



# Healthcare Risk Management®



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## Simple strategies can help reduce falls and liability in your facility

*Women and elderly fall more frequently*

Slips, trips, and falls happen in any health care setting, and they can be enormously expensive. The good news is that you can sharply reduce those accidents by aggressively employing some rather simple strategies.

It's simple, but not necessarily obvious. Sure, your housekeeping staff clean up spills when they're reported, but how fast? Have you ever had someone slip in a spill between the time it was reported and the time it was actually cleaned up? It happens.

Thinking about realities like that is a big step toward reducing slips and falls, says **Ruth M. Maher**, PT, DPT, MPT, BS, director of physical therapy at HyOx Medical Treatment Center in Marietta, GA. HyOx is a comprehensive outpatient rehabilitation facility and Maher has worked in reducing slips, trips, and falls in a variety of health care settings.

"The cost and effort required to reduce these incidents is far less than what is required to deal with the aftermath, especially if it results in legal action," she says.

### **Falls likely to result in injuries**

Maher notes that among U.S. industries with 100,000 or more injuries and illnesses, hospitals have the second highest rate of nonfatal injury or illness cases.<sup>1</sup> When one considers that injuries from falls are approximately 40% greater in hospitals than in general industry, it is not surprising that the National Institute for Occupational Safety and Health (NIOSH) in Washington, DC, along with the Finnish Institute of Occupational Health, Johns Hopkins School of Public Health in Baltimore, and Liberty Mutual Research Institute in Hopkinton, MA, are conducting a study of transient risk factors which may lead to occupational slips and falls in hospital settings.

Pilot data from last year showed that among those who slipped or fell, 86% were women, 36% were nurses, and 12% were employed in housekeeping.

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The hospital workers were asked a series of questions about the circumstances prior to the incident. Fifty-five percent fell after slipping and 41% after tripping. Thirty-four percent of incidents involved liquid such as water or cleaning solutions, and 59% occurred at a transitional area (such as wet to dry, from one type of floor to another, or uneven surfaces).

Ninety-one percent of workers were injured as

a result of the incident with typical injuries including contusions (23%), strains and sprains (22%), and fractures (9%). The pilot study also showed that the injured workers' exposure to causative factors such as contaminated floors, unfamiliar pathways, rushing, carrying atypical loads, and distraction was greater at the time of the injury than it had been in the previous month.

## ***Women most at risk***

Maher says it is important to note that the median age of workers who slipped, tripped, and/or fell was 46 years, and most were women. This should raise significant concerns as the prevalence of osteoporosis increases with age. This essentially predisposes older women who slip, trip, or fall to more serious injuries than those who are younger.

In 2001, more health care workers were injured than workers in any other sector, and slips, trips, and falls accounted for the largest proportion of lost-time injuries (21%), according to information from the U.S. Bureau of Labor Statistics.

Advocate South Suburban Hospital in Hazel Crest, IL, was no exception to those statistics. After a series of falls that got the administration's attention, **Mary Lange**, RN, BSN, MHA, CPHQ, CRM, director of quality risk management, implemented several initiatives to prevent patient and employee falls at the hospital. She also is part of a larger task force for an eight-hospital system that is focusing on this specific issue.

A root-cause analysis revealed one clue right away: Reducing slips and falls may involve departments you had never considered. At Advocate, the team conducting the root-cause analysis included the department responsible for ordering equipment because Lange realized the specific products in use can affect the risk of slips and falls.

"We discovered that the system was considering ordering new restraints, so we thought that was a great time to look at which particular items can contribute to falls or lessen them," she says.

## ***Halcion can be special risk***

The team also analyzed the hospital's own fall data and found that, consistent with the national data, most patients who fell were elderly women. Next, the team looked at ways to reduce falls and pinpointed some particular strategies.

"We noted that there was research showing

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### **Editorial Questions**

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Halcion [triazolam] contributed to some falls, particularly at night. It has to do with the fact that as you age, your kidneys don't function as well and can't throw off the medicine as quickly, so you end up overdosing in a way," she says. "So we did education through our pharmacy newsletter to physicians about appropriate dosing of Halcion."

Advocate also educated nurses about how patients might not be at risk of falling when they first come to the hospital, but they might be at risk later after receiving medications and after other changes. The hospital also has experimented with different automated systems that can help keep elderly and confused patients in bed without being restrained. The systems can be triggered by movement and use the recorded voice of spouses or other family members to remind the patient to stay in bed.

### ***Post-fall protocol necessary***

The Advocate team also determined that the system lacked a post-fall protocol, leaving it up to nurses to determine how to respond after a fall. So Advocate immediately implemented a post-fall protocol that requires staff to take certain actions. (See p. 112 for a standard post-fall protocol.)

Among other standard steps like recording the conditions causing the fall, the Advocate plan calls for computed tomography scans of some high-risk patients, like those on blood thinning drugs, to rule out subarachnoid hemorrhage and other hidden injuries. The protocol ensures that post-fall procedures are the same from one unit to the next, Lange says.

The new plan has been in place at Advocate for fewer than six months, and each unit reported a reduction in falls of from 2% to 4% over the first quarter. Advocate has not yet determined the cost savings that may accrue from that reduction, but Lange says she expects the savings to be substantial and to make up for any expenses incurred in the fall reduction program. (For an insurers' perspective on reducing slips and falls, see p. 113.)

### ***Most hazards can be addressed***

Risk managers must have an occupational health and safety plan, and an appropriate safety culture and working environment in order to address the incidence of falls, Maher urges. Safety culture seeks to develop an awareness, to value the importance of making safety an integral part

## **Top 10 strategies for reducing slips and falls**

Experts say these are the top 10 strategies for reducing slips, trips, falls, and the associated liability:

**1. Assess flooring surfaces.** Study friction levels and eliminate uneven surfaces. Choose flooring surfaces carefully when designing or remodeling any part of the facility. Remember that different areas of the facility will require different flooring surfaces, notes **Ruth M. Maher**, PT, DPT, MPT, BS, director of physical therapy at HyOx Medical Treatment Center in Marietta, GA. The emergency department will need a high-quality, no-skid surface because you can expect fluids to be spilled frequently and people to rush around.

