

# JUCM™

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## Identifying and Treating Superficial Fungal Infections in the Urgent Care Setting

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## LETTER FROM THE EDITOR-IN-CHIEF

# ‘Responsible Leadership:’ Questions and Answers



**Q** “I’m a physician. I’ve paid my dues. Isn’t it enough to provide good care for my patients?”

**Q** “I’m an owner. I have a business to run, decisions to make, money at stake. Don’t I call the shots here?”

**Q** “I’m a manager. I have spreadsheets to analyze, schedules to make, sick calls...with all my responsibilities, how can I be expected to find time to be a leader?”

**Q** “I’m a front desk staffer. I just work here. Can’t I do my job and collect my check?”

**A** I’m sorry to break the news, sorry to disrupt your neatly drawn “job descriptions,” but you chose healthcare, and, as “providers” of healthcare, you have made a commitment to excellence, a commitment to lifelong learning...a commitment to “care.”

I’m also sorry to tell you that you cannot follow through with these commitments without dedicating yourself to “responsible leadership.”

**Q** “Okay, so what is ‘responsible leadership,’ and how do I get me some of that?”

**A** *Teach, motivate, adapt, learn, and reflect.* These five actions represent your commitment to “responsible leadership” and reflect your commitment to your patients.

Let’s look at each one individually:

- **Teach:** We are all “guides.” Doctors guide patients, managers guide employees, owners guide practices. Our patients present to us with problems they can’t solve—physical problems, social problems, insurance problems. In order to guide them toward solutions, every one of us in the practice must participate. You made a commitment!
- **Motivate:** Successful urgent care practice is the work of a team, and there is no “I” in team! Your practice is only as strong as its weakest link. Every day is a battle. To win the battle on behalf of every patient, you need all hands on

deck. When team members start to veer off course, forget their purpose, each and every one of us has a responsibility to rally the troops. You made a commitment!

- **Adapt:** “Change? We hate change!” Change takes us out of our comfort zone and makes us feel vulnerable, out of control, and weak.

But, consider this: Those who seek opportunity in the face of change evolve, and medicine is an evolutionary discipline. Your patients depend on you to be willing to adapt and offer the promise of something better. You made a commitment!

- **Learn:** Great learners are students for life. They are voracious consumers of new information. They actively pursue opportunities for learning and are creative at identifying sources.

Learn from your patients. Learn from your colleagues. Learn from experience (good and bad). Be a keen observer of situations, study the outcomes, then reflect and learn. Remind yourself not to judge. Judgments are convenient ways to avoid learning, because you cannot “learn” from what you already “know.” Instead of judgments, try listening. Seek solutions instead of “declarations.” You made a commitment!

And, finally...

- **Reflect:** Identify your own failures when things go wrong, learn from them, and work toward developing skills to avoid them in the future. Being reflective makes you a better teacher, motivator, adapter and learner, and that defines a “responsible leader.” And, when you chose healthcare, that was your commitment!

Lee A. Resnick, MD  
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### CLINICAL

## 11 Identifying and Treating Superficial Fungal Infections in the Urgent Care Setting

The acute discomfort associated with many common fungal infections may drive patients unwilling to wait for relief to the urgent care center. A clinician's ability to diagnose and treat them is emblematic of urgent care's role in the healthcare continuum.

*By Kosta G. Skandamis, MD and George Skandamis, MD*

### BOUNCEBACKS

## 21 The Case of a 36-Year-Old Man with Cough

Like the proverbial search for a needle in a haystack, it can be difficult to find the one patient for whom a very common complaint—in this case, a seemingly simple cough—foretells a dire outcome.

*By Michael B. Weinstock, MD and Jill C. Miller, MD*

### CASE REPORT

## 25 A 12-year-old Girl with Back Pain

A primary complaint of back pain is unusual for a pediatric patient. A high index of suspicion can help you establish its cause and initiate proper medical management.

*By Forrest Nguyen, DO*

### IN THE NEXT ISSUE OF JUCM

*Patients with psychiatric issues can present a unique challenge to the urgent care physician due to the modified skill set required, lack of community resources, and other unforeseen difficulties.*

### WEB EXCLUSIVE

#### Urgent Care Clinic Evaluation: A Case Study

Providing competent care is not enough to ensure success in the urgent care marketplace. Focused leadership, a well-defined mission, and sound financial systems are other cornerstones for financial success.

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*By Julie Wright, MBA, CMPE*

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

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Physicians, physician assistants, and nurse practitioners, whether practicing in an urgent care, primary care, hospital, or office environment, are invited to submit a review article or original research for publication in a forthcoming issue.

Submissions on clinical or practice management topics, ranging in length from 2,500 to 3,500 words are welcome. The key requirement is that the article address a topic relevant to the real-world practice of medicine in the urgent care setting.

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Sometimes, patient discomfort trumps prevailing definitions of clinical “urgency.” Itchy, burning feet or an unsightly rash caused by a fungal infection, for example, can lead a patient to seek relief in the urgent care setting rather than wait for a visit to primary care or a dermatologist. Hopefully, if you’ve made yourself visible in the community or had the benefit of good word-of-mouth generated by satisfied patients, they’ll know you provide immediate and thorough care without an appointment.



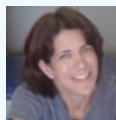
Identifying and Treating Superficial Fungal Infections in the Urgent Care Setting (page 11), by father-and-son authors **Kosta Skandamis, MD** and **George Skandamis, MD** will help you prepare for just such an opportunity.

**Kosta Skandamis, MD** and **George Skandamis, MD** will help you prepare for just such an opportunity.

Kosta Skandamis started his career as an OB/GYN in Toledo, OH before deciding to “retrain” in family medicine at the University of Louisville. His clinical evolution culminated with a move to urgent care five years ago. As befits his background, Dr. Skandamis has particular clinical interest in women’s health and skin disorders.

George Skandamis is a dermatologist in private practice in Columbus, OH.

Then there’s the patient who you see all too commonly—so much so that you might be tempted to take his symptoms for granted. Fight the temptation to write a pro-forma prescription, though. In this month’s Bouncebacks! feature (page 21), authors **Michael B. Weinstock, MD** and **Jill C. Miller, MD** articulate the importance of identifying the one patient in a thousand who will “go bad” without over-treating the other 999.



A more obvious patient whose presentation requires a high index of suspicion would be a child with back pain. Medical management—and prevention of residual effects—starts with identifying the cause, as demonstrated in a new case report by **Forrest Nguyen, DO** (A 12-year-old Girl with Back Pain, page 25).

Finally, we present an original article that takes a clinical research-type approach to a non-clinical matter. Urgent Care Clinic Evaluation: A Case Study, by **Julie Wright, MBA, CMPE** considers the prospects of four urgent care centers by comparing key factors with an urgent care center that ultimately failed. This article is available exclusively at [www.jucm.com](http://www.jucm.com).

Also in this issue:

**Nahum Kovalski, BSc, MDCM** reviews new abstracts on predicting pneumonia in children with wheezing, the link between normal ECG during chest pain and ACS, a resuscitation protocol that minimizes hands-off time, identifying children at very low risk of clinically important brain injuries, and the sensitivity of H1N1 rapid tests.

**John Shufeldt, MD, JD, MBA, FACEP** shares some lessons learned in observing humanity over decades as a physician and attorney.

**Frank Leone, MBA, MPH** explains the importance of having a fallback position in case your primary objective in an occupational medicine sales call doesn’t look too promising.

**David Stern, MD, CPC** responds to questions on splint applications by staff, and modifiers -25, -26 and -59.

If you’d like to see your name on this page in a future issue of *JUCM*, let us know in an e-mail to **Lee A. Resnick, MD**, *JUCM*’s editor-in-chief, at [editor@jucm.com](mailto:editor@jucm.com). ■

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## FROM THE EXECUTIVE DIRECTOR

# Hands Across the Water

■ LOU ELLEN HORWITZ, MA

2009 has been an interesting year, to say the least. At the beginning of this year I was writing about internal quality and accountability; now that we finally had benchmarking data available, what were you going to do with it in your clinics to improve your own quality? Over the subsequent months, while urgent care became more and more present in public discussions (newspapers, blogs, television, radio) it was grossly absent from political discussions, and we took our first steps to remedy that.

Then the flu season hit, with a new “wrinkle” in the form of H1N1, and urgent care centers stepped up across the country to play a significant role in vaccination and treatment administration.

In a nutshell, our industry has fully realized that while we must continue to look inward to improve ourselves, we must also be looking outward to influence the larger role we play in our country’s healthcare delivery.

I’m sure you’ve noticed that a large part of the healthcare reform discussion has been around the “medical home.” Statistically, about 50% of urgent cares formally provide primary care in addition to urgent care, so are essentially serving as a “medical home” for patients. This has been confusing for some people outside our industry, and has even been misinterpreted as an organized movement by urgent care to steal patients from primary care physicians.

Of course, there is no organized industry movement. Every urgent care center I’ve talked to that also provides primary care made that decision individually in response to patient demand. And assuming provision of that service does not compromise the center’s ability to provide urgent care at a level consistent with UCAOA’s Certified Urgent Care criteria, at this point primary care services are as “valid” as any other ancillary service an urgent care chooses to provide.

Then there’s the “traditional” urgent care center, which does not do primary care at all. Why not? It’s not in their mission, it’s not what their community needs, it’s not what they choose to do

*“Only 29% of PCPs have arrangements for getting their patients after-hours care.”*

with the limited time and resources they have available. There’s plenty of urgent care to be done without adding primary care into the mix. In short, they’ve made an individual decision not to.

Outsiders looking at our industry are somewhat troubled by this dichotomy, which is odd. No one seems troubled when regular primary care offices start to offer walk-in hours in the evening, even when they add “urgent care” to their sign, even when the scope of service does not expand.

So what’s the point of all this musing on the state of the industry circa end of 2009? And what was Paul McCartney singing about in “Uncle Albert/Admiral Halsey” (from which the title for this month’s column is taken, but I digress...)?

A new study by The Commonwealth Fund on the state of primary care in the U.S. and 10 other countries showed that in the U.S. only 29% of primary care physicians have arrangements for getting their patients after-hours care so they can avoid visiting a hospital emergency room. It wasn’t clear from the study if that meant arrangements “inside their practice,” but even so, that possibly means that 70% of the primary care physicians in our country could use a visit from you to offer to be their after-hours partner.

For many reasons, that visit is unlikely to come from the other side, so instead of waiting for your center to get included in a primary care practice’s medical home after-hours plan, be the one to reach your hand across that water. As Thomas P. O’Neill, Sr. (Tip’s father) said, “All politics is local”—so get local. Worst case, they will bar the door and not let you in. Best case, you add to the complex fabric of care delivery in your community, provide a safety net for some patients, and gain a solid relationship with another provider.

You must, of course, treat this relationship well once you have it. When you grasp a hand across the water, or across a giant political chasm, the assumption is that you won’t slap it, or let it go. Happy New Year. ■



**Lou Ellen Horwitz** is executive director of the Urgent Care Association of America. She may be contacted at [lhorwitz@ucaoa.org](mailto:lhorwitz@ucaoa.org).



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## Identifying and Treating Superficial Fungal Infections in the Urgent Care Setting

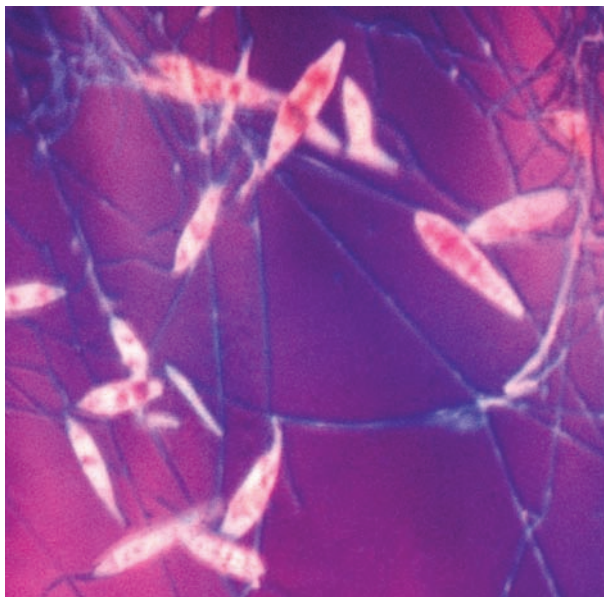
**Urgent message:** Rashes often lead patients to seek relief in the urgent care center. The ability to differentiate among common, superficial fungal infections and to select the most appropriate treatment or refer is an important skill to master.

Kosta G. Skandamis, MD, and George Skandamis, MD

### Introduction

Superficial fungal infections are among the most common skin conditions seen in the urgent care setting. Dermatophytes are the most common type of fungi that infect and survive on dead keratin (i.e., skin, hair follicles, nails), but certainly not the only type the clinician is likely to be presented with. Candidiasis, primarily due to *Candida albicans*, affects not only mucous membranes, but also skin (skin folds and moist areas). Finally, tinea versicolor (also known as pityriasis versicolor or, more colloquially, as yeast infection) is caused by the lipophilic yeast *Pityrosporum*, also known as *Malassezia furfur*.

