



# Management

Best Practices – Patient Flow – Federal Regulations – Accreditation

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## Physician-initiated follow-up contact improves patient satisfaction, provides opportunities to improve care

*HIPAA-compliant e-mail tool provides an efficient way to reach out to patients following discharge*

It is entirely understandable for emergency providers to question any new task or responsibility handed down by regulators or administrators. Busy providers are already stressed with burgeoning patient volumes and all the pressures associated with handling acute care crises. Consequently, it is no surprise that when Kaiser Permanente's Northern California region rolled out an initiative aimed at getting emergency providers to initiate post-ED visit contact with patients, it was a tough sell, at least initially.

### EXECUTIVE SUMMARY

Numerous studies have shown that follow-up contact with patients after they have received care in the ED can move the needle upward on patient satisfaction surveys. Many organizations give this responsibility to ancillary staff, but an initiative involving all 22 EDs within Kaiser Permanente's northern California region is challenging the treating providers to initiate this follow-up. Three years into the initiative, ED directors indicate that while obtaining physician buy-in of the practice was initially challenging, most now view the approach as an opportunity to improve care.

- A pilot of the approach found that there is little difference between phone contact and e-mail communications, although e-mail contact is much more efficient.
- Most providers take advantage of a web-based tool to make follow-up contact with patients via e-mail. The approach is a HIPAA-complaint process that enables providers to include confidential medical information within the e-mail communications.
- Providers say the follow-up contact gives them an opportunity to reinforce important medical instructions and to answer any questions the patient may have neglected to ask during the medical emergency.
- Administrators recommend that ED managers interested in implementing post-ED-visit contacts establish attainable goals for their providers and publish performance figures as means to improve adoption of the practice.



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However, three years into the initiative, ED directors report that not only is the practice improving patient satisfaction, which was a primary goal of the effort, it is also giving physicians the opportunity to reinforce instructions that may have been missed or misunderstood in the midst of a medical emergency, and to answer critical patient

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follow-up questions that can have an impact on outcomes. In addition, emergency providers are receiving feedback on their performance, which they never had access to before.

## Phone follow-up presents challenges

Kaiser's decision to implement the post-ED visit callbacks followed a pilot of the practice, led by **Pankaj Patel, MD**, former chief of the EDs at Kaiser Sacramento and Roseville Medical Center. A few of the physicians at these facilities were already contacting patients by phone following their ED visits. Patel and some of his colleagues wanted to see if they could leverage a tool that was already in use among Kaiser's primary care practitioners, which enables secure messaging between providers and patients via e-mail. "We thought it would be a great opportunity for ED physicians to use this tool also, even though these were not our own private patients," says Patel. "These were potentially patients we had never seen before, but we thought the impact might be equally valuable in the ED setting."

Kaiser's secure messaging capability is a HIPAA- (Health Insurance Portability and Accountability Act) compliant process that patients can sign up for, explains Patel. Patients who elect to take advantage of secure messaging understand that the process will be used to exchange medical information, and they determine what the confidentiality will be in the e-mail address that they provide, he says.

The pilot, which was conducted between May 1 and June 30 of 2010, involved 42 emergency physicians who volunteered to participate by either e-mailing or telephoning patients within 72 hours of their ED visit. In an alternate month, the physicians provided no follow-up contact.<sup>1</sup>

Among all patients who received follow-up contact, 348 patients returned patient satisfaction surveys, with 87.7% reporting their experience as "very good" or "excellent." Among all the patients who did not receive follow-up contact, there were 1002 patients who returned patient satisfaction surveys, with 79.4% who rated their experience as "very good" or "excellent."

There was little difference between patients who received follow-up via phone and those who received e-mail contact, but Patel notes the e-mail contact was more efficient. The study showed that it takes about two minutes to send a follow-up e-mail to a patient, but reaching a patient by phone may take much longer, requiring multiple attempts.

“If you do not get a hold of the patient and leave a message, then you have to leave a phone number. And if you leave a phone number, then when the patient calls back, it may be in the middle of your shift, so it presents real challenges,” says Patel. “In the ED environment, the study shows that there is no better way to communicate at this point than via e-mail because you can do it on your time and the patients are able to reply on their time.”

## Positive feedback is the norm

While patients reacted positively toward the physician contacts, investigators found that they were also contacting the physicians back, and that nine times out of 10, this feedback was positive, says Patel. “It was nice. In our day-to-day affairs, we would go days and days without getting any comments or feedback at all, or just get feedback that was bad,” he says. “This was the first time when we were getting feedback that was consistently positive from the patients that were taken care of by the physicians.”

Another finding was that in instances in which an ED visit or patient interaction didn’t go as well as the physician would have liked, the follow-up provided a second opportunity to “make a good first impression,” says Patel. “Also, it allowed us to reinforce things that we may have not had enough time to reinforce during the ED visit.”

For example, if a key instruction was for a patient to stop one medication and start on a new one, the physician could state this in the follow-up e-mail message. “It gave us that opportunity to reinforce important things,” adds Patel.

When the study was completed, the two participating EDs institutionalized the practice, and it is now a standard of care in the departments. “Out of our 85 physicians in the group, almost all of them are using the e-mail function,” says Patel. “About half of the physicians are contacting every patient who is on secure messaging, and the others are contacting various percentages.”

The physicians often want to send the follow-up messages to patients with whom they have had a good interaction, explains Patel. But they also use the opportunity to reach out to patients who may not have had a good experience in the ED. “Roughly half of the patients who are on secure messaging are being contacted through our department standards,” he says. “Even patients with lacerations or simple ankle sprains will contact us back and say that they have never, in all their visits

to the ED over the years, had a doctor contact them.”

