clinical significance: Middle ear fluid or purulence is present.

Type B large volume (>2 mL) tympanogram: TM perforation or patent ear tube with no TM movement. Clinical significance: No middle ear fluid or purulence; TM defect present.

Type C tympanogram: Retracted TM with movement; abnormal middle ear pressure; Clinical significance: Presence of middle ear fluid highly unlikely.

Images used with permission by MAICO and Jeff Lacour, MD

reviewed studies to date have been published reporting the prevalence of otalgia, OME, or AOM among children in UC settings, over 90% of children will have OME at some point in the first 2 years of life.[16] Additionally, AOM is diagnosed in nearly one-fourth of children <2 years presenting to the ED with fever.[9,17] Anecdotally, similar trends have been observed by the authors in UC settings. This underscores the imperative for accurate diagnosis of AOM and OME in UC settings, which are often the initial site of care for children suffering from otalgia.

Among adult patients, UC is often the site of initial evaluation for both otalgia and acute hearing loss. Unlike in children, AOM is not a leading cause of otalgia in adults, and more cases are attributable to non-otologic or referred sources.[18] For example, temporomandibular disorder (TMD) is a leading cause of referred

Figure 2: Portable Tympanometer

Table 1. Cohort Gender and Age Stratified by Tympanometry Indications

	Overall (n = 10,000)	% of Overall	Tympanometry Indicated (n = 1,819)	% of Tympanometry Indicated
Gender				
Female	6,034	60.3%	1,203	66.1%
Male	3,966	39.7%	616	33.9%
Age Group, Years				
0–10	1,691	16.9%	404	22.2%
10–20	1,529	15.3%	250	13.7%
20–30	1,721	17.2%	289	15.9%
30–40	1,488	14.9%	295	16.2%
40–50	1,147	11.5%	229	12.6%
50–60	889	8.9%	143	7.9%
60–70	776	7.8%	126	6.9%
70–80	524	5.2%	59	3.2%
80–90	205	2.1%	23	1.3%
90+	30	0.3%	*	0.1%

*Value suppressed due to patient count fewer than 5

otalgia with most patients reporting ear pain and fullness.[19,20] Frequently, adults with TMD are given an incorrect diagnosis of AOM and antibiotic prescriptions.[19] If tympanometry were implemented in such cases, a normal type A tympanogram could exclude middle ear effusion, suggesting a greater probability for non-otologic etiologies, such as TMD.[21]

Acute hearing loss also commonly presents initially to UC and ED settings. Sudden sensorineural hearing loss (SSNHL) is an underrecognized condition and considered an otolaryngologic emergency.[22,23] Accurate diagnosis of SSNHL is dependent on distinguishing the cause from a conductive hearing loss (CHL) (ie, resulting from OME). The AAO-HNS guidelines advocate for tympanometry to clarify the cause of hearing loss.[22] Prompt diagnosis and treatment of SSNHL is correlated with a higher likelihood of return of hearing.[23,24] Many patients will fail to respond to oral steroids adequately and require transtympanic steroid injections (ie, next-line therapy), which are most effective when administered within 1 week of symptom onset.[25] This highlights the urgency of distinguishing between CHL and SSNHL, which, if facilitated by tympanometry, can ensure timely otolaryngology referral.[22]

Artificial intelligence (AI) algorithms have gained considerable traction in recent years as tools to support evidence-based clinical decisions and to mitigate heterogeneity in clinician practice patterns around common conditions.[26] Given the lack of familiarity that many UC clinicians and staff have with tympanometry, we aimed to determine if a clinical-support machine learning (ML) algorithm could provide guidance for appropriate UC cases in which tympanometry would be likely to aid in diagnosis and management.

Objectives

The primary objective was to determine if a prediction model could be used to identify UC patients for whom tympanometry would be clinically indicated. Secondary objectives included application of the prediction model to estimate the frequency with which tympanometry would be indicated among UC patients and, finally, to assess the financial viability of tympanometry if it were implemented in a hypothetical UC setting using the prediction model.

Methods

This was a retrospective cohort study of de-identified UC patient encounters **(Table 1)**. Initially, a regularized linear regression model for tympanometry was developed and trained in R-statistical software (R-Project, version 4.4, Vienna, Austria) based on previously described methods,[27] using 140,894 training UC patient encounters. These occurred from May 2024–March 2025 where the presenting symptoms were recorded in Intellivisit (UCP-Merchant Medicine, Minneapolis, MN). Intellivisit (IV) is an algorithmic clinical support software tool designed to enhance efficiency and guideline-adherent care in UC settings. IV collects de-identified data, including demographics, vital signs, chronic conditions, and current symptoms, via a guided interview administered by staff members (eg, medical assistants, nurses) when the patient is roomed.

The initial regression model was developed using a list of target diagnoses **(Supplemental Material on jucm.com)**. This list was developed by using ICD-10 codes that are indicated as appropriate for tympanometry reimbursement by the Centers for Medicare and Medicaid Services (CMS). Once the initial model was developed, it was validated by manual review of 100 cases (50 cases predicted by the model to either use or not use tympanometry) presented in a random order. Manual labeling was performed by 2 board-certified otolaryngologists (JL, DA) to confirm the model's accuracy based on both clinical expertise and the AAO-HNS guidelines. The 2 reviewers were blinded to their counterpart's labels.

Cohen's Kappa was used to assess inter-rater agreement. Accuracy was measured using sensitivity, specificity, and F1 with reviewer labels as the reference "gold standard." We used a bootstrap calculation to estimate the 95% confidence intervals (CI) of F1, specificity and sensitivity.

To address the secondary objectives, the validated model was then applied to a unique random sampling of 10,000 UC encounters collected with IV to determine the frequency with which tympanometry was predicted to be indicated in a representative UC setting.

Finally, a simple financial analysis was performed to determine the economic feasibility of tympanometry implementation in a UC setting. The cost of a tympanometer was estimated using the price for a device likely to be used in UC centers (MAICO easyTymp, $4,700 USD). The price of which includes training and maintenance for the device.[28] Tympanometry reimbursement was estimated using the low end of average reimbursements reported by CMS,[8] which was $22 USD per exam. Tympanometry can be billed in any outpatient setting using the Current Procedural Terminology (CPT) code 92567.[8] Annual UC encounter volume was estimated to be 14,750 visits based on Urgent Care Association benchmarking data.[29]

Ethics Statement

Given the use of only de-identified cases without protected health information, this study was exempt from Institutional Review Board evaluation as it did not meet criteria for human subjects research. There was no outside funding for this study, and authors and labelers were uncompensated for their contributions.

Results

To address the primary objective, we found that the prediction model achieved a median F1 score of 0.80 (95% CI, 0.65–0.95). The model has a median sensitivity of 0.55 (95% CI, 0.38–0.80) and specificity of 1.00 (95% CI, 0.99–1.00), indicating probable clinical utility to predict encounters which likely benefit from the use of tympanometry. The validity of expert labels as the "gold standard" was confirmed by the high rate of agreement between the otolaryngologist reviewers (κ=0.9).

For the secondary objective, we found that, among the random sample of encounters to which the model was applied, 1,819/10,000 (18.2%) were predicted as having an indication for tympanometry. The most common chief complaint and UC diagnosis for encounters where tympanometry was predicted were ear pain and AOM, respectively **(Table 2)**.

Table 2. Most Common Chief Complaints and Diagnoses When Tympanometry Was Indicated

Chief Complaints	Number of Visits	% Indicated for Tympanometry
Ear pain	709	39.0%
Cough	388	21.3%
Sore throat	332	18.3%
Nasal congestion	103	5.7%
Fever	101	5.6%
Earache	85	4.7%
Headache	76	4.2%
Sinus problem	74	4.1%
Ear fullness	67	3.7%
Flu symptoms	43	2.4%
Diagnoses	**Number of Visits**	**% Indicated for Tympanometry**
Acute suppurative otitis media without spontaneous rupture of eardrum	265	14.6%
Viral upper respiratory tract infection	142	7.8%
Viral disease	67	3.7%
Streptococcal pharyngitis	67	3.7%
Upper respiratory infection	58	3.2%
Acute otitis externa	58	3.2%
Influenza	52	2.9%
Acute pansinusitis	52	2.9%
Acute maxillary sinusitis	48	2.6%
Impacted cerumen of bilateral ears	47	2.6%

A linear regression model was able to reasonably identify urgent care encounters where tympanometry would be clinically indicated.

