

# JUCM™

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## Assessing for Life-threatening Chest Pain

*in the Urgent Care Center*

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## LETTER FROM THE EDITOR-IN-CHIEF

# Funding Healthcare Reform: Tax Sugar, Not Success, Part II

*"Sugar, rum, and tobacco are commodities which are nowhere necessities of life, which are become objects of almost universal consumption, and which are therefore extremely proper subjects of taxation."*

– Adam Smith, *Wealth of Nations* (1776).



No one has more eloquently stated the case for carving out the so-called "unnecessaries" from the capitalist code of taxation than Adam Smith. Yet, more than 230 years after the publication of arguably the most authoritative text in defense of capitalism, we continue to struggle with the concept of taxation as a socialist plot.

Last month, I examined the so-called "success tax." I suggested that a tax on earned income was punitive, anti-productive, and especially harmful to professionals and small-business owners. I argued that the burden of paying for healthcare reform should not be unfairly levied on the shoulders of these two groups. So, if new taxes are necessary for funding the availability of health insurance for all, what form should they take, and who should carry the burden?

Well, taxes are inherently disincentives. It would be ludicrous to think otherwise. And while the behavioral impact of taxes may vary, their psychological impact is undeniable. Why not tax unproductive behavior? For that matter, one could label the aforementioned "unnecessaries" of life as counterproductive, and even more worthy of such disincentives.

We already tax rum and tobacco. Sugary drinks seem to be the next logical target: They are empty of any nutritional value, they are over-consumed, and they have a well-documented negative impact on public health and healthcare costs.

Taxing sugary drinks may just be the perfect tax; such a tax would help fund healthcare for all Americans, while decreasing the cost of care related to obesity.

Experts from the CDC, among other authorities on obesity, estimate that every 1 cent tax per 12 ounce can would generate \$1.5 billion per year and reduce consumption by 1%. A tax of 5 cents per 12 ounce can would raise \$75 billion over 10 years. And consider this: A tax of one penny per ounce would generate a whopping \$180 billion dollars, or nearly one quarter of the esti-

mated cost of healthcare reform.

One can hardly even call this a "tax." For decades, we have been subsidizing the beverage industry with cheap high-fructose corn syrup. In essence, we have encouraged consumption through artificially low prices. I am simply arguing for removal of that incentive. In reality, a tax on sugary drinks is really just a removal of the subsidy.

Some argue that a sugar tax will unfairly target the poor. Huh? Substance abuse disproportionately affects the poor; should we make illicit drugs and alcohol cheaper so as not to discriminate? This argument is, of course, preposterous. While soda pop is hardly illicit, it serves no purpose nutritionally, and has arguably contributed to an obesity epidemic with a burden that, just so happens, disproportionately affects the poor.

It, therefore, seems logical to deduce: If new taxes are necessary to fund healthcare for all, a sugar tax makes better sense than a success tax. So, how did the sugar tax die, while the income tax flourished? Ah, the politics of money!

The American Beverage Association, Coca-Cola and Pepsico collectively spent an average of \$32 million per year on lobbying efforts in 2009 and 2010 while healthcare reform was being debated. They averaged only \$2 million to \$3 million per year over the previous two decades. Coincidence?

Hidden behind straw advocacy groups like the Center for Consumer Freedom, the food and beverage industry has successfully bought influence at the grassroots level while lobbyists have blanketed the politicians. All the while, non-profit groups like and your very own American Academy of Family Physicians accept multi-million dollar "grants" from Coca-Cola and Pepsi. Sounds more like hush money to me!

And that, my friends, is just one more reason why the burden of healthcare reform will be carried on your backs. Your wallet gets lighter, while the nation fattens-up on Big Gulps! ■

Lee A. Resnick, MD  
Editor-in-Chief

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**CLINICAL**

# 11 Assessing for Life-threatening Chest Pain in the Urgent Care Center

“Chest pain” may mean one thing to a patient and quite another to a clinician. Similarly, this vexing complaint can indicate a fairly minor, self-limiting condition or a life-threatening event. Vigilance for the relevant signs and symptoms of each are essential to quick action and positive outcomes.

*By Jasmeet Singh Bhogal, MD*

**WEB EXCLUSIVE****Getting Paid: Ten Steps to Reducing Accounts Receivable**

Urgent care is carving out a unique clinical niche in the healthcare continuum. When it comes to billing, however, urgent care has as much in common with retail establishments as it does a primary care office. Find out why cash is the lifeblood of an urgent care business—and how to manage your receivables efficiently—in *Getting Paid: Ten Steps to Reducing Accounts Receivable*. Available exclusively at [www.jucm.com](http://www.jucm.com).

*By Alan A. Ayers, MBA, MACC*

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**IN THE NEXT ISSUE OF JUCM**

*Children's bones are different from adult bones. Orthopedic injuries in pediatric patients bear special consideration. With temperatures below freezing even in normally temperate environments this winter, urgent care centers may see an influx of such injuries sustained on the slopes, on the ice, or even on the walkway.*



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## Mission Statement

**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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The news that a patient in the waiting room came in complaining of chest pain could be enough to give the practitioner a little of the same.

How does this person experience “pain;” is it indigestion, a pulled muscle, or an indication of acute coronary syndrome? Or something less common? How long did they wait before deciding they needed to be seen today?

Though the ultimate diagnosis may not even be something you would have expected to see in urgent care a few years ago, the fact is that more and more patients are turning to this setting when they experience chest pain. Your clinical skills and experiences will be needed—and fast—in order to manage the patient toward a positive outcome, even if that means stabilizing him and getting him out the door bound for the emergency room as quickly as possible.

These are the questions and challenges addressed in *Assessing for Life-threatening Chest Pain in the Urgent Care Center* (page 11), by **Jasmeet Singh Bhogal, MD**.

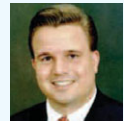


Dr. Bhogal is one of a handful of physicians participating in a trio of urgent care fellowship programs across the country. He is affiliated as such with University Hospitals in Cleveland, OH. (Other fellowship programs are being hosted at the University of Illinois College of Medicine at Rockford and the University of Nevada School of Medicine.)

Whether a patient presents with chest pain or a hangnail, of course, billing is sure to follow—ideally, with the expectation of receiving payment in a timely fashion. When it comes to waiting for that payment, time actually *is* money; the longer you wait for it, the less it’s actually worth when you factor in the cost of human resources, etc. Carrying a

high volume of receivables leaves the urgent care center in a perilous position.

In *Getting Paid: Ten Steps to Reducing Accounts Receivable*, available exclusively at [www.jucm.com](http://www.jucm.com), **Alan A. Ayers, MBA, MAcc** explains why cash is the lifeblood of the urgent care business and offers a plan for keeping *your* wait times (for payment) to a minimum.



Mr. Ayers is content advisor to the Urgent Care Association of America and vice president of Concentra Urgent Care in Dallas.

### Also in this issue:

**Nahum Kovalski, BSc, MDCM** reviews new abstracts on sports concussions, the wisdom of administering meningitis boosters, revised guidelines for cardiopulmonary resuscitation, adverse events from cough and cold medications after a market withdrawal of products labeled for infants, and dosing directions and measuring devices for nonprescription liquid medications for children.

**John Shufeldt, MD, JD, MBA, FACEP** takes a fanciful look at the case of *Management v. Leadership*, and how the verdict might affect your viability as a compliant and successful urgent care operator.

**Frank Leone, MBA, MPH** enters the new year with talk of how new media can support your urgent care occupational medicine marketing efforts.

If you’d like to contribute an article or case report, please describe it in an email to our editor-in-chief, **Lee A. Resnick, MD**, at [editor@jucm.com](mailto:editor@jucm.com). We’d like to share your perspective with your colleagues. ■

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

Manuscripts on clinical or practice management topics should be 2,600–3,200 words in length, plus tables, figures, pictures, and references. Articles that are longer than this will, in most cases, need to be cut during editing.

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## FROM THE EXECUTIVE DIRECTOR

# Not an Ostrich

■ LOU ELLEN HORWITZ, MA

If 2010 was the “year of the pilot project” in healthcare, it certainly doesn’t look like that’s going to be slowing down in 2011.

There are pilot projects for Accountable Care Organizations, Patient-centered Medical Homes, chronic care via telehealth, ER wait-time billboards, and recently, for ambulances to deliver low-acuity patients to urgent care instead of to the ED. (That last one is in Manitoba, but you can bet that some of the powers that be in the U.S. are watching it with interest.)