The patient feedback is often infused with praise and gratitude, says Patel. “It is a nice pat on the back for physicians, and it makes them feel better about their jobs,” he says.

One very big fear of the investigators initially was that the post-ED follow-up contacts might generate all kinds of time-consuming questions and concerns from the patients. Fortunately, this has not proven to be a problem, says Patel. “It is interesting that out of 100 patients that we e-mail, literally there is only one who makes those kinds of requests,” he explains. “Our policy is that we want to respond back at least one time again if the patient asks a question, but if it is a question that is outside the realm of the ED physician, our recommendation would be that this is something that the patient really needs to follow-up with through his or her PCP. That would end the e-mail communication.”

However, there are times when physicians will carry on the e-mail communications with patients for a week or two following an ED visit — perhaps because they have a strong interest in the case — although this does not happen very often, says Patel.

## Establish goals, incentives

Since the pilot was completed in 2010, the post-ED visit contacts have been adopted in all of the other 20 EDs in Kaiser’s northern California region, but physician leaders in these settings acknowledge that it took some time to get attending physicians on board.

“On the surface, it seemed like a superfluous responsibility added to an already long list of duties. It was an abstract concept that sending an e-mail to a patient after you had seen him or her in the ED added any value for the provider or the patient,” explains **David Roth, MD**, chief of the ED at Kaiser’s Walnut Creek Medical Center in Walnut Creek, CA, a facility that treats 54,000 patients a year. “It was difficult to explain or prove the value in secure messaging initially, and we used alternative measures to increase adoption of this practice.”

For example, ED administrators established an attainable goal that each physician would follow-up with 30% of his or her patients via secure messaging, and then the leadership began to publish each physician’s messaging rate. “It evoked a heightened awareness that this was important to

the group and the organization,” says Roth. “I am sure it also fostered some healthy competition [among the physicians] to avoid being the laggard.”

Once the physicians started adopting the practice at higher rates, the benefits of the practice became more tangible and personal. “I and the others in the department now consider secure messaging as one of the more gratifying parts of our practice,” says Roth. “Unlike our MPS (member patient satisfaction) scores, which give aggregate data, we now get personal messages from patients and parents which are overwhelmingly complimentary and thankful for the care they received during their visit.”

Roth says he uses the opportunity to answer questions the patients have or to remind them of follow-up appointments. “It is a fantastic way of communicating and reinforcing our integrated model of care within Kaiser,” he observes. “The patients seem to enjoy having this level of access with their treating physicians, and this has driven even more consistent use of secure messaging by our physicians.”

While patient satisfaction has been gradually increasing in the ED at Walnut Creek, Roth acknowledges that this is probably a result of many factors. “I am convinced that secure messaging has played a large part in our record MPS scores,” he says.

To continually reinforce the importance of the practice, Roth regularly asks his physicians to send him accumulated patient secure message responses without any identifying information so he can share them with the entire department. “This reminds our physicians and staff how important their work is in the lives of our patients and their families,” adds Roth.

The ED at Kaiser Hospital in Santa Rosa, CA, a facility that treats about 49,000 patients per year, was among the first in northern California to adopt the secure messaging practice three years ago, explains Hilary Bartels, MD, the chief of Emergency Medicine. However, she experienced many of the same challenges with physician buy-in that Roth confronted at Walnut Creek.

To facilitate physician adoption of the practice, administrators began including the percentage of patients who received a secure message as one of the metrics that is tied to bonuses and salary. “It is transparent, and it is shared with all the other physicians,” explains Bartels. “It needs to become part of the culture for physician behavior.”

As with the other EDs that have adopted the practice, Bartels notes that physicians have come

to realize that the practice is a nice way to keep in touch with patients. “Also, physicians have the incentive to send the secure message because it allows them to catch any overlooked follow-up items, and because it is on our publicly shared physician dashboard,” adds Bartels.

## Consider legal aspects

Adoption of the post-ED contacts was a very low-cost intervention for the Kaiser EDs because they already had access to Kaiser’s secure messaging system, explains Patel. “If I didn’t have a system to e-mail patients in my ED, I would probably have to go through med-legal and make sure that I have some type of HIPAA-compliant feature that allows me to do e-mail,” he advises.

Another task that is critical to the successful adoption of the practice is having mechanisms in place to verify patient phone numbers and e-mail addresses. “We make it a point with our reception staff that if we don’t have accurate phone numbers, then following up with patients is going to be very difficult. For EDs that want to do this type of post-visit contact, this practice would need to apply to checking e-mail addresses also,” says Patel. He advises ED managers who are interested in adopting this practice to make sure that the reception desk gets an accurate e-mail address on record for every patient who comes in.

One nice thing about written communications is that they can be easily uploaded onto a patient’s electronic medical record. Kaiser now does this automatically with all secure messages that are both sent and received. “If you call a patient by phone, you then also have to enter notes in the chart to make the communication part of the medical documentation,” says Patel. With e-mail messages, such documentation is a much simpler matter, he says.

The time commitment involved for carrying out post-ED visit e-mail messages has turned out to be relatively small, says Patel. “If a physician is seeing 15 patients in a shift, roughly half of whom [have elected to take advantage of Kaiser’s secure messaging feature], the time commitment is 15 to 20 minutes per day,” he says.

Roth advises ED leaders to set attainable milestones of performance and to publish transparent data on the rates of compliance by each physician. “Physicians are, by nature, competitive and want to validate themselves to their colleagues,” he says.

