



## → INSIDE

Transition to ICD-10-CM: What you need to know.....cover

What new evidence suggests about a simplified pain protocol.....89

Should EPs be more involved in care and treatment of addicted patients?.....92

AUGUST 2015

Vol. 27, No. 8; p. 85-96

## The next big challenge for EPs: The transition to ICD-10-CM coding system

*Changing definitions, requirements for much more specificity may create workflow, reimbursement challenges*

**W**ith the viability of the Affordable Care Act (ACA) now largely settled by the U.S. Supreme Court, providers must now turn their attention to the next big hurdle: the long-delayed transition to the International Classification of Diseases, Clinical Modification administrative codes (ICD-10-CM), set to take place in October. While EPs tend to stay so busy with the work in front of them, it can be difficult to plan for the future. New research suggests now is the time for both administrators and clinicians to get up to speed on the new coding system.

What's the urgency? ICD-10-CM represents a massive expansion in the

number of codes that will be available to providers as they document their activities so they can be reimbursed. However, the level of detail required in ICD-10-CM will present a host of challenges, especially for smaller practices that do their own coding rather than pass the task on to vendors. However, investigators suggest even providers working for the largest and busiest EDs in the country are going to have to familiarize themselves with the new system, and that it may well change their approach to charting and documentation. While the long-term impact of this transition is hard to gauge, experts say there is no question ICD-10-CM will demand more of

<p>EMERGENCY MEDICINE <b>REPORTS</b></p> <p>THE TOP 10 ISSUES IN EMERGENCY MEDICINE TODAY</p> <p> <b>SUMMIT 2015</b></p> <p>Encore Hotel   Las Vegas   August 28-29</p>	<p><b>AHC Media Celebrates its 40th Anniversary</b></p> <p>Enjoy <b>Free Attendance and 14.5 CME/CNE!</b></p> <p>Our special "Thank You" to former &amp; current <b>AHC Media Customers!</b></p> <p> <b>800-688-2421</b></p> <p> Customer.Service@AHCMedia.com</p>
--	--



**NOW AVAILABLE ONLINE!** VISIT [AHCMedia.com](http://AHCMedia.com) or **CALL** (800) 688-2421

**Financial Disclosure:** Author **Dorothy Brooks**, Associate Managing Editor **Jonathan Springston**, and Nurse Planner **Diana S. Contino** report no consultant, stockholder, speaker's bureau, research, or other financial relationships with companies having ties to this field of study. Executive Editor **James J. Augustine** discloses he is a stockholder in EMP Holdings. Executive Editor **Shelly Morrow Mark's** spouse works for a company that has created advertising for Uroplasty. **Caral Edelberg**, guest columnist, discloses that she is a stockholder in Edelberg Compliance Associates.



## ED Management®

ISSN 1044-9167, is published monthly by AHC Media, LLC  
One Atlanta Plaza  
950 East Paces Ferry Road NE, Suite 2850  
Atlanta, GA 30326.  
Periodicals Postage Paid at Atlanta, GA 30304 and at additional mailing offices.

**POSTMASTER:** Send address changes to:  
ED Management®  
P.O. Box 550669  
Atlanta, GA 30355.

## SUBSCRIBER INFORMATION:

Customer Service: (800) 688-2421  
customerservice@ahcmedia.com  
AHCMedia.com  
Hours of operation: 8:30 a.m.-6 p.m. Monday-Thursday; 8:30 a.m.-4:30 p.m. Friday, EST

## EDITORIAL EMAIL ADDRESS:

jonathan.springston@ahcmedia.com.

## SUBSCRIPTION PRICES:

Print: U.S.A., 1 year with free AMA PRA Category 1 Credits™: \$519. Add \$19.99 for shipping & handling.  
Online only: 1 year (Single user) with free AMA PRA Category 1 Credits™: \$469  
Outside U.S., add \$30 per year, total prepaid in U.S. funds

**MULTIPLE COPIES:** Discounts are available for group subscriptions, multiple copies, site-licenses or electronic distribution. For pricing information, call Tria Kreutzer at (404) 262-5482. Canada: \$529 per year plus GST. Elsewhere: \$529 per year.

Back issues: \$82. Missing issues will be fulfilled by customer service free of charge when contacted within one month of the missing issue's date.  
GST Registration Number: R128870672.

**ACCREDITATION:** AHC Media, LLC is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation.

This activity has been approved for 1.04 nursing contact hours for each issue and a maximum of 12.48 hours annually. Provider approved by the California Board of Registered Nursing, Provider #CEP14749, for 12.48 Contact Hours.

AHC Media, LLC is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

AHC Media, LLC designates this enduring material for 1.25 AMA PRA Category 1 Credits™ per issue and a maximum of 15 AMA PRA Category 1 Credits™ annually.

Physicians should claim only credit commensurate with the extent of their participation in the activity.

Approved by the American College of Emergency Physicians for a maximum of 15.00 hour(s) of ACEP Category I credit.

This activity is intended for emergency physicians, ED nurses, and other clinicians. It is in effect for 24 months from the date of the publication.

Opinions expressed are not necessarily those of this publication, the executive editor, or the editorial board. Mention of products or services does not constitute endorsement. Clinical, legal, tax, and other comments are offered for general guidance only; professional counsel should be sought in specific situations.