Early last year, I attended a small gathering at RAND in Washington, DC to observe a group of “thought leaders” discuss what healthcare reform would mean to retail health. The most interesting aspect of that meeting, to me, was that as the government is tossing ideas to and fro, the folks in the trenches are not sitting still waiting to see what will happen. They are experimenting. They are building bridges (or casting nets); they are making educated guesses and taking risks.

For an industry not widely known for embracing change, healthcare is looking strangely innovative lately. Rather than sticking its head in the sand, healthcare is building sandcastles. Healthcare is reaching out to the kid down the beach and saying “Hey, want to see if we can build a better castle together?”

Perhaps it’s because things feel so much in flux that leaders feel the freedom to experiment—or perhaps it is Mother Necessity giving them the urge. Regardless, it’s happening, and people outside of healthcare are also taking notice—especially of urgent care.

Even though urgent care is rarely mentioned in the DC-based discussions, and irritatingly absent from articles on how to deal with the pending influx of insured patients, do not think that we are still operating under the radar. This summer I added a special Outlook folder just to file emails from investors interested in the urgent care space. You’ve seen recent announcements and there will be more to come. If I had to make a prediction, I think



it would be safe to say that we are going to see a significant escalation of center growth in the coming 12-24 months.

Unfortunately, there’s also been a dark cloud forming. I am starting to hear from some of you that insurance companies are pulling back on their contract terms, ceasing payment on certain codes, not returning phone calls—ever—and other horror stories.

On the flip side, however, other centers’ arguments are falling on very fertile ground with insurance officials coming out to visit their centers to discuss urgent care’s role in their overall coverage plans.

While it’s the same mixed bag payor-to-payor and state-to-state it has always been, the negative trend is obviously somewhat alarming. It’s not like reimbursement was that extraordinary to begin with, so a downturn is not the future we want to see.

Conventional wisdom says that not much will happen in DC for the next several months, as the swapping of offices and staff and chairmanships sorts itself out. That doesn’t mean any of us will have our heads in the sand, though. At UCAOA, we are working on long-term plans to be able to make some national arguments, and in the short term I hope we are providing ways for you to connect with each other and share strategies for being successful.

We do that in the immediate term via UConnect (our online member community; you can access it through our home page, [www.ucaoa.org](http://www.ucaoa.org)) and again this spring for our annual “face to face,” this time in Chicago.

We hope to see you there. In the meantime, keep in touch. ■

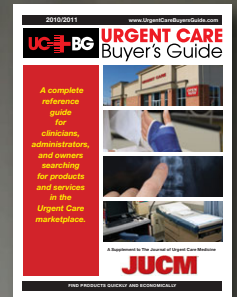


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# Assessing for Life-threatening Chest Pain in the Urgent Care Center

**Urgent message:** Data show that urgent care centers are becoming a more common destination for patients experiencing chest pain. Immediate recognition of emergent vs. urgent causes may be the make-or-break moment for the patient's outcome.

Jasmeet Singh Bhogal, MD

### Introduction

Evaluation of chest pain always presents as a diagnostic challenge, be it in the outpatient family medicine setting or the hospital emergency department.

In fact, urgent care centers occupy a unique position in the equation; while most urgent cares usually do not have the high-end services of an emergency department that can offer serum troponin levels, areas for monitoring of patients over a period of time, etc., they may have electrocardiograms, the ability to do basic blood work, and other services that set them apart from a typical family practice office.

Despite the availability of emergency medical services in most areas, urgent care centers are seeing more and more adult patients with chest pain.<sup>1</sup> Many are high-acuity cas-

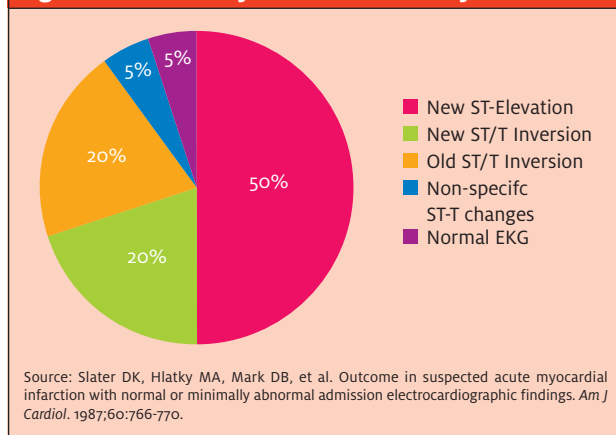
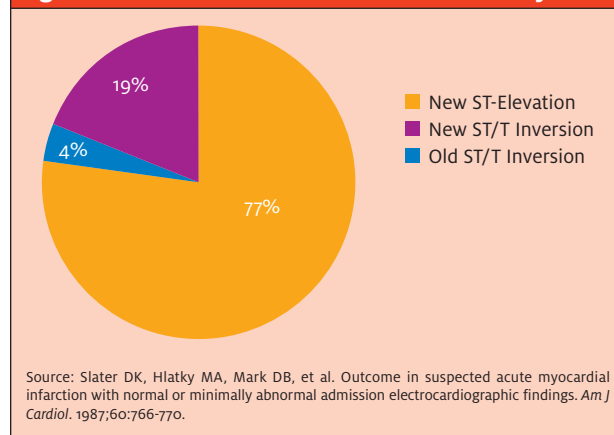


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es who require emergent attention, in spite of the fact that they may be in urgent care hoping to get a “quick-fix” for their chest pain so they can go on with their activities without being admitted to the hospital.

Given this, it is all the more important for urgent care providers to be familiar with and to constantly remind themselves of the common emergent and urgent causes of chest pain. Patients need to be evaluated with the resources we have available and then triaged in a timely manner to the appropriate level of care.

This article will focus on the diagnostic evaluation of the emergent causes of chest pain, and the principles that may help in the development of chest pain protocols at the urgent care level.

**Figure 1. Sensitivity of EKG to Identify AMI.****Figure 2. Predictive value of an EKG to identify AMI.**

### Acute Coronary Syndrome

Despite considerable progress, heart disease is still the leading cause of death in the United States.<sup>2</sup> In fact, the fear of heart attack is probably the most common reason for patients to go to a medical facility to get evaluated for chest pain.

The diagnostic approach to chest pain starts with the basic history and physical examination. A retrosternal chest pain that is episodic, lasting <10 minutes and provoked by exertion usually represents typical exertional angina.<sup>3</sup>

On the other hand, a similar pain that is present at rest and not related to exertion may represent atypical angina.<sup>3</sup>

Any change in the character of an already existing pain may represent unstable angina, and may put the patient at a high risk of acute myocardial infarction (AMI) and death.<sup>3</sup>

Certain characteristics of chest pain that increase the likelihood of AMI include, in decreasing order of likelihood ratio: radiation to right arm or shoulder; radiation to both arms or shoulders; associated with exertion; radiation to left arm; associated with diaphoresis; associated with nausea or vomiting; worse than previous angina or similar to previous MI; described as pressure.<sup>4</sup>

Characteristics that decrease the likelihood of AMI include: pain described as pleuritic, positional, or sharp; pain that is reproducible with palpation; inframammary location; not associated with exertion.<sup>4</sup>

### Diagnosis

It is important to note that although certain elements of the chest pain history are associated with increased or decreased likelihoods of a diagnosis of acute coronary syndrome (ACS) or AMI, none of them alone or in combination identifies a group of patients that can be discharged

safely without further diagnostic testing.<sup>4</sup>

The response to the administration of nitroglycerin is often used by physicians to differentiate whether chest pain is cardiac or non-cardiac in nature.<sup>5</sup> However, there is evidence suggesting that neither a response nor lack of response to nitroglycerin predicts active coronary artery disease in patients presenting to an ED with chest pain (LOE=2b).<sup>5</sup> Another consideration is the fact that certain other disorders (e.g., esophageal spasm) respond to nitroglycerin.

The EKG is also a very important diagnostic tool in the evaluation of chest pain. Although new abnormalities in the ST-segment and t-waves represent myocardial ischemia, the EKG may be normal or non-specific in patients with either ischemia or infarction. The sensitivity and the positive predictive value of an EKG to identify AMI are shown in the **Figure 1** and **Figure 2**.