Roth also recommends that administrators take the time to share patient comments with the physicians and staff, particularly in the initial stages of the intervention. This should help to increase buy-in among physicians and a willingness to give the approach a try. “After the initial adoption of this practice, I think the benefit and importance of this quick and easy communication tool will become self-evident,” he says. ■

## REFERENCE

1. Patel P, Vinson D. Physician e-mail and telephone contact after emergency department visit improves patient satisfaction: A crossover trial. *Ann Emerg Med.* 2013 Feb. 25. [Epub ahead of print]

## SOURCES

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## Clinical team leaders provide added heft in driving improvements, moving the ED culture toward a patient-centered approach

*Approach relies on 24/7 enforcement of new practices and policies*

As the country moves toward full implementation of the Affordable Care Act, one issue that many safety-net hospitals are grappling with for the first time is market competition. While it is still not clear how many states are going to go along with the reform law’s expansion of Medicaid, the thinking is that in areas where newly insured patients have options for where to receive care, safety-net facilities are going to have to

compete with other facilities to be the hospitals of choice.

The issue has not been lost on administrators at Truman Medical Center (TMC) Lakewood in Kansas City, MO. With another hospital less than two miles up the road, TMC is taking steps to re-engineer outdated practices and replace a safety-net-hospital mentality with a patient-focused culture that prizes efficiency and high satisfaction scores.

One primary focus of this effort is the hospital’s 20-bed ED, a department that treats just over 32,000 patients a year. **Daniel Thompson**, RN, BSN, CEN, MBA, was brought on board as the director of Emergency Services in 2011 to lead the improvement effort. And he immediately realized he wasn’t going to be able to make the needed changes without help.

“Any time you are implementing culture change, somebody has to be there to be the voice of why you are doing this and why it is important,” explains Thompson. “I can’t work 24 hours a day, seven days a week, so if we were going to establish a new culture of accountability, then we needed to do something that put real leaders at the bedside with the staff so that they could drive the change, hold people accountable, and give them the tools to be successful.”

## EXECUTIVE SUMMARY

Anticipating a more competitive marketplace when the Accountable Care Act is fully implemented next year, ED administrators at Truman Medical Center Lakewood in Kansas City, MO, have taken steps to re-engineer outdated practices and infuse the department with a patient-focused culture. To get staff on board, the ED director appointed several clinical team leaders (CTL) from the nursing staff. Infused with a combination of managerial and administrative responsibilities, the CTLs have reinforced a flurry of new practices and policies on a 24/7 basis, and key metrics are on the rise.

- The CTLs were created through the re-allocation of existing full-time positions within the ED. There was no need to take on additional staff, although the ED director solicited staff input when deciding which of the staff nurses were best suited for the CTL positions
- Since the CTL positions were created in 2011, the ED has implemented immediate bedding, bedside triage, hourly rounding, bedside shift reports, and a number of other improvements.
- The ED’s left-without-being-seen rate has been more than halved, from 10% to 4.6%, and the arrival-to-leave time has been slashed by more than 100 minutes, even while volume is on the increase.

Thompson could see that the way the ED was structured at the time, with a system of rotating charge nurses who would go back to their staff nurse roles on the days they weren't taking charge duty, did not adequately empower or incentivize anyone to make needed changes. "They weren't given the skills, the tools, or really the authority to make difficult decisions regarding behavior, performance, or even attendance," he explains.

To address the problem, Thompson created a "clinical team leader" (CTL) position, a new role that would be given to four nurses who would work under Thompson, but have the authority to drive improvements and enforce changes in his absence. Thompson credits the approach with helping him to implement a number of difficult changes, ranging from immediate bedding and bedside triage to hourly rounding and bedside shift reports. Such changes are driving improvement on key metrics. The ED's left-without-being-seen (LWBS) rate has been slashed by more than one-half, from 10% to 4.6, and the arrival-to-leave time has been reduced by more than 100 minutes, even while volume continues to rise by about 2,000 patients a year. (*Also, see "To improve the patient experience, focus on team development first," p. 67.*)

### **Solicit input from staff**

While Thompson needed to receive approval from hospital leadership to implement the CTLs, the move didn't require the addition of any new full-time employees (FTE). He used one open nurse position to bring in a CTL from the outside, but the other CTLs came from within the organization. To find the best candidates, Thompson queried staff about who they thought ran the floor best when they took charge duty. "I asked them who really 'owns it' when they are in that position," he says. "I got a lot of staff feedback ... and then anybody who expressed interest in the position, I interviewed."

Thompson infused the CTL position with some managerial responsibilities as well as charge nurse functions. "If the CTLs were just managers, then they would be far more administrative, and if they were just charge nurses, then they would be so close to the staff that I don't think they would be able to have as much authority to discuss attendance, performance, or behavior," he explains. "So I just hybridized the two. It definitely wasn't easy to create the CTL positions, but I think it has really come together."

For example, while the CTLs typically do not have patient loads, they are expected to take on patients if the department is short-staffed, says Thompson. Also, while they perform the responsibilities of charge nurses, they also do evaluations and have direct reports. "I oversee the evaluations to make sure they are written correctly and that they are accurate representations, but I also feel that the CTLs are the best people to say where [many of the employees] fit into our evaluation system. They are at the bedside with them," he observes. The CTLs also perform extra administrative duties, such as audits, that are required on an ongoing basis, and some of them do scheduling as well as payroll. They do not, however, have the authority to hire or terminate employees, adds Thompson.

### **Establish 24/7 coverage**

Having leaders with authority on the floor at all hours has helped Thompson implement changes, oftentimes in the face of considerable resistance. For example, one of the first changes that he implemented once the CTLs were in place was immediate bedding. A significant number of both physicians and nurses thought the approach wouldn't work even though beds were often left empty in the ED when the department was overwhelmed with patients. "If it had just been me [promoting the practice], I would have said that we were going to do this, and then on nights, it wouldn't have happened. Anytime I wasn't around, it wouldn't have happened," says Thompson.