**EDITOR:** Dorothy Brooks (dobr@bellsouth.net).

**ASSOCIATE MANAGING EDITOR:** Jonathan Springston (jonathan.springston@ahcmedia.com)

**EXECUTIVE EDITOR:** Shelly Morrow Mark (shelly.mark@ahcmedia.com)

**CONTINUING EDUCATION & EDITORIAL DIRECTOR:** Lee Landenberger (lee.landenberger@ahcmedia.com)

Copyright© 2015 by AHC Media, LLC. ED Management® is a registered trademark of AHC Media, LLC. The trademark ED Management® is used herein under license. All rights reserved. No part of this newsletter may be reproduced in any form or incorporated into any information-retrieval system without the written permission of the copyright owner.

providers.

## Be careful with reports

In the new analysis, investigators from the University of Illinois in Chicago looked specifically at how the transition to ICD-10-CM will impact emergency medicine and where the biggest challenges are likely to surface. Using government files that enable providers to map ICD-9-CM codes to ICD-10-CM codes and vice versa, investigators found that nearly 25% of all clinical encounters in the ED may present coding difficulties, ranging from coding accuracy issues and problems in justifying hospital admissions to challenges in preparing the kinds of reports that hospitals routinely create to ensure they have adequate supplies and staffing to meet future needs.

“We applied a mathematical technique that labeled the convoluted or the complex areas of the transition,” explains **Andrew Boyd**, MD, a co-author of the analysis and an assistant professor in the Department of Biomedical and Health Information Sciences in the College of Applied Health Sciences at the University of Illinois in Chicago. “The initial finding of the study was that 23% of the visits, or 27% of the codes emergency medicine physicians use, are complex.”

For instance, in the case of a patient who presents with abdominal pain, ICD-10-CM will require providers to specify whether this pain is upper, lower, or pelvic and perineal.

“That initially sounds OK. We are just specifying more information, but when you look at the overall complexity of the transition, [the government files] also map [from ICD-9-CM] unspecified symptoms

associated with female genital organs,” Boyd notes. “If you run emergency room reports about how many female-specific diagnoses you have in a shift, when you map it forward to ICD-10-CM, that gender information isn’t encoded...so your new report, when you are looking at pelvic and perineal pain, you would also actually have to import gender information in order to make sure you are actually getting that information on the report.”

The reason why it is critical for ED administrators to have information about gender is because if they have an all-male physician staff, they will need to know whether or not they need extra nurses in order to have chaperones, Boyd explains.

“Knowing what your baseline is or how many gender-specific exams you need will help you plan staffing, especially when you look at the number of individuals or the gender of the individuals,” he says. “You might have delayed service if you are short nurses or you don’t have an appropriate chaperone for the EPs.”

When ED administrators make planning decisions, they don’t want to have too many staff or supplies, but they also don’t want to have too few, Boyd notes.

“By highlighting the hard parts [of the new coding system] — the convoluted or complex areas — we are saying, ‘hey, here are the areas you really need to understand.’”

## Note changing definitions

Another potential problem area involves the way EPs use codes to establish the medical necessity of a hospital admission. For example, malignant essential hypertension can now be used as a justification

for hospital admission, but the ICD-9-CM codes used to describe this condition are going away, Boyd observes.

“That concept — malignant essential hypertension — does not exist in ICD-10-CM, so you just have to label it as essential hypertension and then add additional codes for end-organ damage and complications,” he explains. “If you just follow the direct mapping of malignant essential hypertension [from ICD-9-CM] to essential hypertension [in ICD-10-CM] ... you don’t adequately portray the severity of the disease in front of you.”

If EPs fail to grasp this nuance it will likely be costly.

“Because we are changing definitions, and this is what determines what hospital admissions are medically necessary, there could be challenges for EPs or hospital physicians in getting reimbursement,” Boyd adds.

Another code that doesn’t quite exist in the same way in ICD-10-CM is accidental poisoning by an unspecified drug.

“They do have the concept [in ICD-10-CM] ... but you have to specify what class of drug is involved. If a 5-year-old plays in the medicine cabinet, uses all sorts of medicines, and you don’t know which one they ingested, you actually have to specify the class of drug in the coding system,” Boyd observes.

Ongoing physician education and guidance are going to be very important, according to **Mark Mackey**, MD, MBA, FACEP, a co-author of the analysis and vice chairman of the Department of Emergency Medicine at the University of Illinois Hospital and Health Sciences System in Chicago.

“A distal radius fracture could have 44 different descriptions [in

## EXECUTIVE SUMMARY

The long-delayed transition to the International Classification of Diseases, Clinical Modification administrative codes (ICD-10-CM) is set to take place in October, presenting a host of challenges for EPs. A new analysis suggests roughly a quarter of the clinical encounters that take place in the ED will involve complexity in the transition to the new system. Further, experts anticipate workflow challenges as well as new considerations when making planning decisions and reporting to public health departments.

- The number of codes available to providers will jump from 14,000 to 80,000 with the transition to the new coding system.
- Investigators found that that 23% of the visits, or 27% of the codes, emergency medicine physicians use are complex.
- The new coding system requires much more specificity, but there are also instances in which definitions have been altered or blended together, essentially changing the concepts described.
- While all EPs will face some challenges with the new coding system, analysts are particularly concerned about smaller EDs and physician groups because these practices typically don’t have the ICD-10-CM implementation teams that larger systems have.

ICD-10-CM] depending on what it is,” he advises. “There are going to be some situations that are frequent occurrences, and we will have to get feedback to the physicians so that they provide specificity within their final diagnoses.”

Mackey also sees some additional challenges for academic medical centers, where much of the documentation is done by residents.

“Some of those are emergency medicine residents who are doing this with some regularity on site, so they will get that feedback on how much specificity they need to provide, but some of them are rotating residents,” he explains, noting that keeping these physicians apprised of the specificity required in emergency medicine is going to require more effort.