Financial Modeling

Assuming $22 reimbursement per tympanometry exam and a one-time device cost of $4,700, UC centers could be expected to reach a "break-even" point after 214 tympanograms. If 18.2% of all UC patients were candidates for tympanometry, this would translate to 2,657 exams annually per center assuming the national average of 14,750 visits per center per year.[29] If these exams were distributed evenly month-over-month, 221

tympanometry exams would be performed monthly. Based on these assumptions, an average UC center would be expected to be revenue positive from the addition of tympanometry within the first month of implementation (29.4 days) and generate $4,862 in gross revenue monthly in perpetuity exclusively from the additional CPT billing related to tympanometry.

"The predicted utilization rate of tympanometry was 18% based on the model's application to a large sample of real-world UC cases."

Discussion

The results of this retrospective UC cohort study suggest that a regression model trained on a large data set of de-identified UC encounters can predict cases where tympanometry would have clinical utility with high accuracy. The combination of the model's high accuracy and the level of agreement between expert labelers suggests that this approach could have clinical utility in guiding staff on the appropriate application of tympanometry. Therefore, such a prediction tool could be valuable in UC, ED, and primary care settings, where staff are unlikely to have familiarity with the indications for tympanometry.

The predicted utilization rate of tympanometry was 18% based on the model's application to a large sample of real-world UC cases. The model predicted tympanometry may provide clinically valuable data in nearly one-fifth of encounters. Given the poor test characteristics of standard otoscopy, rule-based application of tympanometry has the potential to standardize care and improve antibiotic stewardship.[6] Additionally, visually subtle cases of OME may be identified and otolaryngology referrals placed more appropriately and expeditiously. Given the frequency with which ear and hearing complaints were seen among this real-world UC encounter set, it appears that tympanometry has the potential to meaningfully affect patient safety and resource utilization.

Additionally, the financial modeling estimate suggests that tympanometry would support revenue to reach the "break-even" point within 1 month when applied in an average hypothetical UC setting. Finally, to our knowledge, this is the first study to date describing the frequency of common chief complaints and diagnoses in a general UC population.

Limitations

This study has several limitations worth noting. First, the retrospective design and use of de-identified encounters prevented correlation with actual otoscopic findings, which limits the ability to verify predicted tympanometry indications by otoscopy exam results. Second, the model's performance was validated using expert review rather than patient outcomes due to the study design; this could somewhat overestimate real-world utility. Third, financial model predictions were based on assumptions from published reimbursement data, fee-for-service billing, and current device pricing rather than prospective implementation. It is possible that individual organizations may realize different levels of reimbursement based on their specific payer mix and contracts. Finally, while the model we developed identified cases likely to have a justifiable indication for tympanometry, it is possible that it overestimates real-world use as clinician discretion and/or patient preference to forgo tympanometry may occur for myriad reasons. These limitations could be addressed in future studies designed to prospectively validate the model and assess operational feasibility testing in a diverse range of UC environments.

Conclusion

Tympanometry is a simple, yet underutilized tool in UC despite strong evidence and guidelines supporting its diagnostic value for common UC complaints. This retrospective modeling analysis suggests that an ML algorithm could operate in lieu of specialty expertise in guiding the appropriate application of tympanometry in UC. The financial analysis indicates that, if applied in an average UC center, the addition of tympanometry could transition to revenue positive within 30 days. Future work should prospectively validate this model to evaluate effects on patient-oriented outcomes and rates of inappropriate otolaryngology referral and antibiotic use. ■

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The 2026 Urgent Care Top 100
By Number of Locations

Alan Ayers, MBA, MAcc

Citation: Ayers AA. The 2026 Urgent Care Top 100 By Number of Locations. *J Urgent Care Med.* 2026:20(9):33-35

Keywords: urgent care; ambulatory care facilities; joint venture; organizational affiliation

The nation's total urgent care center count reached 14,655 as of April 1, 2026, based on data provided by National Urgent Care Realty and Urgent Care Consultants.

Of these, 6,056 locations (41.3%) are operated by a Top 100 entity. Hospital affiliations within the Top 100 remain the dominant model, with 55.9% of Top 100 locations participating in a health system relationship.

A hospital affiliation may include majority or minority equity joint ventures, management-only contracts, clinical network integration, branding or cobranding agreements, or other engagement that is marketed to the public. To avoid duplication, affiliated centers are reported under the private entity, separate from centers operated by the health system directly.

Because there are several ties in the rankings—multiple operators with an equal number of locations—the total number of operators in the 2026 Urgent Care Top 100 is 105. ■

Ranking	Corporate Entity	Total	Hospital Affiliated	Comments
1	American Family Care	409	16	Includes franchises owned by health systems
2	HCA Healthcare	386	386	
3	GoHealth Urgent Care	369	369	Includes hospital affiliated and/or joint venture centers
4	Fast Pace Health	288		Includes CFM&P and Reelfoot related brands
5	CityMD Urgent Care	189		
6	WellStreet Urgent Care	165	165	Includes hospital affiliated and/or joint venture centers
7	WellNow Urgent Care	159	15	Includes hospital affiliated and/or joint venture centers
8	NextCare Urgent Care	149	45	Includes hospital affiliated and/or joint venture centers
9	Advocate Health	126	126	
10	Community Care Partners	110		
11	CRH Healthcare	97	86	Includes hospital affiliated and/or joint venture centers
12	Urgent Team	84	65	Includes hospital affiliated and/or joint venture centers
13	CommonSpirit Health	83	83	
13	PM Pediatrics Urgent Care	83	19	Includes hospital affiliated and/or joint venture centers
15	Carbon Health Urgent Care	81		
16	XpressWellness	80		
17	Patient First	79		
18	Bon Secours Mercy Health	76	76	Excludes American Family Care franchised locations
18	Urgent Care Group	76	27	Includes hospital affiliated and/or joint venture centers
18	Providence	76	76	
21	AdventHealth	69	69	
22	Sanitas Medical Center	68		Affiliated with Blue Cross Blue Shield in multiple states

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Ranking	Corporate Entity	Total	Hospital Affiliated	Comments
23	MainStreet Family Urgent Care	67		
23	Trinity Health	67	67	Excludes WellNow centers
25	Sanford Health	65	65	
26	Exer - More Than Urgent Care	62		
27	Access Medical Clinic	61		
28	MultiCare Health System	60	60	
29	My Dr Now	58		
30	PeaceHealth	57	57	Includes ZoomCare centers
31	Midwest Express Clinic	53		
32	ConvenientMD	50		
32	Novant Health	50	50	Excludes GoHealth centers
34	Banner Health	48	48	
35	Next Level Urgent Care	47		
36	CareSpot Urgent Care	46	37	Includes hospital affiliated and/or joint venture centers
36	Community Health Systems	46	46	
38	CareFirst Urgent Care	44		
38	FastMed	44		Owned by Blue Cross Blue Shield of North Carolina
38	Rock Oak Capital Partners	44		
38	Sutter Health	44	44	
42	Cleveland Clinic	43	43	
42	CloseKnit Primary and Immediate Care	43		
44	Intermountain Health	41	41	
45	Ascension Health	40	40	Excludes Urgent Team centers
45	Risant Health	40	40	
47	Endeavor Health	37	37	
47	OSF HealthCare	37	37	Excludes WellNow centers
47	UnityPoint	37	37	
50	Ardent Health Services	36	36	
50	Family HealthCare Network CA	36		
52	UNC Health Care	35	35	
53	MedStar Health	34	34	
53	Optum Urgent Care	34		
55	ExpressCare Urgent Care	33	33	Affiliated with Lifepoint Health
55	Hometown Urgent Care & Occupational Health	33		
55	Perlman Clinic	33		
55	Texas Health Breeze Urgent Care	33	33	
59	Ochsner Rush Health	32	32	
60	Doctor's Urgent Care Group	30		
61	University of Colorado Health	29	29	
61	University of California System	29	29	Includes regional health systems (UCLA, UCSD, etc.) but excludes GoHealth centers