However, the CTLs were able to enforce the practice during all the shifts. "Once I stepped away from the table, they backed it up, and they just basically made sure that the beds stayed full and that nursing staff got used to the new model," explains Thompson.

Next, to institute more equity in how the workload was distributed, Thompson established bed assignments. While staff members were more accepting of this change, it took time to implement because the beds in the department aren't all contiguous. One nurse might have the beds numbered four, five, and nine, for example. Thompson and the CTLs were able to work through this problem by color-coding the beds and establishing a zone system. In addition to eliminating disparities in workload, the approach has also improved patient care, stresses Thompson.

One of the hardest changes to implement was

bedside triage. Many veterans of the department saw triage as more of a place than a process, says Thompson. However, with enforcement help from the CTLs, the department has made significant progress transitioning to the practice. “We triage at the bedside now, and it works well,” he says. “We have really been going at it completely for about a year, and it is finally becoming the new normal.”

Other changes that Thompson implemented include a new bedside shift report, hourly rounding, and more accountability in the way time off for holidays is determined. “There was an issue where certain people got holidays off all the time, and there wasn’t a reproducible fairness to it, so we really had to reinvent the wheel in a way,” notes Thompson.

### Identify resistance early on

With respect to all of these new practices, the CTLs have been particularly helpful at identifying pockets of resistance at an early stage, stresses Thompson. “Anytime you are instituting culture change, there is always probably going to be 20% who are with you, 60% who are on the fence but are complying with the change because they value their jobs and do it because they are told to, and then there is a small group at the bottom who really actively work against change and will spend a fair amount of time and energy attempting to undermine it,” he observes. When you catch this resistance early on, it is easier to control, adds Thompson.

The CTLs also act as key advisors who have their ears to the ground and can let Thompson know when processes or projects are not going well. For example, Thompson recalls a few occasions when the CTLs told him to hit the brakes. “We rolled out a huge amount of change, and it was very fatiguing to the staff,” says Thompson. “There were times when my CTLs came to me and said that we needed to slow down a little bit. And when they said that — because they were ‘A’ players and engaged in the process — I trusted them.”

Thompson has plans for further improvements. Next on the agenda is implementation of a fast track area — a move designed to drive the hospital’s LWBS rate down to a level more in sync with national averages. Thompson will rely on the CTLs to enforce process improvements, and he notes that the approach can work in other ED settings as well. But he has some advice,

gleaned from having made a few mistakes along the way.

First, he recommends that ED managers take the time to get some alignment with the physicians before going live with changes. “I didn’t include the physicians on a couple of [our changes], thinking they wouldn’t care, and it really impacted them,” says Thompson. “Make sure you have formulated a reasonable goal and that you have communicated that goal as effectively and redundantly as possible so that everyone gets the memo.”

Also, Thompson says it is important to make sure that staff fully understand the reasons behind new initiatives. “You have to constantly preach the gospel of why something is necessary for the future of the organization and the care of your patients. They deserve this,” he says.

In cases in which expectations are not met, make sure that it wasn’t due to some type of communications failure or a failure to get buy-in from important stakeholders, advises Thompson. But if those issues aren’t to blame, then consider whether there was a lack of enforcement. “People do what they are held accountable for doing,” he says. ■

## SOURCES

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## To improve the patient experience, focus on team development first

**P**aul Spiegelman, founder and CEO of The Beryl Companies, a collection of organizations headquartered in Bedford, TX, that focus on improving the patient experience, makes the case that hospital leaders who want to improve patient satisfaction must first focus on their own teams. Spiegelman explains his reasoning in *Patients Come Second*:

*Leading Change by Changing the Way You Lead*, (An Inc. Original, 2013) a new book on the subject, which he authored with **Britt Berrett**, president of Texas Health Presbyterian Hospital in Dallas.

Spiegelman says that the importance of internal development is particularly applicable to ED managers. “Make sure people feel fulfilled in their work and that they are bringing their passion and their best to work every day, obviously in a very stressful environment,” he says. “If the staff, the nurses, or the physicians don’t feel like they are being cared for beyond just having a job, then our hypothesis is that this is going to impact the quality of care, the patient experience, and, ultimately, the financial results of the organization.”

What can ED leaders do to nurture the right kind of attitude in subordinates? “Ways to do that are really common sense,” says Spiegelman. “It starts with making sure that staff connect with the mission, vision, and values of the organization. They need to understand what these are, repeat them, and make decisions based on them,” he says.

However, Spiegelman adds that leaders also need to demonstrate that they care about staff — not just their job performance. “That includes recognizing events in their lives that may be personal and not professional, such as a birth or a death, by sending a note card to the home or making a phone call,” he says.

In addition, leaders need to make time for rewards and recognition so that people feel valued for the work they are doing, and there should be an emphasis on training and development, adds Spiegelman. “People need to feel like there is a path to growth in the organization, and that leaders are not just focused on the job and the emergency of the day, the hour, or the moment, but also on growing their people so that they can achieve their personal goals,” says Spiegelman.

Not everyone is going to respond to such overtures by making requested changes or developing a positive outlook, acknowledges Spiegelman. And too often administrators make excuses for why they need to hang onto such malcontents, he says. “In health care, we do a very poor job of getting rid of people who don’t fit the culture. We hold onto them forever,” he stresses. “There will be people who are resistant, but when you have leaders or supervisors who become a negative influence on the organization, you need to make those tough decisions and move them out.” ■

## Text-message-driven intervention, real-time feedback slashes time-to-treatment for stroke patients

*Build quality-improvement interventions around hospital-specific challenges*

Sometimes just making people aware of their performance is all that is necessary to significantly improve care. Investigators at the University of California at San Francisco (UCSF) found this to be precisely the case when they attempted to use this approach to improve door-to-needle times for stroke patients who presented to the ED for care at UCSF Medical Center.