In this article, we will review common causative organisms and discuss presenting characteristics, differential diagnoses, and available treatments.



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### Overview: Dermatophyte (Tinea) Infections

Three types of dermatophytes account for the majority of superficial fungal infections:

- *Trichophyton*
- *Epidermophyton*
- *Microsporum*

Dermatophytes can be classified according to the place of origin (anthropophilic, zoophilic, or geophilic), according to the tissue mainly involved (epidermomycosis, trichomy-cosis, or onychomycosis), or by body region affected (tinea faciale, corporis, cruris, manus, pedis).

It is not uncommon for dermatophyte infections to affect healthy individuals, but immunocompromised patients are particularly susceptible.

Dermatophytes tend to present in children as scalp infections, while young adults are likely to have intertriginous infections. Gupta, et al, reported in the *Journal of the*

**Table 1. Summary of Diagnostic Methods**

Infection	Methods
Tinea capitis	<p><i>Black dot type</i> Visualization of hyphae under the microscope or by fungal cultures.</p> <p><i>Gray patch type</i> Direct visualization of hyphae under the microscope or by Wood's lamp. Hairs infected with <i>Microsporum spp</i> fluoresce.</p>
Tinea cruris	Direct visualization of hyphae under the microscope or by cultures (on Sabouraud's medium).
Tinea pedis	Direct microscopy or fungal cultures.
Cutaneous candidiasis	Clinical diagnosis can be confirmed by potassium hydroxide (KOH) preparation or culture of scrapings.
Tinea versicolor	Identify round yeast and elongated hyphae "spaghetti and meatballs" on direct microscopic examination of scales prepared with KOH or by the blue-green fluorescence of the scales under the Wood's lamp.

American Academy of Dermatology that the prevalence of fungal nail infections is 0.7% in patients <19 years of age, compared with 18% in patients 60 to 79 years of age.

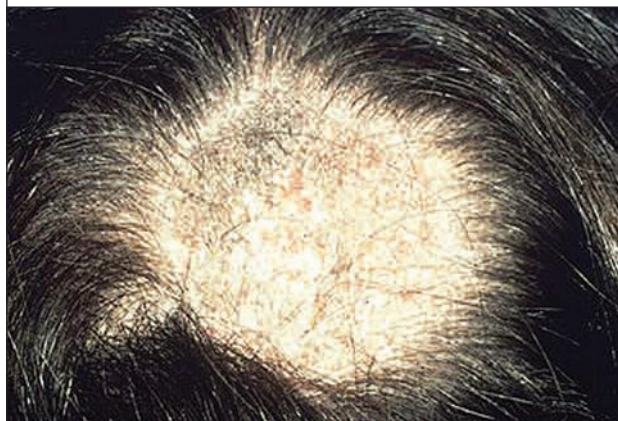
The single most important test for diagnosis of dermatophytosis is the direct visualization of the hyphae under the microscope. (See **Table 1.**) Cultures are usually unnecessary, since most species respond to many of the same agents.

### Tinea Capitis

Tinea capitis affects children almost exclusively, and is much more common in

**Figure 1. Black dot tinea capitis.**

Source: George Skandamis, MD.

**Figure 2. Gray patch tinea capitis.**

Source: George Skandamis, MD.

African-Americans than in Caucasians. In adults, seborrheic dermatitis can mimic tinea capitis. Clinically, tinea capitis presents as two distinctly different forms:

- *Black dot tinea capitis* (BDTC) is the most common form of tinea capitis in U.S. and spreads from person to person by fomites (hats, combs, brushes, etc). Small patches of asymptomatic, erythematous, scaling lesions can go unnoticed until alopecia develops. Broken-off hairs near the surface give the appearance of "dots" in dark-haired persons (hence, the name). (See **Figure 1.**)

Without treatment, BDTC progresses, leaving permanent scars. A secondary infection and transition to kerion may occur.

Diagnosis is only by visualization of hyphae under the microscope or by fungal cultures. A Wood's lamp is not helpful.

- *Gray patch tinea capitis* (GPTC), caused by *Microsporum canis*, is usually contracted from dogs or cats and, rarely, from another person.

The infection starts as an erythematous, scaling, pruritic, well-demarcated circular patch, showing numerous broken-off hairs, that keeps spreading centrifugally. Small patches coalesce to form larger patches. Many patches may be present for weeks to months. (See **Figure 2.**)

Diagnosis is by direct visualization of hyphae under the microscope or by Wood's lamp. Hairs infected with *Microsporum spp* fluoresce.

Occasionally, the lesion becomes boggy, waxy,

Keep influenza under control...

## Make the change— choose RELENZA

- To date, no detectable resistance to RELENZA has been found in CDC surveillance\*
- According to CDC, RELENZA is a preferred treatment for patients with influenza.



**RELENZA®**  
(ZANAMIVIR) INHALATION POWDER  
||| MAKE THE CHANGE |||

\*Clinical significance can not be inferred from surveillance data.

### Important Safety Information

- RELENZA is not recommended for treatment or prophylaxis of influenza in individuals with underlying airways disease (such as asthma or chronic obstructive pulmonary disease)
- Serious cases of bronchospasm, including fatalities, have been reported during treatment with RELENZA in patients with and without underlying airways disease. Many of these cases were reported during postmarketing and causality was difficult to assess
- If use of RELENZA is considered for a patient with underlying airways disease, the potential risks and benefits should be carefully weighed. Use in these patients should be done only under conditions of careful monitoring of respiratory function, close observation, and appropriate supportive care including availability of fast-acting bronchodilators
- Discontinue RELENZA and initiate appropriate treatment if an allergic reaction occurs or is suspected
- Patients with influenza, particularly pediatric patients, may be at an increased risk of seizures, confusion, or abnormal behavior early in their illness. Monitor for signs of abnormal behavior
- Safety and efficacy have not been demonstrated in patients with high-risk underlying medical conditions
- RELENZA has not been proven effective for prophylaxis of influenza in the nursing home setting
- RELENZA is not a substitute for early influenza vaccination on an annual basis as recommended by the Centers for Disease Control's Immunization Practices Advisory Committee
- Influenza viruses change over time. Emergence of resistance mutations could decrease drug effectiveness. Other factors (for example, changes in viral virulence) might also diminish clinical benefit of antiviral drugs. Prescribers should consider available information on influenza drug susceptibility patterns and treatment effects when deciding whether to use RELENZA

For more information on RELENZA visit [www.relenza.com](http://www.relenza.com)

Please see Brief Summary of Prescribing Information on next page.

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# RELENZA®

## (ZANAMIVIR) INHALATION POWDER

### BRIEF SUMMARY

#### RELENZA® (zanamivir) Inhalation Powder

The following is a brief summary only; see full prescribing information for complete product information

#### 1 INDICATIONS AND USAGE

**1.1 Treatment of Influenza:** RELENZA is indicated for treatment of uncomplicated acute illness due to influenza A and B virus in adults and pediatric patients 7 years of age and older who have been symptomatic for no more than 2 days.

**1.2 Prophylaxis of Influenza:** RELENZA is indicated for prophylaxis of influenza in adults and pediatric patients 5 years of age and older.

#### 1.3 Important Limitations on Use of RELENZA

- RELENZA is not recommended for treatment or prophylaxis of influenza in individuals with underlying airways disease (such as asthma or chronic obstructive pulmonary disease) due to risk of serious bronchospasm [see *Warnings and Precautions* (5.1)].
- RELENZA has not been proven effective for treatment of influenza in individuals with underlying airways disease.
- RELENZA has not been proven effective for prophylaxis of influenza in the nursing home setting.
- RELENZA is not a substitute for early influenza vaccination on an annual basis as recommended by the Centers for Disease Control's Immunization Practices Advisory Committee.
- Influenza viruses change over time. Emergence of resistance mutations could decrease drug effectiveness. Other factors (for example, changes in viral virulence) might also diminish clinical benefit of antiviral drugs. Prescribers should consider available information on influenza drug susceptibility patterns and treatment effects when deciding whether to use RELENZA.
- There is no evidence for efficacy of zanamivir in any illness caused by agents other than influenza virus A and B.
- Patients should be advised that the use of RELENZA for treatment of influenza has not been shown to reduce the risk of transmission of influenza to others.

#### 4 CONTRAINDICATIONS

Do not use in patients with history of allergic reaction to any ingredient of RELENZA including lactose (which contains milk proteins) [see *Warnings and Precautions* (5.2) and *Description* (11) of full prescribing information].

#### 5 WARNINGS AND PRECAUTIONS

**5.1 Bronchospasm:** RELENZA is not recommended for treatment or prophylaxis of influenza in individuals with underlying airways disease (such as asthma or chronic obstructive pulmonary disease).

Serious cases of bronchospasm, including fatalities, have been reported during treatment with RELENZA in patients with and without underlying airways disease. Many of these cases were reported during postmarketing and causality was difficult to assess.

RELENZA should be discontinued in any patient who develops bronchospasm or decline in respiratory function; immediate treatment and hospitalization may be required.

Some patients without prior pulmonary disease may also have respiratory abnormalities from acute respiratory infection that could resemble adverse drug reactions or increase patient vulnerability to adverse drug reactions.

Bronchospasm was documented following administration of zanamivir in 1 of 13 patients with mild or moderate asthma (but without acute influenza-like illness) in a Phase I study. In a Phase III study in patients with acute influenza-like illness superimposed on underlying asthma or chronic obstructive pulmonary disease, 10% (24 of 244) of patients on zanamivir and 9% (22 of 237) on placebo experienced a greater than 20% decline in FEV<sub>1</sub> following treatment for 5 days.

If use of RELENZA is considered for a patient with underlying airways disease, the potential risks and benefits should be carefully weighed. If a decision is made to prescribe RELENZA for such a patient, this should be done only under conditions of careful monitoring of respiratory function, close observation, and appropriate supportive care including availability of fast-acting bronchodilators.

**5.2 Allergic Reactions:** Allergic-like reactions, including oropharyngeal edema, serious skin rashes, and anaphylaxis have been reported in postmarketing experience with RELENZA. RELENZA should be stopped and appropriate treatment instituted if an allergic reaction occurs or is suspected.

**5.3 Neuropsychiatric Events:** Influenza can be associated with a variety of neurologic and behavioral symptoms which can include events such as seizures, hallucinations, delirium, and abnormal behavior, in some cases resulting in fatal outcomes. These events may occur in the setting of encephalitis or encephalopathy but can occur without obvious severe disease.

There have been postmarketing reports (mostly from Japan) of delirium and abnormal behavior leading to injury in patients with influenza who were receiving neuraminidase inhibitors, including RELENZA. Because these events were reported voluntarily during clinical practice, estimates of frequency cannot be made, but they appear to be uncommon based on usage data for RELENZA. These events were reported primarily among pediatric patients and often had an abrupt onset and rapid resolution. The contribution of RELENZA to these events has not been established. Patients with influenza should be closely monitored for signs of abnormal behavior. If neuropsychiatric symptoms occur, the risks and benefits of continuing treatment should be evaluated for each patient.

**5.4 Limitations of Populations Studied:** Safety and efficacy have not been demonstrated in patients with high-risk underlying medical conditions. No information is available regarding treatment of influenza in patients with any medical condition sufficiently severe or unstable to be considered at imminent risk of requiring inpatient management.

**5.5 Bacterial Infections:** Serious bacterial infections may begin with influenza-like symptoms or may coexist with or occur as complications during the course of influenza. RELENZA has not been shown to prevent such complications.

**5.6 Importance of Proper Use of DISKHALER:** Effective and safe use of RELENZA requires proper use of the DISKHALER to inhale the drug. Prescribers should carefully evaluate the ability of young children to use the delivery system if use of RELENZA is considered [see *Use in Specific Populations* (8.4)].

#### 6 ADVERSE REACTIONS

**6.1 Clinical Trials Experience:** The placebo used in clinical studies consisted of inhaled lactose powder, which is also the vehicle for the active drug; therefore, some adverse events occurring at similar frequencies in different treatment groups could be related to lactose vehicle inhalation.

*Treatment of Influenza: Clinical Trials in Adults and Adolescents:* Adverse events that occurred with an incidence  $\geq 1.5\%$  in treatment studies (patients  $\geq 12$  years of age) are listed in Table 1.

**Table 1. Summary of Adverse Events  $\geq 1.5\%$  Incidence During Treatment in Adults and Adolescents**

Adverse Event	RELENZA		Placebo (Lactose Vehicle) (n = 1,520)
	10 mg b.i.d. Inhaled (n = 1,132)	All Dosing Regimens (n = 2,289)	
<b>Body as a whole</b>			
Headaches	2%	2%	3%
<b>Digestive</b>			
Diarrhea	3%	3%	4%
Nausea	3%	3%	3%
Vomiting	1%	1%	2%
<b>Respiratory</b>			
Nasal signs and symptoms	2%	3%	3%
Bronchitis	2%	2%	3%
Cough	2%	2%	3%
Sinusitis	3%	2%	2%
Ear, nose, and throat infections	2%	1%	2%
<b>Nervous system</b>			
Dizziness	2%	1%	<1%

\*Includes studies where RELENZA was administered intranasally (6.4 mg 2 to 4 times per day in addition to inhaled preparation) and/or inhaled more frequently (q.i.d.) than the currently recommended dose.