**2. Choose waxes and other floor treatments carefully.**

**3. Promptly clean up spillage and debris.** This requires an *aggressive* response when a hazard is observed, says **Mary Lange**, RN, BSN, MHA, CPHQ, CRM, director of quality risk management at Advocate South Suburban Hospital in Hazel Crest, IL.

"In the time it takes you to make a mental note of the spill and walk over to a phone to call housekeeping, you could have two people slip in it," she says. "If you have to stand over it and warn people away while someone else calls housekeeping, that might be the better way to address it."

**4. Provide warning for wet areas.**

**5. Promote or require shoes that are slip-resistant and waterproof.**

**6. Use anti-slip mats in appropriate areas — especially any area in which water may be spilled.**

**7. Keep passageways free from clutter and power cords.** Provide floor plugs so cords do not have to run across floors. That is a huge risk in health care settings, especially in the ED. Hallways jammed with equipment carts are another risk. Consider having a designated safety officer in each department who can do spot checks to look for hazards.

**8. Clean stairs and walkways.**

**9. Provide adequate lighting.**

**10. Require staff to use ladders for reaching high places — never a stool, chair, or box. ■**

## What to do if you witness a fall

Any hospital employee witnessing a fall should know how to document the incident clearly, says **Ruth M. Maher**, PT, DPT, MPT, BS, director of physical therapy at HyOx Medical Treatment Center in Marietta, GA. She suggests training employees to immediately note this information after a fall:

1. Date, time, and location of the incident
2. Person involved
3. Did the person suffer an injury? If so, what type?
4. Description of the incident the mechanism of the incident (what the person was doing at the time)
5. What type of surface did the incident occur on?
6. Was the surface wet, dry, cluttered, etc.?
7. Contact information for the party involved and witnesses
8. Action taken to prevent reoccurrence
9. What type of safety or fall prevention training the individual received before the fall?
10. Could anything have been done to prevent the incident? ■

of your company's culture and to develop an awareness of the importance of accountability in an effective safety program.

"Fall prevention is everyone's business," she says. "I'd like to see everyone in the organization participate in a fall prevention program at least once a year. Show them how much these accidents cost and that there are very concrete ways to reduce them, strategies that actually show results."

A successful prevention program can address most, if not all, of the controllable factors, she says. For example, there must be a formal written program dealing with floor treatments. The floor treatment that is most appropriate for a particular work environment will depend on the nature of the floor and the hazards that are present. The plan should address appropriate cleaning protocols for each contaminant, the use of signage/warnings, and the training of employees in proper cleaning techniques procedures. **(See p. 111 for the Top 10 strategies for reducing falls and liability.)**

"Just mopping a spill is not enough. That often can just spread the contaminant," she says. "A thorough cleaning may require abrasives or other techniques. This isn't always as simple as just wiping up the spill and moving on."

Langue says it is key to measure your results

with fall prevent programs. Once you see how your falls data are affected by particular strategies, you can keep the things that work and ditch the things that don't.

She also urges risk managers to consult physical therapists like Maher.

"They understand better than most people what some patients are coping with, issues like how high a bed should be set or what kind of beds to order," she says. "A physical therapist can tell you that with patients so much more acutely ill, it's hard to get patients back in bed. Those cushy, soft mattresses may look good, but patients can slide right off of them."

Even the most common equipment used by staff can increase or reduce the risk of falls, she says. Did you know that office chairs come with two different types of wheels — one intended for carpet and one type for hard surfaces?

"If you borrow a chair from down the hall and it's the wrong type, it can slip right out from under you," she says. "That's the kind of thing we'd never considered until we took a very comprehensive look at what causes falls."

### ***Fast track for cleanup***

Frequent inspections of high-traffic areas and keeping a written log of each inspection can be a critical element in defending against a lawsuit, a real danger should a nonemployee slip in your facility, Maher notes.

She also recommends that you do some risk management by walking around. Reading incident reports in your office is one thing, Maher says, but you might gain much better insight by touring the facilities once in a while with an eye toward slip and fall hazards.

"You also need a fast track for getting things fixed," she says. "When someone reports that there is a fall hazard, you need a way to get that fixed right away rather than waiting for the paperwork to go through. That also encourages people to report these hazards when they see that you will address them immediately."

Maher also recommends using a free tool offered by OSHA. The Hospital E Tool provides a computerized way to help employers identify and address potential occupational hazards in hospitals. The tool can help employers in developing and implementing engineering and work practice controls that comply with OSHA requirements, and Maher suggests they could be incorporated into a facility's safety and health plan to reduce the hazards of

hospital work and improve worker safety. The Hospital E tool is available at [www.osha.gov/SLTC/etools/hospital/er/er.html](http://www.osha.gov/SLTC/etools/hospital/er/er.html).

## Reference

1. Courtney T, Wellman H, Lombardi D, et al. Slips, trips, and falls in hospital workers — Pilot outcomes. Presented at the American Industrial Hygiene Conference and Expo by the American Industrial Hygiene Association. Atlanta; May 8-13, 2004. ■

## If you want to reduce falls, you've got to plan

Slips and falls are a leading loss driver in both frequency and severity, says **Jim Sheridan**, senior risk control consultant with PMA Insurance Group in Blue Bell, PA. To remain attractive to insurers, health care providers must take a proactive approach to reducing falls and liability, he says.

So where do risk managers go wrong when trying to reduce slips and falls? Too often, he says, risk managers try to implement a generalized fall reduction plan instead of devising one specific to your own needs.

"A good comprehensive program that address your specific circumstances is going to reduce the frequency and severity of your slip and fall accidents, absolutely," he says.

Sheridan offers this advice:

- **Don't just try to make a quick fix.**

Some of the most successful strategies for reducing slips and falls are fairly simple, but don't put too much faith in any one solution, he says. A comprehensive management program is necessary to see real results.

"Risk managers go wrong when they avoid looking at the big picture and instead they just throw down some floor mats," he says. "Putting umbrella bags by the door when it rains is a good idea, but it's not enough."

- **Don't look only at national statistics.**

Focus on your own experience and your own data, Sheridan says. Your particular facility, patient population, and staff may present risks that are different from those in the average health care organization.