As a teaching hospital, it can be challenging to reinforce care guidelines with residents who continually rotate through the stroke care team, explains **Molly Burnett**, MD, who is a resident in the Department of Neurology at UCSF. “We rotate so frequently that a lot of times we are not [with the stroke team] long enough to get feedback about how long we are taking, or even to realize that the goal for [time-to-treatment] is 60 minutes,” she says.

Administrators observed that when stroke patients presented to the ED, it was taking the hospital longer than some of the other hospitals in the area to deliver brain-saving tissue plasminogen activator (tPA). “Our average door-to-

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### EXECUTIVE SUMMARY

Providers at the University of California, San Francisco (UCSF) Medical Center have been able to significantly improve door-to-needle times for stroke patients by using a real-time, text-message intervention to routinely inform all members of the stroke care team about the door-to-needle time for every stroke patient who receives thrombolytic therapy.

- Administrators say the approach has slashed average door-to-needle times by at least 20 minutes.
- The Stroke Center medical director follows up with team members for every patient who does not receive tPA within the recommended 60-minute time frame to find out what the impediment was.
- To be successful, administrators say the intervention needs to include real-time feedback, a mechanism for accountability, and sustained effort.

needle times were over 80 minutes, and definitely not in compliance with the guidelines,” explains Burnett.

To address the issue, Burnett and colleagues decided to test whether immediate notification about the door-to-needle time for each patient, delivered to all members of the stroke team in real time, via text message, would be enough to boost awareness of the guidelines, and expedite care to patients.

## Monitor performance

The intervention was designed to follow the traditional “code stroke” page that is always triggered by an ED provider whenever a patient presents with symptoms of stroke. That page goes to the entire treatment team, including representatives from radiology, bed control, the lab, and several others, explains Burnett. Investigators added a “reply” page to this sequence that would go to the same group of people as the initial “code stroke” page. It would indicate via text message whether or not tPA was given and, if so, what the door-to-needle time was.

Initial results from the test of this intervention, which was completed in 2011, were clear-cut. The average door-to-needle time for 95 patients treated before the intervention was implemented was 82 minutes. The 45 patients who received tPA after the intervention was employed were treated within 61 minutes. Further, investigators report that a significantly higher percentage of intervention-group patients were treated within the recommended 60-minute time frame (50%) than was the case in the pre-intervention group (16%). Burnett notes that since 2011, results have continued to improve at UCSF Medical Center, as the text-messaging intervention is now a standard of care at the facility. “On average, our door-to-needle times are in the 50- to 60-minute range now,” she says.

Burnett emphasizes that one key to the intervention’s success is the constant monitoring of the text messages by **Andy Kim, MD, MAS**, an assistant professor in neurology and medical director of the Stroke Center at UCSF. “If a door-to-needle time is more than 60 minutes, he will contact the treating team and ask what the impediment was to making the 60-minute time frame,” says Burnett. “He also sends out stroke performance results to the entire multidisciplinary team about every two weeks. These data show us how well we are doing.”

## Deliver real-time feedback

While it would seem that the Stroke Center director serves as the task master in this intervention, he explains that the approach was actually very easy to implement. “I spent the first month or two sending reminder pages at all hours of the day and night, but quickly it became self-sustaining even without the additional reminder pages,” explains Kim.

Kim also emphasizes that ED staff are crucial to making the intervention work. “Providing objective feedback to the entire team, including the ED, in real-time rather than a week, a month, or a quarter later, only serves to enhance our existing relationship because it allows us to celebrate our successes together rather than just interacting when things do not go as smoothly,” he says.

Other hospitals interested in experimenting with a similar strategy need to design their approach around the specific challenges that they face, advises Kim. “Here, we knew that our existing system was capable of delivering tPA quickly because in individual cases we were able to achieve our goal,” he says. “We focused on the problems of short institutional memory due to rotating residents in our training programs and the diffusion of responsibility, given the large team of people involved.”

Having the technology already in place to implement the intervention was certainly helpful, says Kim. But he suggests that success of the approach had more to do with what the technology enabled the UCSF team to accomplish. “It is the real-time nature of the feedback, clear and immediate accountability, and frequent and sustained effort to improve care that are the key components of any successful quality improvement initiative,” he says. ■

## SOURCES

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## Payer audits: Time for a system overhaul, but stay vigilant and be prepared to mount a robust defense

[This quarterly column is written by *Caral Edelberg*, CPC, CPMA, CAC, CCS-P, CHC, President of Edelberg Compliance Associates, Baton Rouge, LA.]

The face of health care compliance is rapidly changing. Having spent the past week attending the largest health care compliance gathering in the country, I am convinced that no one is immune to payer audits. I am further convinced that the definitions of “right” and “wrong” are as varied as the number of individuals who practice medicine and monitor health care compliance.

When auditors are incentivized to find something wrong, they will. When rules and regulations are purposely vague, subjective, and left open to interpretation by auditors without medical training or knowledge of the medical specialty areas they are auditing, only those providers with the resources and financial means to stay the course stand a chance of winning audit appeals. To hear governmental representatives tell it, a few bad apples spoil it for the rest. However, the means of identifying the bad apples crushes the rest in the basket right along with them.