Additional adverse reactions occurring in less than 1.5% of patients receiving RELENZA included malaise, fatigue, fever, abdominal pain, myalgia, arthralgia, and urticaria.

The most frequent laboratory abnormalities in Phase III treatment studies included elevations of liver enzymes and CPK, lymphopenia, and neutropenia. These were reported in similar proportions of zanamivir and lactose vehicle placebo recipients with acute influenza-like illness.

*Clinical Trials in Pediatric Patients:* Adverse events that occurred with an incidence  $\geq 1.5\%$  in patients 5 to 12 years old receiving treatment doses of RELENZA in 2 Phase III studies are listed in Table 2.

**Table 2. Summary of Adverse Events  $\geq 1.5\%$  Incidence During Treatment in Pediatric Patients\***

Adverse Event	RELENZA 10 mg b.i.d. Inhaled (n = 291)	Placebo (Lactose Vehicle) (n = 318)
<b>Respiratory</b>		
Ear, nose, and throat infections	5%	5%
Ear, nose, and throat hemorrhage	<1%	2%
Asthma	<1%	2%
Cough	<1%	2%
<b>Digestive</b>		
Vomiting	2%	3%
Diarrhea	2%	2%
Nausea	<1%	2%

\*Includes a subset of patients receiving RELENZA for treatment of influenza in a prophylaxis study.

In 1 of the 2 studies described in Table 2, some additional information is available from children (5 to 12 years old) without acute influenza-like illness who received an investigational prophylaxis regimen of RELENZA: 132 children received RELENZA and 145 children received placebo. Among these children, nasal signs and symptoms (zanamivir 20%, placebo 9%), cough (zanamivir 16%, placebo 8%), and throat/tonsil discomfort and pain (zanamivir 11%, placebo 6%) were reported more frequently with RELENZA than placebo. In a subset with chronic pulmonary disease, lower respiratory adverse events (described as asthma, cough, or viral respiratory infections which could include influenza-like symptoms) were reported in 7 of 7 zanamivir recipients and 5 of 12 placebo recipients.

*Prophylaxis of Influenza: Family/Household Prophylaxis Studies:* Adverse events that occurred with an incidence of  $\geq 1.5\%$  in the 2 prophylaxis studies (patients  $\geq 5$  years of age) are listed in Table 3.

**Table 3. Summary of Adverse Events  $\geq 1.5\%$  Incidence During 10-Day Prophylaxis Studies in Adults, Adolescents, and Children\***

Adverse Event	Contact Cases	
	RELENZA 10 mg inhaled once daily (n = 1,068)	Placebo (n = 1,059)
<b>Lower respiratory</b>		
Viral respiratory infections	13%	19%
Cough	7%	9%
<b>Neurologic</b>		
Headaches	13%	14%
<b>Ear, nose, and throat</b>		
Nasal signs and symptoms	12%	12%
Throat and tonsil discomfort and pain	8%	9%
Nasal inflammation	1%	2%
<b>Musculoskeletal</b>		
Muscle pain	3%	3%
<b>Endocrine and metabolic</b>		
Feeding problems (decreased or increased appetite and anorexia)	2%	2%
<b>Gastrointestinal</b>		
Nausea and vomiting	1%	2%
<b>Non-site specific</b>		
Malaise and fatigue	5%	5%
Temperature regulation disturbances (fever and/or chills)	5%	4%

\* In prophylaxis studies, symptoms associated with influenza-like illness were captured as adverse events; subjects were enrolled during a winter respiratory season during which time any symptoms that occurred were captured as adverse events.

*Community Prophylaxis Studies:* Adverse events that occurred with an incidence of  $\geq 1.5\%$  in 2 prophylaxis studies (patients  $\geq 5$  years of age) are listed in Table 4.

**Table 4. Summary of Adverse Events  $\geq 1.5\%$  Incidence During 28-Day Prophylaxis Studies in Adults, Adolescents, and Children\***

Adverse Event	RELENZA 10 mg inhaled once daily (n = 2,231)	Placebo (n = 2,239)
<b>Neurologic</b>		
Headaches	24%	26%
<b>Ear, nose, and throat</b>		
Throat and tonsil discomfort and pain	19%	20%
Nasal signs and symptoms	12%	13%
Ear, nose, and throat infections	2%	2%
<b>Lower respiratory</b>		
Cough	17%	18%
Viral respiratory infections	3%	4%
<b>Musculoskeletal</b>		
Muscle pain	8%	8%
Musculoskeletal pain	8%	6%
Arthralgia and articular rheumatism	2%	<1%
<b>Endocrine and metabolic</b>		
Feeding problems (decreased or increased appetite and anorexia)	4%	4%
<b>Gastrointestinal</b>		
Nausea and vomiting	2%	3%
Diarrhea	2%	2%
<b>Non-site specific</b>		
Temperature regulation disturbances (fever and/or chills)	9%	10%
Malaise and fatigue	8%	8%

\* In prophylaxis studies, symptoms associated with influenza-like illness were captured as adverse events; subjects were enrolled during a winter respiratory season during which time any symptoms that occurred were captured as adverse events.

#### 6.2 Postmarketing Experience:

**Allergic Reactions:** Allergic or allergic-like reaction, including oropharyngeal edema [see *Warnings and Precautions* (5.2)]. **Psychiatric:** Delirium, including symptoms such as altered level of consciousness, confusion, abnormal behavior, delusions, hallucinations, agitation, anxiety, nightmares [see *Warnings and Precautions* (5.3)]. **Cardiac:** Arrhythmias, syncope. **Neurologic:** Seizures. **Respiratory:** Bronchospasm, dyspnea [see *Warnings and Precautions* (5.1)]. **Skin:** Facial edema; rash, including serious cutaneous reactions; urticaria [see *Warnings and Precautions* (5.2)].

#### 7 DRUG INTERACTIONS

The concurrent use of RELENZA with live attenuated influenza vaccine (LAIV) intranasal has not been evaluated. However, because of potential interference between these products, LAIV should not be administered within 2 weeks before or 48 hours after administration of RELENZA, unless medically indicated. The concern about possible interference arises from the potential for antiviral drugs to inhibit replication of live vaccine virus.

Trivalent inactivated influenza vaccine can be administered at any time relative to use of RELENZA [see *Clinical Pharmacology* (12.4) of full prescribing information].

#### 8 USE IN SPECIFIC POPULATIONS

**8.1 Pregnancy: Pregnancy Category C.** There are no adequate and well-controlled studies of zanamivir in pregnant women. Zanamivir should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Zanamivir has been shown to cross the placenta in rats and rabbits. In these animals, fetal blood concentrations of zanamivir were significantly lower than zanamivir concentrations in the maternal blood.

**8.3 Nursing Mothers:** Studies in rats have demonstrated that zanamivir is excreted in milk. However, nursing mothers should be instructed that it is not known whether zanamivir is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when RELENZA is administered to a nursing mother.

**8.4 Pediatric Use:** Treatment of influenza: Safety and effectiveness of RELENZA for treatment of influenza have not been assessed in pediatric patients less than 7 years of age, but were studied in a Phase III treatment study in pediatric patients, where 471 children 5 to 12 years of age received zanamivir or placebo [see Clinical Studies (14.1) of full prescribing information]. Adolescents were included in the 3 principal Phase III adult treatment studies. In these studies, 67 patients were 12 to 16 years of age. No definite differences in safety and efficacy were observed between these adolescent patients and young adults.

In a Phase I study of 16 children ages 6 to 12 years with signs and symptoms of respiratory disease, 4 did not produce a measurable peak inspiratory flow rate (PIFR) through the DISKHALER (3 with no adequate inhalation on request, 1 with missing data), 9 had measurable PIFR on each of 2 inhalations, and 3 achieved measurable PIFR on only 1 of 2 inhalations. Neither of two 6-year-olds and one of two 7-year-olds produced measurable PIFR. Overall, 8 of the 16 children (including all those under 8 years old) either did not produce measurable inspiratory flow through the DISKHALER or produced peak inspiratory flow rates below the 60 L/min considered optimal for the device under standardized in vitro testing; lack of measurable flow rate was related to low or undetectable serum concentrations [see Clinical Pharmacology (12.3), Clinical Studies (14.1) of full prescribing information]. Prescribers should carefully evaluate the ability of young children to use the delivery system if prescription of RELENZA is considered.

**Prophylaxis of Influenza:** The safety and effectiveness of RELENZA for prophylaxis of influenza have been studied in 4 Phase III studies where 273 children 5 to 11 years of age and 239 adolescents 12 to 16 years of age received RELENZA. No differences in safety and effectiveness were observed between pediatric and adult subjects [see Clinical Studies (14.2) of full prescribing information].

**8.5 Geriatric Use:** Of the total number of patients in 6 clinical studies of RELENZA for treatment of influenza, 59 patients were 65 years of age and older, while 24 patients were 75 years of age and older. Of the total number of patients in 4 clinical studies of RELENZA for prophylaxis of influenza in households and community settings, 954 patients were 65 years of age and older, while 347 patients were 75 years of age and older. No overall differences in safety or effectiveness were observed between these patients and younger patients, and other reported clinical experience has not identified differences in responses between the elderly and younger patients, but greater sensitivity of some older individuals cannot be ruled out. Elderly patients may need assistance with use of the device.

In 2 additional studies of RELENZA for prophylaxis of influenza in the nursing home setting, efficacy was not demonstrated [see Indications and Usage (1.3) of full prescribing information].

#### 10 OVERDOSAGE

There have been no reports of overdosage from administration of RELENZA.

#### 17 PATIENT COUNSELING INFORMATION

See FDA-Approved Patient Labeling (17.6).

**17.1 Bronchospasm:** Patients should be advised of the risk of bronchospasm, especially in the setting of underlying airways disease, and should stop RELENZA and contact their physician if they experience increased respiratory symptoms during treatment such as worsening wheezing, shortness of breath, or other signs or symptoms of bronchospasm [see Warnings and Precautions (5.1)]. If a decision is made to prescribe RELENZA for a patient with asthma or chronic obstructive pulmonary disease, the patient should be made aware of the risks and should have a fast-acting bronchodilator available.

**17.2 Concomitant Bronchodilator Use:** Patients scheduled to take inhaled bronchodilators at the same time as RELENZA should be advised to use their bronchodilators before taking RELENZA.

**17.3 Neuropsychiatric Events:** Patients with influenza (the flu), particularly children and adolescents, may be at an increased risk of seizures, confusion, or abnormal behavior early in their illness. These events may occur after beginning RELENZA or may occur when flu is not treated. These events are uncommon but may result in accidental injury to the patient. Therefore, patients should be observed for signs of unusual behavior and a healthcare professional should be contacted immediately if the patient shows any signs of unusual behavior [see Warnings and Precautions (5.3)].

**17.4 Instructions for Use:** Patients should be instructed in use of the delivery system. Instructions should include a demonstration whenever possible. For the proper use of RELENZA, the patient should read and follow carefully the accompanying Patient Instructions for Use.

**If RELENZA is prescribed for children, it should be used only under adult supervision and instruction, and the supervising adult should first be instructed by a healthcare professional [see Dosage and Administration (2.1)].**

**17.5 Risk of Influenza Transmission to Others:** Patients should be advised that the use of RELENZA for treatment of influenza has not been shown to reduce the risk of transmission of influenza to others.

**17.6 FDA-Approved Patient Labeling and Instructions for Use:** See separate leaflet.

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Figure 3. Gray patch tinea capitis with associated kerion.



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purulent, and extremely tender and is associated with lymphadenopathy (kerion; see **Figure 3**).

#### Treatment

BDTC and GPTC both respond to the same medications (**Table 2**). Topical agents are ineffective.

Treatment of kerion is a subject of minor controversy. While some practitioners advocate treating with antibiotics active against Group A *Strep* and *S aureus* in addition to griseofulvin 250 mg BID for four to six weeks plus hot compresses, others maintain that kerion can be treated successfully without antibiotics.

#### Prevention

Examine school and home contacts to identify asymptomatic carriers. Carriers should be treated with selenium sulfide shampoo or with an oral antifungal agent. Children under treatment can return to school.

#### Tinea Corporis

Tinea corporis (TC; also referred to as ring worm) refers to dermatophyte infections of the trunk, legs, arms, and neck (excluding feet, hands, or groin), most commonly due to *T rubrum*. It affects all ages and can be transmitted by autoinoculation from other parts of the body, but also from close contact with animals or contaminated soil.

TC is more common in tropical and subtropical regions. It appears clinically as multiple, bright, mildly pruritic or asymptomatic sharply marginated, scaly plaques, with or without vesicles at the margin (**Figure 4**). These plaques enlarge peripherally with central clearing and production of concentric rings.

Allergic contact dermatitis, psoriasis, seborrheic dermatitis, and granuloma annulare all can mimic TC.

Tinea corporis gladiatorum affects athletes who have skin-to-skin contact, and is caused primarily by *T tonsurans*. In such cases, the athlete should abstain from contact sports for 10 to 15 days.

