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Vol. 45, No. 1; p. 1-12

→ INSIDE

Multiple codes cause confusion 4

Updated guideline on pressure injuries 5

Study: Subepidermal moisture useful in predicting ulcers 7

Insurer's data fuel QI efforts 8

Practical steps for addressing opioid disorder..... 10



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Plain Language Alerts Can Save Lives, Becoming More Prevalent

It is common for hospital staff and visitors to hear coded alerts on the public address system, with Code Blue calls mixing with Code Reds, Pinks, and maybe Oranges.

What is a Code Orange? A staff member may worry this is something important that requires action, but he or she may not know what to do. A patient or visitor may just worry something bad is happening in the hospital and feel left in the dark. What if an employee works at more than one hospital, and a Code Orange in one means a hazardous material incident but in the other it means an active shooter?

More hospitals and health systems are adopting plain language for their emergency announcements, forgoing some traditional code words for situations such as fires and infant abductions. The goal is to reduce the potential for confusion caused by facilities using different codes, and the desire to more effectively communicate with patients and visitors. Twenty-five state hospital associations recommend plain language alerts, and The Joint

Commission (TJC) has recommended plain language since 2012. Federal agencies such as Health and Human Services, Homeland Security, and FEMA recommend using plain language for emergency alerts, citing the need for clarity.

For instance, FEMA says first responders and incident managers should use common terminology to promote public safety, especially the safety of those directly affected by the incident. TJC suggests healthcare organizations forgo the traditional Code Red for fire in favor of something like “Facility Alert – Fire Alarm,” followed by more specific information.

Health System Switches to Plain Talk

Piedmont Healthcare recently adopted plain language alerts at its 11 hospitals in Georgia. Part of the impetus for the change was the growth of the healthcare system, which has more than doubled in size in four years.

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As each facility joined the Piedmont system, it brought its own codes for facility announcements, says **Eric Bour**, MD, CEO at Piedmont Newton Hospital in Covington, GA. There was overlap with some of the most commonly used codes, but many facilities used codes that were unfamiliar to health system employees and professionals traveling from one hospital to another.

“Within one facility, it wasn’t a big deal because people were trained to know their hospital’s particular codes,” Bour says. “But ... there is a potential that someone in one facility would not respond correctly to an event because they would not know what that particular color meant in that facility.”

The potential for harm became especially evident with Code Pink. Bour notes that Code Pink is a legacy color code that usually means infant abduction, but it might also mean an infant cardiorespiratory arrest.

“In one event, you want the place locked down and everyone ... doing everything you can to find that infant. If it’s an infant cardiac arrest, you want the code team, and failure to respond appropriately in either case could be disastrous,” Bour says. “Those kinds of disparities in what we think of as a commonly used code were apparent even in two of our hospitals that are practically right next to each other. We have numerous staff that go back and forth to both places.”

Better to Inform

Coded language was used largely because healthcare organizations sought quick, concise ways to alert staff to certain situations, and also

to keep certain information from patients and visitors, Bour notes. For example, there was a fear that simply alerting everyone to a fire in the building with plain language might set off a panic. Many considered a code that alerted only a select audience as the better solution.

“But when you really look at it, the data and studies show that people aren’t more afraid when they know what’s happening. They’re actually more afraid when they don’t know what’s happening,” Bour says. “It’s scarier when you hear something is going on but you don’t know what. Your mind fills in the gap with the worst possibility.”¹

Piedmont adopted plain language across all its facilities in September 2019, starting with the assembly of a group of staff and leaders who could guide the process. That group included nursing, public safety, emergency management, and communications, including the operators who make public announcements.

The group conducted some research into the hazards of codes and the benefits of plain language, assessing the available data and the position statements of many state hospital organizations and other healthcare groups. (*See the story on page 4 for details on research indicating the wide variety of codes in use.*)

Piedmont’s group then started presenting that information to departments and units throughout the health system to solicit buy-in. Feedback from that process led to some retooling of their original plan to eliminate all codes.