### Consider impact on workflow

**Erik Kulstad**, MD, a co-author of the analysis and a faculty attending physician at Advocate Christ Medical

Center in Oak Lawn, IL, is hardly sanguine about the upcoming transition, predicting it will be a quagmire.

“It really does look like a major change to our workflow,” he says, noting complications will stem from the minute-to-minute charting that physicians do when they take care of patients. “It is really a very different thought process that has to occur and a different eventual charting process that has to happen.”

In particular, Kulstad is worried about all the detailed information EPs will be expected to supply that they simply do not have the ability to discern while patients are in the ED.

“We see a lot of chest pain patients coming into the ED, and all we can do is rule out a few bad things,” he says. “But with ICD-10-CM, we are supposed to [indicate] things like acute vs chronic, anatomically related due to coronary event, and specify by the artery, and we can’t do any of that. It is a system that has not been

well-tailored to emergency medicine.”

Similarly, Kulstad says EPs are not in a position to supply all the required information with respect to stroke patients.

“The best we can do is say maybe [transient ischemic attack] because the patient hasn’t been in our care long enough to discern whether [it] is going to resolve or not and therefore meet the definition of TIA,” he says. “Maybe you can say ischemic vs hemorrhagic because that, again, is sort of a binary decision point that is determined in the ED, but beyond that we can’t discern any more.”

However, for charging purposes, the ICD-10-CM system will want physicians to indicate detailed information about what anatomical part of the brain is affected and what caused the stroke, Kulstad notes. “All of those things are not information that is obtained in the ED,” he says. “The net effect is going to be that we can chart only what we see and what we have, and that is going to be very limited. It is going to reduce the level of reimbursement that these charts obtain.”

Mackey expects at least some of this coding information will eventually be provided for patients who are admitted to the hospital.

“The inpatient folks will have another bite at the apple ... so if it is an inpatient case, then the information can be captured on the back end. If it involves a patient who is discharged, then that is going to be more challenging,” he says. “I think it is going to require some vigilance on both the ED staff and ED coding entities, and the revenue cycle people for the ED.”

Mackey anticipates the challenge of implementing the new coding system will be similar to what providers experienced in adopting electronic medical records.

“I think capturing more accurately and more robustly what we all manage every day is important, and there is potentially an upside ... but I don’t think there is a good understanding of how this should be done in a way that minimizes the problems it presents,” he says. “I don’t think we all know what the ultimate effects are going to be.”

**“IT IS GOING TO TAKE A HUGE LEARNING CURVE FOR THE PROFESSIONAL CODERS AND THE PHYSICIANS TO UNDERSTAND WHAT ALL THE 80,000 NEW CODES ARE.”**

There are some easy concepts in the transition to ICD-10-CM. For example, the only change to the ICD-9-CM definition for ear infection is that you have to indicate whether the infected ear is on the right, left, bilateral, or unspecified, Boyd offers. Unfortunately, not all the codes transition quite so easily.

“When ICD-10-CM was first proposed, we all thought with more codes it was going to be better and that we could make better decisions,” Boyd notes. “But in the 27% of codes, or 23% of visits, the definitions are convoluted. The definitions from ICD-9-CM don’t just [require] more information, they actually take information and mix it together, and the concepts aren’t the

same,” he explains.

For this reason, the quality of reporting from EDs to public health departments could be problematic, at least early on in the transition to the new coding system, Boyd advises.

“It is going to take a huge learning curve for both the professional coders as well as the physicians to understand what all the 80,000 new codes are,” he says. “As people learn, [the reporting] will become more stable, but for the first several months there could be significant variations in disease reporting, not necessarily because there is a disease outbreak, but because we are all in the process of learning the new codes.”

## Learn the common codes

What steps can administrators and clinicians take to ensure a smoother transition to ICD-10-CM? First, the people who assign the individual codes need to get a handle on the new code set, Boyd advises.

“The professional coders, the physicians, and the nurse practitioners — anyone in your team who needs to use ICD-10-CM — needs to learn the common codes,” he says.

Next, staff, providers, and anyone who makes strategic decisions can take advantage of a free online tool, available at [www.lussierlab.org/transition-to-ICD10CM](http://www.lussierlab.org/transition-to-ICD10CM), which visually shows just how complex the top codes are, Boyd explains. He observes the task is not as daunting as it could be. “When we look just generically across all the codes, the convolutedness or complexity is 36%, but when we look at only ED-specific codes, it is actually much less,” he says.

For the complex codes, Boyd suggests decision-makers consider

why they are running specific reports that rely on codes, what they are trying to decide, and whether the reports in question make sense in the new coding system.

“If a report does not make sense, you might have to make decisions without the same level of information that you had before [the transition to ICD-10-CM],” he says.

For instance, it may make sense to base some decisions regarding staffing or supplies, for example, on historical data rather than diagnosis codes.

“Many of the large systems have whole teams [devoted to the ICD-10-CM transition],” Boyd observes. “What we are really concerned about are the smaller EDs and physician groups where clinicians may rotate around through multiple hospitals. They don’t have a huge, 100-person ICD-10-CM implementation team.”

Despite all the anticipated headaches and confusion, there are

huge potential benefits from the new coding system, according to Boyd, although he acknowledges there will be a steep learning curve.