**Table 2. Pharmacotherapy for BDTC and GPTC**

	Dose*	Side effects	Noteworthy
<b>Griseofulvin</b>	<p><i>Adults</i> For GPTC: 250 mg BID, 1-2 months; microsize 15 mg/kg/day up to 500 mg/day</p> <p>For BDTC: 250 mg TID, 6-12 weeks; ultramicrosize 10 mg/day</p> <p><i>Children</i> 30-50-pound child: 125 mg-250 mg/day &gt;50-pound child: 250 mg-500 mg/day</p>	Headache, nausea/vomiting, photosensitivity	CBC, LFTs if treatment lasts >3 months
<b>Terbinafine</b>	<p><i>Adults</i> 10-20 kg: 62.5 mg/day, 4 weeks 20-40 kg: 125 mg/day, 4 weeks &gt;40 kg: 250 mg/day, 4 weeks</p> <p><i>Children</i> Not recommended</p>	Rarely, nausea, abdominal pain, aplastic anemia	
<b>Itraconazole</b>	<p><i>Adults</i> 200 mg/day, 4-8 weeks</p> <p><i>Children</i> 3-5 mg/kg/day, 4-6 weeks</p> <p><b>or</b> 5 mg/kg/day, 1 week each month for 2-3 months</p>	Needs acid gastric pH, raises levels of digoxin and cyclosporine	
<b>Fluconazole</b>	<p><i>Adults and children</i> 6 mg/kg/day, 2 weeks Repeat at four weeks if needed</p>		Only oral agent approved for children <2 years

CBC, complete blood count; LFT, liver function test \*Variations on dosing regimens exist in the literature.

for immunocompromised individuals, patients who failed topical treatment, and for TC gladiatorum.

### Tinea Cruris

Tinea cruris (jock itch) refers to dermatophytosis of the groin, pubic area, and inner thighs. Primarily, it affects obese males who wear tight occlusive clothing in a humid, warm environment. Usually, it is associated with tinea pedis, often with a history of tinea cruris.

Clinically, tinea cruris presents as an erythematous patch on the inner aspect of one or both thighs. It spreads outward with central clearing and sharp, slightly elevated border which may or may not contain tiny vesicles. Scrotum and penis are rarely involved.

Differential diagnosis involves intertrigo, erythrasma, pityriasis versicolor, and psoriasis.

Diagnosis is achieved by direct visualization of hyphae under the microscope or by cultures (on Sabouraud's medium).

### Treatment

Tinea cruris responds well to topical antifungals, including azole and allylamine products, as well as ciclopirox and haloprogin. Failure to treat concomitant tinea pedis results in recurrence.

### Prevention

Prevention is achieved by wearing shower shoes when using public baths, using antifungal powders to keep the groin dry, and avoiding hot baths and opting for boxer shorts instead of briefs. Wearing loose clothing may also be helpful. Also, avoid sharing fomites, like hats, clothing, and towels.

### Treatment

Tinea corporis usually responds well to topical antifungals, particularly the azoles. Systemic treatment is reserved

### Tinea Pedis

Tinea pedis (athlete's foot; see **Figure 5**) is the most

common dermatophytic infection seen in practice. It involves the feet and is characterized by erythema, scaling, maceration and/or bulla formation. The infection can, in time, spread to the groin, trunk, hands, and nails. Bacteria can invade through the cracks and cause cellulitis or lymphangitis.

Tinea pedis tends to be chronic, with exacerbations.

Males are more prone to tinea pedis than females. Hot, humid weather, occlusive shoes, and excessive sweating are other predisposing factors. Typically, tinea pedis is transmitted by walking barefoot on contaminated floors.

Itching and pain with secondary infections are characteristics of the disease.

Skin lesions can be:

- *interdigital type* (dry scaling or macerated, peeling, fissuring of toe webs)
- *moccasin type*, which is the most difficult to treat (well-demarcated erythema with tiny papules and scales and being confined to heels, soles and lateral

**Figure 4. Tinea corporis.**



Source: George Skandamis, MD.

borders of feet)

- *inflammatory/bullous type* (vesicles or bullae filled with clear fluid on soles, instep, web spaces)
- *ulcerative type* (extension of interdigital tinea infec-

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**Figure 5A and Figure 5B. Tinea pedis.**

Source: George Skandamis, MD.

**Figure 6. Tinea manuum.**

Source: George Skandamis, MD.

tion onto dorsal and plantar foot, usually complicated by bacterial infections).

Differential diagnosis includes erythrasma, impetigo, *Candida* intertrigo, bullous impetigo, and dyshidrosis.

Diagnosis is established by direct microscopy or fungal cultures.

### Treatment

Most topical agents (azoles, pyridones, allylamines, or benzylamines) applied BID for four weeks are effective against tinea pedis. Some prescription agents have a broader spectrum and can be applied once daily. A meta-analysis of 11 randomized trials concluded that treatment with terbinafine or naftifine HCl produces a higher cure rate than treatment with itraconazole.

It should be noted that topical agents may be unable to penetrate keratinized plantar skin. In such cases, the oral form of these agents may be preferable.

Apply Burow's wet dressings to macerated, interdigital lesions. Apply cool compresses and, if severe, add systemic steroids to acutely inflamed feet.

### Prevention

Instruct patients to wear shower shoes in public baths and locker rooms. Wash feet with benzoyl peroxide after shower.

### Tinea Manuum

Tinea manuum refers to a chronic dermatophytosis of the hands that does not resolve spontaneously. Even after treatment, recurrences are common. Usually, the dominant hand is involved. Tinea manuum can last for years.

On examination, hands look red with white scales confined to palmar creases (**Figure 6**). Borders are well demarcated with central clearing and pruritus is present.

Tinea manuum is usually associated with tinea pedis and/or tinea cruris and/or tinea unguium of fingernails.

### Treatment

Because of the thickness of the palmar skin, topical agents are not effective. Use:

- terbinafine 250 mg QD for two weeks, or
- itraconazole 200 mg QD for one week, or
- fluconazole 200 mg QD for two to four weeks.

### Cutaneous Candidiasis

Cutaneous candidiasis is a superficial skin infection affecting moist, macerated, chafed skin. Intertrigo refers to *Candida* infection of intertriginous areas (two closely opposed skin surfaces; see **Figure 7**). Factors that *increase* skin friction, moisture, warmth, or maceration and *decrease* immune response typically increase risk.

Clinically, the initial picture is one of an erythematous, pruritic plaque of the groin, perianal area, axilla, abdominal pannus, web space of toes and fingers, or under the breasts, with fine peripheral scaling and satellite pustules. Later, the plaques coalesce to form large eroded areas.

Diagnosis is clinical but can be confirmed by potassium hydroxide (KOH) preparation or culture of scrapings.

### Treatment

The treatment is tailored toward the actual fungal infection, the underlying predisposing factors, and keeping the intertriginous areas as dry as possible.

Initial treatment for the majority of patients is a topical antifungal cream, typically miconazole or clotrimazole, applied for seven to 14 days. Oral antifungal agents (ketoconazole 200 mg/day or fluconazole 100 mg/day for four to six weeks) are reserved for resistant cases.

Various drying agents (e.g., corn starch, Domeboro's solution, talcum powder, antifungal powders) can minimize skin fold moisture. Drying agents are used after adequate antifungal treatment has been completed. High-risk patients should use drying agents indefinitely, as well as an antifungal cream once or twice a week.

### Tinea Versicolor

Tinea versicolor is a chronic asymptomatic scaling dermatosis due to overgrowth of a yeast (*Pityrosporum ovale*) that resides normally in the keratin of skin and hair follicles. The term "tinea" should be reserved for dermatophytosis, and the present condition should be termed "pityriasis versicolor" (PV). Predisposing factors include humidity, high rate of sebum production, application of grease to skin, or high levels of cortisol.

PV presents as multiple, sharply demarcated hypopigmented macules with fine scales on the upper back, trunk, neck, arms, and abdomen (see **Figure 8**). The small macules are asymptomatic or may produce mild itching and can enlarge to form extensive patches.

Differential diagnosis includes vitiligo, pityriasis alba, psoriasis, and tinea corporis.

Diagnosis is achieved by identifying round yeast and elongated hyphae, so-called "spaghetti and meatballs," on direct microscopic examination of scales prepared with KOH or by the blue-green fluorescence of the scales under the Wood's lamp.

Patients should be informed that PV is not considered contagious, does not leave permanent scars, and that skin color alteration resolves within months.

### Treatment

Selenium sulfide lotion applied to affected areas daily for two weeks is the mainstay of treatment.

Topical azole antifungal agents can be used once daily for two weeks.

**Figure 7. Intertrigo infection (cutaneous candidiasis).**



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**Figure 8. Pityriasis versicolor.**



Source: George Skandamis, MD.

Recurrence can usually be prevented by using any topical agent once weekly for the following few months.

Oral therapy is also effective (and sometimes preferred for its convenience), using:

- ketoconazole 200 mg/day for 10 days, or
- fluconazole 150 mg to 300 mg single dose/week for two to four weeks, or
- itraconazole 200 mg/day for seven days.

Oral therapy does not prevent recurrences.

### Conclusion

Acute discomfort is often viewed as an urgent matter for which some may be disinclined to wait for a primary care appointment. Urgent care's growth has been fueled by its ability to fill such gaps. Being prepared to provide relief with an accurate diagnosis and informed treatment choice for common, superficial fungal infections will help further establish the practitioner as an invaluable member of the healthcare "team." ■

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# Bouncebacks

## The Case of a 36-Year-Old Man with Cough

In Bouncebacks, which appears semimonthly in JUCM, we provide the documentation of an actual patient encounter, discuss patient safety and risk management principles, and then reveal the patient's "bounceback" diagnosis.

Cases are adapted from the book *Bouncebacks! Emergency Department Cases: ED Returns* (2006, Anadem Publishing, [www.anadem.com](http://www.anadem.com); also available at [www.amazon.com](http://www.amazon.com) and [www.acep.org](http://www.acep.org)) by Michael B. Weinstock and Ryan Longstreth. The book includes 30 case presentations with risk management commentary by Gregory L. Henry, past president of The American College of Emergency Physicians, and discussions by other nationally recognized experts.

Michael B. Weinstock, MD and Jill C. Miller, MD

### The Case of a 36-year-old Man with Cough

You will see this patient in the urgent care today—10 times! Your job will be to pluck out the one who will go bad, and not overtreat the thousands who just need a few drops of "tincture of time." It will be déjà vu....all over again.

This month's case is unique in our series, as the initial visit was basically well done. However, the presentation serves as a framework for later discussion.

### Initial Visit

(Note: The following, as well as subsequent visit summaries, is the actual documentation of the providers, including punctuation and spelling errors.)

**CHIEF COMPLAINT:** Cough

### VITAL SIGNS

**Time** 11:55  
**Temp(F)** 100.5  
**Rt.** 0



<b>Pulse</b>	106
<b>Resp</b>	18
<b>Syst</b>	131
<b>Diast</b>	79
<b>O2 Sat</b>	94
<b>%O2</b>	RA
<b>Weight</b>	300 lbs

**Triage** (nurse notes): Patient c/o fever, cough, chills—onset last night.

**Allergies:** NKDA

**Meds:** Bystolic, lovastatin, Prozac, metformin

**PMH:** High cholesterol, HTN, depression

**PSH:** Ear surgery

**SH:** Nonsmoker, no alcohol

### HISTORY OF PRESENT ILLNESS:

This is a 36-year-old male with a chief complaint of cough and fever. His symptoms started yesterday. He denies chest pain, shortness of breath, sore throat, ear pain, headache abdominal pain or vomiting. He denies any sick contacts. He otherwise has been in his normal state of health. Denies fever, rhinorrhea, blood in urine/stool, rash, pain or numbness of the extremities

**EXAM:**

**Constitutional:** Alert and oriented X3, well-nourished, well appearing, in no apparent distress

**Head:** Normocephalic; atraumatic.

**Eyes:** PERRL, no scleral icterus.

**Oral:** posterior pharynx pink and moist.

**Ears:** TMs pearly gray bilaterally.

**Nose:** The nose is normal in appearance without rhinorrhea

**Resp:** Normal chest excursion; breath sounds clear and equal bilaterally; faint diffuse wheezes or crackles

**Card:** Regular rhythm, without murmurs, rub or gallop

**Abd:** Non-distended; non-tender, soft, without rigidity, rebound or guarding

**Skin:** Normal for age and race; warm and dry; no apparent lesions

**ORDERS:** Prednisone 60mg PO, Albuterol aerosol

**RESULTS:** CXR: Symmetric low lung volumes.

Otherwise, no acute abnormality is seen

**DIAGNOSIS:** Bronchitis, fever

**DISPOSITION:** Discharged home with family member. Condition improved. F/u PCP in 2-3 days. Rx Tessalon Pearles 200mg #20, prednisone 20mg – take 3 per day for 4 days #12, albuterol inhaler. Aftercare instructions for bronchitis

**Discussion of Documentation and Risk Management**

**Point 1:** Pulse not rechecked or discussed.

**Discussion:** Tachycardia is a recurrent theme in return visits. In fact, Sklar et al found tachycardia present in 71% of patients who died an avoidable death within seven days of the initial visit.