“We decided to let Code Blue stay the same,” Bour reports. “It’s a very quick way to get the attention of those key people who are needed to respond ... we

provided an enunciation tool to all our communications people so that they know exactly what to say in each situation. We educated our staff through our intranet, posters, table tents, and all kinds of things to let people know we were converting.”

No Need to Phase In

There had been some in the health system who insisted that such a change should be made over a six- to nine-month period to allow people to start thinking in different terms and not expect the usual coded messages. Bour pushed back on that, saying there would be no learning curve for the plain language alerts.

“If you state things directly, people will understand what’s going on and determine their most appropriate response,” Bour offers. “It’s the coded language that you have to train people to understand.”

The change took effect in September. Since then, Bour says it has been successful.

“There are some soft ways to measure success with something like this, such as how much push back you’re getting in the first 30 days. The answer is we got zero,” he says. “The other measure of success is whether people are responding properly to overhead communication. There have been no safety events because of an improper response.”

Missouri hospitals began seriously considering plain language communication in 2012, notes **Jackie Gatz**, MPA, CHEP, vice president for safety and preparedness with the Missouri Hospital Association (MHA). An MHA committee that focuses on healthcare continuity of operations during a disaster assessed the use of codes.

As could be found elsewhere, the use of codes was wildly inconsistent across Missouri, Gatz recalls. Nine different codes were used to announce a mass casualty event, meaning someone from a different facility might not recognize a code that should trigger immediate action, she explains.

“Those staff who are moving between different facilities could really be confused by that, and that matters when you’re going to be receiving multiple casualties in 10 minutes,” Gatz says.

The MHA determined that plain language also was becoming the preferred communication method in the field of emergency preparedness. Many public safety and law enforcement organizations now discourage or forbid the use of “10” codes in favor of direct communication. The National Incident Management System has established plain language requirements for communication and information management.²

The MHA urged hospitals to adopt plain language and provided a guide for consistent announcements.³ A hazardous materials incident would be announced as “Facility Alert + Hazardous Spill + Descriptor (location).”

Several varieties of security incidents would be announced as “Security Alert + Descriptor (threat/location).” The descriptor could be a bomb threat, a violent person, an active shooter, or whatever information was necessary for people to respond appropriately.

The MHA guide is voluntary, although the association strongly encourages hospitals to adopt plain language. For those hospitals that are reluctant to use plain language, the guide provides a standardized code for some scenarios so that at least the codes will be more uniform throughout the state. For example, hospitals that do not want to fully commit to plain language for a bomb threat are encouraged to use Code Black.

Keeping Red and Blue

The MHA decided to retain the use of the two most popular codes (Code Red and Code Blue) because they are so well known in the healthcare community and generally to most other people, Gatz says. Some hospitals use Code Blue with a

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descriptor of the medical emergency to use plain language while still satisfying those listening for the traditional code, she explains.

Gatz notes MHA has pushed harder for the use of plain language in recent years due to the increased concern over violent incidents in healthcare settings. When the plain language initiative began, there were many hospital leaders who believed that security alerts for violent incidents still needed to be cryptic enough not to alarm people, Gatz says. That attitude has changed more recently, and there is widespread support for open communication.

“With some of the violent incidents we’re seeing in our communities and in our healthcare facilities, you almost have a fundamental right to make people aware of a threat that is near them. Denying them that knowledge through coded announcements is not acceptable,” Gatz suggests. “There has been a lot of discussion among safety leaders that you are much better off if you communicate clearly and allow people to move safely away from the threat in the environment.”

Effective plain language communication must not only convey what is happening but also what action is appropriate, Gatz says.

That action may be spelled out specifically in the announcement

(e.g., “evacuate the third floor”), or it may be surmised by the listener, such as when code team members know they must respond to the stated location.