“You don’t just jump from 14,000 to 80,000 codes overnight and magically have the same fidelity,” he says. “However, in three to five years, when all of our decisions can be based on ICD-10-CM, we will be able to make better, more intelligent, and informed decisions. The challenge is that during the transition we just have to be very careful to be making appropriate decisions. We have to know what we don’t know.” ■

## REFERENCE

1. Krive J, et al. The complexity and challenges of the International Classification of Diseases, Ninth Revision, Clinical Modification to International Classification of Diseases, 10th Revision, Clinical

Modification transition in EDs. *Am J Emerg Med* 2015;33:713-718.

## SOURCES

- **Andrew Boyd**, MD, Assistant Professor, Department of Biomedical and Health Information Sciences, College of Applied Health Sciences, University of Illinois, Chicago. E-mail: boyda@uic.edu.
- **Erik Kulstad**, MD, Faculty Attending Physician, Advocate Christ Medical Center, Oak Lawn, IL. E-mail: ekulstad@gmail.com.
- **Mark Mackey**, MD, MBA, FACEP, Vice Chairman, Department of Emergency Medicine, University of Illinois Hospital and Health Sciences System, Chicago. E-mail: marklmackey@gmail.com.

---

# Simplified approach for delivering medicine to patients with severe pain shows promise

*Experts agree direct patient input is superior to relying on numbered pain scales*

For years clinicians have relied on numerical rating scales to assess whether patients in severe pain have received adequate relief from analgesic medications. However, many believe it’s a suboptimal approach because numbers mean different things to different patients, and pain tolerance varies widely. Further, some emergency providers view the introduction of pain scales as an unnecessary and burdensome step in a fast-paced environment that leaves little time for individualized pain treatment.

Why not simply ask patients if they need more medicine? It’s a

provocative idea, but one that is gaining traction and adherents in one form or another in EDs across the country. What’s more, researchers looking at the use of an evidence-based pain protocol built around this basic concept have found that it is not only effective at achieving pain control, it’s also a winner with emergency patients, although some physicians believe there are limits to how far such protocols should go.

## Solicit input from patients

Wanting to create a simple

titration protocol tailored to the unique ED environment, researchers at Montefiore Medical Center in Bronx, NY, designed an approach that expanded upon an earlier protocol first published in 2009.<sup>1</sup>

“In that protocol, all patients received 1 milligram IV hydromorphone followed by an optional second dose,” explains **Andrew Chang**, MD, MS, FACEP, FAAEM, the lead author of the study and an assistant professor in the Department of Emergency Medicine at Albert Einstein College of Medicine, Montefiore Medical Center. “We then decided to build

on that protocol to create the current protocol, which allows for patients to receive up to 4 mg IV hydromorphone over a four-hour time span.”

In the study, non-elderly emergency patients reporting acute severe pain received 1 milligram of IV hydromorphone. After 30 minutes elapsed, the patients were asked whether they wanted more pain medication. If they answered yes, they received another 1 milligram of hydromorphone. This question was asked a total of four times at 30-minute intervals with patients receiving the same 1 milligram dose if they indicated that they needed more pain medication.<sup>2</sup>

Investigators report that 205 out of 207 patients received satisfactory pain control at one or more points in the study, with no adverse events associated with the hydromorphone. More than half the patients (114) received 1 milligram of hydromorphone, 78% received two doses of the drug, nine patients received three doses, and six received

4 milligrams of the drug.

Only two of the participating patients failed to achieve satisfactory pain control within the study’s duration of two to four hours. Further, the patients gave their treatment for pain decent marks. According to the researchers, 67% reported being very satisfied with their pain treatment in the ED, and 29% reported being satisfied.

To minimize the risk of attracting drug-seekers, investigators used strict inclusion and exclusion criteria, Chang explains.

“A patient couldn’t just request to be in the study,” he says. “We specifically excluded patients with chronic pain syndromes and anyone who had taken an opioid pain medication within the past seven days.”

Such measures were apparently effective. The researchers report that they found no evidence of drug-seeking, and they note that only two out of the 207 participating patients asked for additional opioid medication every time they were

queried during the study period.

Chang suggests the approach, which he dubs the 1+1+1+1 protocol, is clearly doable in a busy, urban ED setting.

“The ED where the study was conducted is one of the busiest in the country, so if it can work here, we are confident that it can work anywhere,” he says. “In addition, I hear from colleagues around the country that they are already using the 1 + 1 protocol that we developed several years ago, so I don’t see any reason why clinicians could not also adopt this extended protocol.”

## Limit dosing levels

**Ross Berkeley, MD, FACEP**, the director of quality for Emergency Medicine Physicians, and director of the chest pain center at University Medical Center of Southern Nevada in Las Vegas, NV, sees potential value in using the type of protocol that Chang and colleagues have devised, but what he sees as most important is the way it forces clinicians to continually reassess patients at regular time intervals.

“It is very easy in a busy environment for a patient to potentially get lost in the system, to be forgotten about, or to be given a dose of medicine and never asked, or not asked until they are ready to be discharged, how is their pain,” Berkeley observes. “So just having a system in place where you have to reassess somebody 30 minutes after they received an analgesic and find out whether they are better, worse, or the same — that is the value of the system, whether you choose to use hydromorphone like [the study investigators] or you choose to use morphine or fentanyl.”

However, Berkeley isn’t entirely

## EXECUTIVE SUMMARY

A new study suggests that in a busy emergency environment, a protocol based on simply asking patients if they need more pain medicine at 30-minute intervals can be effective at controlling pain, although some experts urge stricter limits on the automatic authorization of hydromorphone, and a mechanism to keep physicians more involved in care.