Ranking	Corporate Entity	Total	Hospital Affiliated	Comments
63	Baptist Health South Florida	28	28	
63	Emergence Health Holdings	28	4	Includes hospital affiliated and/or joint venture centers
63	Jefferson Health	28	28	
63	Med First Primary & Urgent Care	28		
63	Northwestern Medicine	28	28	
63	SSM Health	28	28	
69	Baptist Health Kentucky	27	27	
69	Baylor Scott & White Health	27	27	Excludes NextCare centers
69	Sentara Healthcare	27	27	
69	WellStar Health System	27	27	
73	Adventist Health	26	26	
73	Atlantic Health System	26	26	
73	Corewell Health	26	26	
73	HonorHealth	26	26	
73	St. Luke's Care Now	26	26	
73	Yale New Haven Health	26	26	
79	FMOL Health	25	25	
79	QUICKmed Urgent Care	25	2	Includes hospital affiliated and/or joint venture centers
81	Avera Health	24	24	
82	CareConnect Health	23		
82	Essentia Health	23	23	
82	Excel Urgent Care	23		
82	MedRite Urgent Care	23		
82	Norton Healthcare	23	23	
82	WVU Medicine	23	23	
88	HealthPartners	22	22	
88	Mass General Brigham	22	22	
88	Urgent Care for Kids	22		
91	Fast Track Urgent Care	21	21	Partnership with Tampa General Hospital
91	INTEGRIS Health	21	21	
91	Walk In Urgent Care Ohio	21		
94	Hackensack Meridian Health	20	20	
95	Aspirus Healthcare	19	19	
95	BayCare Health System	19	19	
95	BJC HealthCare	19	19	
95	LifePoint Health	19	19	
95	Little Spurs Pediatric Urgent Care	19		
100	Allina Health	18	18	
100	CHRISTUS Health	18	18	
100	Docs Urgent Care	18		
100	MedFast Urgent Care	18		
100	OhioHealth Corporation	18	18	
100	WakeMed Health & Hospitals	18	18	Excludes PM Pediatrics centers

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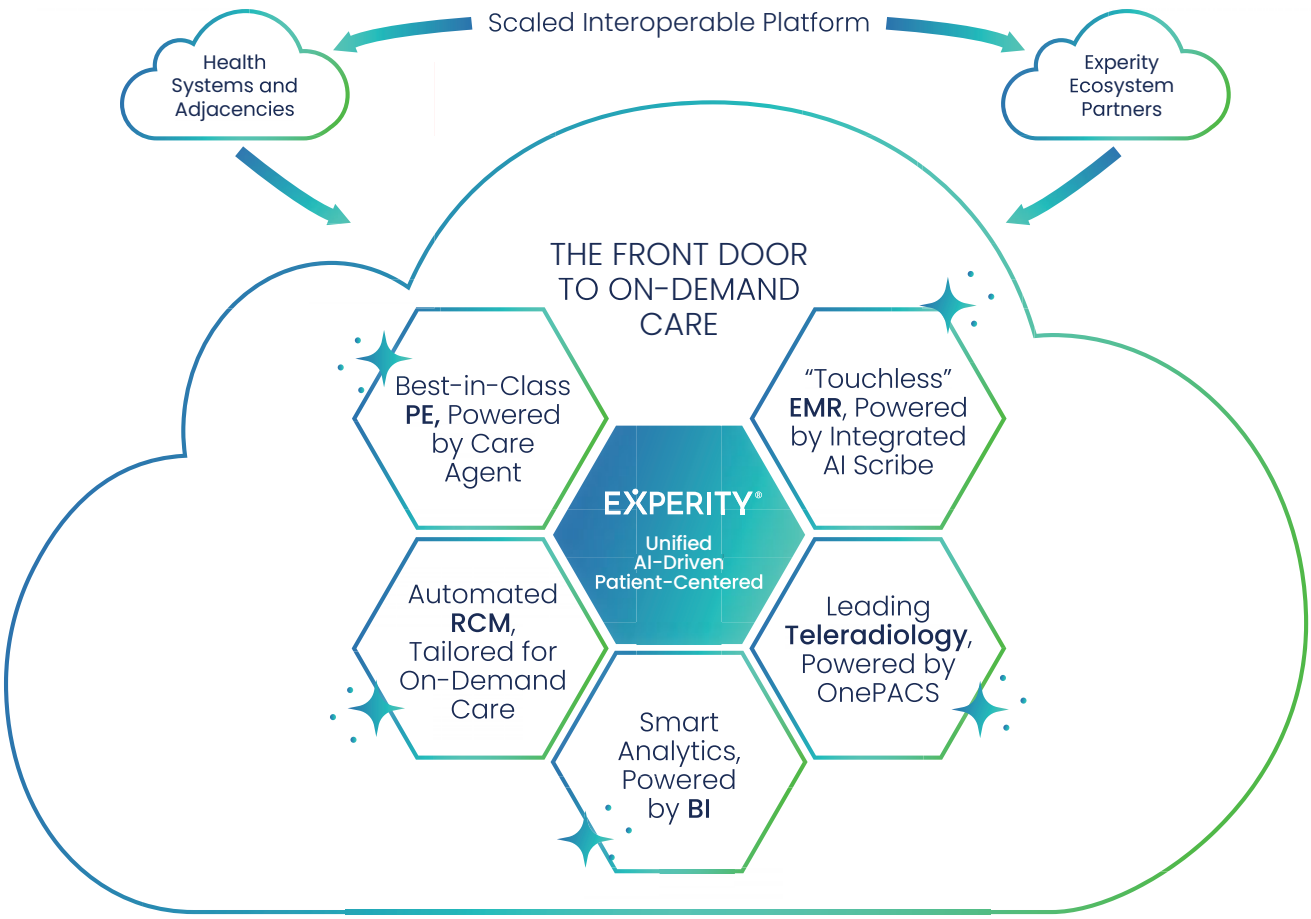

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Comparing Point-of-Care Ultrasound With X-Rays in Pediatric Physeal Injuries

Take Home Point: Point-of-care ultrasound (POCUS) demonstrated a high sensitivity in detecting traumatic bone and physeal fractures in children. However, it had only moderate concordance with x-rays (XR) in assessing the extension of the fracture into the joint space and Salter-Harris classification.

Citation: Gurkan O, Kozaci N, Colak S, et al. Diagnostic accuracy of point-of-care ultrasonography in physeal fractures. *Am J Emerg Med*. 2026 Feb;100:198-204. doi: 10.1016/j.ajem.2025.12.009.

Relevance: Limb injuries in children are a common presentation to urgent care centers (UCCs). In settings where radiology technicians are not always available on-site, point-of-care ultrasound may serve as an alternative imaging modality.

Study Summary: This prospective study was conducted in the emergency department (ED) of a single university hospital in Turkey. Pediatric patients with suspected growth plate (physeal) fractures based on physical examination were enrolled. Four experienced emergency physicians who routinely used point-of-care ultrasound participated in the study. Each patient was evaluated (history and physical examination) by 2 physicians and then one performed the point-of-care ultrasound examination and the other interpreted x-rays. Both physicians interpreted imaging findings in a blinded manner.

The authors recruited 117 patients, of whom the presence or absence of bone fractures was accurately identified in 112 patients during POCUS examination and 85 patients on x-ray. Compared with XR, POCUS demonstrated a sensitivity (Sn) of 97%, specificity (Sp) of 94%, positive predictive value (PPV) of 98%, negative predictive value (NPV) of 91% (area under curve [AUC] 0.951; 95% confidence interval [CI] 0.90–1.00), and a κ value of 0.894 in detecting fractures. In detecting physeal fractures, POCUS showed Sn of 93%, Sp of 95%, PPV of 74%, NPV of 99% (AUC 0.942; 95% CI 0.87–1.00), and a κ value of 0.794. For detecting the extension of the fracture into the joint space, POCUS showed a Sn of 62%, a Sp of 100%, a PPV of 54%, a NPV of 10% (AUC: 0.810; 95% CI: 0.68–0.94), and a κ value of 0.727. Moderate concordance was observed between POCUS and XR for Salter-Harris classification (κ=0.673).