This discussion has led to some confusion; tachycardia is a very prevalent but nonspecific finding. How should it be approached?

The answer is that patients who have abnormal vital signs are waving a red flag that something more serious could be occurring. An analogy is that when crossing a busy street with a child in each arm, most will look twice before crossing. The fact that the street is busy does not mean that it should not be crossed, only that we should be more careful.

In our discussion of this case, we need to be careful by:

- rechecking the vital signs to ensure they are not worsening
- explaining any unclear medical decision-making in a progress note
- going back to the bedside to confirm that the history and exam are accurate
- ensuring the patient is aware of diagnostic uncer-

tainty and has aftercare instructions that are action- and time-specific.

**Point 2:** The pulse OX reading was lower than expected.

**Discussion:** This likely prompted a chest x-ray, which was read as being normal.

A repeat pulse OX reading could have been helpful. If 97%, it would have been reassuring; if 91%, it would have been concerning. The importance of strict attention to vital signs cannot be overemphasized; there is a reason they are called *vital* signs, after all.

**Point 3:** Aftercare instructions are uncertain.

**Discussion:** It is unclear from the physician's note if there was any discussion about possible deterioration of the patient's condition. Reflecting this discussion in the chart goes a long way if there is an adverse outcome—which there was.

**ED VISIT 2—FIVE DAYS LATER**

- **Chief complaint (20:01):** Difficulty breathing.
- Assignment to highest triage category: Black
- **Vitals:** Pulse 124, resp. 32, BP 137/72, RA O2 sat = 70%
- **HPI:** Saw PCP yesterday as Sx had not improved and was prescribed a Z-pack. Wife returned from work at 6PM to find the patient with a high fever and altered mental status. No hemoptysis but strong family hx of thromboembolic disease. Takes metformin but no hx DM
- **PE:** Lethargic and cyanotic upon arrival. Arousable and will answer simple questions. Tachycardic and tachypnic. Breath sounds decreased bilaterally, no wheezing or crackles. Heart regular without murmur. Skin cyanotic and cool. No lower extremity edema, pulses 2+ in all extremities
- **ED course:**
  - 20:07 – Orders: Zosyn 4.5 g ivpb, IVF 1L NS bolus then 125ml/hour, narcan 0.4mg IVP
  - 20:22 – BiPAP applied
  - Stat portable CXR – (rad interpretation): Bilateral pulmonary infiltrates c/w pneumonia
  - Labs return: CBC = WBC 7.5, Hb 16.5, plt 336. Lytes WNL. Bun/creat = 18/1.5. BNP 33 (normal). Flu swab A/B – negative. Glucose 151. Cardiac enzymes negative
  - 20:59 – Vancomycin 2g ivpb
  - 21:02 – Respiratory status continues to decline: Amidate 30mg ivp, succinylcholine 150mg ivp → patient is intubated and Propofol drip is started for sedation

- 21:33 – Tamiflu 75mg per NG
- 21:55 – Pt. bucking the vent, difficulty oxygenating with sat 91-93% on 100% O<sub>2</sub>, has developed pink, frothy sputum → Pavulon 10mg ivp, lasix 40mg ivp
- 22:25 – BP drops to 85/56. O<sub>2</sub> sat only 86% on vent with 100% FIO<sub>2</sub>
- Consult to pulmonary critical care and admission to ICU

**Final Ed Diagnosis (21:56):** Pneumonia, acute respiratory distress.

### Inpatient Hospital Course

- CTA chest is negative for PE. Does show extensive bilateral pneumonia.
- In the ICU the oxygen saturation improves.
- Patient develops acute renal failure.
- H1N1 swab returns positive. Tamiflu increased to 150mg BID.
- Renal failure progresses and dialysis is initiated.
- Patient is still intubated 2 weeks later.
- PEG tube, trach, supportive care continued.

### Risk Management and Patient Safety Issues

Tens of thousands of patients die annually from the flu, mostly the elderly or those with chronic medical conditions. In the urgent care center, we have plenty of experience with viral illness.

The H1N1 flu, for the most part, is acting like the regular seasonal flu, with administration of symptomatic medications helping the patient tolerate the myalgias and rigors while the illness “runs its course.”

The evaluation and management in this case was appropriate; however, a small percentage of patients will decompensate. Of the several million in the U.S. infected with the H1N1, around 1,000 have died—a risk in all patients of less than 0.05% (one per 2,000 affected patients).

The affected demographic is the young and immunosuppressed.

Pregnant patients have a relative immunosuppression (so their immune system will not reject the fetus), as well as a decreased inability to clear secretions due to an element of restrictive lung disease—a fetus compressing the chest cavity. Children, particularly those less than 2-years-old, have a decreased ability to respond to this novel virus due to lack of immunity from previous exposure to similar viruses.

Our patient was morbidly obese, increasing his risk.

With a global pandemic raging, it is important to be aware of national guidelines. The CDC has recommended consideration of antiviral treatment for certain demographic groups, but has avoided backing us into a therapeutic corner: “Physicians may also decide not to treat some people in these groups and/or treat people who are not in these groups based on their clinical judgment” (Updated Interim Recommendations for the Use of Antiviral Medications in the Treatment and Prevention of Influenza for the 2009-2010 Season; see Suggested Readings). The October 6 iteration of the CDC antiviral recommendations also advises:

- Influenza antiviral medications can reduce the severity and duration of influenza illness and can reduce the risk of influenza-related complications, including severe illness and death.
- Most healthy persons who develop an illness consistent with uncomplicated influenza, or persons who appear to be recovering from in-

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fluenza, do not need antiviral medications for treatment or prophylaxis. However, persons presenting with suspected influenza and more severe symptoms, such as evidence of lower respiratory tract infection or clinical deterioration, should receive prompt empiric antiviral therapy, regardless of previous health or age.

- Treatment with oseltamivir or zanamivir is recommended for all persons with suspected or confirmed influenza requiring hospitalization.
- Early empiric treatment with oseltamivir or zanamivir should be considered for persons with suspected or confirmed influenza who are at higher risk for complications, including:
  - children <2-years-old
  - persons aged ≥ 65-years-old
  - pregnant women and women up to two weeks postpartum (including following pregnancy loss)
  - persons of any age with certain chronic medical or immunosuppressive conditions, as previously discussed
  - persons <19 years of age who are receiving long-term aspirin therapy.
- Children 2- to 4-years-old are more likely to require hospitalization or urgent medical evaluation for influenza compared with older children and adults, although the risk is much lower than for children younger than 2 years old. Children aged 2 years to 4 years without high-risk conditions and with mild illness do not necessarily require antiviral treatment.

Morbid obesity is not generally grouped into high risk categories, but was present in our patient. Such patients may be at increased risk for hospitalization and death from H1N1, as many have underlying conditions such as diabetes, asthma, chronic respiratory illness, or liver disease. These patients should be treated with antiviral medications if the underlying conditions are present or if they have signs of lower respiratory infection.

#### Flu swabs

While it is tempting to check patients with a flu swab, it is unlikely the result would change the management. The sensitivity of a swab for influenza A is between 10% and 51%—little better (and sometimes worse) than a flip of a coin.

A negative test should not be reassuring, and a positive test only confirms what was previously suspected. About 99% of the circulating influenza A virus is H1N1.

Treatment is based on clinical data and not laboratory results.

#### Indications for Transfer to ED

Patients with evidence of pneumonia, compromised pulse OX reading, tachypnea—particularly in the immunosuppressed or very young—should be transferred for further critical care evaluation. All patients should be counseled on potential for decompensation and given action- and time-specific aftercare instructions.

#### Conclusion

Could our patient's outcome have been affected by the initial evaluation? There were a few "red flags" initially present, but the eventual decompensation and horrible outcome would have been difficult to predict.

Informing patients about potential for decompensation coupled with action and time specific discharge instructions are the best tact at preventing an adverse outcome.

#### Resources and Suggested Reading

- Sklar DP, Crandall CS, Loeliger E, et al. Unanticipated death after discharge home from the emergency department. *Ann Emerg Med.* 2007;49:735-745.
- Centers for Disease Control and Prevention. Updated interim recommendations for the use of antiviral medications in the treatment and prevention of influenza for the 2009-2010 season. Available at: <http://www.cdc.gov/h1n1flu/recommendations.htm>.
- Centers for Disease Control and Prevention. Bacterial coinfections in lung tissue specimens from fatal cases of 2009 pandemic influenza A (H1N1)—United States, May–August 2009. *MMWR.* 2009;58(38):1071-1074. Available at: <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5838a4.htm>.
- Morens DM, Taubenberger, Fauci AS. Predominant role of bacterial pneumonia as a cause of death in pandemic influenza: Implications for pandemic influenza preparedness. *J Infect Dis.* 2008;198:962-970.
- Centers for Disease Control and Prevention. Hospitalized patients with novel influenza A (H1N1) virus infection—California, April–May, 2009. *MMWR.* 2009;58(early release):536-541. Available at: <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm58e0518a1.htm>.
- Centers for Disease Control and Prevention. Evaluation of rapid influenza diagnostic tests for detection of novel influenza A (H1N1) virus—United States, 2009. *MMWR.* 2009;58(30):826-829. Available at: <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5830a2.htm>.
- Faix DJ, Sherman SS, Waterman SH. Rapid-test sensitivity for novel swine-origin influenza A (H1N1) virus in humans. *N Engl J Med.* 2009;361(7):728-729. ■

# Case Report

## A 12-year-old Girl with Back Pain

**Urgent message:** Back pain in a pediatric patient requires a high index of suspicion. Ominous causes (e.g. cancer, infection), are far more common in the pediatric population. Conversely, mechanical low back pain is far less common, and is a diagnosis of exclusion.

Forrest Nguyen, DO

### Introduction

As urgent care physicians, we are responsible for anything that comes through the door. Often, the diagnosis proves to be routine—a viral infection, a sore throat, or cough.

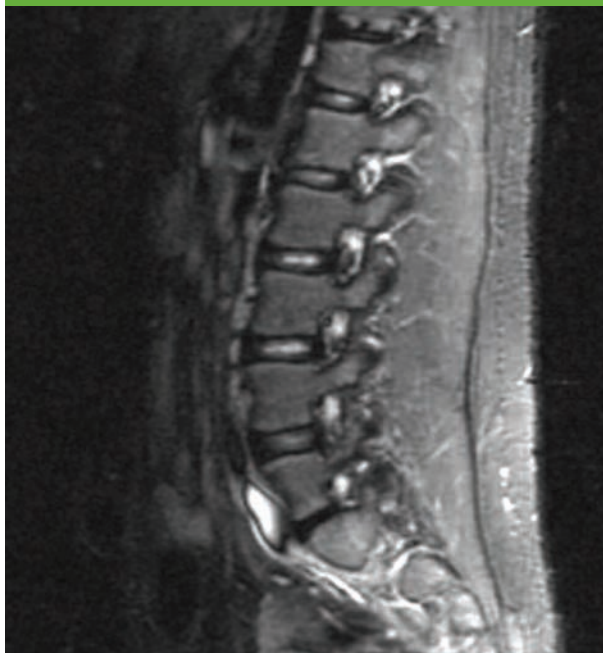
Other times, however, we discharge the patient wondering if we made the right diagnosis. In-house labs, CT scans and/or MRIs are a luxury not all centers enjoy. For those that do not, the history and physical exam become ever more important and are the foundation of correct diagnosis.

### Case Study

A 12-year-old female presented with a one-week history of back pain described as gradual onset, sharp, and 10 out of 10 on the pain scale. She indicated a location in the lower back between the L4 and L5. The pain did not radiate, was worse with movement, and was alleviated with ibuprofen.

The patient stated that the pain began right after

Figure 1. MRI Results



getting her tetanus shot. She denies any recent history of trauma or injuries, but admits to falling off a trampoline two years ago and hurting her ankle. Plain film of the ankle at the time was negative.

She also denies any headaches, acute visual changes, dyspnea, chest pain, recent infection, or acute neurological changes, as well as any urinary/bowel incontinence or saddle anesthesia.

Upon further questioning, the patient admitted to bilateral lower quadrant abdominal pain and bladder pressure. She stated she had minimal urination (“just dripping”) over the previous four days. Her last

void was the night before. She denies any dysuria, vaginal discharge, or incontinence.

The patient reported that her last menstrual period was two months ago, but denies any sexual activity. She is awake, alert, and in no acute distress. Our findings are detailed in **Table 1**.