- Experts suggest that soliciting patient input is more effective than relying on numbered pain scales to gauge whether pain has been adequately controlled.
- For non-elderly patients in severe pain, the protocol includes an automatic authorization for an additional milligram of hydromorphone up to four times at 30-minute intervals.
- Study results indicate that all but two of 207 study participants achieved satisfactory pain control at one or more points in the study, and that most were satisfied with their treatment.

comfortable with patients being able to receive up to 4 milligrams of hydromorphone without being reassessed by a physician.

“There are a lot of warnings and advisories coming out at the state level regarding potential complications of hydromorphone due to unexpected, delayed effects on respiratory drive,” he warns. “Although I like part of the concept, I don’t like the idea that a patient will receive a large dose of opioids without being reassessed by the physician, because maybe that means he or she is being under-dosed.”

In fact, Berkeley says he would seldom even consider prescribing as much hydromorphone as the protocol allows.

“I work at a level one trauma center — the only level one trauma center in the state. We see more than 12,000 trauma patients a year, and I do many shifts there where I am giving large doses of opioids for everything from fractures and dislocations to significant soft tissue injuries,” he observes. “However, it would be exceedingly unusual for me to give doses in the range of 4 milligrams of hydromorphone.”

If someone required such large doses, Berkeley says he would probably switch the patient to a shorter-acting titratable drug like fentanyl, or he would give the patient ketamine.

“I would consider other methods of synergistically controlling their pain and figure out exactly what is going on,” he explains. “Four milligrams of hydromorphone is roughly worth 30 milligrams of morphine. That is a pretty sizable dose. You might need it for someone with bad burns or a bad kidney stone, but, usually, there is value in considering synergy between different drug classes.”

## Consider weight-based adjustments

Berkeley suggests another weakness in the protocol is administering the same standardized dose to every patient regardless of whether they weigh 40 kilograms or 340 kilograms.

“REASSESSING SOMEBODY 30 MINUTES AFTER THEY RECEIVED AN ANALGESIC AND FINDING OUT WHETHER THEY ARE BETTER, WORSE, OR THE SAME — THAT IS THE VALUE OF THE SYSTEM.”

“They are all getting 1 milligram of hydromorphone, so having a weight-based system makes a lot more sense,” he says. “It would probably be much more likely to deliver analgesic doses to patients in a more rapid fashion.”

If a patient receives two doses of the same medication and they still haven’t gotten relief, then perhaps they require a different medicine, Berkeley notes.

“Maybe they need to switch to a

benzodiazepine or maybe they need some ketamine,” he says. “Maybe there is something else going on with the patient the physician should be involved with because he or she is missing something.”

For instance, Berkeley says a patient could be in a lot of pain because he is suffering from compartment syndrome or necrotizing fasciitis, and the physician has made an incorrect assessment of what is going on with the patient.

“After two doses of medication [patients] should have a bedside reassessment as opposed to an automated order, because this isn’t even a verbal order where the nurse is asking the physician whether she can provide another dose. It is an automatic authorization,” Berkeley notes. “From a patient safety standpoint and just quality of care, you can take this to another level by simply making sure the physicians stay involved in the care a little bit more.”

Berkeley acknowledges having a protocol in place makes sense where there is no physician available or when the goal is to decrease the time it takes to get a drug on board.

“If you’ve got a protocol available in triage, and the nurses know it is going to take an hour before the physician can see the patient, what better way to get the patient comfortable than to have a protocol in place that authorizes the nursing staff to give 0.15 milligrams per kilogram of morphine IV to any patient with a severely painful injury,” he says, noting the authorization for this kind of prescribing should be fine as long as the patient is not allergic to the drug.

However, if a patient is already in a bed and being seen, automatically protocolling drugs in such high doses doesn’t make as

much sense, Berkeley adds.

“That is a slippery slope,” he says. “I worry that it could be the beginning of a trend in medicine that may have some downstream effects that we are not prepared to deal with, or that nobody is thinking about.”

## Re-think use of pain scales

Nonetheless, Berkeley agrees that simply asking patients about their pain is a superior practice to relying on numbered pain scales.

“You might have a patient with a very low threshold for pain, and to them, they need to be a two or less to be comfortable, whereas I might be happy with a four for myself,” he explains. “A patient reporting an eight out of 10 might say they are fine while another patient who is a six is in agony.”

The numbers on a pain scale may have some utility with documentation or gauging whether a patient’s pain level has improved or declined over

time, but Berkeley prefers a more straightforward approach.

“It is much more valuable to just ask patients subjectively how they are feeling, and do they need more medication right now. I think it is a great way to do it,” he says.

Chang also has little use for pain scales when assessing whether a patient needs more medication.

“I think one of the main take-away points from this as well as some of our other studies is to use a patient-centered approach to deciding whether patients’ pain is adequately controlled,” he says.

Chang does have plans for further work in this area. Previously, he developed a similar pain protocol for older adults — a half plus half protocol.

“I am thinking about trying to extend that for older adults just as I did with this protocol for younger adults,” he says. ■

## REFERENCES

1. Chang AK, et al. Safety and efficacy

of rapid titration using 1 mg doses of intravenous hydromorphone in emergency department patients with acute severe pain: The “1 plus 1” protocol. *Ann Emerg Med* 2009;54:221-225.