Editor's Comments: Overall, this study demonstrated that POCUS was effective in detecting the presence of extremity and physeal fractures. The study may have limited generalizability due to its single site, and the use of very experienced POCUS emergency physicians. However, advances in ultrasound technology and artificial intelligence-guided support could allow UCCs to use ultrasound more effectively in the evaluation of extremity injuries thus improving patient care and reducing unnecessary transfers. ■

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Chest Pain Evaluation and Management in Female Patients

Take Home Point: Evaluation and management of chest pain should account for biological differences as well as social and systemic factors that influence access to care in biologically female patients.

Citation: Diercks D, Cao M, McHugh M, et al. Evaluation and management of chest pain from cardiovascular causes in female patients. *BMJ*. 2026;392:e086177. doi: 10.1136/bmj-2025-086177.

Relevance: Chest pain is a common presentation to UC. Despite advances in clinical awareness and diagnostic tools, significant sex-based disparities persist in recognition and management among female patients.

Study Summary: This systematic review evaluated factors contributing to under-recognition of cardiac causes of chest pain in female patients. The authors searched PubMed using the terms "sex" AND "chest pain" and noted the distinction between biological sex and gender ("sex, female" and "gender, woman") in their inclusion criteria.

Female patients were more likely to present with at least 3 associated symptoms, including epigastric pain, palpitations, and discomfort in the jaw, neck, arms, or between the shoulder blades. Additional symptoms more frequently reported included fatigue, anxiety, dyspnea, dyspepsia, and nausea. Risk factors more prevalent in female patients included tobacco use, type 2 diabetes mellitus, and psychological diagnoses such as anxiety and depression. A family history of diabetes was more strongly associated with acute myocardial infarction in younger female patients.

Physiologic differences may also affect evaluation by affecting the severity of electrocardiography (ECG)-based ischemia. These include lower QRS voltage due to smaller cardiac muscle mass, estrogen-related electrophysiologic effects (similar to digoxin-like effects), and variation in estradiol levels during the menstrual cycle. Additional considerations include older patients, who may present with atypical symptoms; patients with polycystic ovary syndrome, who have increased cardiovascular risk independent of body mass; and peripartum patients, who have higher risk of acute myocardial infarction and spontaneous coronary artery dissection.

Editor's Comments: This review highlights the importance of recognizing biologic and clinical differences when evaluating chest pain in female patients. Reliance on traditional symptom patterns and ECG findings alone may lead to missed diagnoses. Incorporating these distinctions into clinical assessment may improve diagnostic accuracy and patient care. ■

TWIST Score Evaluation and Point of Care Ultrasound in Children

Take Home Point: The Testicular Workup for Ischemia and Suspected Torsion (TWIST) score and point-of-care ultrasound (POCUS), when performed by emergency physicians and pediatricians, were useful for diagnosing testicular torsion. Assessment of testicular blood flow combined with identification of the whirlpool sign improved sensitivity.

Citation: Nakamura T, Kinoshita M, Ihara T, et al. Evaluating the TWIST score and point-of-care ultrasound for paediatric testicular torsion. *Emergency Medicine Journal.* 2026. doi: 10.1136/emermed-2025-215067

Relevance: Acute scrotal and testicular pain is a common presentation in the emergency department and urgent care settings, and may result from many diagnoses. Rapid identification of testicular torsion is essential to reduce the risk of long-term morbidity.

Study Summary: This retrospective observational study was conducted at Tokyo Metropolitan Children's Medical Center. Patients ≤15 years of age presenting with acute scrotal pain were evaluated in the emergency department by an emergency physician or pediatrician using the TWIST score and point-of-care ultrasound. All patients underwent point-of-care ultrasound regardless of TWIST score risk category.

Key ultrasound findings for testicular torsion included reduced or absent intratesticular blood flow and the whirlpool sign, defined as a swirling or spiral configuration of the spermatic cord (indicating twisting and usually seen on color Doppler). The primary outcome was diagnostic accuracy of the TWIST score and point-of-care ultrasound when performed by emergency physicians and pediatricians.

A total of 512 patients were included, of whom 55 (11%) were diagnosed with testicular torsion and 457 (89%) with other causes of acute scrotal pain. The TWIST score demonstrated Sn of 91% (95% confidence interval 80–97%), Sp of 95% (95% confidence interval 93–97%), PPV of 63% (95% confidence interval 50–75%), and NPV of 99% (95% confidence interval 97–100%). Reduced or absent blood flow on point-of-care ultrasound demonstrated high sensitivity and specificity, while the whirlpool sign demonstrated high specificity. Although the TWIST score and POCUS had high diagnostic accuracy, the non-negligible, false-negative rate indicated that the TWIST score should be used for risk stratification rather than as an exclusionary method.

Editor's Comments: The study did not assess clinician experience with point-of-care ultrasound, which may affect interpretation of results. Lack of blinding and a high exclusion rate may also introduce selection bias. However, findings support the role of the TWIST score and point-of-care ultrasound in differentiating testicular torsion from other causes of scrotal pain and may assist urgent care clinicians in clinical decision-making. ■

Approach to Mallet Finger Injury

Take Home Point: Mallet finger injuries can be recognized and managed in primary care and urgent care settings.

Citation: Dinh V, Market M, Cheung K. Approach to mallet finger injury: Practical guide for Canadian primary care

physicians. *Can Fam Physician*. 2026;72(2):93-97. doi: 10.46747/cfp.720293.

Relevance: Hand and finger injuries are common presentations to urgent care. Effective management in the appropriate clinical setting is important to ensure good cost-effective outcomes.

Study Summary: This review and practical guide reviews current evidence and best practices for management of mallet finger injuries in primary care. The authors conducted literature searches using PubMed and Google Scholar, which incorporated clinical evidence and expert opinion to develop their recommendations.

Diagnosis is based on mechanism of injury (an axial load) and an inability to actively extend the distal interphalangeal (DIP) joint. Most injuries are treated nonoperatively with splinting, particularly in the absence of fracture. The goal of splinting is to maintain the distal interphalangeal joint in extension to allow extensor tendon healing. Splint options include plastic splints, aluminum foam splints, and custom thermoplastic splints. Evidence from a systematic review and retrospective study suggests equal effectiveness across splint types.

Surgery referral should be considered for avulsion fractures resulting in joint subluxation, open injuries, and failure of conservative management. Delayed presentation, defined as more than 4 weeks after injury, was associated with a 25% risk of persistent extensor lag or small deformity on the dorsum of the finger. Referral is recommended for mallet finger injury cases with joint subluxation identified on x-ray imaging.

Editor's Comments: This is a practical guide to management of mallet finger injuries. The authors have practical and recognized approaches to management based on best practice and published evidence. Of note, local recommendations and orthopedic physician preference may differ geographically. However, this is an excellent reference for urgent care clinicians. ■

Concussion and Risk of Suicide Among Youth and Young Adults

Take Home Point: In this population-based study, concussion was associated with an increased risk of suicide among youth and young adults, supporting the need for risk screening in this population.

Citation: Yang J, Brock G, Steelesmith D, et al. Association Between Concussion and Risk of Suicide Among Youth and Young Adults. *Am J Prev Med*. 2026;70(3):108127.

Relevance: Concussion is a common consequence of head injury and may present in urgent care settings, particularly among young athletes. There is concern for increased risk of suicidal ideation and death by suicide in affected patients.

Study Summary: This retrospective longitudinal cohort study evaluated the association between concussion and suicide among youth and young adults (ages 5-24) using Ohio Medicaid data. Patients with a concussion comprised the exposed group, and those with an orthopedic injury served as the comparison group. Data were obtained from Ohio Medicaid claims and state death certificate records.

A total of 41,341 patients with concussion and 376,171 with orthopedic injury were included. There were 42 suicides in the concussion group and 229 in the orthopedic injury group. The concussion group had a higher unadjusted hazard for suicide (hazard ratio 1.86; 95% CI 1.34–2.59; p<0.001). Cumulative incidence of suicide risk increased steadily over time rather than peaking shortly after injury. The 5-year estimated suicide risk was 0.084% (95% CI 0.057%–0.111%) in the concussion group and 0.050% (95% CI 0.042%–0.058%) in the orthopedic injury group. This represented a risk difference of 0.034% (95% CI 0.006%–0.061%) or 34 additional suicides per 100,000 individuals. Stratified analyses by sex, age, race, mental health conditions, and suicidal ideation revealed variation but no statistically significant differences.