Many urgent care centers now incorporate the use of serum troponin level in the evaluation of chest pain. Among patients with non-ST elevation ACS, the short-term odds of death are increased three- to eightfold for those with an abnormal troponin test.<sup>6</sup>

Bedside tests for cardiac-specific troponins are highly sensitive for early detection of myocardial-cell injury in ACS. Negative tests are associated with low risk.<sup>7</sup> Elevated levels of troponin I (i.e., >1 ng per ml, though reference ranges may vary according to the brand of reagent/testing equipment) at least six hours from presentation support the diagnosis of MI or ACS and increase the likelihood of death or recurrent MI within 30 days.<sup>8</sup>

Normal level of troponin I between six and 72 hours after the onset of chest pain is strong evidence against ACS and MI, particularly if the EKG is normal.<sup>8</sup>



### Risk scores

Once that information is available, the next step is to evaluate all these findings in order to stratify risk for the patient and henceforth determine appropriate triage.

Various risk scores have been developed to facilitate this. Examples include the Agency for Healthcare Policy and Research Risk Prediction Model, Rush Risk Prediction Model, Goldman Chest Pain Protocol, and the Acute Coronary Ischemia Time-Insensitive Predictive Instrument. The most commonly used, however, is the TIMI Risk Score (**Table 1**). It uses seven variables at presentation, which are independently predictive of outcome in patients with unstable angina or non ST-elevation MI (NSTEMI). A value of 1 is assigned for each factor present (0 if it is absent).

The combination of the findings on the EKG, troponin levels, and TIMI risk score can provide a very good tool for evaluation of ACS in urgent care centers. Based on this evaluation, the physician may make informed decisions on giving the patient aspirin, oxygen, and nitro-

glycerin.

The physician may also decide on the appropriate means of transferring the patient at this time (e.g., 911 versus regular ambulance).

Finally, this evaluation may also help the physician give the accepting ED a more detailed summary and help expedite further management of the patient once he or she is in the ED.

### Aortic Dissection

Data defining the incidence of aortic dissection are limited. Estimates range from 2.6 to 3.6 per 100,000 person-years.<sup>9</sup> Although not very common, it is a catastrophic illness, typically presenting in the elder population (usually >60 years old), with males being affected more than females (two thirds of patients are male).<sup>10</sup>

Chest pain is typically the most common presenting symptom. It is described as sharp, or tearing (approximately 50% of patients) in character. It may be located in the posterior chest or back if the dissection is distal to the



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**Table 1. TIMI Risk Score**

Add one point for each of the following characteristics present:

- Age  $\geq 65$  years
- At least three risk factors for coronary artery disease (hypertension, diabetes, hyperlipidemia, smoking, or positive family history of early MI)
- Significant coronary stenosis of  $\geq 50\%$
- Presence of ST segment deviation on admission EKG
- At least two anginal episodes in prior 24 hours
- Elevated serum cardiac markers
- Use of aspirin in last seven days (which is probably a marker for more severe coronary disease)

| Score | Risk         |
|-------|--------------|
| 0-1   | Low          |
| 2-3   | Intermediate |
| 4-7   | High         |

Source: Antman EM, Cohen M, Bernink PJLM, et al. The TIMI risk score for unstable angina/non-ST elevation MI: A method for prognostication and therapeutic decision making. *JAMA*. 2000;284(7):835-842.

**Table 2. Modified Well's Criteria**

|                                 |   |   |
|---------------------------------|---|---|
| <b>Point values of criteria</b> | Clinical Symptoms of DVT (leg swelling, pain with palpation)          | 3.0   |
|                                 | Other diagnosis less likely than pulmonary embolism                   | 3.0   |
|                                 | Heart rate $>100$ beats per minute                                    | 1.5   |
|                                 | Immobilization ( $\geq 3$ days) or surgery in the previous four weeks | 1.5   |
|                                 | Previous DVT/PE   | 1.5   |
|                                 | Hemoptysis  | 1.0   |
|                                 | Malignancy  | 1.0   |
| <b>Probability</b>              | <i>Traditional simplified probabilities</i>                           | <i>Score</i>                                  |
|                                 | Clinical probability—traditional                                      | High $>6.0$<br>Moderate 2.0–6.0<br>Low $<2.0$ |
|                                 | Clinical probability—simplified PE Likely                             | $>4.0$<br>PE Unlikely $\leq 4.0$              |

Sources: Wells PS, Anderson DR, Rodger M, et al. Derivation of a simple clinical model to categorize patients probability of pulmonary embolism: increasing the models utility with the SimpliRED D-dimer. *Thromb Haemost*. 2000;83(3):416-420. Writing Group for Christopher Study Investigators. Effectiveness of managing suspected pulmonary embolism using an algorithm combining clinical probability, D-dimer testing, and computed tomography. *JAMA*. 2006;295(2):172-179.

left subclavian artery, or it may be anterior chest pain if the dissection is in the ascending aorta.

Syncope is another important symptom of aortic dissection that may be present in 10% to 12% of patients.<sup>11</sup> Patients may often present with an initial syncopal episode, followed by regaining of consciousness, and complain of severe abdominal or back pain. Syncope is associated with a worse prognosis.<sup>11</sup>

Chest pain as a symptom is more common in patients with dissections of the ascending aorta, while back and abdominal pain is common in all other dissections.<sup>10</sup>

Aortic dissection can also be painless, but this is relatively uncommon.

Physical examination may reveal a pulse deficit in the carotid, brachial, or femoral pulse. A variation of  $>20$  mm Hg in the systolic blood pressures of both arms may be associated with dissection of the ascending aorta. The patient may also show signs of hypotension or shock.

The most important predisposing factor in the elderly that may be evident on further evaluation is the presence of systemic hypertension (72% of patients). Atherosclerosis is another risk factor, present in approximately 31% of patients.<sup>10</sup>

Specific risk factors that may predispose younger people to aortic dissection include: pre-existing aortic aneurysm, inflammatory diseases causing vasculitis (e.g., giant cell arteritis, Takayasu's arteritis, rheumatoid arthritis, syphilitic aortitis), disorders of collagen (e.g., Marfan's syndrome, Ehlers-Danlos syndrome, annuloaortic ectasia), a positive family history, bicuspid aortic valve, aortic coarctation, and Turner syndrome.

Other predisposing factors include previous aortic valve replacement, cardiac catheterization, use of crack cocaine, and high-intensity strenuous resistance training. Coronary artery bypass graft and trauma are rare causes of aortic dissection.

### Diagnosis

The diagnosis of aortic dissection is usually made on the basis of history and physical exam findings, especially in an urgent care center.

EKG usually adds little to the evaluation, though it may be used to differentiate from a myocardial infarction. In aortic dissection, the EKG may be normal, show non-specific ST-T changes (LVH associated with hypertension), or show ischemic or acute MI in a minority of patients.<sup>10</sup>

Routine blood work is non-diagnostic in aortic dissection.

The following is a useful tool that can be used as a clin-

**Table 3. PERC Rules**

- Age <50 years
- Heart <100 bpm
- Oxyhemoglobin saturation  $\geq 95\%$
- No hemoptysis
- No estrogen use
- No prior DVT or PE
- No unilateral leg swelling
- No surgery or trauma requiring hospitalization within the past four weeks

ical model for predicting acute aortic dissection:<sup>12</sup>

- Abrupt onset of thoracic or abdominal pain with a sharp, tearing and/or ripping character
- Mediastinal and/or aortic widening on chest radiograph
- A variation in pulse (absence of a proximal extremity or carotid pulse) and/or blood pressure (>20 mm Hg difference between the right and left arm).

Incidence of dissection varies according to the combination of these factors present in a given patient. If all three are absent, incidence has been found to be 7%; if just pain is present, 31%; just chest x-ray abnormalities, 39%; variation in pulse or blood pressure differential, 83%. Incidence if any two out of the three are present is also 83%.

In practice, there may be not enough time for the patient to even undergo a chest x-ray or other diagnostic studies if there are signs of hemodynamic instability or if the suspicion of an aortic dissection is high based on the history and examination findings. Management of airway, breathing, and circulation (ABCs) may take precedence over any further diagnostic evaluation, and the patient will need to be transferred to the ED or the ICU (based on availability) using means such as 911.

It is advisable to have a high index of suspicion for an aortic dissection in patients with chest pain, as these patients may become unstable very quickly and may need interventions such as intubation and ventilation.

### Pulmonary Embolism

Pulmonary embolism (PE) is and has always been one of the most challenging diagnoses to make, no matter what the setting. Urgent care centers are no exception to this.