**Table 1. Findings in Urgent Care**

BP: 114/70 P: 80 T: 98.5 (tympanic) Wt: 138 lbs (62.6 kg) LMP: 2 months ago	Abdomen: BS x 4, soft, b/l lower quadrant tenderness, non-distended, no masses, no bruits, no hepatomegaly, no guarding, no rebound
HEENT NCAT, PERRLA, EOMI, TMs clear bilaterally	Back: No deformity, no costovertebral angle tenderness, point tenderness L4-L5 with no radiculopathy
Nares patent	Extremities: No clubbing, cyanosis, or edema, 2+ dorsalis pulses bilaterally
Oropharynx pink and moist without erythema or exudate	Neurological: CN 2-12 grossly intact, MS 5/5 all extremity, absent patellar reflexes b/l
Tonsils not enlarged	Achilles reflex intact, negative Babinski
Neck: Supple, no lymphadenopathy, full range of motion, no deformity	Pt with antalgic gait
Lungs: Clear to auscultation bilaterally	Proprioception intact, sensation to sharp and dull stimuli intact, b/l quadricep "clonus," negative Romberg, Mini mental exam nml
Heart: Regular, S1/S2 no rubs, murmurs, or gallops	Skin: No lesions, rashes, or deformities

The patient was admitted into the hospital, where the following labs were drawn:

WBC-12.0	Na-140
Hgb-12.7	K-3.9
Hct-36.9	Cl-102
Plt-252	Co2-28
Neut-80.5	BUN-9
Bands-0	Creat-0.41
Lymph-12.6	Glucose-107
Mono-5.8	Alk Phos-111
Eosin-0.8	ALT-12
Baso-0.3	AST-11

UA (clean catch)—unable to obtain  
Foley Catheter—240 ml  
UA—negative  
Urine drug screen—negative  
Urine pregnancy—negative  
Sedimentation rate—94 mm/hr  
CRP—5.4

#### CT ABD with contrast

- No CT evidence for acute intra-abdominal process

- Approximately 11 mm low attenuation lesion in the midpole left kidney, likely representing a cyst
- CT pelvis with contrast*

- Bilateral ovarian follicles with a small amount of free fluid in the cul-de-sac
- Foley catheter and gas within the bladder lumen

Over-read by pediatric radiologist: Findings are very suspicious for probable discitis at L5-S1 with possible osteomyelitis involving S1. MRI of the L-S spine is recommended.

#### MRI results

Findings suspicious for osteomyelitis involving superior T12 body and at least S1. Prevertebral and epidural phlegmon from superior L5 to S1.

#### Discussion

Back pain is a rare complaint in the pediatric population. Approximately half of the episodes of back pain in all age groups are caused by musculoskeletal trauma. The remainder is from infection, idiopathic pain, sickle cell pain crisis, or miscellaneous causes.

In the ambulatory care setting, overloaded school backpacks (defined for our purposes as weighing >15% to 20% of the child's weight) are a common cause of back pain in children.

The following are red flags that the physician should consider in evaluating every pediatric patient with back pain:

- young age (particularly <4 years)
- fever
- weight loss
- severe or constant pain
- nocturnal pain
- progression over the course of time
- history of acute or repetitive trauma
- history of malignancy or tuberculosis exposure
- evidence of neurologic dysfunction (bowel or bladder dysfunction or abnormal reflexes)
- interference with activity

#### Discitis

Discitis usually presents with the gradual onset of irritability and back pain. The patient will sometimes refuse to walk. The disease is usually without systemic toxicity and is only occasionally accompanied by fever.

In some patients, abdominal pain may be the only complaint.

The lower lumbar discs are affected most commonly, but any disc (occasionally more than one) may be involved.

*Continued on page 28*



# On Wheezing Children, ECG and ACS, and Resuscitation Protocols

■ NAHUM KOVALSKI, BSc, MDCM

Each month, Dr. Nahum Kovalski reviews a handful of abstracts from, or relevant to, urgent care practices and practitioners. For the full reports, go to the source cited under each title.

### Clinical Predictors of Pneumonia Among Children with Wheezing

**Key point:** *The routine use of chest radiography for children with wheezing but without fever should be discouraged.*

**Citation:** Mathews B, Shah S, Cleveland RH, et al. Clinical predictors of pneumonia among children with wheezing. *Pediatrics*. 2009;124(1):e29-e36.

A prospective cohort study was performed with children <21 years of age who were evaluated in the ED, were found to have wheezing on examination, and had chest radiography performed because of possible pneumonia. Historical features and examination findings were collected by treating physicians before knowledge of the chest radiograph results. Chest radiographs were read independently by two blinded radiologists.

A total of 526 patients (median age: 1.9 years) met the inclusion criteria; 36% were hospitalized. A history of wheezing was present in 247 patients (47%). Twenty-six patients (4.9%) had radiographic pneumonia. History of fever at home, triage temperature of 38°C, maximal temperature in the ED of 38°C, and triage oxygen saturation of <92% were associated with increased risk of pneumonia. Among afebrile children (temperature of <38°C) with wheezing, the rate of pneumonia was very low (2.2%).



**Nahum Kovalski** is an urgent care practitioner and assistant medical director/CIO at Terem Emergency Medical Centers in Jerusalem, Israel.

Radiographic pneumonia among children with wheezing is uncommon. Historical and clinical factors may be used to determine the need for chest radiography. The routine use of chest radiography for children with wheezing but without fever should be discouraged. ■

### Normal ECG During Chest Pain Does Not Rule Out ACS

**Key point:** *Among chest pain patients with normal initial ECGs, a similar percentage had acute coronary syndrome whether the ECG was performed when chest pain was present or absent.*

**Citation:** Turnipseed SD, Trythall WS, Diercks DB, et al. Frequency of acute coronary syndrome in patients with normal electrocardiogram performed during presence or absence of chest pain. *Acad Emerg Med*. 2009;16:495-499.

A normal electrocardiogram does not exclude acute coronary syndrome (ACS) in patients who present with chest pain, but many clinicians believe that ACS is unlikely to be the cause of the chest pain if the normal ECG was obtained during a pain episode. To clarify this issue, these authors conducted a prospective, observational study of 387 patients who presented to an emergency department with chest pain, had normal initial ECGs, and were admitted for evaluation for ACS.

Patients were divided into two groups, based on whether they had active chest pain during acquisition of the normal initial ECG: 126 had chest pain and 261 did not. ACS was defined as non-ST-segment-elevation myocardial infarction, >70% stenosis on coronary angiography, or positive noninvasive cardiac stress test. The prevalence of ACS did not differ significantly between the groups

that did and did not have chest pain when the normal initial ECG was obtained (16% and 20%, respectively).

Lack of changes on an ECG performed during chest pain often is thought to reduce the likelihood of ACS. However, this and other research has shown that this assumption is erroneous and that the likelihood of serious cardiac disease in patients with chest pain and an initial normal ECG is the same whether or not chest pain was present when the ECG was obtained.

[Published in *J Watch Emerg Med*, June 12, 2009—Diane M. Birnbaumer, MD, FACEP.] ■

## A Resuscitation Protocol That Minimizes Hands-off Time Improves Survival

**Key point:** A pre-hospital protocol emphasizing minimal interruption of chest compressions was associated with improved survival to hospital discharge.

Citations: Garza AG, Gratton MC, Salamone JA. Improved patient survival using a modified resuscitation protocol for out-of-hospital cardiac arrest. *Circulation*. 2009;119:2597-2605.

Ewy GA. Do modifications of the American Heart Association guidelines improve survival of patients with out-of-hospital cardiac arrest? *Circulation*. 2009;119:2542-2544.

Recent research suggests that minimizing interruptions during cardiopulmonary resuscitation improves coronary perfusion pressure and increases the likelihood of return of spontaneous circulation (ROSC).

The Kansas City, MO, emergency medical services system changed its cardiac arrest protocol to emphasize early chest compressions and de-emphasize airway management for resuscitation of adult patients with primary cardiac arrest (ventricular fibrillation [VF] or pulseless ventricular tachycardia).

In a retrospective study, researchers compared ROSC, survival to discharge, and cognitive function in 1,097 patients with primary cardiac arrest during the 36 months before the change and 339 patients during the 12 months after.

Overall, survival to discharge increased significantly from 7% before the change to 14% after. In the subset of adult patients with witnessed arrest and an initial rhythm of VF (143 before the change and 57 after), survival to discharge increased significantly from 22% to 44%, and rates of ROSC increased significantly from 38% to 60%. In this subset, cerebral performance category scores at discharge (assessed only in the after group) were favorable (scores of 1 or 2) in 88% of 25 survivors.

The concept of minimally interrupted cardiac resuscitation is important for revising how we think about CPR. Our focus should be to provide sufficient and sustained perfusion to the ailing myocardium. Prolonged or repeated interruptions significantly undermine the process.

[Published in *J Watch Emerg Med*, June 5, 2009—Aaron E. Bair, MD, MSC, FAAEM, FACEP.] ■

Neurologic findings (e.g., decreased muscle strength or reflexes) may be present; blood cultures, typically, are sterile.

White blood cell count usually is normal, and the erythrocyte sedimentation rate is elevated in most patients.

The etiology of discitis is controversial. For our patient, the cause was never found.

Sixty percent of biopsied discs grow bacteria, usually *Staphylococcus aureus*.

Differential diagnosis should include consideration of the following:

- Spondylolysis is a unilateral or bilateral defect (separation) in the vertebral pars interarticularis, usually in the lower lumbar vertebrae, particularly L5. Spondylolisthesis occurs when bilateral defects permit anterior slippage of the vertebral body. These may be congenital, but more typically are acquired as the bone “fatigues” from recurrent microtrauma during excessive lumbar hyperextension, a common problem in gymnasts, dancers, divers, weightlifters, and football linemen.
- Scoliosis.
- Degenerative disc disease. Herniation of the nucleus pulposus is less common in children than in adults. Some risk factors include acute trauma and Scheuermann kyphosis.
- Osteoid osteoma, the most common neoplasm that presents with back pain in children. This is a benign bone tumor characterized by nocturnal pain and prompt relief with NSAIDs.

## Treatment

Children often recover from discitis without antibiotic therapy, and many cases probably go undiagnosed. The current consensus is that discitis in children is a low-grade infection. Host defense systems usually are capable of overcoming the infection without assistance because the disc is richly vascularized up to 7 years of age. Occasionally, host defenses are overwhelmed, and complications such as abscess formation may result.

Treatment for discitis is not standardized. Aspiration of the affected disc for culture usually is not performed. Empiric antibiotic therapy should be directed against *S aureus*. Limited retrospective data suggest that initial treatment with IV antibiotics followed by oral antibiotics is associated with more rapid response and fewer relapses than is treatment with oral antibiotics or analgesia alone. ■



## INSIGHTS IN IMAGES

# CLINICAL CHALLENGE: CASE 1

In each issue, *JUCM* will challenge your diagnostic acumen with a glimpse of x-rays, electrocardiograms, and photographs of dermatologic conditions that real urgent care patients have presented with.

If you would like to submit a case for consideration, please e-mail the relevant materials and presenting information to [editor@jucm.com](mailto:editor@jucm.com).

FIGURE 1



The patient is a 93-year-old female who lost her balance and twisted her ankle. She presents with significant pain in the ankle and swelling over her lateral ankle, though she is able to bear weight.

View the x-ray taken (**Figure 1**) and consider what your diagnosis and next steps would be.

Resolution of the case is described on the next page.

## THE RESOLUTION

FIGURE 2



In this case, the x-ray was directed to the ankle due to the nature of the patient's complaint, but the pathology was in the foot. This is a proximal fifth metatarsal fracture involving the tuberosity.

It is difficult to assess on this view whether or not there is involvement of the diaphysis. Distinguishing fifth metatarsal "shaft" fractures from tuberosity fractures is critical to determining stability. Fifth metatarsal shaft fractures have a high incidence of malunion, and orthopedic consultation is mandatory. Tuberosity fractures can be managed with a compression dressing and a post-op shoe.

This case highlights the importance of ensuring appropriate films are obtained based on mechanism of injury and exam. It also demonstrates that pathology can be elsewhere from the location of the primary complaint and findings.

Many urgent care patients are triaged to x-ray prior to physician evaluation. A full set of foot films would be indicated in this case.

*Acknowledgment: Case presented by Nahum Kovalski, BSc, MDCM, Terem Emergency Medical Centers, Jerusalem, Israel.*



## CLINICAL CHALLENGE: CASE 2

FIGURE 1



The patient is a 2½-year-old child whose parents report recurrent episodes of abdominal pain without vomiting or diarrhea.

On exam, you note fullness of the abdomen.

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

Resolution of the case is described on the next page.

THE RESOLUTION



A globus of the urinary bladder was suspected based on the opacification in the area of the pelvis and the displacement of the bowel.

The child underwent an ultrasound study that, in fact, displayed a significant urinary retention after voiding, as well as dilatation of the kidney collecting system (consistent with longer-standing retention).

The child was referred to hospital for a) assessment of renal function, b) alleviation of the urinary retention, and c) diagnosis of the source of the retention.

*Acknowledgment: Case presented by Nahum Kovalski, BSc, MDCM, Terem Emergency Medical Centers, Jerusalem, Israel.*



# So Here's What I've Learned...

■ JOHN SHUFELDT, MD, JD, MBA, FACEP

I am always amazed by the myriad of personalities encountered on any given day in the urgent care center or emergency room, at the office, or even when simply out and about. Over the years, I've been fortunate to learn a few things from the thousands of patients I've treated and the remarkable individuals I've met along the way.

How is it that some people with serious acute or chronic diseases seem to accomplish so much, are very serene, and always upbeat? Why are some extremely accomplished individuals the most humble people you'll ever meet? How is it that some people never speak an ill word towards or about others?