- **Remember that the entire organization is not the same.**

Chances are good that you have more slips and falls in certain departments. Focus your attention

where it is needed.

- **Look for trends in how the accidents occur.**

Do they happen more at certain times of the day? How about during inclement weather? Do you have an effective plan for rainy days when floors get wet around entryways?

- **Include outside areas in your plan.**

It's easy to focus extensively on indoor concerns and neglect the campus, Sheridan says. But when someone falls outside on your property, you're just as liable. Weather greatly complicates this concern in some parts of the country. If you get snow, do you have a snow removal plan?

"Snow can be a huge issue because first it melts and then it refreezes," he says. "If you're in an area with that risk, you have to have a real plan, something very well thought out, or else you're just inviting falls and lawsuits." ■

## Self-assessments can be used against you

Insurance industry underwriters are relying more on risk assessments when you apply for coverage, but they're not the only ones you have to please. The Joint Commission on Accreditation of Healthcare Organizations in Oakbrook Terrace, IL, also has some expectations in this area, and

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risk managers could benefit from knowing exactly what the accrediting body wants.

Some caution is necessary, however, because complying with JCAHO expectations could mean disclosing sensitive material to potential plaintiffs.

**Kurt A. Patton**, JCAHO's executive director for accreditation services, says risk managers should use self-assessment as a way to strengthen their programs. JCAHO's site visits too often are the focus of a risk manager's attention, when they should be seen more as simply a snapshot of what goes on in the organization every day, he says. He addressed the topic recently during an audio conference sponsored by the American Society for Healthcare Risk Management in Chicago.

### ***Frequently self-assess***

Ongoing self-assessments are one of the best ways to ensure compliance with JCAHO standards, Patton says. The periodic performance review, a requirement of the new JCAHO review process, can be a useful tool for assessing risk and improving quality throughout the organization, he notes.

"Very highly motivated, high-achieving organizations do self-assessments periodically between surveys to see how they are doing with compliance with standards," Patton says. "In addition to the self-assessment tools available from the Joint Commission, we also make it possible to have a dialogue with the surveyors in our Standards Interpretation Group, to make sure they are interpreting things correctly and developing an appropriate action plan if they identify deficiencies."

He notes that utilizing those resources will not affect your organization's assessment when surveyed, even if in the process you report deficiencies to JCAHO. Each self-identified deficiency in the required periodic performance review does require you to develop a plan of action and usually a method for measuring success.

Self-assessments can focus on specific elements that are known to affect quality or threaten patient safety, such as communication failures or the universal protocol for reducing wrong-site surgery, Patton says. Risk managers can use various methods and tools for conducting the self-assessments, he notes, but JCAHO requires some type of periodic performance review.

"It is an accreditation participation requirement, so we do expect organizations to go through that process, roughly between the 15th and 18th months after the last full survey," Patton says. "If an organization identifies a particular deficiency, and they

work within periodic performance review to develop an approved plan of action, and then if the Joint Commission comes out to do a random unannounced survey, our surveyors are not going to score that particular problem area because you have self identified it, you're working on it, and there would be no benefit from our surveyor citing the same issue."

The approved plan of action cannot be overruled or modified by the surveyor on site, Patton notes. But the surveyor may request a review of the plan's success so far and look at how well you have implemented the specific measures.

"In most cases, the on-site surveyor will be using the same measures that you identified in your plan of action," he says. "The standards are written in such a way that the corrective measures for a particular problem should be almost self-evident, and the surveyor's focus will be on how well you are following through on those."

Because there are concerns about information being transmitted either electronically or on paper to JCAHO saying essentially that you're not doing something right, some health care attorneys are concerned that the information might be disclosed to third parties in the event of a lawsuit. To address those concerns, JCAHO offers three options regarding the reporting of results from the periodic performance review:

In Option 1, you can affirm that you have discussed the situation with legal counsel and have decided not to participate in the full periodic performance review, but you will go about your own self-assessment, developing plans of action and measures of success as appropriate. However, you will not use JCAHO's Internet-based tools for conducting the self-assessment and you will not report the results to JCAHO.

"If organizations don't use the Internet tools and don't submit the information to the Joint Commission, they will not be able to have specific conversations about the situation with the Standards Interpretation Group," Patton says. "However, they can have more general conversations about the standards and interpretation."

Option 2 is designed for organizations whose legal counsel has advised them not to conduct the self-assessment. The organization can report that to JCAHO and invite JCAHO in to do the assessment for them. The findings from this on-site survey do not affect the accreditation decision. There is no survey report or score, but there are feedback mechanisms for discussing the findings, such as a conference call with the Standards

Interpretation Group.

For those risk managers most skittish about possible disclosure of any findings, there is Option 3, in which the organization invites JCAHO in to do the assessment but without using the Internet based tools. There is no written documentation, only a verbal report from the surveyor. The organization can have a phone discussion with the Standards Interpretation Group, but only for general interpretations and not anything specific to that organization.

About 60% of JCAHO-accredited organizations are using full periodic performance review, and 25% are using Option 1, Patton reports. About 9% are using Option 2 and only 1% is using Option 3.

But what about using JCAHO's Internet-based tools for the periodic performance review and then just not submitting the data?

"Technically, you can do that, but it's something you should check with your legal counsel about to see if they would want you doing that," Patton says. "Remember that if you are working in our on-line self-assessment tools, you are working on a computer that resides in Chicago and you are sending information to Chicago even though you haven't hit the 'submit' button to send the information to our Standards Interpretation Group."

If you are in a state in which discoverability is an issue and your counsel does not want you to submit your review findings to JCAHO, you probably shouldn't use the Internet tools at all, he suggests. ■

## Hospital ad supports doc in malpractice case

Doctors accused of malpractice may find it a lonely ordeal as their colleagues avoid any association with the case, but one Maine hospital decided to publicly support a cardiologist on trial after the death of a patient. The hospital placed an ad in a local newspaper supporting the doctor, an unusual step that hospitals leaders say was intended to show they had faith in the physician.