Expect Little Resistance

About 90% of Missouri hospitals have adopted plain language. Gatz notes some hospitals are trying to decrease the number of overhead announcements. Thus, they are no longer broadcasting certain codes, using more directed methods of communication instead.

Switching to plain language requires a champion who can explain the reasoning to different constituents and overcome barriers, Bour says. However, this improvement project should not meet a great deal of resistance.

Most hesitation is based on tradition, with long-time staff wondering if it is a good idea to let everyone know what is going on in the hospital without any filter, he says.

That skepticism can be overcome by showing the extensive research on how plain language improves safety, Bour says.

“If we want to provide the safest environment for our staff, our patients, everyone else in the facility

for any reason, then we need to be able to communicate clearly and concisely what is happening,” he says. “We are in an environment, unfortunately, that is very vulnerable to the actions of bad people and bad events. We need to be able to communicate in a way that makes sense to everyone.” ■

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Study: Hospitals Using 154 Code Combinations

The Emergency Nurses Association (ENA) supports using plain language alerts, citing the wide variation in codes that were in use throughout the country before the gradual move to more direct communication.

In its position paper on plain language, ENA provided examples of how the risk from confusing

and ambiguous codes is more than theoretical. “The difference between coded alerts and plain language alerts can be seen in the contrast between active shooter situations at West Anaheim Medical Center (WAMC) in 1999 and at Brigham and Women’s Hospital in 2015,” the ENA paper authors wrote. “At WAMC, there was no specific color

code for an active shooter, and the coded alert system, by its very nature, prohibited adaptation of established codes to novel situations.

As a result, ‘Code Gray’ was announced, which indicated the presence of a combative person. However, the Code Gray protocol at WAMC directed male staff members to respond and help control the

situation, which drew them toward the shooter and resulted in two of them being killed.” By the time it had an active shooter incident in 2015, Brigham and Women’s hospital had replaced coded alerts with plain language alerts. The hospital’s announcement said, “A life-threatening situation now exists at Watkins Clinic B, Shapiro 2. All persons should immediately move away from that location if it is safe to do so. If it is not safe to move away, shelter in place immediately.”

The ENA paper cited research from Pennsylvania healthcare

facilities between 2004 and 2013 showing that they used 80 different emergency codes to designate 37 separate functional categories. That meant there were 154 possible combinations to interpret correctly. This was the state of codes used by Pennsylvania facilities:

- 15 different codes for “combative person”;
- 15 for “internal/external emergency”;
- 15 for adult medical emergencies;
- Code Yellow carried 10 meanings;

• Code Orange carried nine meanings;

• Codes Purple, White, and Silver each carried seven meanings.

The Pennsylvania hospitals also used 16 different letter codes, such as Code A, and four coded names, such as Dr. Quick. There were 12 number codes and 22 word codes, such as Code Wintergreen. In other research, California used 47 different codes for infant abduction and 61 different codes for a combative person.

The ENA research summary and position paper is available online at: <https://bit.ly/33sZGyu>. ■

Updated Best Practices for Pressure Injuries Focus on Assessment

A recently revised guideline for the prevention and treatment of pressure injuries may require quality leaders to reassess how they address this issue.¹

The guideline was released recently by an international coalition that includes the National Pressure Injury Advisory Panel (NPIAP), an independent, not-for-profit professional organization in Westford, MA, that addresses the prevention and management of pressure injuries. NPIAP worked with the European Pressure Ulcer Advisory Panel, and the Pan Pacific Pressure Injury Alliance.

The groups developed evidence-based recommendations for the prevention and treatment of pressure injuries. NPIAP President **Janet Cuddigan**, PhD, RN, FAAN, issued a statement saying the groups analyzed a large body of international research to develop evidence-based clinical recommendations. “The guideline bridges a critical gap by accelerating the translation of

research into practice to improve patient outcomes,” she said.²

Time to Reassess

The guideline is an opportunity for reflection, says **Martin Burns**, CEO of Bruin Biometrics, a company in Los Angeles that provides consulting and technology to address pressure injuries.