2. Chang AK, et al. Efficacy of an acute pain titration protocol driven by patient response to a simple query: Do you want more pain medication? *Ann Emerg Med* 2015;doi: <http://dx.doi.org/10.1016/j.annemergmed.2015.04.035>

## SOURCES

- **Ross Berkeley**, MD, FACEP, Director, Quality for Emergency Medicine Physicians, and Director, Chest Pain Center, University Medical Center of Southern Nevada in Las Vegas, NV. E-mail: [rberkeley@emp.com](mailto:rberkeley@emp.com).
- **Andrew Chang**, MD, MS, FACEP, FAAEM, Assistant Professor, Department of Emergency Medicine, Albert Einstein College of Medicine, Montefiore Medical Center, Bronx, NY. E-mail: [aching@montefiore.org](mailto:aching@montefiore.org).

# Patients more likely to engage in treatment at 30 days when given buprenorphine in the ED, referred for follow-up

*Emergency providers hesitant to take on treatment for addiction, citing complexity, lack of resources*

**W**ith the problems of addiction and the misuse of prescription drugs raging across the country, emergency providers are under increasing pressure to put new solutions on the table. After all, they are the ones who interact with these patients when they present to the ED from overdoses or withdrawal symptoms. While emergency providers may be reluctant to

get into the business of treating addiction, a new study suggests when these patients are treated in the ED with buprenorphine, a medication that reduces withdrawal symptoms, cravings, and opioid use, they are significantly more likely to receive formal addiction treatment than patients who only receive a brief intervention and referral to treatment. Further, the data show

patients who receive buprenorphine are less likely to report subsequent illicit opioid use or to use inpatient addiction services, although buprenorphine does not appear to significantly reduce the rate of HIV risk or of urine samples testing positive for opioids.<sup>1</sup>

**Establish partnerships**  
Study investigators, led by **Gail**

**D’Onofrio**, MD, MS, chair of the Department of Emergency Medicine at Yale University School of Medicine in New Haven, CT, randomly assigned opioid-dependent patients who presented to the ED to one of three treatment arms: screening and referral to treatment, brief intervention and facilitated referral, or screening and brief intervention combined with ED-initiated buprenorphine/naloxone and referral to primary care for 10-week follow-up.

At 30-days after the ED visit, 78% of the patients in the buprenorphine group (89 of 114 patients) were engaged in addiction treatment compared with just 45% of the patients in the brief intervention group (50 of 111 patients) and 37% of patients in the referral group (38 of 102 patients).

While the authors note their findings need to be replicated at other centers, they also stress the urgent need for action.

“Overdoses are an enormous problem, and opioid addiction is really escalating, so we have to do something,” D’Onofrio says. “We know these patients come to the ED and this is where they get their care, so what we need to do is get as many people into treatment as possible.”

For patients in withdrawal, buprenorphine will help them feel better, D’Onofrio observes.

“You are then able to talk to them; you can try to motivate them and then to directly engage them with treatment,” she explains. “This gives us the opportunity to get more people into treatment, and that is the whole point.”

Given the huge gap between the need for addiction treatment and the supply of such service providers, EDs can be an additional available option, D’Onofrio suggests.

## EXECUTIVE SUMMARY

A new randomized trial shows patients who present to the ED with opioid dependence are much more likely to engage in treatment when they receive buprenorphine along with coordinated follow-up than when they just receive a brief intervention and a facilitated referral for treatment or just screening and referral. However, barriers to prescribing are robust, and many ED leaders are not persuaded they should be in the business of providing treatment for addiction.

- In the trial, at 30 days 78% of patients in the buprenorphine group (89 of 114 patients) were engaged in addiction treatment, compared with just 45% of the patients in the brief intervention group (50 of 111 patients) and 37% of patients in the referral group (38 of 102 patients).
- To prescribe buprenorphine for addiction disease, providers must undergo training and pass a test to obtain a DEA waiver; they are limited to treating 100 patients.
- While experts note there are not enough providers to prescribe buprenorphine and provide the follow-up needed to patients with addiction disease, they also acknowledge concerns about drug diversion as well as potential problems with capacity if EDs take a larger role in treating addiction.

“Primary care physicians can offer it in their clinics and we can offer it in the ED, and if we set up these partnerships, this can only be good,” she says.

### Consider the barriers

However, despite the study results, it’s clear that not all ED leaders are persuaded that they should play a bigger role in providing treatment for addiction, or that they should be involved in prescribing buprenorphine to opioid-dependent patients at all.

“The whole pain issue is a big deal and it is complicated, and there is a real difficult balance between patient satisfaction, appropriate pain control, addiction and drug seeking and diversion,” observes **Mark Notash**, MD, FACEP, the medical director of the ED at San Leandro Hospital in San Leandro, CA. “We purposely do not deal with the addiction piece.

That is absolutely not our business to do ... and I think most docs feel that way in the emergency setting.”

Notash acknowledges that addiction touches the providers in his ED on a daily basis, sometimes in a very dark way when patients who have overdosed experience brain damage and other problems. However, he doesn’t think providing patients with buprenorphine is the answer.

“Medicine needs to be involved, but it is about having a support network, having therapy, and having all of the right social and psychological pieces present in order to ensure the patient recovers,” he says. “Giving that one drug or any one drug is very unlikely to actually succeed. Even if someone is extremely motivated to change and to get off the drugs, it is highly unlikely that it is going to succeed.”

For these reasons, Notash is not particularly troubled by the

multiple barriers in place that make prescribing buprenorphine for addiction disease difficult. For instance, unless they are board certified in addiction medicine or psychiatry, providers need to undergo eight hours of mandated training and a test in order to prescribe buprenorphine for opioid use disorders. Further, once providers receive waivers from the DEA enabling them to prescribe buprenorphine for addiction disease, they are then limited to treating just 100 patients under the Drug Addiction Treatment Act, passed by Congress in 2000.