York Hospital placed a 3-inch by 8-inch ad in seven local weekly and daily newspapers proclaiming "We Support Alan Hymanson, MD." A York County jury recently found the hospital and emergency department staff not negligent in the death of a patient who was prescribed a clot-busting medication for a brain hemorrhage.

The jury found Hymanson negligent, however, and awarded the plaintiffs \$1.6 million. Dawn Fernald, spokeswoman for the hospital, says the ad was a response to media coverage that hospital leaders felt portrayed Hymanson and the hospital unfairly.

"We felt we had to support this physician in our community," she says. "We're a small community, and information in the media can really affect a physician's practice. He did everything right and there was just an unfortunate outcome, so we had to stand up for this physician."

York Hospital's ads stated that it "stands behind the clinical decisions made by Alan Hymanson, MD, and the York Hospital Emergency Center staff" in the case. Noting that the jury ruled against Hymanson, the ad said, "We disagree with their judgment."

"While our thoughts have been with the Healy family throughout this process, we know that Dr. Hymanson followed proper medical procedure in treating Mrs. Healy and was not in any way negligent," the ad said. "Dr. Hymanson is an experienced cardiologist with Seacoast Cardiology Associates who has provided exceptional care for our patients over the last 20 years and will continue to do so. Just like the State's Medical Malpractice Screening Panel, who met earlier in the process and found unanimously that the treatment provided by York Hospital and Dr. Hymanson was proper in this case, we feel the same."

The ad went on to extol the quality care provided by the hospital and the cardiology group, concluding with a statement that "We are honored to have this skillful and experienced group of physicians, including Dr. Hymanson, taking care of heart patients at York Hospital and in the communities we serve."

Fernald says the hospital administration received very positive feedback from the medical staff and community after the ads ran. The ads cost roughly \$200 per newspaper, so the hospital spent about \$1,400, she adds. ■

## Children more at risk from adverse events

Children in hospitals often experience adverse patient safety events such as medical injuries or errors in the course of their care, new research shows. Those in vulnerable populations, including

children younger than 1 year old, are at highest risk, according to a study from the Agency for Healthcare Research and Quality in Rockville, MD.

The research can be a good starting point for risk managers who want to reduce the risk of such adverse events but don't know where to start, says **Marlene R. Miller**, MD, from Baltimore's Johns Hopkins Children's Center and the lead researcher.

"There is an unending spectrum of ways to commit errors in hospitals, so where do you start?" she says. "This research gives you a hint at one group that we know is more vulnerable and could benefit from some added attention."

### ***Patient Safety Indicators used***

While the study gives an overall look at problem areas and vulnerable populations, Miller says it really should serve as an example of how a hospital can analyze its own data to zero in on patient safety issues. The study, which uses the recently developed Patient Safety Indicators (PSIs) to focus on children in hospitals, examined 5.7 million hospital discharge records for children younger than age 19 from 27 states, drawn from the 2000 Healthcare Cost and Utilization Project State Inpatient Database.<sup>1</sup>

This is one of the first studies to quantify the impact of patient safety events on children in terms of excess hospital stays and charges as well as the increased risk of death among children due to medical errors.

In total, 51,615 patient safety events involving children in hospitals during 2000 were identified. Children up to 1 year old were consistently and significantly more likely to experience many of the events identified by the PSIs than older children, and children whose primary insurance was Medicaid also were more likely to experience several of the PSI events.

The prevalence of patient safety events resulting in injuries among children also had an impact on the length of stay, charges and the rate of in-hospital deaths. For example, infections resulting from medical care caused a 30-day increase in the average length of stay, and resulted in increased charges an average of more than \$121,000 per discharge. In total, the combined excess charges for all PSI events are estimated to have exceeded \$1 billion.

Postoperative respiratory failure increased the rate of deaths in hospitals by as much as 76%. The researchers estimate that if all deaths among pediatric patients who experience a medical injury are attributed to those injuries, then the

records in their analysis account for 4,483 deaths among hospitalized children in the year 2000 alone.

Risk managers can use these findings to help them direct their efforts to reduce medical errors and improve patient safety among the youngest patients, Miller says. She found that the likelihood of a child experiencing a patient safety event varied greatly depending on the type of event. Some types of events were very uncommon, like postoperative hip fractures and transfusion reactions, both of which occurred less than once for every 10,000 discharges.

Others types of events, however, were very prevalent. The leading patient safety events were obstetric trauma among adolescent mothers, with and without forceps, vacuums, or other instruments, with rates of 2,152 and 1,072 per 10,000 discharges, respectively.

"The Patient Safety Indicators are a valuable tool for researchers to use in identifying the significant problems in patient safety experienced by hospitalized children on a national scale," Miller says. "The PSI data provide a road map for further research and action in pediatric patient safety."

### ***Special risk up to 1 year old***

Miller's study revealed that children up to 1 year old were at particular risk for adverse events, and she says that may be reason for risk managers to pay special attention to that group.

"Younger kids have much less resistance and ability to tolerate errors or abnormalities," she says. "Giving 10% extra medicine to you and me may not be much of a threat, but those younger kids' livers are not able to metabolize as well and that can make them more vulnerable. Younger kids get liquid medicines more often, which means it has to be compounded and there's more chance of getting the dosage wrong."

Children on Medicaid also experienced adverse events more frequently, which Miller says probably is related to the fact that they are more likely to be born to younger and more socioeconomically challenged mothers, which can result in less medical care and other factors that make the child less resilient when subjected to an error.

Miller suggests that risk managers can use the PSIs to analyze their own data and identify potential problem areas.

"If a hospital has 5,000 discharges to look at, where do you start to look for problems?" she asks. "But if this analysis identifies 20 charts with

adverse events that probably should not have occurred, that's an excellent place to direct your energy and resources. That's what we're doing at four different hospitals I'm working with."

Pulling those 20 charts may not immediately identify the root causes of the problem, but they represent much more manageable number to study, Miller notes. For example, you could pull all the charts that indicate a foreign body unintentionally left in the patient. A study of those charts might reveal that most are catheter tips that keep breaking, and then that can lead to a solution, she says.

Also, she says that kind of hospital-specific data will get people's attention more than generic information on a national level, particularly if you combine it with information about how many cases led to legal claims.