The guideline expands the visual indicators that should indicate a risk of pressure injuries, he says. Previous guidelines instructed clinicians to watch for redness on the surface of the skin, indicating the first stage of a pressure ulcer under ICD-11, but only when it was non-blanchable (i.e., the skin did not turn white when pressed with a finger).

The revised guideline also includes blanchable erythema, a condition in which the skin is red, turns white when pressed with a finger, and then immediately turns red again when pressure is removed. “Any redness requires attention, whether it is

blanchable or not,” Burns stresses. “There is a real recognition in these guidelines that there are a lot of biological processes that are occurring underneath the skin surface, invisibly, before you can claim that a pressure ulcer has manifested at the skin’s surface. That’s a huge advance in the understanding of the science behind this problem.”

The updated guideline also emphasizes the role inflammation plays in pressure injuries. The combination of deformation from pressure, inflammation, and ischemia determine the amount of cell death, the guideline explains.

In addition, the guideline recognizes a biophysical marker of that damage that the groups refer to as biocapacitance, the ability of skin and tissue to change its physical features in the presence or absence of moisture. Biocapacitance is “one of the earliest signs of cell death” in pressure injuries, the guideline states.

Skin temperature also is key to assessing the risk of pressure injuries,

the guideline notes, even when it is assessed by a nurse simply touching the patient's skin to see if it is noticeably warm.

"That is hugely beneficial, because it now gives nurses the ability to rely on changes in temperature as an indicator of risk, with simple palpation," Burns says. "This is an acknowledgment that nurses can detect this risk through their normal interactions with a patient and using their own knowledge of what seems normal and what does not."

One new development in the guideline is endorsement of subepidermal moisture (SEM) measurement devices. Bruin Biometrics produces SEM devices. Another company that produces SEM devices is Delfin Technologies in Greenwich, CT.

"Pressure injuries are still among the most reported patient safety events in any care setting across the country. Nurses have been relying on their own ability to try to assess and diagnose the onset of an early stage pressure ulcer so that they can take the right action to keep the skin intact, but this is very subjective," Burns notes.

"It puts nurses on the hook to try to identify cell damage, which no one can do definitively by sight and touch," Burns continues. "The guideline says they need help from a device to assess these changes going on at the skin and tissue level." Research has indicated

the effectiveness of SEM devices, with studies revealing that the measurements are an objective determination of the risk of pressure injuries. *(See the story on page 7 for more on that research.)*

The revised guideline does not encourage sole dependence on SEM devices for assessing pressure injury risk, Burns notes. In fact, it reinforces the primacy of nurse assessments as the key method for protecting patients.

"That's very encouraging, because it means that though this is a time to pause and reflect on new opportunities, nurses can keep doing what they are doing because they are effective and the best advocates for their patients," Burns explains. "The addition of any technology can help them and give them an ability to measure risk in a way that they didn't have before, but it is not a substitute for good nursing practice."

Dark Skin a Factor

Burns notes that the updated guideline addresses the challenge of diagnosing early stage pressure injuries in darkly pigmented skin because the nurse cannot see redness, one of the clearest and earliest indicators of damage.

Research indicates a significantly smaller proportion of black nursing home admissions see their pressure ulcers heal, compared to

a similar group of white patients.³ Recommendation 2.7 says that "When assessing darkly pigmented skin, consider assessment of skin temperature and subepidermal moisture as important adjunct assessment strategies."¹

That highlights the need to pay particular attention to patients with darker skin, which should help address the higher incidence of death among these patients, Burns says.

The guideline also emphasizes the need to protect patients from device-related pressure injuries, particularly those tied to tubing and face masks. It also expands the effort to protect neonates and children from pressure injuries.