Over the years, I have often thought about the answers to these questions and others of the same genre. After 23 years in medicine and nearly 50 years on this earth, I have come up with a few ideas.

So here's what I've learned:

■ **At the end of the day, life is simply about perspective.**

If ranked, this is the most important of all the lessons I have learned. Simply changing your perspective changes everything. I recently had a patient who was in moderate respiratory distress from the pulmonary embolism we diagnosed in the ED. He was also dying of colon cancer. When I told him about his PE, he said, "Whew, at least I am still on the right side of the turf." For most of us—me included—the thought of a PE would be horrifying. This gentleman was afraid that his colon cancer had metastasized to his lungs and was actually relieved when he heard the diagnosis. Changing your perspective changes your attitude toward whatever life can throw at you. When all else fails to fix the problem, change your perspective.

■ **Being able to laugh at yourself is important.** I do more stupid things in a week than most people do in a year. Fortunately, I am usually able to laugh at myself slightly before everyone else does. Lacking this trait, I would probably have

a gun in my mouth or at least be constantly embarrassed. Not laughing at yourself, or taking yourself too seriously, often leads to the level of humiliation usually reserved for finding *60 Minutes* knocking on your door or when jumping up and down on Oprah's couch.

■ **It is easier to be nice.** When I am confronted by a rude service person at some retail store, I often wonder what could possibly be making them so bitter that it would be worth ruining their day over.

I suspect some people are simply not wired for kindness. For this unfortunate group, know this: when you are not nice, dealing with the resultant fallout takes much more time and energy than if you would have simply been compassionate the first time around. For some reason in health-care, most people don't seem to actually expect anyone to be nice to them. So, when you do display kindness, it is often met with such appreciation that you are left wondering how many bad experiences the patient has had.

As discussed previously in this space, a professional but patient-friendly demeanor can also help you stay on the good side of a patient who might otherwise be inclined to file suit in the event of a misadventure.

■ **Arrogance is insecurity in disguise.** I have been fortunate over the years to meet some talented individuals who are not only at the top of their game; they are at the top of everyone's game. They are the rock stars of their respective fields. For the most part, none of them had any perceptible arrogance about their abilities or achievements. Why is that? If anybody had any right to be arrogant, these people did.

What I came to understand is that arrogance is simply a cover for insecurity. Insecure individuals will go to great lengths to let everyone know what they have accomplished, how much money they make, how they won some competition, etc. For whatever reason, these people only feel good about themselves while telling others about their exploits. Apparently, these individuals do not have any capacity for meaningful internal affirmation. The take-home point is this: humility counts for much in life.

■ **If it is not fun, don't do it.** In the grand scheme of things,



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# Share Your Insights

At its core, **JUCM**, *The Journal of Urgent Care Medicine* is a forum for the exchange of ideas and a vehicle to expand on the core competencies of urgent care medicine.

Nothing supports this goal more than **Insights in Images**, where urgent care practitioners can share the details of actual cases, as well as their expertise in resolving those cases. After all, in the words of UCAOA Executive Director Lou Ellen Horwitz, everyday clinical practice is where “the rubber meets the road.”

Physicians, physician assistants, and nurse practitioners are invited to submit cases, including x-rays, EKGs, or photographic displays relating to an interesting case encountered in the urgent care environment. Submissions should follow the format presented on the preceding pages.

If you have an interesting case to share, please e-mail the relevant images and clinical information to [editor@jucm.com](mailto:editor@jucm.com). We will credit all whose submissions are accepted for publication.

# JUCM

THE JOURNAL OF URGENT CARE MEDICINE

## HEALTH LAW

we are only among the living for a short time. Why do things that do not bring you joy or are not fun? I am continually amazed by people who hate their job, their life, their significant other, their body, etc., but do not make any effort to change their circumstances. If they are unwilling to take steps to change their circumstances, they should at least think about altering their perspective so that whatever is making them so miserable is seen with a fresh set of eyes.

- **Failure is not always bad.** I recently listened to Steve Jobs' (Apple's CEO) commencement address to the graduating class at Stanford. The theme of the address was “Connecting the dots backwards.” In a nutshell, if he hadn't dropped out of college he would have never taken calligraphy; if he hadn't taken calligraphy, Apple's first operating system would not have had such remarkable fonts. If he had not been fired from Apple, he would not have started Pixar or NeXT. Looking forward, he could have never connected the dots from his failures to his future mega-successes. Looking backwards, it was easy.

Michael Jordan was quoted thusly: “I've missed more than 9,000 shots in my career. I've lost almost 300 games. Twenty-six times I've been trusted to take the game-winning shot and missed. I've failed over and over and over again in my life and that is why I succeed.”

The point is this: If you approach failure as simply a hurdle to jump or an event from which you can learn, failing is not so bad. In fact, it may lead to your next success.

- **The more you learn, the more you realize you don't know.** Socrates was quoted as saying, “A wise man knows he knows nothing.” When you think about it, that is the best part of learning—the knowledge that there is still more to learn. How boring life would become if you knew everything you needed to know.
- **Most barriers are imaginary.** Most people have greater capacity than they ever give themselves credit for. Most of us have never been truly tested. Think of people who run the Badwater Ultramarathon—135 miles in 120° heat—or Navy SEALs during hell week, or people who against all odds perform heroic feats to save others or themselves from catastrophe.... If asked, probably very few of these outliers would ever admit to “knowing” they could have accomplished the unimaginable prospectively.

One of my favorite stories is about the 97-year-old marathoner. When asked how it was that he was running at that age, he responded, “No one ever told me that I shouldn't.” If you admit to a barrier, it becomes one. Put more simply, you are not beaten till you quit.

This list is far from exhaustive and given some of my personal debacles of the past 50 years, I clearly have a long way to go during the home stretch. However, as Michelangelo reportedly stated, “Ancora imparo.” *I am still learning.* ■



## Using Fallback Options to Your Advantage

■ FRANK H. LEONE, MBA, MPH

**W**e tend to operate in a black-and-white world: win or lose, succeed or fail, make the sale or don't make the sale, achieve your objective or don't achieve your objective.

The reality is that our world is exceedingly gray, and that success can and should be measured along a continuum of success and not always viewed as win/loss.

### The Concept

There are many reasons why even the best sales professionals fail to make the sale. The prospect may not be ready for your service, they may simply be in a bad mood, the prospect may be satisfied with their current provider (only to change their mind at some point in the future), the prospect may be in a hurry, or the prospect may simply not have all the information they need to make a decision.

None of these reasons would seem to shut the door on getting the business once and for all; a wise businessperson should never accept rejection as final.

### The Variants

The use of fallback options need not be restricted to face-to-face sales calls. Indeed, the "fallback option" concept can be applied to almost any stage of the sales cycle, as well as to virtually all interpersonal activities.

#### *During a telephone call*

Every call should have an overarching objective. For example, the purpose of the call might be to learn more about a prospect's needs, qualify the prospect, set up a meeting, or actually close a sale.



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But what if you fail to achieve your core objective during the call? The instinctive reaction is to chalk one up in the loss column and move on to the next prospect. But such a reaction closes the door and assumes that you will never achieve your objective. It is better to find some way to keep the objective alive. For example:

Unsuccessful primary objective	Fallback option
Learn more about the prospect's needs	Send them a self-assessment questionnaire
Qualify the prospect	Assume they qualify and move on
Set up a meeting	Ask if they will agree to speak with you again in three months
Close a sale	Suggest they visit your clinic

The key to using a fallback option during a telephone call is to prepare the fallback option *before* you place the call.

Before placing any business call, consider three questions:

1. What is the purpose of my call? If everything goes my way, what do I want to achieve?
2. If things do not go my way, what is my fallback option?
3. If I get voicemail, exactly what message do I want to leave? Do I even want to leave a message, or would I prefer to call back at a later time or date?

#### *During a face-to-face meeting*

These principles apply during a one-on-one or group meeting, as well. The primary difference between the two venues is that when you are with a prospect, you can gauge their facial expressions and body language and provide them

*Continued on page 37*



# Splint Applications by Staff, and Proper Use of Modifiers -25, -26, and -59

■ DAVID STERN, MD, CPC

**Q.** At the UCAOA Fall Urgent Care conference, you welcomed all questions, so here goes: Can you please let me know if it is appropriate to charge for Ortho-Glass and fiberglass splints in the urgent care setting? In some cases, the splints are applied by a tech under the direct supervision of the physician. In these cases, can the charge for the application of the splint be coded in addition to the Q codes?

- Question submitted by Joan Stephanofsky

**A.** Yes, cast and splint application codes (in addition to the Q codes for supplies) may be used when appropriate in a physician office, an emergency department, an urgent care center, or any other clinical location. You may use the application codes if the physician applies the splint or if staff that are directly supervised by the physician apply the splint.

**Q.** We have trouble getting reimbursed for E/M codes on the same claim as procedure codes, even if we use modifier -25 on the E/M code. I have even received a denial of the E/M code when billed with a Go168.

- Question submitted by Lina, Keith & Company 6

**A.** When calculating reimbursement for the code Go168 (Wound closure utilizing tissue adhesive(s) only), CMS included relative value units (RVUs) for an E/M, the cost of the 2-cyanoacrylate, and the work to apply the tissue glue. Thus, it is not appropriate to add an E/M code to Go168. HCPCS code

Go168, however, should be used only for CMS payors.

For other payors, you should review the CPT definition for wound closure: "CPT repair codes (12001-13160) are used to designate wound closure using sutures, staples, or tissue adhesives (i.e., 2-cyanoacrylate), either singly or in combination with adhesive strips."

Thus, for payors that are not governed by CMS, you should use the standard CPT code for wound closure, along with an E/M with modifier -25, as long as a separately identifiable E/M is documented in the chart.

**Q.** We own our own x-ray equipment and read all of our x-rays. A radiologist also reads each x-ray. I do use modifier -25 on my EM and modifiers -TC & -26 plus body location on my x-ray. I was told that I should not add modifier -TC nor modifier -26 to the bill. Which is correct?

- Question submitted by Kimberly, Express Pediatrics

**A.** You should use modifier -26 only when you are billing for the professional component alone.

You should use modifier -TC only when you are billing for the technical component alone.

When you are billing for both the professional component and the technical component on the same claim, you should bill the CPT code without modifier -26 and without modifier -TC. Using a modifier to indicate anatomic location (i.e., -R for right and -L for left) is appropriate.

I assume that the radiologist works for you as an employee or independent contractor. If so, you may bill the global radiology code (x-ray code without any modifier) for the x-ray. The code includes the professional component and the technical component. You do not need to add modifier -25 to the E/M code if the only procedure performed during the visit is the x-ray.



**David E. Stern, MD, CPC** is a certified professional coder. He is a partner in Physicians Immediate Care, operating 12 urgent care centers in Oklahoma and Illinois. Stern serves on the Board of Directors of the Urgent Care Association of America and speaks frequently at urgent care conferences. He is CEO of Practice Velocity ([www.practicevelocity.com](http://www.practicevelocity.com)), providing urgent care software solutions to more than 500 urgent care centers. He welcomes your questions about coding in urgent care.

**Q** If I bill an E/M with 96360 (Intravenous infusion, hydration; initial, 31 minutes to 1 hour) and J7030 (Infusion, normal saline solution, 1000 cc), do I need modifier -59 on the CPT code 96360?

- Question submitted by Francine Nicoletti, Veterans Administration, Northport, NY

**A.** In general, modifier -59 is reserved for when you are coding for services that would otherwise be considered bundled together. You should not use modifier -59 if neither code could be considered as bundled into the other code.

For example, modifier -59 should be used when a patient has two separate lacerations on two different fingers—one laceration involves the tendon and requires a tendon repair (CPT code: 26418, Extensor tendon repair, dorsum of finger, single, primary or secondary, without free graft, each tendon) and the other laceration involves a simple repair (CPT code: 12001, Simple repair of superficial wounds of scalp, neck, axillae, external genitalia, trunk and/or extremities (including hands and feet); 2.5 cm or less).

The code for tendon repair assumes and includes a simple skin closure over top of the repaired tendon and the other laceration, so one would not generally add a code for a simple laceration repair to a tendon repair.

In this specific example, however, the simple laceration repair is on a different finger, so it is clearly distinct from the tendon laceration repair. Thus, the simple laceration repair should be coded as a simple skin closure (12001), and modifier -59 should be added to CPT code 12001.

In addition, when the lacerations are on different fingers, the coder should also use the modifiers particular to specific fingers (modifiers -F0 to -F9).

In the specific question that you ask, however, the E/M code and the IV code are obviously distinct procedures that are never bundled together in either code. Thus, it would not be a standard coding procedure to use modifier -59.

In addition, the CPT code for IV hydration (96360) includes the fluids administered to the patient. Thus, it is *not* appropriate to add J7030 to CPT code 96360. ■

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*“It is better to consider your call ‘success or deferred success’ rather than ‘success or failure.’”*

with appropriate material right on the spot.

You should review and answer the same types of questions before a face-to-face meeting as you would before placing a phone call. In a face-to-face meeting, there can be a fourth question: “What, if anything, do I need to bring with me so I can hand it out should the need arise?”