PE is a common cause of chest pain and can be fatal if not treated promptly. EKG and chest x-ray can aid in the diagnosis of acute PE. However, most urgent care centers do not have access to ultrasound, V/Q scan or

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**Table 4. Etiologies and Symptoms of Various Types of Tamponade**

| Tamponade  | Etiology  | Clinical features  |
|--|---|--|
| Acute<br>(Life-threatening if not treated early) | <ul style="list-style-type: none"> <li>• Trauma</li> <li>• Ruptured heart or aorta</li> <li>• Complication of invasive diagnostic/therapeutic intervention</li> </ul> | <ul style="list-style-type: none"> <li>• Sudden onset chest pain, tachypnea, dyspnea</li> <li>• Elevated jugular venous pressure</li> <li>• Venous distention in forehead and scalp</li> <li>• Muffled heart sounds</li> </ul> |
| Sub-acute  | <ul style="list-style-type: none"> <li>• Neoplasm</li> <li>• Uremia</li> <li>• Idiopathic pericarditis</li> </ul>   | Initially asymptomatic, followed by: <ul style="list-style-type: none"> <li>• Dyspnea</li> <li>• Chest discomfort/pressure</li> <li>• Peripheral edema</li> <li>• Easy fatigability</li> </ul>                                 |
| Low pressure                                     | Severe hypovolemia secondary to: <ul style="list-style-type: none"> <li>• traumatic hemorrhage</li> <li>• hemodialysis</li> <li>• overdiuresis</li> </ul>             | Any of the above findings, but much less common  |
| Regional   | <ul style="list-style-type: none"> <li>• After pericardiotomy</li> <li>• After myocardial infarction</li> </ul>   | Typical findings usually absent. Needs very high index of suspicion  |

Adapted from [http://www.utdol.com/online/content/topic.do?topicKey=myoperic/133800&selectedTitle=1%7Et26&source=search\\_result](http://www.utdol.com/online/content/topic.do?topicKey=myoperic/133800&selectedTitle=1%7Et26&source=search_result)

CT-angiography; these are required to confirm the diagnosis of PE.

### Diagnosis

Factors that make diagnosing PE difficult in the urgent care setting include:

- non-specific presentation. The symptoms and signs may mimic other disorders. There is no specific pattern with which a patient presents.
- non-specific routine lab findings, including pulse oximetry, WBC, ESR, arterial blood gas, BNP, and troponin. Serum troponin elevations may be useful to determine prognosis, as they are associated with adverse outcomes.<sup>13</sup>

Given the non-specific symptoms and signs that a patient with PE can present with, physicians should rely on pretest clinical probability criteria and, if necessary, pursue tests like EKG and chest x-ray in a more focused fashion. This is important to note, as even the chest x-ray and EKG do not have specific diagnostic findings that confirm acute PE.

The most commonly used scoring system is Well's criteria. The interpretation of the score can be done using either the original Well's criteria or the modified Well's

criteria (**Table 2**). Each can be helpful in deciding the course of action for patients with suspected PE.

The PERC (**PE Rule-out Criteria**) (**Table 3**) is also useful in ruling out PE in patient populations presumed to have a low-risk of PE. When combined with Well's criteria, the PERC has a high sensitivity and negative predictive value.<sup>14</sup> It can essentially exclude acute PE and prevent further testing if all the criteria in the PERC rule are met, along with a low probability on the Well's criteria.<sup>14</sup> The PERC criteria, however, has a low specificity and positive predictive value.<sup>14</sup>

Once it is decided that further investigation needs to be done, physicians may decide on which tests to perform based on the condition of the patient and the availability of the test.

The classic EKG findings of S1Q3T3, right ventricular strain, and new incomplete right bundle

branch block are seen in patients with massive acute PE and cor pulmonale.<sup>15-17</sup> Findings associated with poor prognosis include:<sup>15-17</sup>

- atrial arrhythmias
- right bundle branch block
- inferior Q-waves
- precordial T- wave inversion and ST-segment changes.

Although certain chest x-ray findings are common in PE, they are not diagnostic.<sup>18,19</sup> Such findings include atelectasis, parenchymal abnormality, and pleural effusion. Published reports of the proportion of patients with PE who have normal x-rays range from 12% to 24%.<sup>18-20</sup>

The D-dimer is another test that may help in excluding PE but has little value in diagnosing PE. In patients with low or moderate pretest probability of PE, a D-dimer level <500 ng/ml by quantitative ELISA or semi-quantitative latex agglutination excludes PE.<sup>21</sup>

The usefulness of this test depends on the pretest probability and the type of assay performed.<sup>21</sup> It should not be used to exclude PE in patient with high clinical probability.<sup>21</sup>

The diagnostic test of choice for diagnosing PE is pulmonary angiography. Where available, a CT-chest may

be performed to confirm the diagnosis of PE. If not available, then a V/Q scan or lower extremity venous ultrasound may be performed, again based on availability. If neither of these tests is available, then the patient may need transfer to a facility where the tests are available and the patient can be treated appropriately. The patient may also need transfer if the V/Q scan or lower extremity venous ultrasound is inconclusive, but the suspicion for PE is high.

### Pericardial Tamponade

Based on the etiology, pericardial tamponade can present in the form of a patient with mild symptoms with no hemodynamic compromise, to a patient in severe distress and hemodynamic instability, requiring resuscitation measures. The presentation may vary from that of chest pain, to signs of overt cardiogenic shock like peripheral cyanosis and cool extremities. Clinical features at presentation may vary based on the acuteness of symptoms (**Table 4**).

Physical examination findings that may be found in any of these types of tamponade include: sinus tachycardia, elevated jugular venous pressure, pulsus paradoxus, pericardial rub, and Kussmaul's sign (usually associated with constriction).

EKG may reveal a sinus tachycardia and low voltage. A maximum QRS amplitude of  $<0.5\text{mV}$  in the limb leads may be a specific finding of pericardial tamponade.<sup>22</sup> A chest x-ray may show enlarged cardiac silhouette if 200 ml of fluid has accumulated in the pericardial space.<sup>23</sup> The patient may need further investigation such as an ECHO and CT chest, which may be beyond the scope of urgent care.

Almost all patients with a suspected tamponade will need transfer to the ED or the ICU in consultation with the ED physician or the cardiologist, as available. Patients in hemodynamic compromise may need emergent attention to the ABCs along with expedited transfer to the ED. Again, it is important to keep a high index of suspicion for tamponade in patients presenting with the signs and symptoms as described above.

### Tension Pneumothorax

While presentation to the urgent care center may be rarer than in the ED, the urgent care clinician should nonetheless be prepared for patients presenting with chest pain and severe distress that may ultimately be indicative of tension pneumothorax.

A history of blunt chest injury or a small penetrating wound may be elicited. Patients usually are in respiratory distress. Physical exam findings may reveal tachypnea, hypoxia, hyperresonance to percussion, and decreased or absent breath sounds on the affected side.

The crucial factor to bear in mind while evaluating such patients is that the diagnosis of tension pneumothorax is clinical; once confirmed based on the history and physical exam, immediate treatment without waiting for the chest x-ray is necessary if the patient is unstable.

For a stable patient, diagnosis is confirmed using chest x-ray. It should be noted that tension pneumothorax is almost always unstable, and diagnosis should be made long before an x-ray is taken.

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Tension pneumothorax may be one of the rare occurrences in which emergent intervention is needed in the urgent care center (as opposed to waiting for emergency transfer to a higher acuity facility). In such a case, a needle thoracostomy may be the only available option. This involves putting a large bore (16 gauge) needle in the second intercostal space in the midclavicular line in order to convert a tension pneumothorax into a simple pneumothorax. Leave the needle in place until a definite chest tube is put in.

### Esophageal Rupture

Esophageal rupture is a relatively rare cause of chest pain; however, it can be fatal if missed. Again, its presentation may be somewhat less common in urgent care compared with the ED due to the degree of hyperemesis involved. In addition, causative penetrating trauma of this nature typically goes directly to the ED.

Patients with esophageal rupture present with retrosternal chest pain or upper abdominal pain, typically after an episode of severe retching and vomiting. This vomiting could be induced by caustic ingestion, alcohol ingestion, blunt or penetrating chest trauma, esophagitis secondary to pill ingestion, Barrett's ulcer, or infectious ulcers in patients with AIDS, among other causes. Instrumentation of the esophagus can also lead to esophageal rupture.

Other findings may include odynophagia, fever, respiratory distress, cyanosis, and subcutaneous emphysema (not very sensitive).<sup>23</sup> If transport is delayed and the patient is stable, a chest x-ray may be performed, which will reveal free air in the mediastinum or peritoneum.<sup>24</sup> A neck film may demonstrate air in soft tissues of the prevertebral space.