"That is a good development because this has been a neglected cohort for some time now," Burns says. "Unfortunately, children and neonates suffer from pressure injuries at quite an intensive rate, with the guideline citing a study in Spain showing a 23% worldwide pressure injury prevalence in NICUs."⁴

Major Financial Risk

Burns suggests that quality improvement and patient safety professionals should work with clinical leaders to use the guideline as a tool for reassessing current practice in the organization regarding pressure injuries. The revised guideline provides a concise analysis of the

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latest information on etiology and a roadmap to the best practices for prevention and treatment, he says.

Aside from the effect on patients, healthcare organizations are strongly incentivized to properly assess and prevent pressure injuries because CMS has stopped reimbursing hospitals for the care required to treat most pressure injuries acquired during a hospital stay, Burns notes. Medicare also can penalize hospitals 1% of reimbursement for high rates of hospital-acquired conditions such as pressure injuries.⁵

“Take the opportunity to update your understanding of the scientific advancement. Think about it in terms of what you do on admission, how you scan for patients at risk, and how you record the biomarkers recognized in the guideline when you’re entering data in the patient record,” Burns recommends.

Admission Testing Crucial

Hospitals should ensure their present-on-admission testing is up to date according to the research and recommendations in the guideline, Burns says.

During the inpatient stay, assessment and prevention efforts should focus particularly on perioperative patients and the cohorts

known to be at high risk for pressure injuries, including neurology, stroke, and orthopedic trauma.

“At discharge, make absolutely sure you have a record in your notes of what assessment was done and how it was done. In the event a patient is discharged and gets readmitted within 30 days, you’ve documented that the patient was discharged with the signs of a developing pressure ulcer, and those signs were adequately communicated to the next caregiver,” Burns says.

CMS and the Agency for Healthcare Research and Quality are likely to follow the international guideline with updated standards that are binding on American healthcare organizations, Burns predicts.

Meanwhile, organizations can get ahead of the coming regulations by using the international guideline to more closely match their pressure injury practices with current research.

“Get ahead of it by looking at screening on admission and at discharge,” Burns suggests. “Focus hard on those cohorts that have been called out as high risk. Dark-skinned people is the big one, and also neonates and children. Working to address their needs now will put you in a better place when CMS follows through with new standards.” ■

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Research Reveals Subepidermal Moisture Useful in Predicting Ulcers

Researchers reported the measurement of subepidermal moisture by surface electrical capacitance can be an important tool in the assessment and prevention of pressure injuries.

They compared using the capacitance measurement with visual skin assessment of pressure ulcers at the trunk location in 417 nursing home residents residing in 19 facilities. The participants were at

risk for pressure ulcers, with a mean score for Braden Scale for Predicting Pressure Ulcer Risk of 15.6.

Investigators obtained concurrent visual assessments and subepidermal moisture readings at the sacrum as

well as the right and left ischium weekly for 16 weeks.

Elevated subepidermal moisture values occurred with concurrent skin damage at the sacrum, and higher subepidermal moisture values were associated with visual damage one week later.

“Subepidermal moisture of 39 tissue dielectric constant units predicted 41% of future skin damage, while visual ratings predicted 27%,”

they wrote. “Thus, this method of detecting early skin damage holds promise for clinicians, especially as it is objective and equally valid for all groups of patients.”

The study results are available at: <https://bit.ly/2sfgmws>.

Meanwhile, the same researchers reported on subepidermal moisture and visual skin assessment of heel pressure injury among the same study group over 16 weeks.

In those measurements, subepidermal moisture was associated with concurrent damage and damage one week later. Subepidermal moisture detected deep tissue injury and differentiated among those that resolved, remained, and deteriorated over 16 weeks.

These researchers concluded that subepidermal moisture may be an objective method for detecting heel pressure injury. ■

Aetna Combines Data With Clinical Insight for Quality Improvement

A pair of data-driven quality improvement initiatives are helping Aetna improve care in two different areas. One involves improving oral hygiene to reduce infections; another helps reduce opioid-related deaths by contacting patients after an overdose.