In addition to these barriers, many states and payers have placed added limitations on prescribers of buprenorphine. These range from prior authorization requirements and lengthy waiting periods to requirements that patients undergo counseling or be enrolled in formal rehabilitation programs. Of course, cost is a big factor as well, especially for Medicaid pharmacy benefit managers.

The American Society of Addiction Medicine (ASAM) believes such barriers are preventing more patients from getting the addiction treatment that they need.

“I’d like to see more physicians of all specialties get their DEA waivers to prescribe buprenorphine if they are seeing a substantial number of people with addiction disease in their practice,” explains **Kelly Clark**, MD, MBA, FASAM, DFAPA, the president-elect of ASAM, and chief medical officer of CleanSlate Centers based in Northampton, MA, a group of nine centers offering outpatient medication-assisted treatment programs for addictive disease. “We don’t have enough physicians who are waived to prescribe, and the majority of physicians who are

waived are not using their waiver for a variety of reasons.”

In particular, Clark finds the 100-patient limit to be problematic for patients as well as the EDs they frequent when there is nowhere else to turn. However, she also agrees with Notash that simply providing buprenorphine to a patient with addiction disease is not enough.

“EMERGENCY PHYSICIANS SHOULD ESTABLISH RELATIONSHIPS WITH HIGH-QUALITY ADDICTION TREATMENT SPECIALIST PHYSICIANS WHO HAVE THE CAPABILITY OF BRINGING ALL APPROPRIATE TREATMENTS TO THESE PATIENTS.”

“Unless there is follow-up in place, the relapse rates are enormous,” she observes.

Nonetheless, Clark emphasizes the best treatment for opioid dependence is maintenance therapy with medication, either buprenorphine or methadone.

“That is beyond question,”

she says. “Medication is the best treatment according to the data, and that is a maintenance treatment, not a detox treatment.”

## Address need for follow-up

Clark acknowledges there are valid concerns about prescribers of buprenorphine. For instance, providers and regulators alike have their eyes on the problem of drug diversion.

“We have seen some doctors prescribe what are considered to be relatively high doses of buprenorphine, and patients divert those substances and get cash for them in order to pay for treatment because much of [addiction] treatment is not covered by a variety of healthcare plans,” she explains. “Then there is diversion simply because people can’t access the drug.”

Buprenorphine is a partial agonist, Clark explains. If someone is intoxicated on heroin, oxycodone, or hydrocodone, and they are given buprenorphine, it will put them into withdrawal.

“If, however, they are in withdrawal, it will control their signs and symptoms of withdrawal,” she says. “While it is very unusual for someone to overdose on buprenorphine ... there are issues of diversion.”

Another concern is patients may flock to busy EDs to obtain buprenorphine, creating capacity problems. Clark notes any ED interested in following the protocol described in D’Onofrio’s study should first make sure there is an adequate number of physicians to follow up with these patients.

“I would recommend EPs establish relationships with high-

quality addiction treatment providers, particularly addiction specialist physicians who have the capability of bringing all the appropriate treatments to these patients,” she explains. “Then they will be able to stop that cycle of patients coming to the ED that we see so often.”

The most important thing is to make sure that patients get the longitudinal care that they need, Clark advises.

“That would mean a relationship with an outpatient physician who can continue buprenorphine treatment,” she says. “I would suggest having that piece in place before prescribing [the drug.]”

## Facilitate training

D’Onofrio acknowledges that while many emergency medicine professionals disagree with her views regarding the role of EDs in dealing with addiction, she is nonetheless taking steps to ensure that all attending physicians in her ED receive the necessary training to receive a waiver from the DEA, enabling them to prescribe buprenorphine.

“I am also going to offer [the training] to my graduating residents. We are going to start incorporating that so when they go out in their world they can have their waiver,” she says. “We should train all of our residents — every one of them — how to prescribe this drug. It should not be different than any other medication.”

D’Onofrio is hoping that her study will fuel more interest.

“I try to put the systems in place and talk to other EDs about how they can do this. It is not a revolving door of people coming back,” she

says. “The old days of treating and streeting people are over. In emergency medicine we know we are the primary access [point] for many patients.”

“WE SHOULD TRAIN ALL OUR RESIDENTS HOW TO PRESCRIBE THIS DRUG. IT SHOULD NOT BE DIFFERENT THAN ANY OTHER MEDICATION.”

The paradigm is already in place for emergency providers to treat both newly-diagnosed chronic problems and exacerbations of chronic problems, D’Onofrio adds.

“This is no different. I am just trying to make addiction similar to any other chronic disease,” she says. “You just have to work in an ED on Friday and Saturday nights, and

you are going to see that half your population is connected to some type of drug addiction or misuse. This is where you find the patients, so why don’t we try to help them and get them into treatment?” ■

## REFERENCE

1. D’Onofrio G, et al. Emergency department-initiated buprenorphine/naloxone treatment for opioid dependence: A randomized clinical trial. *JAMA* 2015;313:1636-1644.

## SOURCES

- **Kelly Clark**, MD, MBA, FASAM, DFAPA, President-Elect, American Society of Addiction Medicine, and Chief Medical Officer, CleanSlate Centers, Northampton, MA. E-mail: drkjclark@yahoo.com.
- **Gail D’Onofrio**, MD, MS, Chair, Department of Emergency Medicine, Yale University School of Medicine, New Haven, CT. E-mail: gail.donofrio@yale.edu.
- **Mark Notash**, MD, FACEP, Medical Director, Emergency Department, San Leandro Hospital, San Leandro, CA. E-mail: marknotash@cep.com.