Patients can go into shock rapidly; therefore, while securing the ABCs, emergent transfer of the patient to the ED via 911 may be the only option for appropriately triaging. There may be no time to perform any x-ray studies in the urgent care center. The patient will eventually need a CT-chest and further evaluation and monitoring in the ED.

### Conclusion

The challenge of assessing chest pain in the urgent care settings is often a difficult one. Relatively limited resources make the task even tougher, typically.

Initial evaluation should always include an assessment and stabilization of the airway, breathing, and circulation.

Emergent causes, as described previously, should be considered first; further evaluation and management should be conducted as needed. Available resources should be used judiciously, and in a timely fashion.

It is often difficult to make people understand the seriousness of the situation when dealing with chest pain in the urgent care center. It is important to always keep the patients informed about the reasons for various tests and the possibility that they might need to be transferred to a higher level of care if the need arises.

With more and more urgent care centers opening up, the number of patients presenting to this setting with chest pain is bound to increase. As urgent care providers, we must be well prepared to evaluate and provide these patients with timely and appropriate care. ■

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FIGURE 1



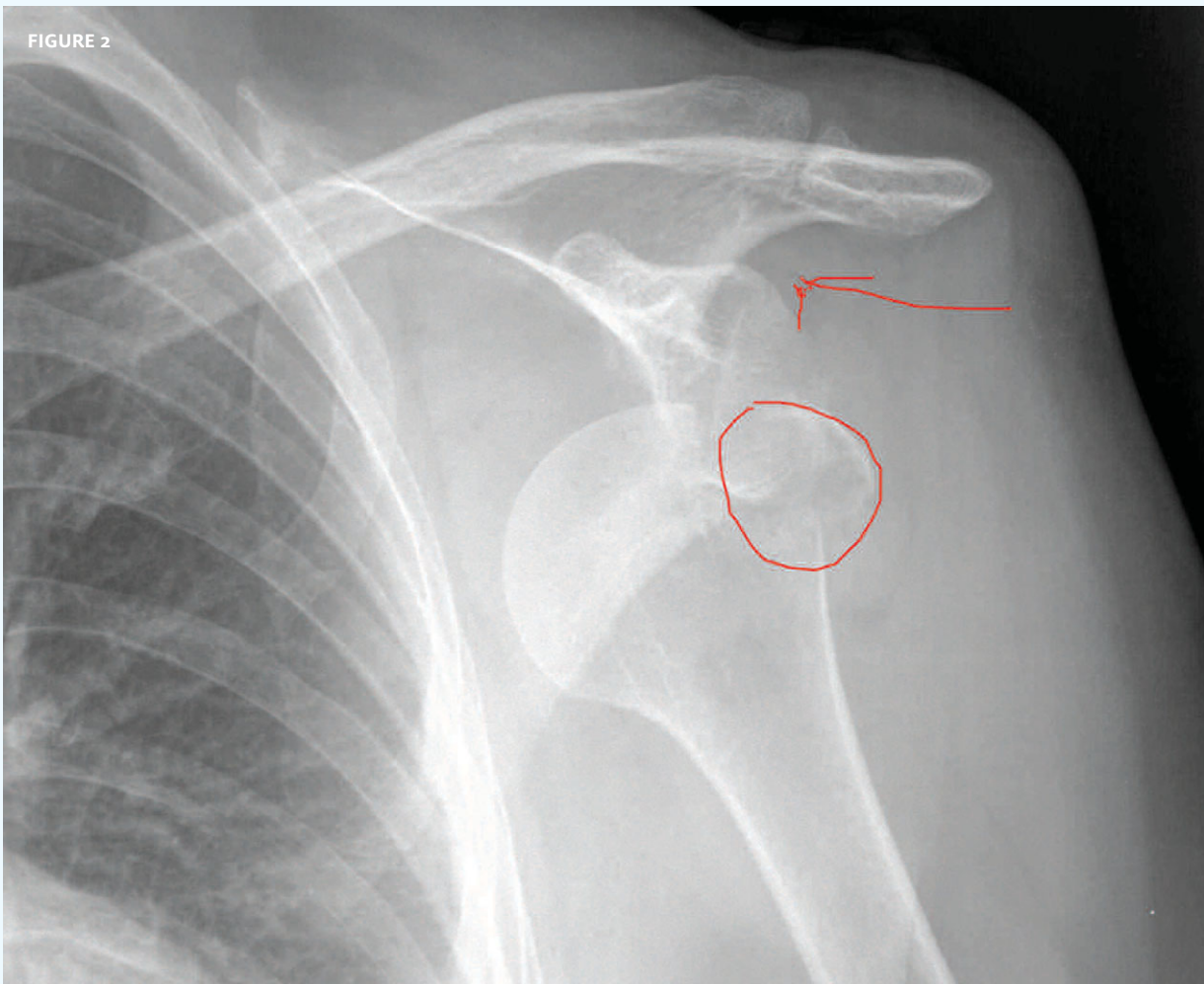
The patient is a 64-year-old man who presents with pain in his left shoulder after experiencing a fall in which the shoulder took the brunt of the blow. He is otherwise healthy.

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

FIGURE 2



Dislocation of the head of the humerus is evident, but there is also a fracture.

This is one of the reasons it is so important to get a pre-reduction film, even in classical dislocation. Fractures can complicate reductions, as they can “catch” on surrounding anatomy.

Suspicion for fracture should be raised by the age of the patient, combined with the mechanism of injury. Where younger patients may be more prone to dislocation resulting from a fall on the outstretched arm, older patients are prone to fracture (with or without dislocation).

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

*This case is one of hundreds that can be found in Terem's online X-ray Teaching File, with more being added daily. Free access to the file is available at <https://www2.teremi.com/xrayteach/>. A no-cost, brief registration is required.*

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## ABSTRACTS IN URGENT CARE

# On Sports Concussions, Meningitis Boosters, CPR Guidelines, and Infant/Pediatric Medications and Dosing

■ 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.

### Position Statement on Sports Concussions

**Key point:** Sports are second only to motor vehicle accidents as the leading cause of traumatic brain injury among 15- to 24-year-olds. Citation: AAN Sports Neurology Section, Practice Committee, and Board of Directors. Position statement on sports concussion. October 2010 (AAN Policy 2010-36).

Concussion is a common consequence of trauma to the head in contact sports, estimated by the Centers for Disease Control and Prevention to occur 3 million times in the United States each year. Among people aged 15 to 24 years, sports are now second only to motor vehicle accidents as the leading cause of traumatic brain injury.

While the majority of concussions are self-limited injuries, catastrophic results can occur and the long-term effects of multiple concussions are unknown.

Members of the American Academy of Neurology (AAN), which advocates for policy measures that promote high-quality, safe care of individuals participating in contact sports, specialize in treating disorders of the brain and nervous system. Some members have particular interest and experience caring for athletes and are best qualified to develop and disseminate guidelines for managing athletes with sports-related concussion.



Nahum Kovalski is an urgent care practitioner and assistant medical director/CIO at Terem Emergency Medical Centers in Jerusalem, Israel. He also sits on the JUCM Editorial Board.



Based on the clinical experience of these experts, the AAN supports the implementation of policy that supports the following recommendations:

1. Any athlete who is suspected to have suffered a concussion should be removed from participation until he or she is evaluated by a physician with training in the evaluation and management of sports concussions.
2. No athlete should be allowed to participate in sports if he or she is still experiencing symptoms from a concussion.
3. Following a concussion, a neurologist or physician with proper training should be consulted prior to clearing the athlete for return to participation.
4. A certified athletic trainer should be present at all sport-

ing events, including practices, where athletes are at risk for concussion.

5. Education efforts should be maximized to improve the understanding of concussion by all athletes, parents, and coaches. ■

## ACIP Recommends Meningitis Booster for Teens, Pertussis Booster for Adults

**Key point:** *The CDC's Advisory Committee on Immunization Practices has recommended that teens receive an additional shot of the meningitis vaccine at age 16 and that those between 11 and 64 receive a pertussis booster.*

**Citation:** ACIP recommends meningitis booster for teens, pertussis booster for adults. *Physician's First Watch*. October 28, 2010. Available at: <http://firstwatch.jwatch.org/cgi/content/full/2010/1028/1>.

The meningitis vaccine, which was thought to have been effective for 10 years, is only effective for five years. In a close vote, the ACIP recommended giving the additional shot, rather than moving the age at first vaccination to 14 or 15 from the currently recommended age of 11 or 12.