Editor's Comments: Use of a single-state Medicaid population may limit generalizability to youth in other states or those with different insurance coverage. Strengths include a large and diverse sample size, use of an injury-exposed comparison group, and longitudinal follow-up for subsequent concussions with adjustment for multiple confounders. These findings support consideration of suicide risk screening in patients with concussion. Urgent care clinicians should remain cognizant of concussion-associated risks and provide appropriate screening. ■

Preventing Post Vaccination Presyncope and Syncope of Teenagers

Take Home Point: Use of a vibration and cooling device (Buzzy) to reduce injection site pain and distraction with

a video game reduced presyncope in adolescents receiving vaccinations.

Citation: Smith M, Harrington T, Chung R, et al. Preventing Postvaccination Presyncope and Syncope in Adolescents: A Randomized Controlled Trial of a Clinic-Based Intervention. *J Pediatr.* 2026;293:115035.

Relevance: Syncope is a known adverse event associated with vaccination. Strategies to reduce this risk can improve patient safety and experience from vaccination.

Study Summary: This single-site, randomized, open-label trial evaluated the combination of a vibration and cooling device (Buzzy) and simultaneous distraction via a video game in adolescents (ages 10-14) receiving at least 1 intramuscular vaccination at Duke University Health System. Participants were randomized 1:1 to the intervention or standard care using block randomization of 10. Anxiety was assessed using the Patient-Reported Outcomes Measurement Information System Pediatric Anxiety Short Form version 2.0 8a instrument.

A total of 332 participants were enrolled and randomized, with 165 assigned to the intervention group and 167 to the control group. The intervention (combination of Buzzy and video games) reduced the risk of postvaccination presyncope by 12%. Mean pain scores were higher in the control group compared with the intervention group (3.26 vs 2.51; p=0.006).

Most participants reported positive experiences with video games; 81% indicated they would use them again during future vaccinations. At 1 minute after vaccination, 151 participants (91.5%) continued playing, and 133 (80.6%) continued at 10 minutes.

Editor's Comments: The study design did not allow separation of the efficacy of the Buzzy device and distraction, which may affect interpretation of the results. Lack of blinding may also influence reported outcomes, specifically pain and presyncopal symptoms. These findings support the use of distraction techniques during painful procedures for adolescents.

This may offer practical applications for urgent care clinicians when performing similarly painful procedures. Further research is needed in the urgent care setting and with additional procedures beyond vaccination. ■

Who Can Take X-Rays in an Urgent Care Center: A 50-State Framework

Urgent Message: This 50-state framework details who can legally operate x-ray equipment, as these laws dictate whether the industry's predominant advanced practice provider-staffing model remains operationally and financially viable.

Alan A. Ayers, MBA, MAcc

Citation: Ayers AA. Who Can Take X-rays in an Urgent Care Center: A 50-State Framework. *J Urgent Care Med.* 2026;20(9):42-44

Keywords: urgent care; x-ray; radiography; radiologic technologists; licensure; nurse practitioners; physician assistants

According to the Urgent Care Association (UCA), on-site plain-film radiography is a defining feature of urgent care and is among the criteria for UCA Certification.[1] Yet across the 50 states and the District of Columbia, the regulations governing who may operate that equipment vary so dramatically that a staffing model fully compliant in one state may be operationally impossible in the next.

This update,[2] compiled in May 2026, provides a framework built around how urgent care operators actually think about staffing, rather than how regulators classify training or certification. While most existing analyses organize the law by statute or profession, this approach starts with the operator's primary question: Given my state and my staffing model, can I practically offer x-ray services?

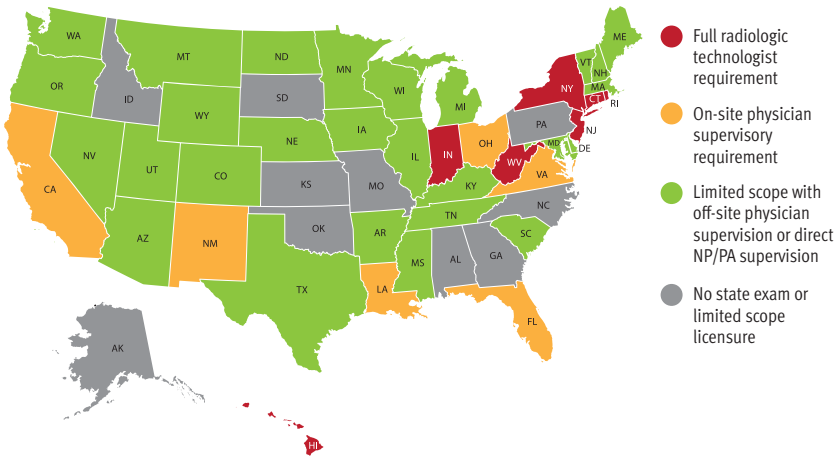
The framework sorts every jurisdiction into 1 of 4 mutually exclusive structural categories **(Figure 1)**. The status of each state is further outlined in **Table 1**.

The Foundational Categories

- **Strict Radiologic Technologist (RT) Requirement:** Seven states require a fully credentialed Radiologic Technologist without exception (Connecticut, Hawaii, Indiana, New Jersey, New York, Rhode Island, West Virginia). While Indiana and New Jersey nominally permit a limited-scope credential, those licenses do not cover the body areas a typical urgent care needs to image.
- **On-Site Physician Supervision:** Six states permit limited-scope operators but require an MD or DO physician to be physically on-site (California, Florida, Louisiana, New Mexico, Ohio, Virginia). For an urgent care staffed primarily by physician assistants (PAs) or nurse practitioners (NPs), this is operationally equivalent to Column 1.
- **Off-Site Supervision:** Twenty-seven states permit limited-scope operators under off-site MD/DO direc-

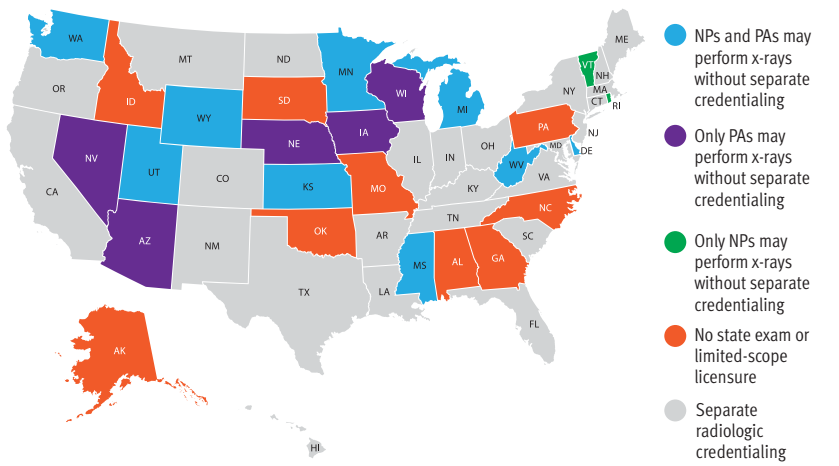
Author affiliations: Alan A. Ayers, MBA, MAcc, is President of Urgent Care Consultants and is Senior Editor of *The Journal of Urgent Care Medicine.*

Figure 1. Who Can Perform X-Rays in Urgent Care?



As of May 2026. Original analysis by Alan A. Ayers

Figure 2. Advanced Practice Provider Authority to Perform X-Rays



As of May 2026. Original analysis by Alan A. Ayers

tion or on-site PA/NP supervision. This is the operational sweet spot for the industry.

- **Advanced Practice Providers (APPs) Direct Authority:** Sixteen states (plus pending legislation in West Virginia) permit APPs to operate x-ray equipment under their own licenses. Nine of these states, along with West Virginia, which has rules pending, recognize both PAs and NPs.
- **No State Licensure:** Eleven jurisdictions require no individual operator credential; on-the-job training is acceptable in most of these states.

This structural pattern has documented operational consequences. Urgent care centers in restrictive states frequently adopt limited-scope models with reduced hours, often forgoing x-ray entirely—disqualifying them from UCA Certification—or going dark on nights and weekends when an RT cannot be staffed.