Data collected by the insurer indicated that good oral health could help fight hospital-acquired pneumonia (HAP), the most common hospital-acquired infection, with more than a 30% mortality rate for patients, says **Dan Knecht**, MD, MBA, vice president of health strategy and innovation at Aetna.

“We had clinical insight that good oral health in the post-operative period could reduce the chance of infection, particularly with pneumonia,” he says. “The clinical insight was combined with the available data, and the point of intersection was the patient. Clinical insight with thoughtful intervention can really positively influence the health of our insured and ultimately reduce costs.”

Knecht and colleagues assessed the data available on Aetna’s insured patients, focusing on which patients

contracted HAP after surgery. They examined the top 25 procedures in which patients contracted HAP, then studied the factors common to those patients.

“CLINICAL INSIGHT WITH THOUGHTFUL INTERVENTION CAN REALLY POSITIVELY INFLUENCE THE HEALTH OF OUR INSURED AND ULTIMATELY REDUCE COSTS.”

A one-year study performed by an Aetna research partner in Salem, VA, found there was a 93% reduction in the incidence of HAP with enhanced postoperative oral care, Knecht says. That spurred Aetna’s Rush to Brush campaign.¹ The campaign addresses

the fact that surgery patients receive little oral care while hospitalized, which sets up perfect conditions for an infection, Knecht says.

These patients often lie on their backs for hours or days, sometimes heavily medicated, without eating, drinking, or brushing their teeth. Even when conscious, postoperative patients often neglect their oral hygiene because they are out of their normal routines and may not have supplies, Knecht explains.

This allows bacterial overgrowth that can lead to medical complications elsewhere in the body, including the lungs, Knecht explains. Research has shown that improving oral hygiene in postsurgical patients can significantly reduce the risk of pneumonia, he says.

Aetna identifies members facing inpatient surgery through precertification data and mails them oral hygiene kits before the procedure, Knecht says. The kits include a soft-bristled toothbrush, toothpaste, and alcohol-free mouthwash packaged in a travel pouch, as well as a personalized “Get Well Soon” card with oral hygiene tips, he says.

“The timing works out quite well. Patients generally receive the kit up to 15 days prior to the scheduled procedure. We launched the program in January 2019 and sent out about 1,000 of these kits,” Knecht says. “We then did patient surveys on their experience with the program, and they were very positive. About 95% of those responding to the survey had a very positive response. One very good result was that about 70% of those who received the kits brought them to the hospital, which is much higher than we expected.”

About 55% of the respondents said the kits improved their hospital experience, and more than 80% said they would recommend the kit to others.

An ongoing clinical study is assessing the effects on HAP, and the early results suggest that the dental health initiative may reduce HAP among Aetna members by 30%. Knecht notes that figure is preliminary but still says it is very encouraging.

Aetna also has been tracking metrics related to opioids. They found that each month, a few hundred members would suffer an opioid overdose. Aetna’s data indicated that patients who go to the ED for an opioid overdose frequently do not engage in post-discharge planning, so the insurer wanted to encourage intervention after the overdose, Knecht says.

The result was the Guardian Angels program, which seeks to engage with these patients soon after the overdose, when they are the most receptive to help, Knecht explains.²

“We look at claims data from members who have had an opioid-related overdose resulting in an ED visit. The data team pulls a list of those folks every month. We have three full-time clinicians who are really dedicated to this program, social workers and nurses with extensive backgrounds in helping people with substance use disorder,” Knecht reports.

“They call these patients to engage with them telephonically, try to understand what happened and how we can help them,” Knecht continues. “We launched this program about a year ago and have learned so much anecdotally about the opioid crisis and people who are struggling with this disorder.”

The clinicians can facilitate the patients seeking additional care to help with the disorder, including medication-assisted therapy.

“One of the problems people run into is that there are not enough clinicians to treat addiction. The Guardian Angels can look for local providers within the Aetna network who treat addiction, make appointments, and sort of hand-hold, if needed, to make sure they get the necessary treatment,” Knecht says.