## CME/CNE OBJECTIVES

After completing this activity, participants will be able to:

1. Apply new information about various approaches to ED management;
2. Discuss how developments in the regulatory arena apply to the ED setting; and
3. Implement managerial procedures suggested by your peers in the publication.

## COMING IN FUTURE MONTHS

- Opportunities for improvement in the care of emergency patients with HIV
- Elevating the care and treatment of children in adult EDs
- Common-sense steps to improve mental health care in the emergency setting
- How to slash errors in formalized communications strategies



## ED MANAGEMENT

### EXECUTIVE EDITOR

**James J. Augustine, MD**

Director of Clinical Operations, EMP Management  
Canton, OH  
Assistant Fire Chief and Medical Director  
Washington, DC, Fire EMS  
Clinical Associate Professor, Department of Emergency  
Medicine  
Wright State University, Dayton, OH

### EDITORIAL ADVISORY BOARD

**Nancy Auer, MD, FACEP**

Vice President for Medical Affairs  
Swedish Health Services, Seattle

**Kay Ball, RN, PhD, CNOR, FAAN**

Perioperative Consultant/Educator  
K & D Medical, Lewis Center, OH

**Larry Bedard, MD, FACEP**

Senior Partner  
California Emergency Physicians  
President, Bedard and Associates  
Sausalito, CA

**Robert A. Bitterman, MD, JD, FACEP**

President, Bitterman Health Law Consulting Group, Harbor  
Springs, MI

**Richard Bukata, MD**

Medical Director, ED, San Gabriel (CA) Valley Medical Cen-  
ter; Clinical Professor of Emergency Medicine, Keck School  
of Medicine, University of Southern California  
Los Angeles

**Diana S. Contino, RN, MBA, FAEN**

Senior Manager, Healthcare  
Deloitte Consulting LLP  
Los Angeles

**Caral Edelberg, CPC, CPA, CAC, CCS-P, CHC**

President, Edelberg Compliance Associates  
Baton Rouge, LA

**Gregory L. Henry, MD, FACEP**

Clinical Professor, Department of Emergency Medicine  
University of Michigan Medical School  
Risk Management Consultant  
Emergency Physicians Medical Group  
Chief Executive Officer  
Medical Practice Risk Assessment Inc.  
Ann Arbor, MI

**Marty Karpel, MPA, FACHE, FHFMA**

Emergency Services Consultant  
Karpel Consulting Group Inc.  
Long Beach, CA

**Thom A. Mayer, MD, FACEP**

Chairman, Department of Emergency Medicine  
Fairfax Hospital, Falls Church, VA

**Larry B. Mellick, MD, MS, FAAP, FACEP**

Professor of Emergency Medicine  
Professor of Pediatrics  
Department of Emergency Medicine  
Georgia Regents University, Augusta

**Robert B. Takla, MD, FACEP**

Medical Director and Chair  
Department of Emergency Medicine  
St. John Hospital and Medical Center, Detroit

**Michael J. Williams, MPA/HSA**

President, The Abaris Group  
Walnut Creek, CA

**Is there an article or issue you'd like posted to your website? Interested in a custom reprint? There are numerous opportunities to leverage editorial recognition to benefit your brand. Call us at (877) 652-5295 or e-mail [ahc@wrightsmedia.com](mailto:ahc@wrightsmedia.com) to learn more.**

**To obtain information and pricing on group discounts, multiple copies, site-licenses, or electronic distribution please contact:**

**Tria Kreutzer**

Phone: (800) 688-2421, ext. 5482  
Email: [tria.kreutzer@ahcmedia.com](mailto:tria.kreutzer@ahcmedia.com)

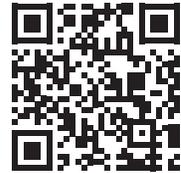
**To reproduce any part of AHC newsletters for educational purposes, please contact The Copyright Clearance Center for permission:**

Email: [info@copyright.com](mailto:info@copyright.com)  
Website: [www.copyright.com](http://www.copyright.com)  
Phone: (978) 750-8400

## CME/CNE INSTRUCTIONS

To earn credit for this activity, please follow these instructions:

1. Read and study the activity, using the provided references for further research.
2. Scan the QR code to the right, or log onto **AHCMedia.com** and click on My Account. First-time users will have to register on the site using the 8-digit subscriber number printed on their mailing label, invoice, or renewal notice.
3. Pass the online tests with a score of 100%. You will be allowed to answer the questions as many times as needed to achieve a score of 100%.
4. After successfully completing the test, your browser will be automatically directed to the activity evaluation form, which you will submit online.
5. Once the completed evaluation is received, a credit letter will be e-mailed to you instantly.



## CME/CNE QUESTIONS

1. **The transition to ICD-10-CM could present additional challenges for academic medical centers where much of the documentation is done by which of the following?**
  - A. coding vendors
  - B. off-site clinicians
  - C. residents
  - D. nursing students
2. **What is the most important aspect of the pain protocol developed by Chang et al?**
  - A. It takes the issue of pain control seriously.
  - B. It forces clinicians to continually reassess patients.
  - C. It solicits patient feedback.
  - D. It takes full advantage of nurses.
3. **Buprenorphine is a partial agonist, so if someone is intoxicated on heroin, oxycodone, or hydrocodone, and they are given buprenorphine, it will do which of the following?**
  - A. make them feel better
  - B. make them more alert
  - C. make them functional
  - D. put them into withdrawal