"When you go in the board room and say, 'We need to do something because we had 10 kids with a foreign body left in them last year,' people will sit up and listen to you," Miller says. "When you bring your own data, that's incredibly motivating. You're not talking about national data; you're talking about kids at your own hospital."

## Reference

1. Miller MR, Zhan C. Pediatric patient safety in hospitals: A national picture in 2000. *Pediatrics* 2004; 113:1,741-1,746. ■

## Long hours, nursing fatigue put patients at risk

A major nationwide study has found that the long hours worked by hospital staff nurses may have adverse effects on patient safety.

By studying the work habits of 393 hospital staff nurses, researchers determined that nurses working more than 12.5 consecutive hours were three times more likely to make an error than nurses working shorter hours. Working overtime at the end of a shift also increased the risk of making an error, says **Linda Scott**, associate professor of nursing in the Kirkhof College of Nursing at the Grand Valley State University in Grand Rapids, MI, and one of the researchers.

The study was conducted by giving nurses log-books to track hours worked, overtime, days off and sleep/wake patterns for 28 days.<sup>1</sup> Participants were asked to describe errors or near errors that might have occurred during their work periods.

Participants reported 199 errors and 213 near errors during the data-gathering period. More than half of the errors (58%) involved medication administration; other errors included procedural errors (18%), charting errors (12%), and transcription errors (7%).

Researchers found that most hospital nurses no longer work eight-hour day, evening, or night shifts. Instead, they may be scheduled for 12-hour, 16-hour, or even 20-hour shifts. Even when working extended shifts (12.5 hours or more), they were rarely able to leave the hospital at the end of their scheduled shift. All participants reported working overtime at least once during the data-gathering period, and one-third of the nurses reported working overtime every day they worked, says **Ann Rogers**, PhD, RN, FAAN, associate professor of nursing at the University of Pennsylvania in Philadelphia and lead researcher.

"Both the use of extended shifts and overtime documented in this study pose significant threats to patient safety," Rogers says. "In fact, the routine use of 12-hour shifts should be curtailed and overtime — especially overtime associated with 12-hour shifts — should be eliminated."

The study was funded with a grant from the Agency for Healthcare Research and Quality in Maryland. Scott and Rogers are conducting a correlating study to research the work hours of critical care nurses.

Scott and Rogers are expected to speak before their respective state legislatures on nurse fatigue and patient safety. Scott also is working with the Michigan Nurses Association on patient safety legislation.

"We need to educate nurses and hospitals about fatigue," Rogers says. "It's a shared responsibility, and both parties are accountable. This is a national problem and will likely have a national effect."

## Reference

1. Rogers AE, Hwant WT, Scott LD, et al. The working hours of hospital staff nurses and patient safety. *Health Affairs* 2004; 23:202-212. ■

## Stolen info results in first HIPAA-related conviction

The U.S. Attorney's office in Western District of Washington state has announced that Richard W. Gibson, 42, of SeaTac, WA, pleaded guilty in

## Reader Question

### Carefully document patient requested ED transfers

**Question:** What should our emergency department (ED) staff do when a patient requests transfer to another facility before being examined and stabilized? Can we comply with that request without violating EMTALA?

**Answer:** This situation can lead to an inadvertent EMTALA violation if your ED staff is not carefully trained in how to respond, cautions **John Wagner, JD**, a health care attorney at the law firm Nossaman Guthner in Sacramento, CA.

In general, he notes, a hospital has the duty under EMTALA to treat a patient with an emergency medical condition until the patient is stabilized. But there is an exception if the patient requests a transfer. That request can arise in two different ways:

- **First scenario: The patient has been stabilized and is requesting a transfer.**

There is no EMTALA problem. The EMTALA duty has been met as the patient now is stabilized.

- **Second scenario: The patient is not stabilized and requests transfer.**

federal court in Seattle to wrongful disclosure of individually identifiable health information for economic gain. The case is the first criminal conviction related to the health information privacy provisions of HIPAA that became effective in April 2003.

According to the U.S. Attorney's office, Gibson admitted that he obtained a cancer patient's name, date of birth, and Social Security number while he was employed at the Seattle Cancer Care Alliance, and that he disclosed that information to get four credit cards in the patient's name.

HIPAA made it illegal to wrongfully disclose personally identifiable health information.

**Matthew Rosenblum**, chief operations officer for privacy, quality management, and regulatory affairs at New York City-based health care consultants CPI Directions, tells *Healthcare Risk Management* that a review of the plea agreement reveals that the Department of Justice supports some previous interpretations of how HIPAA would be applied. Specifically, he says the case confirms these points:

1. Patients names, dates of birth, Social Security numbers, and other identifiers are defined as protected health information.
2. The HIPAA penalties are applicable to a covered entity's individual work force members.
3. Appropriate use and disclosure of protected health information now will be aggressively enforced through the HIPAA statutes. ■

### Audio conference: Including children in clinical research

Children get sick. When they do, parents and pediatricians alike expect to employ just the right therapies, which often include a regimen of drugs, to treat their conditions. But are drugs known to be safe for adults, necessarily safe for children?

It has long been known that drug safety cannot be assessed based on studies with adults. So the FDA and the NIH has encouraged over the years, and even required, that clinical trials include children. But there is a right way and a wrong way to do it. The right way has to do with understanding the ethical dynamics and ensuring that all concerned understand the risks and benefits of involvement in a clinical trial.

Thomson American Health Consultants is offering an audio conference with the information necessary to help you recognize the ethical and regulatory issues related to working with children in clinical trials.

**Getting Assent/Parental Permission for**

**Children Involved In Clinical Research**, which will be held on Thursday, Oct. 21, 2004 from 3 p.m. to 4 p.m. EST, will be presented by **Robert "Skip" Nelson, MD, PhD** and **Alan M. Sugar, MD**.

Dr. Nelson is Associate Professor of Anesthesia & Pediatrics in the Department of Anesthesiology and Critical Care Medicine at the University of Pennsylvania School of Medicine, Children's Hospital of Philadelphia. He also is founder of the IRB Forum. Dr. Sugar is chairman of the New England Institutional Review Board and professor of Medicine at Boston University School of Medicine.