Furthermore, the labor pool is finite. RT salaries in restrictive states must compete with hospitals and high-volume imaging centers, meaning the math often does not work for urgent care margins.

The push toward modernization is clear. States that have updated their radiologic technology statutes within the past decade—such as Kansas, Michigan, Minnesota, Mississippi, Utah, Washington, Wyoming, and Delaware—now recognize PAs and advanced practice registered nurses as licensed practitioners alongside physicians, dentists, podiatrists, and chiropractors **(Figure 2)**. The regulatory momentum is unidirectional; no state has ever removed APPs from a licensed practitioner definition once they have been added.

However, the legislative work is not finished. Ohio Senate Bill 324, West Virginia Senate Bill 580, and New York Assembly Bill A2685A/Senate Bill S684A are actively pending in their 2026 sessions. Each would significantly expand operational flexibility for PA/NP-staffed centers. The urgent care industry—through the UCA, regional associations, state coalitions, and individual operator advocacy—has a vital role to play in ensuring these bills receive a fair hearing.

Finally, operators must remember that this framework addresses only the legal baseline. Centers for Medicare and Medicaid Services' federal supervision rules (42 CFR 410.32), commercial payer credentialing, and liability insurance agreements often impose stricter standards than state law, and operational reality may be tighter than statutory text suggests. ■

Table 1. Who Can Take X-Rays in an Urgent Care Center
A 50-State Framework

Strict Radiologic Technologist Requirement	Limited Scope Exists But Impractical for Urgent Care Due to On-Site MD/DO Supervisory Requirements	Limited Scope Certification Exists with EITHER Indirect MD/DO Supervision OR Direct NP/PA Supervision	NPs and/or PAs Can Perform X-Rays Without Separate Radiology Credentials (Overlay for Regulated States)	No State Exam or Limited-Scope Licensure
Connecticut	California	Arizona	Arizona (PAs)	Alabama
Hawaii	Florida	Arkansas	Delaware (both)	Alaska
Indiana	Louisiana	Colorado	Iowa (PAs)	District of Columbia
New Jersey	New Mexico	Delaware	Kansas (both)	Georgia
New York	Ohio	Iowa	Michigan (both)	Idaho
Rhode Island	Virginia	Illinois	Minnesota (both)	Kansas
West Virginia		Kentucky	Mississippi (both)	Missouri
		Maine	Nebraska (PAs)	North Carolina
		Maryland	Nevada (PAs)	Oklahoma
		Massachusetts	Rhode Island (both)	Pennsylvania
		Michigan	Utah (both)	South Dakota
		Minnesota	Vermont (NPs)	
		Mississippi	Washington (both)	
		Montana	W. Virginia (pending - both)	
		Nebraska	Wisconsin (PAs)	
		Nevada	Wyoming (both)	
		New Hampshire		
		North Dakota		
		Oregon		
		South Carolina		
		Tennessee		
		Texas		
		Utah		
		Vermont		
		Washington		
		Wisconsin		
		Wyoming		

Original analysis by Alan A. Ayers
Statutory verification through May 2026
Column 4 (overlay) is in addition to the Column 5 no-licensure jurisdictions where physician assistants and advanced practice registered nurses can perform x-rays under healing arts authority. Framework verified through direct primary-source citations. Subsequent amendments may alter placements; operators should verify current statutory text before making staffing decisions.
NP - nurse practitioner; PA - physician assistant

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Editor's Note: While the images presented here are authentic, the patient cases are hypothetical.

12-Year-Old With Left Groin and Buttock Pain

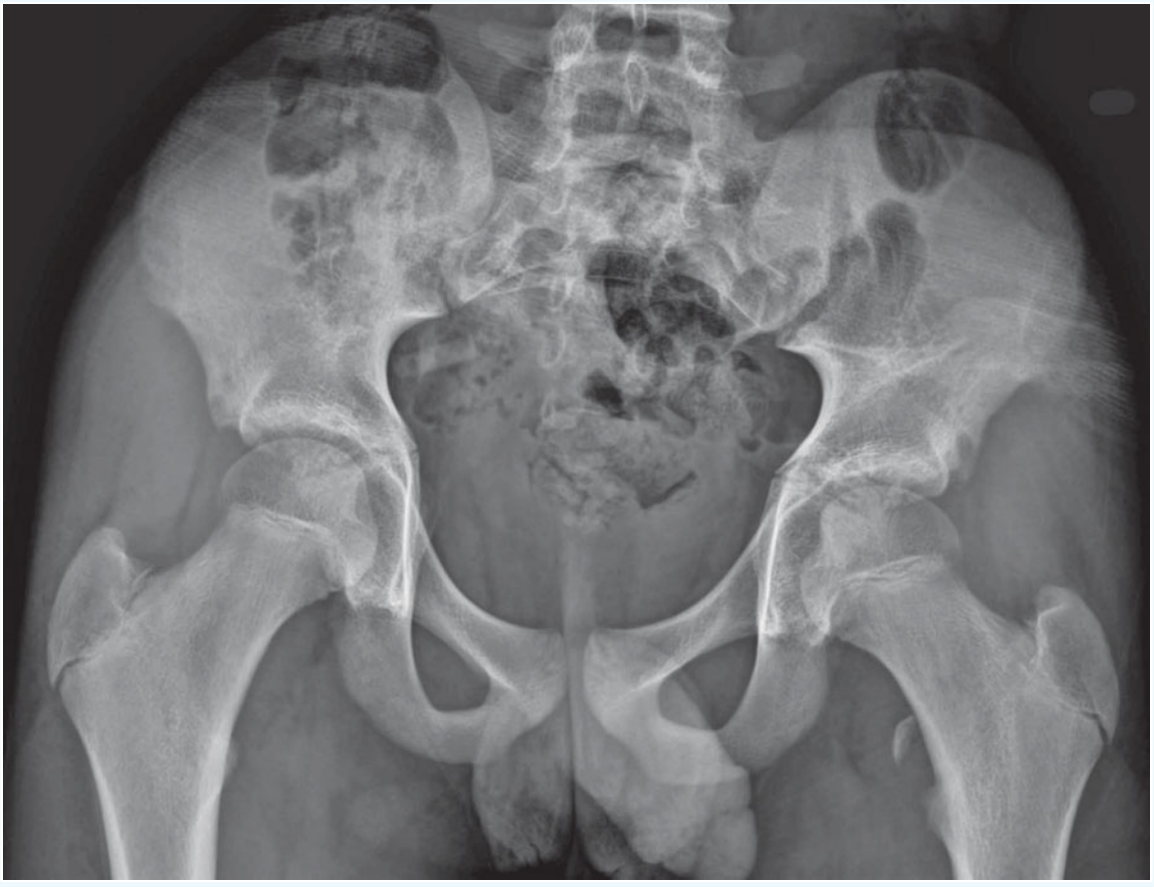

Figure 1: Initial X-ray

A 12-year-old male presents to urgent care with his mother for left groin and buttock pain with acute onset that occurred while running in a track meet earlier today. He reports that he felt a pop while running a sprint race and was subsequently unable to finish the race or bear weight on his left leg due to pain. He has no other past medical history and takes no medications. Physical exam reveals that he is afebrile with normal vital signs except for an elevated heart rate at 108 beats per minute. He is visibly uncomfortable at rest and passive flexion, and internal rotation of the hip elicit pain.

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

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

Differential Diagnosis

- Iliopsoas tear
- Lesser trochanter avulsion fracture
- Hip labrum tear
- Hip joint dislocation
- Proximal femur fracture
- Pelvic ring fracture

Diagnosis

Radiographic interpretation reveals an avulsion fracture of the left lesser trochanter with a displaced apophyseal fragment visible. The lesser trochanter lies on the posteromedial aspect of the proximal femur, inferior to the femoral neck, and is the insertion point for the iliopsoas which is primarily responsible for hip flexion. Isolated trochanteric fractures are typically avulsion fractures resulting from resisted hip flexion, leading to a strong contraction of the iliopsoas which avulses the lesser trochanter. These fractures occur most often in active adolescents and young adults involved in sports which include sprinting or jumping. In older adults, spontaneous avulsion is concerning for pathologic fracture caused by malignancy and is often considered a sign of metastasis until proven otherwise.