Often, the answer to this question is to bring nothing, knowing that you will send them something quickly upon returning to your office (or via a quick call to your assistant at the office).

There are pros and cons to both approaches, depending on the circumstance:

**Option 1: Hand it to them.**

**Pros**

1. Provides instant information to the prospect.
2. Suggests to the prospect that you are prepared.
3. Prolongs the encounter, which may enable you to achieve your initial objective.

**Cons**

1. Suggests that you are pre-programmed.
2. May distract the prospect as they eyeball the handout.
3. May suggest to the prospect that the meeting is over.

**Option 2: Send it to them.**

**Pros**

1. Allows you to fine tune and customize the material.
2. Fast turnaround indicates responsiveness.
3. You buy time to think of additional information you can add.

**Cons**

1. Not turning it around quickly may suggest poor responsiveness.
2. They may receive it at a time they are not focused on you (“out of sight, out of mind”).
3. It gives the prospect time to consider other options (“A bird in the hand...”).

It is far better to consider your sales calls results to be “success or deferred success” rather than success or failure. In sales, there is always a tomorrow. ■

## Career Opportunities

**URGENT CARE OPPORTUNITY** - Seeking BC/BE primary care physician for urgent care in Bryan/College Station Texas. 8 hour shifts, flexible schedule, paid malpractice. For more information contact Lauren with Emergency Service Partners at (888) 800-8237, or Lauren@eddocs.com.

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### URGENT CARE OPPORTUNITY - STOCKTON, CALIFORNIA

Gould Medical Group, Inc., California's premier multispecialty group, is currently seeking two BC/BE emergency, family medicine, or internist physicians to staff their new urgent care department, which will be housed in a brand new 130,000 square foot office building scheduled to open in November of 2009. Candidates should have a full range of urgent care skills, be ACLS certified, and have an interest in working with an innovative group.

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- 12 hour shifts from 10am - 10pm
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WVU Urgent Care opened in September 2007 and is on pace to see 19-20K patient visits this year. The clinic currently operates from 8am to 8pm, seven days a week. Hours may expand in the future. Staffing includes one physician and one mid-level provider at all times.

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# Career Opportunities



## Family Practice or Emergency Medicine Physician Urgent Care Facility

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As a Medical Officer, you will be required to provide care to patients presenting at the clinic with a range of urgent care and minor injury presentations. We are looking for doctors with significant GP experience who also have experience in Emergency Medicine and urgent care and are confident of working in an independent setting.

### Senior Medical Officer

As the Senior Medical Officer, you will be required to assume a clinical leadership responsibility and to ensure the clinic operates to the highest clinical quality standards. You will be required to have the equivalent experience as the Medical Officer.

### Group Medical Officer

The position of Group Medical Officer requires someone with exceptional proven clinical leadership skills and who has a wealth of clinical experience. This role is key to driving the overall clinical governance and excellence programme and requires the incumbent to assume a role with an administrative emphasis in addition to a close working relationship with the CEO and COO.

For further information on these positions, please contact Faith O'Sullivan at [fosullivan@locumotion.com](mailto:fosullivan@locumotion.com) or on +353 1 299 3550.

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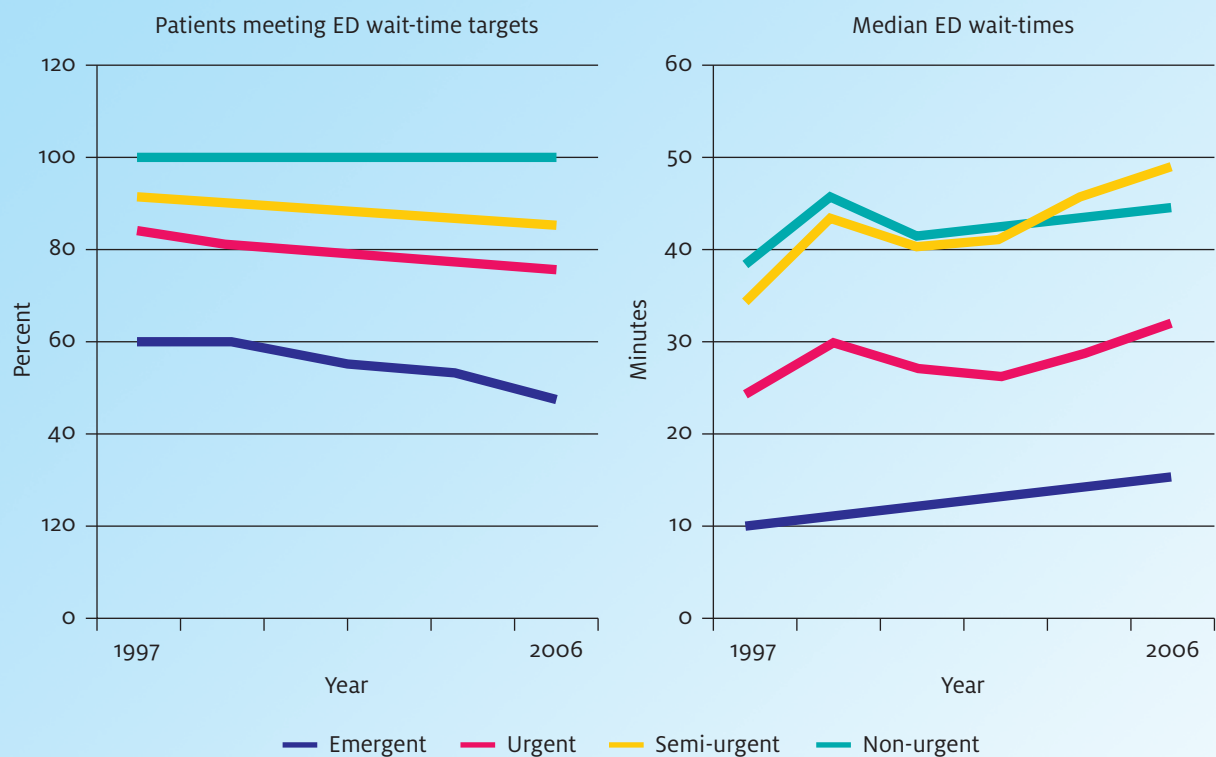
## DEVELOPING DATA

In each issue on this page, we report on research from or relevant to the emerging urgent care marketplace. And few things are more relevant to urgent care's role in the greater healthcare marketplace than wait times in various settings.

This may be especially true of the emergency department, as one of the more often heard take-home messages in urgent care promotion is shorter wait times versus a trip to the ED.

This begs the question, are ED wait times increasing, decreasing, or at a constant? For the answer, we look to a new study published last month in the *Archives of Internal Medicine*.

### ED WAIT TIMES



Source: Horwitz LI, Bradley EH. Percentage of U.S. Emergency Department Patients Seen within the Recommended Triage Time. *Arch Intern Med*. 2009;169(20):1857-1865.

"Wait time" was defined as the number of minutes between arrival in the ED and being seen by a physician. Targets established for each patient category were as follows:

- Emergent: 0 to 14 minutes
- Urgent: 15 to 60 minutes
- Semi-urgent: 61 minutes to 2 hours
- Non-urgent: 2 to 24 hours

If you are aware of new data that you've found useful in your practice, let us know via e-mail to [editor@jucm.com](mailto:editor@jucm.com). We'll share your discovery with your colleagues in an upcoming issue of *JUCM*.

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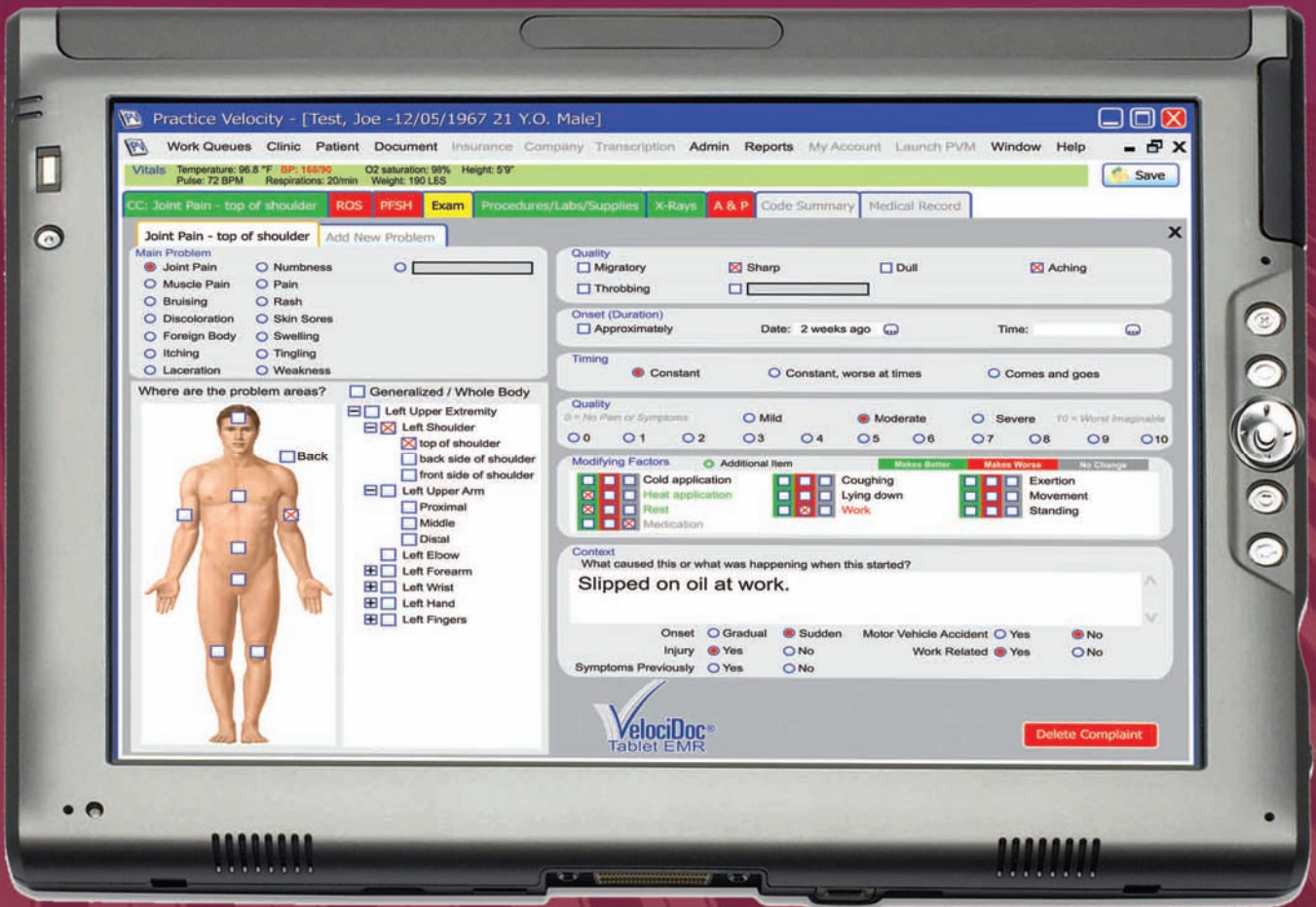
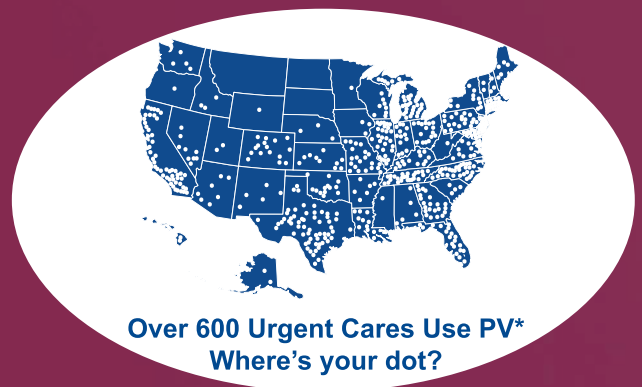
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## 2009/10 UCAOA PRACTICE MANAGEMENT WEBINAR SERIES SCHEDULE

October 15th at 1 p.m. (cst)	<b>Customer Service Scripting: Offering Warm Welcoming Service</b> <i>Patty Riskind, Patient Impact</i>
November 5th at 1 p.m. (cst)	<b>Considerations for Expanding or Relocating a Center</b> <i>Michael Zelnick, Equity Partners</i>
December 3rd at 12 p.m. (cst)	<b>Evaluating Media Purchases – TV, Newspaper, Radio</b> <i>Ira Bloomfield, Market Welby Urgent Care</i>
January 21st at 1 p.m. (cst)	<b>How to Motivate Urgent Care Staff to Deliver Exceptional Service</b> <i>Marty Martin, PhD, DePaul University</i>
February 18th at 1 p.m. (cst)	<b>Top Ten Urgent Care Coding Mistakes: Impact on Compliance and Revenue</b> <i>Dr. David Stern, Practice Velocity</i>
March 4th at 1 p.m. (cst)	<b>Integrating Urgent and Primary Care: Billing/ Service issues; Differentiating Models</b> <i>Jennifer Stephenson, PrimaCare Medical Centers</i>

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\* Map: Numbers per state are accurate, but specific locations not designated.



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