A close friend of mine recently coined the phrase “reverse fraud” to describe the witch hunt that payer auditing has become. I am beginning to believe he is correct, and providers need a coalition to protect themselves. The high number of audit findings that are eventually overturned speaks volumes about the lack of objective direction and payer audit errors prevalent in the industry today. However, efforts are underway to improve the situation.

The American Health Information Management Association (AHIMA) is supporting the Medicare Audit Improvement Act of 2013 (HR 1250). According to AHIMA, this bill will make critical changes to the current Recovery Audit Program (RAC) by:

- Establishing a consolidated limit for medical record requests;
- Improving auditor performance by implementing financial penalties and by requiring medical necessity audits to focus on widespread payment errors;
- Improving recovery auditor transparency;
- Allowing denied inpatient claims to be billed as outpatient claims when appropriate; and
- Requiring physician review for Medicare denials.

Getting involved in helping to legislate a solution presents a perfect opportunity for us to refine a system that needs immediate overhaul.

Some pearls gleaned from listening closely to federal agents, auditors, attorneys, and representatives of the payers:

1. Be sure you monitor your practice data and know if you are an outlier in any aspect of your practice. For emergency medicine, we are most vulnerable to overutilization of 99284 and 99285 evaluation and management services. The subjectivity involved in determining each of these levels, specifically medical decision-making, leaves much open to interpretation. You may find that even with comprehensive history, exam, and medical decision-making, you will be challenged on the medical necessity of the service you provide. Documentation should focus on the risk factors, clinical criteria, and medical necessity of the services you provide. This is the “final frontier” payers use to down code records that are documented to a high level of

### COMING IN FUTURE MONTHS

- Insight from the front lines in Boston and Texas
- Get hospital staff to say yes to flu vaccinations
- Physician-driven triage
- Preventing bounce-back visits to the ED

service but don't contain enough support to establish the same level of medical necessity. For example, why did that suspected ankle sprain in the 90-year-old require a comprehensive history and physical examination? It is pretty obvious to emergency medicine practitioners, but, unbelievably, it is less evident to a payer auditor who has little or no ED experience. Risk factors, details about the mechanism of injury, differential diagnoses, and rationale for the extended ED course help to support medical necessity for a higher level of service when appropriate.

2. Watch your written communication. Stay away from correspondence and directives that base documentation improvement on increasing revenue. Documentation should support the patient's need for the care provided. Document the details about how that care was provided and ensure that the quality of care never wavers. The federal government can and will subpoena your e-mails, correspondence, employee records, etc. If you have questions within your practice about documentation, coding, and billing issues, *talk, don't e-mail*. A recent audit uncovered numerous e-mails in which a disgruntled provider alleged "fraud" when asked by the billing company to document routine services. A fraud investigation may include subpoenas for your hard drives, and investigators will find strings of text that are suspicious or indicate fraudulent billing and use them against you.

3. Be sure you are monitoring the coding and billing performed in your name. If you have questions, address them with the individuals that can provide the highest level of detail. Monitor data through routine reporting of key elements of your practice — E/M distribution compared to your region, spikes or drops in acuity or charges, differences in billing patterns for each provider in your group, and billing for teaching physicians and physicians supervising non-physician practitioners (PAs and NPPs). Any spikes in acuity, charges, and payment are easy for payers to spot, but don't always mean there is a problem when you can provide the rationale if asked. Payers routinely monitor practice data for individual physicians, so comparing E/M distribution for all physicians in your practice is an important step in identifying and managing outliers.

4. When meeting or telephone conferencing with payer auditors and other representatives, prepare discussions in advance, review data about your practice and region, provide data

## CNE/CME INSTRUCTIONS

HERE ARE THE STEPS YOU NEED TO TAKE TO EARN CREDIT FOR THIS ACTIVITY:

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## CNE/CME OBJECTIVES

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

and information to support any outliers in your practice, and always include a physician representative from your practice as well as someone well versed in coding and billing. Be prepared to defend your case on clinical merits and not revenue expectations. Anecdotally, a federal agent recently admitted that he routinely attends payer audit discussions with providers without identifying himself as an agent, as he feels providers "open up" better to auditors. So, be prepared to present your case with everything you have as though it is your final opportunity to defend your actions.

Prevention is the best solution to health care fraud and abuse. Unfortunately, you may be doing everything right and still be audited. Expect it, prepare for it, defend it, and maintain a hard line defense to protect your practice from the limitations of the system. ■

## CNE/CME QUESTIONS

1. According to emergency providers at hospitals in Kaiser's northern California region, provider-initiated patient contact following an ED visit:
  - a. provides a good opportunity to reinforce medical instructions
  - b. can frighten patients if it is not done carefully
  - c. is best done via telephone
  - d. takes a long time to do well
2. To get providers to follow-up with patients after their ED visits on a regular basis, **David Roth**, MD, recommends that ED managers:
  - a. emphasize the importance of patient satisfaction
  - b. review each physician's performance on a weekly basis
  - c. publish transparent data on rates of compliance
  - d. all of the above
3. **Daniel Thompson**, RN, BSN, CEN, MBA, says the "clinical team leader" (CTL) position has both \_\_\_\_\_ and \_\_\_\_\_ responsibilities.
  - a. charge nurse and managerial
  - b. staff nurse and charge nurse
  - c. managerial and administrative
  - d. none of the above
4. Thompson says that one of the hardest changes to implement in the ED at Truman Medical Center Lakewood was:
  - a. hourly rounding
  - b. bedside triage
  - c. a more equitable vacation schedule
  - d. a new fast track area
5. Thompson says the clinical team leaders have been particularly helpful at identifying:
  - a. pockets of resistance at an early stage
  - b. patients who are not receiving expedited care
  - c. problems with patient flow
  - d. b and c
6. **Molly Burnett**, MD, says that one key to the hospital's success in implementing a text-message-driven intervention to improve time-to-treatment for stroke patients was:
  - a. the constant monitoring of text messages by the Stroke Center's medical director
  - b. obtaining buy-in from the physicians and the ED staff
  - c. getting the residents to adhere to recommended guidelines
  - d. finding a technology-driven solution that was acceptable to the ED