What to Look For

- History of involvement in sports including sprinting or jumping, patients will present with sudden groin pain and an antalgic gait.
- Lesser trochanteric fractures generally cause pain in the groin but also may present with knee or posterior thigh pain that is worse with hip flexion and rotation.
- On radiographs, look for fracture fragments displaced medially and superiorly to the lesser trochanter.

Pearls For Urgent Care Management

- Acute management includes rest and non-weight bearing with crutches for 3-4 weeks.
- Non-steroidal anti-inflammatory medications (NSAIDS) and acetaminophen are used for pain management.
- Lesser trochanteric avulsion fractures rarely require surgical intervention. Urgent orthopedic consultation is indicated if displacement is greater than 1 cm, if there is painful nonunion on follow-up imaging, or if the patient is a high-level athlete.
- Otherwise, non-urgent follow up with orthopedics is appropriate to monitor healing and evaluate for uncommon complications such as nonunion, ischiofemoral impingement and chronic hip flexor weakness. ■

39-Year-Old Male With Itchy Rash to Chest

A 39-year-old male presents to the local urgent care reporting an intensely itchy rash for the past 3 weeks that is getting gradually worse. The patient has a history of HIV infection, denies any recent travel or trauma, and is not taking any medications. Physical exam shows he is afebrile with normal vital signs. He has diffuse papular lesions to the trunk and arms ranging from pink to dark brown in color, some with notable excoriation. Laboratory examination shows mild leukocytosis and eosinophilia with a CD_4 count of 210 cells/mm^3.

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

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

Differential Diagnosis

- Bacterial folliculitis
- Eosinophilic folliculitis
- Seborrheic dermatitis
- *Pityrosporum* folliculitis
- Acne vulgaris
- Pruritic papular eruption
- Scabies

Diagnosis

The correct diagnosis is eosinophilic folliculitis (EF), a relatively common skin eruption in patients with advanced human immunodeficiency virus (HIV) disease. Since the advent of antiretroviral therapy (ART), EF has become less common. The etiology of EF is unclear, but may be related to immune dysregulation, possibly in association with an underlying infection or autoimmune response. EF is associated with low CD_4 counts (often below 250) and later-stage HIV disease. It is characterized by a pruritic skin eruption consisting of follicular papules or pustules, predominantly located on the scalp, face, neck, and upper chest. EF is a clinical diagnosis which can also be confirmed via skin biopsy; a 4 mm punch biopsy of an unexcoriated lesion is usually sufficient for histological confirmation.

What To Look For

- EF is characterized by recurrent, pruritic crops of discrete, erythematous, dome-shaped follicular papules and rare pustules, with a diameter of 3-5 mm.
- The most common areas of involvement are those with a high concentration of sebaceous glands: the scalp, neck, and upper trunk.
- Facial involvement is particularly common in female patients with EF.
- Intense and intractable pruritus is typical.
- Peripheral eosinophilia and elevated serum IgE are seen in about 25%-50% of patients with HIV-associated EF; these tests are not needed for diagnosis.
- Chronicity can lead to prurigo and protracted post-inflammatory hyperpigmentation, especially in patients with darker skin tones.

Pearls for Urgent Care Management

- ART management of HIV is the primary first-line therapy for EF. Subsequent rise in CD_4 count is often associated with improvement or resolution of symptoms.
- There are reports of EF flaring during the first 2 – 6 months of ART, consistent with immune reconstitution inflammatory syndrome (IRIS).
- Treatment of pruritus: High potency topical steroids (and lower potency formulations for lesions on the face) can be used for EF-associated pruritic. Oral antihistamines can also be prescribed, but these therapies neither suppress the development of new lesions nor fully control symptoms.
- Although oral glucocorticoids can improve HIV-associated EF, relapses are common within a few weeks after course completion and long-term treatment is associated with risk for serious side effects.
- For patients with recurrent symptoms not responding to treatment, a referral to dermatology is appropriate as phototherapy is often offered as a second-line therapy. ■

CLINICAL IMAGE CHALLENGE
ECG

42-Year-Old With Altered Mental Status

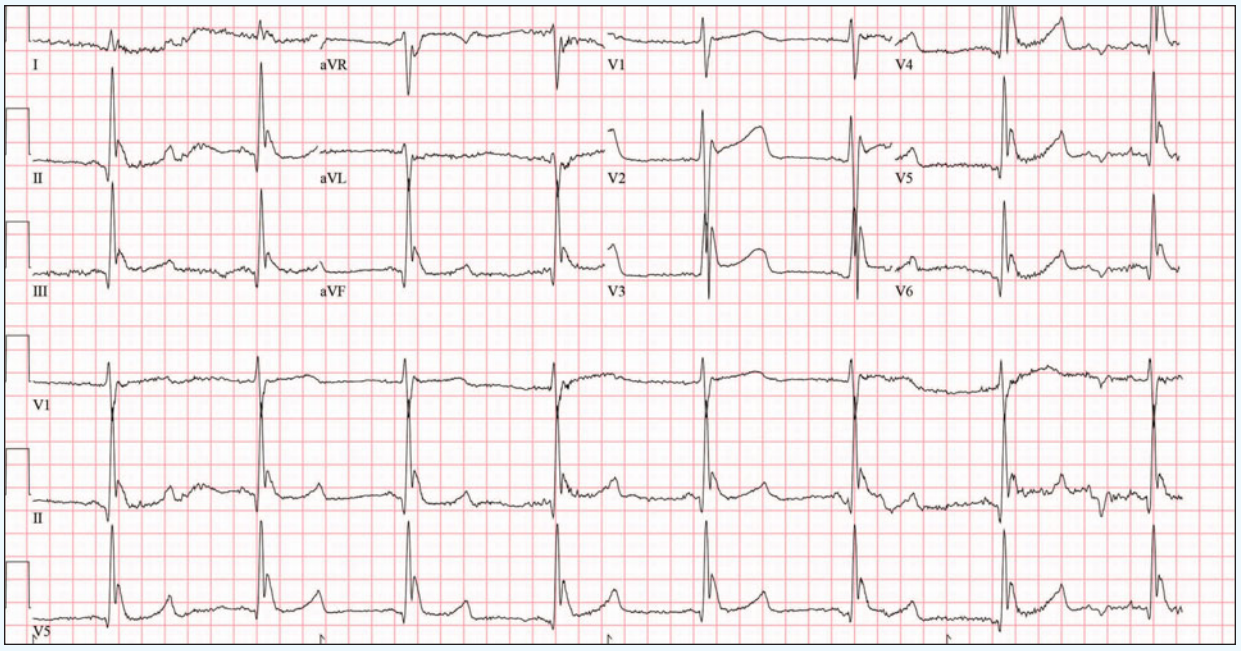

Figure 1: Initial ECG

The family of a 42-year-old male brings the patient to urgent care for altered mental status believing that they had arrived at an emergency department. His family found him on the floor at home with a non-functioning heater on a very cold day. He is bradycardic and ill-appearing. An ECG is obtained.

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

Case presented by Benjamin Cooper, MD, McGovern Medical School, The University of Texas Health Science Center at Houston, Department of Emergency Medicine.

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

ECG STAMPEDE

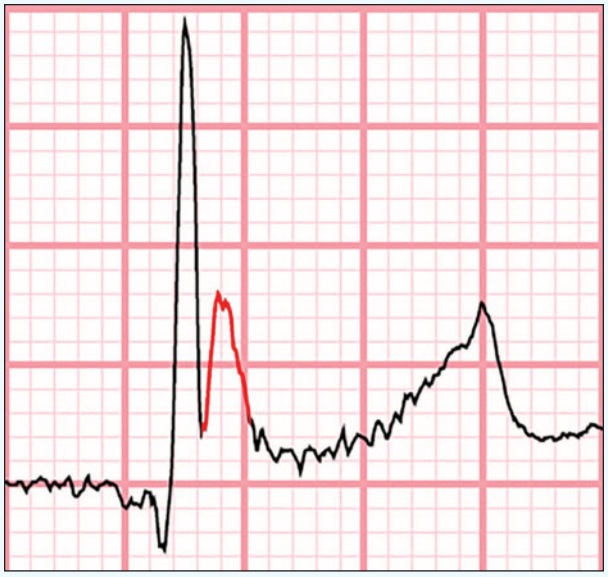

Figure 2: Osborn wave (red) in V5.