The committee also recommended that people aged 11 to 64—as well as people >65-years-old who are regularly around infants—receive a booster vaccine for diphtheria, tetanus, and pertussis because of an outbreak of nearly 6,300 pertussis cases in California.

Pertussis is also on the rise elsewhere in the nation. Previously, older adults were not in the target group for vaccination. ■

## Revised Guidelines: Cardiopulmonary Resuscitation and Emergency Cardiovascular Care

**Key point:** *Compressions are key and respirations not even recommended for standers-by.*

**Citation:** Field JM, Hazinski MF, Sayre MR, et al. Part 1: Executive summary: 2010 American Heart Association guidelines for cardiopulmonary resuscitation and emergency cardiovascular care. *Circulation*. 2010;122(18 Suppl 3):S640-656.

The American Heart Association has updated its 2005 guidelines on cardiopulmonary resuscitation and emergency cardiac care. For CPR, the guidelines newly emphasize chest compressions because of their importance for survival.

Among the changes, published in *Circulation*:

- The order of CPR is now C-A-B (compressions, airway, breathing) instead of A-B-C for everyone except newborns. The first cycle should include 30 compressions before rescue breaths.
- “Look, listen, and feel” is no longer recommended.
- Compressions for adults should be ≥2 inches (instead of up to) and performed at a rate of ≥100 per minute.

- Untrained bystanders should perform compression-only CPR (previous guidelines did not address untrained bystanders separately).
- Emergency cardiac treatments that are no longer recommended include:
  - routine atropine for pulseless electrical activity/asystole
  - cricoid pressure (with CPR)
  - airway suctioning for all newborns (exception for those with obvious obstruction).
- New sections address post-arrest care, care for children with cardiac arrest and specific congenital heart defects, and follow-up for children or young adults with sudden, unexplained cardiac death.
- The major change in CPR is the order of recommended maneuvers, from A-B-C to C-A-B. Consequently, “Look, listen, and feel” for breathing before beginning chest compressions has been removed from the algorithm.
- Controversy remains about delaying defibrillation to administer CPR. In early studies, survival improved when patients in cardiac arrest longer than five minutes received CPR before defibrillation. However, subsequent randomized trials showed no benefit of pre-shock CPR. In practice, compressions are generally administered before a shock because of the time required to locate, retrieve, and set up an AED.
- Transcutaneous pacing for bradycardia has not proven to be as beneficial as was hoped, and the new guidelines circumscribe its use. Atropine remains the first-line therapy for bradycardia.
- Adenosine is now considered reasonable for diagnosis and treatment of wide-complex tachycardias that are regular and monomorphic.
- Pharmacologic therapy for cardiac arrest has been deemphasized. In retrospective studies and randomized trials, epinephrine, vasopressin, and amiodarone all failed to improve survival to hospital discharge when administered in the field. Focus on chest compressions and prompt defibrillation.
- Hypothermia should now be induced in most patients who are comatose after cardiac arrest.

[Published in *J Watch Cardiol*, December 1, 2010—Mark S. Link, MD.] ■

## Adverse Events from Cough and Cold Medications After a Market Withdrawal of Products Labeled for Infants

**Key point:** *Adverse effects from cough and cold medication related adverse events involving children <2 years of age were less than one-half of those in the pre-withdrawal period.*

*Continued on page 28*



# Management v. Leadership, 558 U.S. 461 (2010)

■ JOHN SHUFELDT, MD, JD, MBA, FACEP

Recently, I had the amazing opportunity to be admitted to the Bar of the United States Supreme Court, which simply means that I could conceivably argue cases in front of the Court. After being sworn in by Chief Justice Roberts, our group of newly admitted attorneys was privileged to have front-row seats to hear two landmark cases, the second of which I will share with you in detail.

The first case was 09-751, *Snyder v. Phelps*. I am sure you have heard about the Westboro Baptist Church (WBC) in Topeka, KS, whose members protest at funerals of fallen soldiers (and, recently, Elizabeth Edwards), holding signs saying “Thank God for Dead Soldiers.”

Based upon what I heard during the arguments, their logic is basically, “God is punishing the U.S. by allowing our young soldiers to die in battle because of the United State’s ‘tolerance’ of homosexuality.”

Their incredibly controversial leader, Fred Phelps, and two of his daughters were initially found liable in 2007 for invasion of privacy and intentional infliction of emotional distress for picketing the funeral of Marine Lance Corporal Matthew Snyder, who died in combat in Iraq on March 3, 2006.

In 2007, a federal jury awarded the Snyders a total of \$10.9 million. The WBC said it wouldn’t change its message because of the verdict. This verdict was later reduced, and then overturned in federal appeals court which ruled in favor of Phelps and WBC, stating that their picketing near the funeral of LCpl Snyder is protected speech and did not violate the privacy of the service member’s family. The Supreme Court granted Certiorari, and the arguments were heard on the day I happened to be in court.



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Although the thought of this church and their message sickens me, I could not help but be proud to be an American watching this tiny, detestable church get its day in the highest court of the country. The Court has not yet published its decision.

Now, for the second case, which speaks to a challenge endemic to any business in which it’s necessary to get others to carry out tasks for the benefit of the concern. (Please forgive my marginal stenographic abilities; I tried to keep up the best I could, but it’s possible this may not represent the record verbatim.)

CHIEF JUSTICE ROBERTS: We’ll hear arguments in the second case today. 558 U.S. 461, *Management v. Leadership*.

### Oral Argument of Anthony Verge

ON BEHALF OF THE PETITIONER, MR. VERGE: Mr. Chief Justice, and may it please the Court, we are talking about professional management in this case. It is really as simple as this: One of the key characteristics of being a manager is the very basic notion that a person derives their status and power by their title and nature of the role. What can be simpler?

JUSTICE SCALIA: Do you mean that a manager is only a manager because of their title?

MR. VERGE: No. Well, basically yes. What else is there? Someone is hired as manager to manage the operation. Usually this person was a high performer as an employee of another company in the same or similar space.

JUSTICE SCALIA: Right. I get that but when someone is called a “professional manager” does that mean they were simply a previously successful employee? Don’t answer that yet. So, let me give you a hypothetical: Suppose someone is good at identifying and integrating acquisitions. By being good at that skill set, does it mean they will be a successful man-



ager? Basically, from your brief it sounds like a manager is promoted up the ladder until they reach their level of incompetence.

MR. VERGE: As the district court explained, and the circuit court followed their logic, the manager focuses on systems and structure, the leader focuses on people. That's...

JUSTICE SCALIA: That's fine, but it...it does not answer the basic question. Why would anyone hire a manager? I thought that a manager simply administers while a leader innovates. The manager maintains, the leader develops, isn't that what the lower court wrote?

MR. VERGE: Well, the...

JUSTICE GINSBURG: I have always believed that management is getting work done through others. Leadership is taking people where they haven't been but need to go.

MR. VERGE: Well, I understand that but making others do the heavy lifting is part of being a manager. I mean, if you can't lead through fear of someone losing their job, what good is the title?

JUSTICE SCALIA: So at the end of the day, the manager demands respect because of their title?

MR. VERGE: I think that sums it up, well...

JUSTICE SCALIA: Yes or no?

MR. VERGE: I would say yes, fear of losing your job is a great motivator.

JUSTICE KAGAN: Do you agree with the statement, "A leader commands respect and a manager demands respect?"

MR. VERGE: That could be correct, Justice Kagan. A leader earns respect by taking more than their share of the blame and less than their share of the credit. A manager takes the credit and dodges the blame.

JUSTICE SCALIA: So it sounds like you agree with Sun Tzu, "A leader..."

MR. VERGE: Sun who?

JUSTICE GINSBURG: Come on counselor, Sun Tzu: "A leader leads by example, not by force."

MR. VERGE: Justice Ginsburg, I do not agree with Some Who; I think a manager should lead by telling others what to do and threatening to fire them when they don't. It's Management 101.

Am I right that, under the current statute, this conduct is not unlawful?

JUSTICE GINSBURG: Incorrect on the name, Sun Tzu, not Some Who; however, correct, it is not unlawful, it's...

CHIEF JUSTICE ROBERTS: Fear and intimidation cer-

tainly work in the short term, but counselor would you agree that at some point good people will leave, retire, or simply become immune to the veiled or explicit threats and intimidation?