The connection rate with the Guardian Angels is higher than with most other efforts to reach out to patients, Knecht says.

The program reaches 40% of the people they try to contact, which Knecht says is about three times higher than Aetna’s typical success rate for phone-based care management programs.

“Data are insufficient to make an impact. You have to look at these things through a practical clinical lens to know what will work in these settings and what won’t,” Knecht observes. “You need physicians who understand the real world implications of some of these data trends, along with the right intervention that is individualized to what the patient needs.” ■

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IHI Provides Practical Steps for Reducing Morbidity and Mortality From Opioids

The Institute for Healthcare Improvement (IHI) has collaborated with the Boston Medical Center (BMC) to provide a set of best practices for reducing morbidity and mortality related to opioid use disorder, focusing on practical steps that can be taken immediately.¹

Simply reducing the number of opioid prescriptions is not enough, the report authors wrote.

Hospitals must be much more proactive in identifying patients with opioid use disorder and initiating treatment wherever those patients are encountered within the treatment process.

The Agency for Healthcare Research and Quality (AHRQ) reports that in 2016 the rate of opioid-related inpatient stays in U.S. hospitals was 300 per 100,000 population. That is twice the rate in 2008.² In addition, the number of opioid-related ED visits more than doubled from 2008 to 2017.

The report from IHI and BMC encourages hospitals and health systems to focus on five areas:

- Identify and treat individuals with opioid use disorder at key clinical touchpoints;
- Modify opioid prescribing practices to minimize harm and maximize benefit;
- Train stakeholders on the risks of opioid use disorder and how to reduce stigma;
- Identify and screen individuals at high risk of developing opioid use disorder;
- Reduce the harms of substance use disorder.

The suggestions in the report should help hospital leaders who want to do more to address the

opioid problem, says **Michael Botticelli**, co-author of the report and executive director of the Grayken Center for Addiction at Boston Medical Center in Massachusetts.

It has been known for some time that hospitals are key touchpoints for people with substance use disorder, and they are underused in addressing these patients' needs, adds Botticelli, who served as the director of the White House Office of National Drug Control Policy under President Obama.

"There are significant opportunities for hospitals and health systems to not only prevent opioid use disorders but also to implement what have been proven to be good evidence-based strategies to identify people and initiate treatment," he says. "There has been wide variation in hospital responses to the opioid epidemic ... if hospitals have been doing anything, it's largely centered on their opioid prescribing. That's a good first start, but clearly there are lots of great examples of hospitals going way beyond their prescribing."

The first tactic emphasizes initiating treatment at key clinical touchpoints, Botticelli says, because AHRQ data indicate a significant increase in ED visits related to opioids.²

Those visits are not seen routinely as opportunities to intervene and address the patient's substance use disorder in a meaningful way, he says.

"This is where emerging evidence meets clinical practice. A study from Yale New Haven showed that initiating treatment within the emergency department has

significantly better engagement rates for people with opioid use disorder than the current common practice of giving people a list of referrals for treatment, or sometimes doing nothing else," Botticelli says. "There is good evidence to show that initiation of treatment within the emergency department, particularly the use of buprenorphine, is a key opportunity."³

Significant Effects Possible

Initiating such treatment in the ED improves patient engagement with treatment but also significantly reduces the chance of overdose, Botticelli says.

Also, there is a unique opportunity for hospitals to pursue treatment with patients who are hospitalized for the effects of their substance use disorder, he says. For instance, patients with endocarditis can be offered ongoing treatment that not only reduces mortality but also subsequent admissions and hospital stays, which introduces a cost saving element.

The report includes case examples to illustrate how hospitals can implement practical improvements, rather than providing theoretical guidance. One example comes from the Johns Hopkins Bayview Medical Center Inpatient Addiction Consult Service, which provides information for inpatients with substance use disorder.⁴

Available throughout the facility, the service offers "brief behavioral interventions and counseling, guidance on clinical management, brief buprenorphine/naloxone

bridges, education, and facilitates linkages.”