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# ACCREDITATION UPDATE

*Covering Compliance with The Joint Commission Standards*

## **Citing reports of alarm-related deaths, The Joint Commission issues a sentinel event alert for hospitals to improve medical device alarm safety**

*Experts urge outside expertise, data-driven approach to make progress*

**W**ith the proliferation of medical devices in recent years, hospital providers are now bombarded with a cacophony of sounds, signals, and other information emanating from these ubiquitous machines. While this type of messaging is well-intentioned, The Joint Commission (TJC) stresses that the sheer number of devices now in use is creating “alarm fatigue” among providers, which in turn is putting patients at serious risk. To draw attention to the issue, the accrediting agency has issued a Sentinel Event Alert, prompting hospital administrators and providers to thoroughly examine their practices related to the alarms on these devices, and make changes that will improve safety. *(Also, see “Leadership, outside expertise needed to drive improvements in alarm safety,” p. 3.)*

This is not a new issue to many health care providers, but the scope of the problem is an increasing concern. TJC points out that between January 2005 and June 2010, 566 alarm-related deaths were reported in the U.S. Food and Drug Administration’s Manufacturer and User Facility Device Experience database. Further, TJC’s own sentinel event database includes reports of 80 alarm-related deaths and 13 serious alarm-related issues that occurred between January 2009 and June 2012.

Providers in some hospital units have to deal with thousands of alarm signals every day, and an estimated 85% to 95% of these alerts don’t require any intervention, according to TJC. This could be because the alarm conditions are set too tightly or

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### EXECUTIVE SUMMARY

As medical devices become more widely used in hospitals, there is evidence that providers are becoming overwhelmed by the alarms that emanate from these machines. Experts link the problem with 566 alarm-related deaths reported in an FDA database between January 2005 and June 2010, and 80 alarm-related deaths reported in The Joint Commission’s (TJC) own sentinel event database between January 2009 and June 2012. The ED is among the hospital sites where the adverse events reported to TJC most often occurred.

- Providers in some hospital units have to deal with thousands of alarm signals every day, and an estimated 85% to 95% of these alerts don’t require any intervention, according to TJC.
- Experts say with so much noise and so many false alarms, clinicians can become desensitized to the medical-device alarms.
- The types of alarms that administrators should be most concerned about in the ED are dysrhythmia alarms on heart monitors, oxygen saturation alarms, and signals that a patient has a low respiratory rate.
- Experts urge hospitals to develop cross-disciplinary teams to address alarm safety on an ongoing basis, and to assemble action plans for improvement that contain baseline metrics that can be used to chart progress.

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the default settings are not suited to the patient or the patient population that is using the device. Providers may also be accustomed to alarms going off because the sensors have been positioned incorrectly or the electrodes are dried out. And with too many instances of “false” alarms, hospital staff can become desensitized to them. The danger is that care providers will fail to respond when a patient really does require immediate action.

### ***Review alarms used in the ED***

While alarm fatigue can put patients at risk in many hospital settings, the issue can pose particular problems in an environment as chaotic and noisy as a busy ED. “False alarms are frequent in the ED,” explains **Sandra Schneider**, MD, FACEP, professor and chair emeritus of the Department of Emergency Medicine at the University of Rochester, and an attending physician at Strong Memorial Hospital in Rochester, NY. Indeed, TJC cites the ED as one of the hospital sites where the majority of alarm-related events reported to the agency most often occurred, and it notes that the major contributing factors for these events were: absent or inadequate alarm systems, improper alarm settings, alarm signals that were not audible in all areas, and alarm settings that were inappropriately turned off.

Another problem that Schneider has observed is that many medical alarms that are used in the emergency setting are actually designed for intensive care unit (ICU) patients who typically stay in the unit for long periods of time. For example, she recalls one monitor system that had to “reboot” for 15 minutes between patients or it would automatically revert to the previous patient’s settings instead of the default setting. “This makes sense if you are working in an ICU, but in the ED there may only be a few minutes between patients,” she says.

Schneider advises ED managers to thoroughly familiarize themselves with the monitors and alarms that the department is using. “If possible, create default settings that work in the ED, and contact the manufacturers, if necessary, to customize alarms so that they work for your setting,” she says.

One issue that makes EDs particularly vulnerable to alarm fatigue is the number of patients that nurses often have to monitor. “Unlike an ICU where the nurses have two patients at the most, and they can be stationery, there is less often dedicated personnel that are in any one location who

can watch the monitors [in an ED],” explains **Terry Fairbanks**, MD, MS, FACEP, who is the director of the National Center for Human Factors Engineering in Health Care at the MedStar Institute for Innovation, an attending emergency physician at MedStar Washington Hospital Center, and an associate professor of emergency medicine at Georgetown University in Washington, DC. “The nurse-to-patient ratio in most states is completely unregulated in the ED, although it is regulated on the inpatient units, so if we assign nurses the responsibility for watching the alarms, then they may have a high task load that makes this very difficult to do.”