MR. VERGE: Chief Justice Roberts and Justice Ginsburg, it is not a law that employees, or anyone else for that matter, should be treated with respect. What does it matter if some leave or "retire?" At the end of the day, isn't business simply a war of attrition, we can always find someone to gut it out for a paycheck for awhile? I mean who stays at a job for more than a few years nowadays anyway?

JUSTICE THOMAS: I get it; when I had some attorneys working under me, they clearly knew who buttered their bread.

MR. VERGE: Well, Justice Thomas, I don't know how to respond, I am frankly shocked that you actually said something in court!

JUSTICE ALITO: Let me try to help you. Is it fair to say that management is about skills, while leadership is about skills coupled with character?

MR. VERGE: Of course, having character is not necessarily part of attributes of a manager. I suppose it could help...

JUSTICE SCALIA: So you have to have both of these attributes: skill and character, to be successful correct?

MR. VERGE: Yes, Justice Scalia.

MR. VERGE: Could I reserve the remainder?

CHIEF JUSTICE ROBERTS: Thank you, counsel.

### Oral Argument of Ina Tegrity on Behalf of the Respondents

MS. TEGRITY: Mr. Chief Justice, and may it please the Court: Much of what is mystifying about leadership becomes clearer if we disconnect leadership from management and link leadership specifically to creating and changing an organization's culture or DNA. The unique and essential function of leadership is the positive manipulation of culture to achieve goals previously believed unreachable.

JUSTICE KAGAN: That sounds like some "MBA speak" learned in grad school. You speak of leadership as if it is some sort of existential process.

MS. TEGRITY: I apologize if that is how it was interpreted. I am simply saying that the qualities of a leader go beyond simply telling others what to do. Leaders create a culture in an organization where individuals feel both empowered and responsible, where they enjoy and take pride in what they do. Basically, they believe they are, and actually are, integral

to the team's success.

JUSTICE KAGAN: So you agree with Mr. Don Roberts when he said, "Management is getting work done through others. Leadership is taking people where they haven't been but need to go."

MS. TEGRITY: My answer, Justice Kagan, is yes; to demonstrate characteristics of a leader a person must be more strategically focused. And rather than directing employees through tasks, they inspire and motivate employees to drive themselves. Leaders are adept in the art of emotional intelligence and apply it in a way that generates the best work out of their people. And...

JUSTICE SCALIA: My goodness, have you ignored the fact that one of the key characteristics of a manager, as opposed to a leader, is very basic in the sense that they are someone who was given their authority by the nature of their role? They ensure work gets done; focus on day-to-day tasks, and manage the activities of others. Manager's focus on tactical activities and often times have a more directive and controlling approach. Being tactical is not altogether a negative approach, as this is a skill set that is greatly needed in business, especially in the fast paced environments most of us work and live in. So what is wrong with that?

MS. TEGRITY: Nothing is wrong with that; while a manager receives their authority based on their role, a leader's authority is inherent in their approach. Leaders are very focused on change, recognizing that constant improvement can be achieved in their people and their activities can be a great step towards continued accomplishment. Being able to lead their teams through change, rather than manage them through it, has infinite rewards.

JUSTICE SCALIA: Rewards?

MS. TEGRITY: I will go with benefits, Justice Scalia. And if I may add this: The benefits inure to the individual, the organization, the shareholders and to the customers.

JUSTICE SCALIA: Is...is that so? Do we know that?

MS. TEGRITY: I beg your pardon?

JUSTICE SCALIA: Do we know that? We do know that demonstrating good leadership skills without the management skills to support it will leave you with an inability to operationalize your visions. Likewise, being a good manager without good leadership skills will cause continual challenges in motivating your team and producing the results you are trying to manage to. Being able to blend these two styles is truly a unique skill set. Keep in mind there is an abundance of managers in the world but very few truly em-

*"The manager relies on control; the leader inspires trust."*

– Warren Bennis, *Introducing Change*

body the characteristics of a leader.

MS. TEGRITY: I think...

JUSTICE SCALIA: Where...where do you get the notion that a business—that there has to be a leader?

MS. TEGRITY: I get the notion from the fact you cannot manage men into battle. Justice Scalia, you ride horses. I am sure you have led your horse to water but can you manage him to drink?

JUSTICE SCALIA: So now we are talking about horses?

MS. TEGRITY: No, Justice. Let me say it this way. You lead people, you manage objects or tasks.

JUSTICE ALITO: But is it...

JUSTICE GINSBURG: Ms. Tegrity, so there is no uncertainty, is it fair to summarize your case this way: Essentially, the manager administers and the leader innovates. The manager maintains, the leader develops. The manager accepts the status quo; the leader is always questioning and challenging. The manager focuses on systems and structure; the leader focuses on people. The manager relies on control; the leader inspires trust. The manager has a short-range view; the leader has a long range perspective. The manager asks "how" and "when"; the leader asks "what" and "why." The manager imitates; the leader originates. The manager is a copy, the leader is an original.

MS. TEGRITY: I believe that comes from Warren Bennis in *Introducing Change* and you are exactly correct, Justice Ginsburg.

CHIEF JUSTICE ROBERTS: Thank you, counsel.

Here are my predictions on the way the court will rule in these two cases:

In *Snyder v. Phelps*, as sick on some levels as I am about the outcome, I cannot see how the Court will find for Snyder inasmuch as I believe Phelps' rhetoric is and should be protected under the First Amendment.

In *Management v. Leadership*, I believe the court will rule in favor of Leadership. As common as Management is in many organizations, it still often fails to achieve long-term results and sustain a culture of collaborative achievement and excellence. ■



## Using the New Media: A Modern Plan

■ FRANK H. LEONE, MBA, MPH

**A**daptability is defined as the ability “to adjust to new conditions or a different environment.” It is a word that should be ingrained in the mindset of any sales-minded urgent care clinic.

I believe that lack of adaptability is the primary cause of less than stellar sales and marketing initiatives. In a business world that is changing daily, yesterday’s approach is, well, so *yesterday*.

You need to adapt quickly to our rapidly changing environment. Right now, the sales and marketing theme appears to be social networking. In order to ride this wave, you should:

1. Commit to the *concept* of change before you define exactly what change you want to invoke. If you are more reactive than proactive, you are inevitably backed into the yesterday corner.
2. Browse the Internet for the latest marketing trends, read the hottest marketing books and periodicals, and watch how savvy marketers approach you and others. Healthcare tends to be a step behind when it comes to sales and marketing; borrow from beyond the healthcare planet and you are likely to be a step ahead of your competitors.
3. Balance your portfolio. Although investor strategies vary by economic circumstance and personal risk adversity, many professional financial advisors recommend earmarking 10% (or so) of your stock holdings in higher risk/higher return holdings rather than sticking with a 100% conservative allocation.

Your commitment to tomorrow should be firm and consistent, but by no means should you go “all in.” Rather, strike a balance between forward-thinking tactics and currently effective traditional tactics.



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### Networking

Marketing experts point to networking, including and going well beyond social networking, as the “next big thing.” The time will come when an urgent care clinic will never need to send a routine introductory letter or place an introductory telephone call to a total stranger. Rather, the name of the sales/marketing game will be to network your way to that prospect through existing contacts.

### Using LinkedIn

LinkedIn is compelling because it is a social networking venue for professionals (whereas Facebook is more personal-use oriented and Twitter is something else altogether).

Using LinkedIn can help an urgent care clinic market its services in numerous ways:

1. Whenever your clinic has developed a good relationship with a company or other member of your business community, you should establish a link with that person. If they are not involved or familiar with LinkedIn, you should encourage their participation and send them an invitation to get the ball rolling by linking to you.

Over time, you will be linked to scores, if not hundreds, of local decision makers and in most cases will have access to everyone who is linked to them.

For example, if you are linked to 100 local professionals and each of them is linked to an individual of interest to your clinic, you can encourage your contact to “introduce” you to their contact. It certainly beats the old “I’d like to introduce myself” foot-in-the-door sales method.

2. LinkedIn offers an easy path for any of your linkages to write a short recommendation about your clinic or sales professional. It will henceforth be available on your LinkedIn page and readily available to anyone who passes by the page. Likewise, it certainly beats the old fashioned way of spreading references.
3. You can announce just about anything to everyone you are linked to. Tell them about a new product, a new col-



league, or a soon-to-open clinic. It is a modern way to spread information and is a welcome adjunct to email blasts and advertising.

### Facebook

Granted, as mentioned previously, Facebook is more of a personal networking site, but its sheer numbers of subscribers (more than 500 million active users worldwide, according to its own data) make it attractive.