Early data from the service suggest that it made patients less likely to have more than three ED episodes and more likely to have more than one ambulatory care visit, according to the IHI/BMC report.

“We hope that institutions will look at this as sort of a road map on programs that can address opioid use disorder and use these examples as a yardstick against their own actions to date,” Botticelli says. “There have been so many guidance documents out there ... but we tried to synthesize the guidance into one document that provides some practical options that can be implemented now.”

Systems Problem, Not Prescriptions

The report also indicated that healthcare leaders should think of the opioid and pain crisis as a systems problem, says **Mara Laderman**, MSPH, report co-author and senior research associate at the IHI in Boston. It is not sufficient to reduce the number of opioid prescriptions, she says.

“They need to be thinking about the different points at which patients will be interacting with the health system, whether they have an opioid use disorder or might be developing one,” Laderman explains. “One theory on why there hasn’t been enough progress toward reducing overdose deaths, given the financial and human resources that have been going into addressing this problem, is that current approaches have been focused on isolated parts of the system and not necessarily in a coordinated way.” One of the most important things that hospitals can do is to enhance the capacity of

clinicians to provide medication-assisted treatment, Laderman says. Currently, clinicians must apply for an X waiver to treat opioid use disorder with buprenorphine, and many clinicians do not have the waiver, she says. (*Learn more at: <http://bit.ly/2P9c1Tu>.)*

“Hospitals can assist [clinicians] in getting the waiver and encourage them to get it. This may mean making it a requirement that residents have an X waiver, for instance,” she says. “The next step is to ensure that those clinicians are actually using those waivers where appropriate in the ED or elsewhere. You have to make sure the clinicians have the capacity to provide the buprenorphine, and then make sure they are actually providing that care at those points where they interact with those patients.” ■

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SOURCES

- **Michael Botticelli**, Executive Director, Grayken Center for Addiction, Boston Medical Center. Phone: (617) 414-6926.
- **Mara Laderman**, MSPH, Senior Research Associate, Institute for Healthcare Improvement, Boston. Phone: (617) 301-4800.

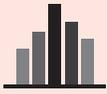
CE OBJECTIVES

After completing this activity, participants will be able to:

1. Identify a particular clinical, legal, or educational issue related to quality improvement and performance outcomes;
2. Describe how clinical, legal, or educational issues related to quality improvement and performance outcomes affect nurses, healthcare workers, hospitals, or the healthcare industry in general;
3. Cite solutions to the problems associated with quality improvement and performance outcomes based on guidelines from relevant authorities and/or independent recommendations from clinicians at individual institutions.

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CE QUESTIONS

1. **What was one impetus for Piedmont Healthcare System switching from coded announcements to plain language?**
 - a. Confusion about a code caused a patient death.
 - b. The rapid growth of the healthcare system.
 - c. A critique from CMS about its codes.
 - d. A directive from the state licensing board.
2. **In the guidance from the Missouri Hospital Association, what codes were deemed acceptable instead of plain language?**
 - a. Code Red and Code Blue
 - b. Code Green and Code Yellow
 - c. Code Red and Code Yellow
 - d. Code Blue and Code Green
3. **In the updated international guideline on pressure injuries, what was recognized as "one of the earliest signs of cell death?"**
 - a. Swelling
 - b. Redness
 - c. Biocapacitance
 - d. Elasticity
4. **In the report issued by the Institute for Healthcare Improvement, in collaboration with Boston Medical Center, what is one key thing hospitals should do to better address opioid use disorder?**
 - a. Reduce the number of opioid prescriptions.
 - b. Be much more proactive in identifying patients with opioid use disorder and initiating treatment wherever those patients are encountered within the treatment process.
 - c. Restrict the use of X waivers.
 - d. Identify clinicians who are prescribing buprenorphine at higher rates than average, and investigate if the volume is justified for the patient population in which they practice.