This program will serve as an invaluable resource for your IRB coordinators, chairs, and members, as well as principal investigators and clinical trial coordinators. Your fee of \$249 includes presentation materials, additional reading, and free continuing education. For more information, visit us at [www.ahcpub.com](http://www.ahcpub.com), or contact customer service at (800) 688-2421 or by e-mail at [customerservice@ahcpub.com](mailto:customerservice@ahcpub.com).

When registering, please reference code **T04122 62762**. ■

EMTALA allows the transfer *if* the patient (or legally authorized person acting on the patient's behalf) is fully informed of risks of transfer. Documentation must show that there was no coercion and the patient was fully informed.

"So step No. 1 is to determine whether the patient is stabilized," Wagner explains. "If so, what happens from then on is no longer an EMTALA issue. Then it would be an ordinary transfer."

But if the patient is not stabilized, things are much more complicated. The hospital generally is obligated to treat such patients, but you cannot force treatment on a patient who does not want it and is capable of making decisions — even bad ones — about his or her care. EMTALA clearly allows patients to request a transfer, so the ED staff must be prepared to respond in a way that protects the hospital.

Many EDs use specific forms for these types of transfers, but it is worth checking to see if they include all the necessary steps and information. Wagner suggests that ED staff should be taught to respond with these steps:

**1. Inform the patient of the risks and benefits of transfer.** "It should be a very detailed discussion," Wagner says, including not only the risks and benefits related to the patient's medical condition but those associated with the mode of travel (ambulance, helicopter, etc.), potential delays, and any other concerns. Document the discussion.

**2. Record the patient's decision in his or her own words.** Get the patient's own language in the documentation as much as possible, Wagner advises. One purpose of the documentation will be to show that there was no coercion, in case the patient tries to claim later that the ED staff urged the transfer and it was not actually motivated by the patient's desires.

"Get verbatim quotes like, 'I like Doctor Smith at Hospital X,' or 'My family always goes to Hospital X,'" he says.

**3. Make sure the other hospital accepts the patient.** It is the original hospital's responsibility to ensure that the second hospital will accept the patient before proceeding with the transfer, Wagner says. If the other hospital will not accept the transfer

for any reason, document that reason clearly — exactly what reason was cited and whom you spoke with at the other hospital. Also document whom you spoke with if the transfer is accepted.

"And it can't be just hospital staff. You should document that you spoke with a physician who explained that they will or won't take the transfer," he says.

When the transfer would be dangerous to the patient, Wagner says you should make sure the receiving hospital understands that fact.

"The second hospital may say the patient is too unstable and refuse to accept him," he says. "In that case, you have to treat the patient because you can't transfer him if the other hospital refuses."

Wagner notes that the ED staff are not obligated to talk the patient out of the transfer; EMTALA does not include any such requirement. However, he says that as a practical matter, the ill-advised transfer request should prompt extra steps by the ED staff.

If, for instance, the patient requests transfer for ill-defined reasons such as, "I just don't like this hospital" *and* the patient's condition is such that the request could create an unnecessary risk, Wagner says the ED staff should go out of their way to explain that risk when discussing the request.

"They should make clear that the patient's choice does not appear to be rational," Wagner says. "You can say that you understand he has that legal right, but that he is risking his life for a trivial reason because he needs surgery for an aneurysm immediately and there is no way to keep his brain stable for that two-hour transfer to the hospital of his choice."

Document that conversation with extra care, Wagner says. In that situation, the ED staff should go to great lengths to try to explain the risk sufficiently to the patient, Wagner says. That may mean calling in another physician to give it a try, possibly the chief of emergency medicine. Inquire about whether there is some underlying reason that the patient wants the transfer, and assure the patient that you are willing to provide treatment.

"If that patient dies on the way to the other hospital, you want to be able to show that you pulled out all the stops trying to get him to stay

## COMING IN FUTURE MONTHS

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## CE Questions

Nurses participate in this continuing education program by reading the issue, using the provided references for further research, and studying the questions at the end of the issue. Participants should select what they believe to be the correct answers, then refer to the list of correct answers to test their knowledge. To clarify confusion surrounding any questions answered incorrectly, please consult the source material. After completing this activity each semester, you must complete the evaluation form provided and return it in the reply envelope provided in order to receive a certificate of completion. When your evaluation is received, a certificate will be mailed to you.

13. According to research from NIOSH along with the Finnish Institute of Occupational Health, Johns Hopkins School of Public Health and Liberty Mutual Research Institute, the incidence of falls is \_\_\_ greater in health care when compared to general industry.  
A. 10%    C. 40%  
B. 25%    D. 70%
14. According to Mary Lange, RN, BSN, MHA, CPHQ, CRM, why does triazolam pose a risk of falls with some patients?  
A. It is easy to accidentally overdose an elderly patient with the drug because of the way their bodies process it differently from younger patients.  
B. Patients refuse to take the drug as directed.  
C. Family members may try to give the patient more than the prescribed dosage.  
D. The strength of the drug can vary from one batch to the next.
15. In JCAHO's periodic performance reviews, which of the following is true of Option 3?  
A. There is no written documentation.  
B. The surveyor completes a full written report but only the accredited organization keeps a copy.  
C. The surveyor completes a full written report, which is filed with the JCAHO Standards Interpretation Group.  
D. The accredited organization can direct the surveyor to write as much of a report as they desire.
16. According to John Wagner, JD, which of the following is true when a patient requests transfer from the ED?  
A. No further action is necessary and the patient always can be transferred immediately.  
B. A stable patient can be transferred but an unstable patient must be counseled and fully informed about the risks of being transferred before screening and stabilization.  
C. The patient's request can be ignored until after the patient is stabilized.  
D. The patient's request must be considered valid only if she is in labor; the treating physician can overrule other patients.