You can use Facebook in various ways, as well, in that you can create a business page and use it for just about anything, including interesting photos, videos, event invitations, games and contests, discussion chains and sub-pages for selected subgroups of your client universe. Further, you can and should connect on a personal level with many of your clinic's contact base; the more your clients consider you a friend the more likely they are to refer you to other companies and offer strong recommendations.

### Mobile Device Marketing

Moving out another step out into the solar system, we find the new world of mobile device marketing. This is the world of apps and text messages, and a new avenue to clinic brand awareness.

In the near future, apps are likely to be available on almost any topic, thus providing mobile-device users with immediate access to any specialized information they deem valuable or essential.

Healthcare apps could range, for example, from a detailed medical dictionary to a summary of work-related conditions. Some insurance companies have even come up with apps to help users locate the nearest urgent care center.

Although it may seem onerous, using text messages to transmit information to your constituents is almost certain to get bigger and bigger. Remember, a nuisance can become a thing of joy if the information being transmitted is of value to its recipients.

It seems that virtually everyone these days has a multi-functional mobile device basically attached to their body. Never before in marketing has there been such a direct track to the consumer.

In summary, two core messages emerge from the networking frontier:

1. Take full advantage of those you know to facilitate upbeat, reassuring connections with new prospects.
  2. Touch your prospects more often, and make each touch briefer and ever more valuable to its recipients.
- In short, network and connect. ■

Citation: Shehab N, Schaefer MK, Kegler SR, et al. *Pediatrics*. 2010;126(6):1100-1107. Epub 2010 Nov 22.

A voluntary market withdrawal of orally administered, over-the-counter, infant cough and cold medications (CCMs) was announced in October 2007. The goal of this study was to assess CCM-related adverse events (AEs) among children after the withdrawal.

Emergency department visits for CCM-related AEs among children <12 years of age were identified from a nationally representative, stratified, probability sample of 63 U.S. EDs for the 14 months before and after announcement of withdrawal.

After withdrawal, the number and proportion of estimated ED visits for CCM-related AEs involving children <2 years of age were less than one-half of those in the pre-withdrawal period difference, whereas the overall number of estimated ED visits for CCM-related AEs for children <12 years of age remained unchanged. During both periods, two-thirds of estimated ED visits involved unsupervised ingestions (i.e., children finding and ingesting medications).

Further reductions will likely require 1) packaging improvements to reduce harm from unsupervised ingestions and 2) continued education about avoiding CCM use for young children. ■

### Evaluation of Consistency in Dosing Directions and Measuring Devices for Pediatric Nonprescription Liquid Medications

**Key point:** Most pediatric OTC liquid meds have problematic dosing directions.

Citation: Yin HS, Wolf MS, Dryer BP, et al. Evaluation of consistency in dosing directions and measuring devices for pediatric nonprescription liquid medications. *JAMA*. 2010;Nov 30. [Epub ahead of print.]

Researchers examined dosing instructions for 200 top-selling pediatric liquid medicines (analgesic, cough/cold, allergy, or gastrointestinal) in 2009. Among the findings:

- One fourth of medicines did not include standardized measuring devices.
- Of those that included such devices, nearly all (99%) had inconsistencies between the label's instructions and the accompanying device. For example, a dose given on the instructions might be missing from the device.
- Most directions were missing definitions for abbreviations listed (e.g., TBSP=tablespoon)
- Six percent of products used nonstandard units of measurement such as drams or cubic centimeters.

The authors note that such problematic labeling is a "root cause of consumer confusion with a high potential to lead to unintentional misuse of products." ■

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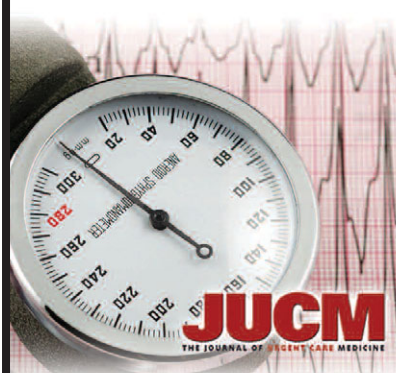
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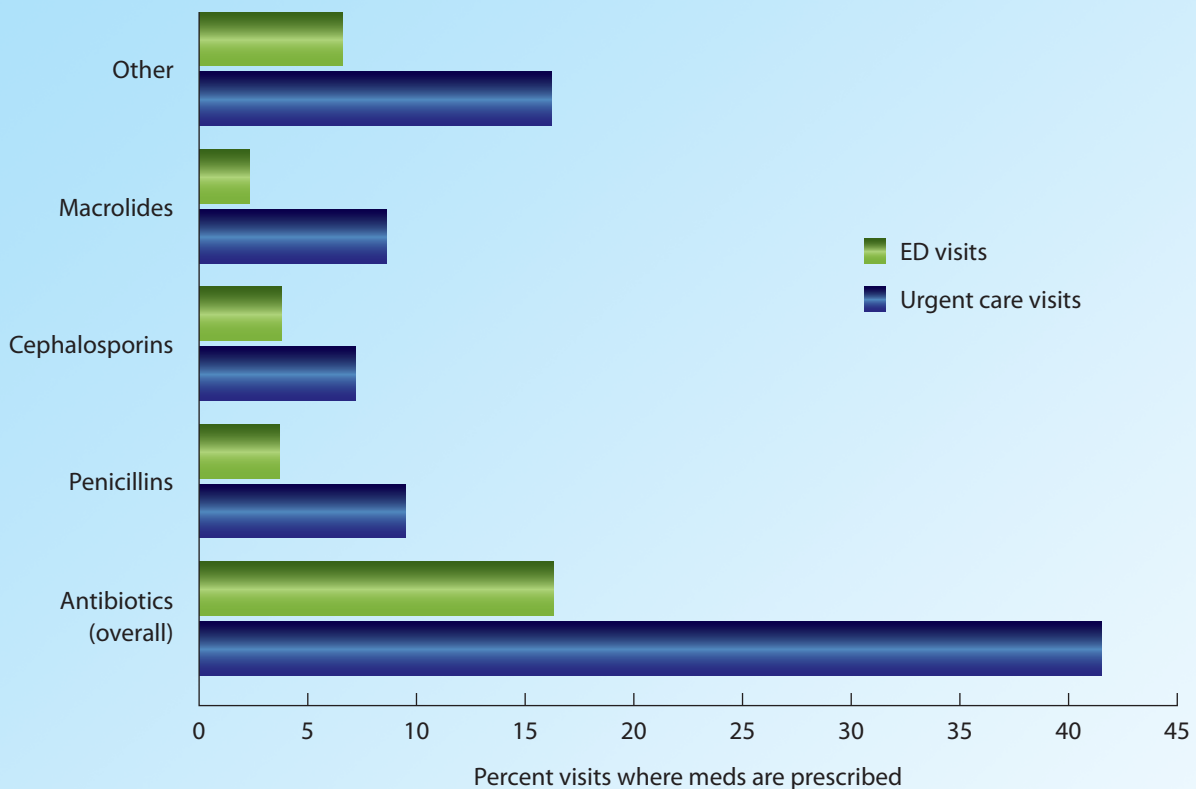


## DEVELOPING DATA

In each issue on this page, we report on research from or relevant to the emerging urgent care marketplace. This month, we begin delving into a report whose top-line data made headlines around the country recently. The article, *Many Emergency Department Visits Could Be Managed at Urgent Care Centers and Retail Clinics*,<sup>1</sup> went beyond the conclusion stated in its title, offering a snapshot of how patients exercise their freedom to choose among those three settings.

One particular data set compared medications prescribed in the urgent care center vs. those prescribed in the ED. This month, we spotlight the rate at which various classes of antibiotics are prescribed.

### ANTIBIOTIC PRESCRIBING



#### Reference

1. Weinick RM, Burns RM, Mehrotra A. *Health Affairs*. 2010;29(9):1630-1636.

By extension, these data tell us a little something about the complaints patients self-determine as appropriate for the urgent care setting. Do they reflect what you see in your practice?

In future issues, we will look at other therapeutic classes, as well as data on diagnoses treated at the urgent care, ED, and retail clinic levels.

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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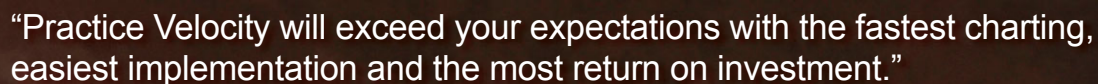
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