Differential Diagnosis

- Slow atrial fibrillation
- ST-elevation myocardial infarction
- Hypercalcemia
- Osborn waves of hypothermia
- Junctional escape

Diagnosis

The diagnosis in this case is sinus bradycardia with Osborn waves of hypothermia. The ECG reveals sinus bradycardia with a ventricular rate of 48 beats per minute. Prominent J-point elevations immediately following the QRS complexes are present, consistent with Osborn waves associated with hypothermia.

Discussion

Electrocardiographic manifestations of hypothermia have been recognized for over a century and include sinoatrial exit block, PR and QT interval prolongation, QRS widening, ST-segment depression, and atrial and ventricular fibrillation. Osborn waves—upright J-point deflections immediately following the QRS complex—are more specific findings **(Figure 2)**.[1,2] These deflections may mimic ST-segment elevation and create the appearance of ST-segment concavity.

The electrocardiographic manifestations of hypothermia follow a predictable progression as core body temperature drops. These changes are fundamentally driven by the temperature-dependent slowing of myocardial conduction and repolarization. With mild hypothermia (32°–35°C), sinus bradycardia, shiver artifact (rapid, erratic, fine-to-coarse spikes that distort the isoelectric baseline), and interval prolongation (PR, QRS, and QT) are common. With moderate hypothermia (28°–32°C), sinus bradycardia frequently degenerates into atrial fibrillation, usually with a slow ventricular response. Osborn waves become distinctly visible and prominent, and shiver artifact often resolves. Severe hypothermia (< 28°C) is associated with ventricular dysrhythmia, high-grade atrioventricular blocks, and asystole.[3]

Although hypercalcemia can shorten the QT interval and produce J-point abnormalities that mimic Osborn waves, this ECG demonstrates distinct repolarization morphology clearly separate from the Osborn deflections.

This patient's core temperature was 27°C (81°F), and he was immediately transferred to an emergency department for further treatment.

What To Look For

- Hypothermia manifests electrocardiographically via a predictable progression that includes sinus bradycardia, prolonged intervals, Osborn waves, slow atrial fibrillation, and ultimately degenerates into ventricular dysrhythmias and asystole.
- Osborn waves are upright J point deflections that immediately follow the QRS complex.

Pearls For Initial Management, Considerations For Transfer

- Passive and active rewarming measures are the mainstays of treatment.
- Urgent care centers are not generally equipped to treat hypothermia severe enough to produce ECG findings; immediate transfer is warranted.
- Warm blankets and/or forced-air warming devices may be initiated while awaiting transfer.■

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Medicare 2026 Therapy Services Update: Key Changes and What Providers Need to Know

Cindy Dickey; Tricia Krueger, CPC

The Centers for Medicare & Medicaid Services (CMS) has introduced several important updates to therapy services for calendar year (CY) 2026. These changes affect reimbursement thresholds, telehealth services, coding practices, and payment reductions. Providers—including physical therapists (PTs), occupational therapists (OTs), and speech-language pathologists (SLPs)—should understand these updates to ensure compliance and optimize billing practices.

One of the most notable updates is the adjustment of the KX modifier threshold. For CY 2026, the threshold amount has been set at $2,480. The KX modifier is used to indicate that therapy services exceeding this threshold are medically necessary and meet Medicare coverage criteria. This adjustment reflects ongoing efforts by CMS to balance cost control with patient access to necessary therapy services. Providers must continue to maintain proper documentation to justify services that surpass this financial limit.

Therapy-Related Codes

CMS has also expanded the list of therapy-related codes, particularly around remote therapeutic monitoring (RTM). Three new codes—98979, 98984, and 98985—have been added to the CY 2026 Physician Fee Schedule as services that may qualify as therapy services under certain circumstances. These additions highlight the growing role of digital health and remote care in modern healthcare delivery.

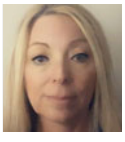
In addition, existing RTM codes 98976 and 98977 have updated descriptors, which may impact how therapists report and bill for these services. Accurate coding is essential, as improper use could lead to claim denials or compliance issues affecting reimbursement.

Telehealth services continue to be a major focus in 2026. Under Section 6209 of the Consolidated Appropriations Act 2026, therapists are permitted to provide telehealth services—including telephone assessment and management services (codes 98966–98968)—through December 31, 2027. This extension ensures continued access to care for patients who may face barriers to in-person visits, such as those in rural or underserved areas. CMS has also streamlined guidance related to virtual service delivery by removing outdated or redundant legislative references, making it easier for providers to navigate current policy.

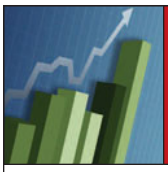
Another key component of the update is the continued application of the Multiple Procedure Payment Reduction (MPPR). Medicare applies MPPR to the practice expense portion of certain "always therapy" services. Since April 1, 2013, the reduction rate has remained at 50% for both office-based and institutional settings. Under this policy, the therapy service with the highest practice expense relative value unit is reimbursed at 100%, while subsequent services performed on the same day are reimbursed at 50%. This policy is intended to reflect efficiencies when multiple services are delivered during a single patient encounter.

The CY 2026 MPPR Rate File has also been updated, most recently on February 24, 2026, to include code 97026. Providers should review this file to ensure accurate billing and reimbursement expectations for affected services.

Overall, the 2026 updates emphasize modernization, particularly through the integration of remote monitoring and telehealth services, while maintaining cost-control measures like the MPPR. Staying informed and adapting to these changes will be essential for therapy providers aiming to deliver high-quality care while remaining compliant with Medicare requirements. ■



Cindy Dickey is Senior RCM Operations Director for Experity. **Tricia Krueger, CPC** is RCM Coding Supervisor for Experity.



DEVELOPING DATA

The Structural Divide in Urgent Care Occupational Medicine

Alan A. Ayers, MBA, MAcc

OCCUPATIONAL MEDICINE VISITS BY PAYER

QUINTILE	PRIVATE VPD	EPS VPD	WC VPD	TOTAL VPD	TOTAL EPS + WC VPD	EPS + WC %	EPS %	WC %
Top 20%	29.5	8.6	3.5	41.5	12.1	29.1%	20.7%	8.4%
Q2	29.6	4.0	1.8	35.4	5.8	16.4%	11.3%	5.1%
Q3	27.2	2.2	1.4	30.9	3.6	11.7%	7.1%	4.6%
Q4	28.4	1.3	1.2	30.9	2.5	10.1%	4.2%	5.9%
Bottom 20%	20.2	0.3	0.5	20.9	0.8	3.8%	1.4%	2.4%

EPS—employer-paid services; Private—private-insurer or patient-paid services; VPD—visits per day; WC—workers' compensation-paid services
Subtotals may not equal the sum of components due to independent rounding.
Source: Urgent Care Consultants analysis of 40,403,880 visits in 2025 from 3,517 clinics using Experity EMR.

Data reveals that occupational medicine in urgent care is fundamentally top-heavy. As the table illustrates, the top 20% of clinics drive 29% of their total occupational medicine visit volume through employer-paid services (EPS) and workers' compensation (WC)-paid services, averaging 12 daily visits. Conversely, the bottom 20% average less than 1 visit per day from these 2 payer types. Private-insurer or patient-paid services account for the balance of the visits overall.

This stark disparity is driven by structural, clinical, and geographic barriers that freeze out smaller operators. Structurally, mega-employers and third-party administrators direct their occupational medicine visits to national networks capable of centralized billing and multistate reporting. Clinically, urgent care's reliance on advanced practice providers often clashes with employer preferences for having physicians manage complex employee return-to-work protocols. Geographically, independent clinics typically lack the dedicated B2B sales infrastructure to win local contracts, and their real estate footprint in affluent retail corridors geographically isolates them from industrial hubs where there might be more occupational medicine needs.

Occupational medicine consequently functions as a heavy scale economy. The infrastructure required to secure employer contracts naturally consolidates 80% of total volume into a concentrated minority of enterprise networks, leaving occupational medicine as merely an incidental revenue stream for the "long tail" of smaller practices. ■

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