**Answers: 13. C; 14. A; 15. A; 16. B.**

for treatment," he says. "It may not be required by EMTALA, but the more you see a potentially bad legal case on the horizon, the more you want to make sure you've done everything you can, and more than is required." ■

## CE objectives

After reading this issue of *Healthcare Risk Management*, the CE participant should be able to:

1. Describe legal, clinical, financial, and managerial issues pertinent to risk managers in health care.
2. Explain how these issues affect nurses, doctors, legal counsel, management, and patients.
3. Identify solutions for hospital personnel to use in overcoming challenges they encounter in daily practice. Challenges include HIPAA and EMTALA compliance, medical errors, malpractice suits, sentinel events, and bioterrorism.
4. Employ programs used by government agencies and other hospitals (such as EMTALA, HIPAA, and medical errors reporting systems) for use in solving day-to-day problems. ■



## Failure to properly treat a puncture wound results in leg amputation, brain damage: \$7.1M settlement

By Jan. J. Gorrie, Esq., and Blake Delaney, Summer Associate  
Buchanan Ingersoll PC  
Tampa, FL

**News:** A child fell from a tree and sustained a puncture wound significant enough to require stitches. Because the emergency department (ED) physician failed to remove a piece of wood from the wound while he was treating the boy, the child's leg became infected. Unfortunately, the infection was not properly treated for several days and the child developed necrotizing fasciitis, which ultimately resulted in brain damage and his leg requiring amputation. The suit settled for \$7.1 million prior to trial.

**Background:** One Sunday afternoon, a 9-year-old child fell out of a tree he was climbing in his backyard. He immediately ran inside and showed his father the innocuous-looking puncture wound on the back of his thigh, which was bleeding profusely down the his leg and into his shoe. Before the father cleaned and bandaged the wound, he noted that the blood appeared to pulse from the wound. Because of the profuse bleeding, the father suspected the wound would need stitches. The father took the boy to the local community hospital ED, which was overflowing with its usual Sunday afternoon patient load. After waiting three hours, the boy's leg was stitched, and he was discharged home.

By the next evening, the boy was running a slight fever. In the morning, the father called the child's pediatrician, who advised him to come in the next day. The following morning, the leg was

extremely sore and swollen. The boy was taken back to the ED and immediately referred to a tertiary hospital where the wound was surgically explored. A 3-cm piece of wood was removed from the back of the child's thigh. By the time of the surgery, the child had developed an infection known as necrotizing fasciitis, literally a "flesh-eating" disease. Despite the administration of massive antibiotics, hyperbaric oxygen treatments, and repeated surgeries, large portions of the boy's body tissue were literally eaten away. This destruction of tissue eventually necessitated the amputation of his right leg at the hip. As a result of systemic complications, the young boy became brain damaged and partially blind.

The boy's parents brought suit against the community hospital, the ED physician, and the child's pediatrician. The plaintiffs alleged that the ED physician failed to adequately explore the wound on the initial trip to the hospital and failed to provide any warning signs of a potential infection to the father. The plaintiffs claimed that the rest of the ED team failed to obtain or document a complete history of the injury, perform any independent assessment, or most importantly, advise the physician that wood particles were flushed from the wound prior to suturing. The plaintiffs also averred that the diagnostic imaging studies required by the circumstances surrounding the injury and emergency treatment were not performed. While X-rays would not

have revealed the wood particle, the plaintiffs' experts opined that ultrasound or CT scan procedures would have been appropriate and would have led to the discovery of the potentially infecting foreign material. To prove this point, the plaintiffs conducted experiments for the purpose of constructing a trial exhibit, involving imaging the legs of a lamb, punctured by similarly sized and shaped wooden fragments from the same tree, showing that the foreign bodies would have been clearly visible by ultrasound or CT.

The case was settled after mediation, which commenced with the PowerPoint presentation consisting of photographs of key exhibits and video clips of witnesses' testimony. The video concluded with a painfully long segment of the now 10-year old boy's unsuccessful attempt to count from one to five. The case was ultimately settled for \$7.1 million among all of the defendants.

**What this means to you:** This case highlights the problems that can stem from traumatic lacerations, a common childhood injury.

"Emergency departments, which should be prepared to manage these injuries, should have a policy, guidelines, and/or a checklist regarding the evaluation and management of patients who present with traumatic lacerations," says **Marva West Tan**, RN, ARM, FASHRM, a health care consultant in Marietta, GA.

For example, in May 1999, the American College of Emergency Physicians (ACEP — [www.acep.org](http://www.acep.org)) developed "Clinical Policy for the Initial Approach to Patients Presenting with Penetrating Extremity Trauma," which might serve as a beginning point for policy development. "Although it has not been recently updated, ACEP points out that it contains substantial content that still may be relevant to the practice of emergency medicine," notes Tan. She also recommends looking to the American Academy of Pediatrics ([www.aap.org](http://www.aap.org)) and professional literature for information regarding recommended policies, procedures, equipment, and consent issues in pediatric care.

Tan highlights key points from ACEP for a typical emergency department policy for traumatic laceration management, in a patient who is otherwise stable: 1) history of time, date, and mechanism of injury and tetanus immunization status; symptoms; prior medical history; relevant social history; factors that can impede wound healing (such as compromised immune status); history of allergies; and a history of keloid formation to

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indicate the potential for scarring; 2) physical examination of vital signs; weight; pain assessment; nerve function; tendon function; vascular integrity; entrance; exit; hematoma; hemorrhage; bruits; evidence of foreign body or contamination; palpation; fracture evaluation; range of motion; and the area of the injury, including the injury's location, length, depth, and shape, all of which can be documented on a checklist format; 3) proper wound preparation, including wound irrigation or cleansing; hair removal and debridement, and use of anesthesia prior to wound closure, all of which is dependent on the type and degree of wound contamination and on the severity of the wound itself; 4) Proper wound closure, which may involve sutures, staples, adhesives and surgical tapes, depending on the nature and location of the wound and on the clinician's preference; 5) Consideration of prophylactic use of antibiotics, which should be tailored to an individual patient with a traumatic laceration based on the mechanism of injury, and other patient factors; and mindfulness of the potential for antibiotic resistance; 6) Time- and action-specific discharge instructions, which should be documented in the medical record, given to all patients so that the patient and family know about appropriate wound care, signs and symptoms of possible infection, compartment

syndrome, retained foreign body, occult tendon or bone injury, methods for pain relief, cast or splint care, when suture or staple removal should occur, and when and how urgently to seek follow-up care if symptoms occur.