Fairbanks notes that the types of alarms that administrators should be most concerned about in the ED are the dysrhythmia alarms on heart monitors, oxygen saturation alarms, and signals that a patient has a low respiratory rate. Ventilator alarms, which signal that a ventilator is not working or someone is not breathing, are also important, but Fairbanks explains that the alarms on ventilators tend to be very shrill and noticeable. “There is not really an alarm fatigue problem with ventilator alarms,” he says. “People tend to hear them and go to them because they don’t issue false alarms very often.”

### ***Consider guidelines, training, and inspections***

When issuing the Sentinel Event Alert on alarm safety in April, TJC made several recommendations for hospitals to follow, including:

- Ensure there is a process for safe alarm management and response in areas identified by the hospital as high risk.
- Inventory all medical devices with alarms that are used in high-risk areas or for high-risk conditions, and identify the default alarm settings and the limits that are appropriate for each care site.
- Create guidelines for alarm settings on medical devices that are used in high-risk areas and for high-risk conditions, and identify situations in which alarm signals are not necessary.
- Establish guidelines for customizing alarm settings and limits for individual patients. These should address circumstances in which limits can be modified to minimize alarm signals.
- Establish regular inspections and maintenance of alarm-equipped medical devices to ensure that they are operating as intended, and that the alarm settings are appropriate. Inspections and maintenance activities should be informed by manufacturer recommendations, risk levels, and experience.

In addition, TJC stresses that hospitals should equip providers and staff with training on the organization's approach to safe alarm management as well as ongoing training regarding new medical devices or updates on existing devices. Further, the agency urges health care organizations to share information about alarm-related events as well as prevention strategies that have proven effective at minimizing or eliminating these events. (*Also see "Embed specific goals in an action plan to drive improvement," p. 4.*)

"One very important, impactful way to reduce false alarms is just by reducing the number of people who are on monitors in the first place," observes Fairbanks. "We have this feeling that by putting someone on a heart monitor it reduces our risk because then in the small chance that their heart stops, we would find out. But what we forget is that in the bigger picture, it increases our overall risk if everybody and their brother is on a heart monitor because instead of saving [these devices] for the people who are truly at risk for sudden death, we cause this problem of constant alarms."

While TJC already has several accreditation standards in place that are related to alarm safety, the organization says it is considering the implementation of a National Patient Safety Goal (NPSG) to further encourage health care organizations to address the issue. The agency conducted a field review of a proposed NPSG in February, and is now reviewing public comments on the measure. ■

## SOURCES

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## Leadership, outside expertise needed to drive improvements in alarm safety

When issuing its Sentinel Event Alert on medical alarm safety in hospitals, The Joint Commission (TJC) noted that addressing this problem will require leadership. It recommends that facilities establish a cross-disciplinary team that includes clinicians as well as representatives from clinical engineering, information technology, and risk management to address alarm safety in all patient care areas.

However, **Terry Fairbanks**, MD, MS, FACEP, the director of the National Center for Human Factors Engineering in Health Care at the MedStar Institute for Innovation, an attending emergency physician at MedStar Washington Hospital Center, and an associate professor of emergency medicine at Georgetown University in Washington, DC, believes TJC missed the mark with this recommendation in one respect.

"There is no one on that cross-disciplinary team that they are recommending that has any experience or training in alarm management, which is very complex, because finding the right threshold between having too many alarms and not enough alarms is quite involved," explains Fairbanks.

People who work in safety science have PhDs in alarm management, observes Fairbanks. Further, he notes that the signal-to-noise ratio is a huge problem in safety throughout many complex, high-risk industries, so the issue of alarm safety is not unique to hospitals. "I think any ED trying to do this right should engage a community member who does alarm fatigue and alarm management in other industries as a part of what they do for living," he says.

Academic medical centers might find such a person through the industrial/systems engineering or the cognitive psychology departments of the university with which they are affiliated, recommends Fairbanks. Other facilities might need to network with outside organizations.

The task of improving alarm safety could be made easier with more leadership on this issue among national groups, stresses Fairbanks. "We keep trying to do things at a local level," he says. "Each ED forms a committee, and they are all spinning their wheels in the same way rather than trying to do an intelligent solution that everyone can do nationally." ■

# Embed specific goals in an action plan to drive improvement

One industry group that has focused considerable attention on the issue of alarm safety is the Association for the Advancement of Medical Instrumentation (AAMI), headquartered in Arlington, VA. The group partnered with The Joint Commission (TJC), the Food and Drug Administration, the American College of Engineering, and the ECRI Institute in 2011 to sponsor a summit on alarm safety, and it continues to work on the issue with these groups in making recommendations.

**Leah Lough**, the executive VP of AAMI and the executive director of the AAMI foundation, says that it is clear from the white papers the organization has published on the subject that for hospitals to improve their performance with respect to alarm safety, they must first understand the problem from a quantitative standpoint. “For example, understand how many alarms you have per bed, per unit, per day,” says Lough. “Pick a baseline measure so that you have a quantitative baseline to determine what it is you are trying to address.”

For instance, a hospital or ED that is interested in reducing the number of nuisance alarms — alarms that are not critical to the patient — may set a goal to reduce these types of alarms by three-quarters or to eliminate them, says Lough. With a concrete end-point in mind, administrators can then identify specific steps that will get them there.

Lough emphasizes that it is important for administrators to share their goals with staff, higher-ups, and everyone who will be impacted. “Make sure they are all on board,” she says.

Also, administrators need to consider the impact such goals will have on clinical staff and the tasks they are expected to carry out, advises Lough. “What is going on in the unit with the nurses, and how will your goal impact their workflow?” she says.

All of these issues can be identified and dealt with in an action plan that outlines specific steps a hospital or unit will take to improve alarm safety performance. “State the goals, get your baseline data, and that way you can benchmark your improvements,” she says. ■

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