In addition to this general overview of an emergency, Tan advises that ACEP warns that wounds to the hands or feet, and wounds that suggest possible nerve, tendon, joint, or fracture involvement or which retained foreign bodies, may need additional assessment and/or exploration, imaging or consultation.

"Likewise, animal or human bites and gunshot or stab wounds may require additional evaluation or consultation. More importantly, she notes, "Experts state that most patients should have prompt primary wound closure to speed healing and reduce discomfort and the risk of infection. Relying on A.J. Singer's October 1997 article 'Evaluation and Management of Traumatic Lacerations' in the *New England Journal of Medicine*, the time during which wound closure is safe should be tailored to 'causation, location, and host factors,'" adds Tan.

The detection and management of foreign bodies in wounds, as occurred in this case, present more challenges for the emergency physician. "History and mechanism of injury as well as physical findings are important in the identification of the potential for foreign bodies. The presence of objects that are small, thin, fragile, brittle, breakable may indicate the need for further evaluation through imaging or exploration," says Tan, in her synopsis of ACEP's 1999 policy. A decision to remove a foreign body is a complex one as exploration and removal of an object from soft tissue can cause more contamination and wound damage.

She continues, "Organic material such as wood, thorns, spines, and clothing are very reactive and, if possible, should be removed. Other individual indications for detection and management of foreign bodies relate to individualized factors, such as inflammation and persistent pain."

In this case, a complete history would have identified a fall from a tree, which would have been consistent with the wood fragments identified when the wound was originally flushed. "This important information was apparently not conveyed to the treating physician, and the remaining wood fragments were only identified and removed at a subsequent time. Failure to

identify foreign bodies in wounds is a known risk management issue for emergency physicians that can be reduced by obtaining a careful history of the mechanism of the injury and complete examination of the wound," states Tan. Indeed, complete documentation and communication among caregivers of pertinent information is a crucial risk avoidance and patient safety strategy.

Further, credentialing and privilege delineation of all clinicians practicing in the ED also is a critical risk management strategy.

"Clinicians who examine and treat traumatic lacerations must have privileges to do so and should be familiar with the ED policy or guidelines for management of lacerations," Tan says.

"Care in credentialing may be especially important at hospitals that rely on rotating medical staff coverage for their ED, as many internists or other medical subspecialists may rarely treat traumatic lacerations in their own practice," she continues.

The rare bacterial infection in this case, necrotizing fasciitis, can destroy skin and soft tissues including fat and fascia. Tan notes that several types of bacteria can cause necrotizing fasciitis, the most common of which is group A streptococcal (GAS) bacterium that also causes other types of infections such as strep throat. She says most GAS infections are mild but, in some patients, toxins develop and spread rapidly through the blood to lungs and other organs. In fact, invasive GAS can develop suddenly, quickly becoming life-threatening with the occurrence of streptococcal toxic shock syndrome and necrotizing fasciitis. Morbidity and mortality in invasive GAS are quite high.

Tan reports, "In 2002, the CDC estimated that approximately 9,100 cases of invasive GAS in the U.S.A. caused 1,350 deaths. Streptococcal toxic-shock syndrome accounted for 5.9% and necrotizing fasciitis accounted for 6.1% of the invasive GAS cases. The overall case-fatality rate among persons with invasive GAS disease was 14.6%." Other studies report varying, but high, rates of respiratory distress syndrome, gangrene with amputation, renal failure, and death.

She relates that reports of recent cases have occurred in young otherwise healthy persons who had no underlying disease who sustained a minor injury to an extremity. "At trial, the high rate of poor outcomes in invasive GAS, even when treated appropriately, makes evaluation of causation and the role that possible delays in

diagnosis planned in the outcome a complex issue for expert witnesses and for the defense in this case," notes Tan.

She states that symptoms of streptococcal toxic shock syndrome may include fever, confusion, dizziness, and a flat, red rash over large areas of the body, and symptoms of necrotizing fasciitis include pain from an injury that becomes much worse, fever, chills, nausea and vomiting, or diarrhea. "The skin may become hot, red, and swollen and, because of the speed with which necrotizing fasciitis develops, the patient may already be very sick before they are seen by a physician," says Tan.

In a case such as this, communication between the clinicians and the patient's family would have been crucial. "Because a healthy young child suddenly developed a life-threatening condition, many caregivers probably were involved in the boy's treatment, including an intensivist, an infection control specialist, a surgeon and perhaps other specialists," Tan surmises.

Consequently, she advises that it is critical for one practitioner to coordinate communication with the family so that they are updated about rapidly moving events and information does not "fall between the cracks."

Tan continues, "Without destroying hope, the family needs to be aware of the gravity of the condition and prognosis so that they have realistic expectations about the patient's possible outcomes. The family may likely have many questions about how such a serious infection with such terrible consequences could have developed in such a short time, and physicians and other caregivers should be prepared to repeat information, as the family may be so shocked by the rapid course of events that they

can not absorb information that is shared with them only once. Because anger and the need to place blame are common family responses to severely poor outcomes, physicians and other caregivers should be prepared and trained to deal with these responses in a nondefensive and supportive manner. Calmly listening to the family's rage and grief may help defuse a potentially adversarial situation. Adequate disclosure and transparency about the natural course of invasive GAS, the outcomes and the care of the individual patient may help avoid the situation in which the family feels that information is being withheld or some sort of cover-up is going on. Additionally, pastoral support may be helpful if this is the family's preference."

If the patient with invasive GAS or family states an intention to sue, the case should be referred to the risk manager for further handling.

Survivors of invasive GAS infections may need ongoing emotional and psychological support to cope with the impact of the illness. "The patient and family in this case suffered devastating losses, and ongoing communication between the primary physician and the family following hospital discharge may be very helpful," Tan says.

Arranging for continuing care, such as physical or occupational therapy, providing the family with information about community resources, and learning about support groups of people with similar illnesses or problems may also be important.

Tan suggests that the National Necrotizing Fasciitis Foundation ([www.nnff.org](http://www.nnff.org)) is an example of a support group for survivors of invasive GAS as well as family members who have lost a loved one. ■

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