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EHPs share a common symptom this flu season: 'Headache'

Reporting employee vaccine rates proving difficult

This year's influenza season spread fever and chills across the country, but for hospital employee health professionals, it was just one big headache. A new requirement to report influenza vaccination rates proved time-consuming and challenging for many EHPs.

As of January 1, the Centers for Medicare & Medicaid Services (CMS) requires acute care hospitals to begin tracking the vaccination rates of employees, licensed independent practitioners, students or trainees, and volunteers through the National Healthcare Safety Network (NHSN) of the Centers for Disease Control and Prevention (CDC).

Although they can report the data monthly, CMS only requires reporting of the overall vaccination rates as of March 31. The report must be entered in an online submission by May 15.

The difficulty lies in the specific parameters of the reporting. Hospitals must include the vaccination status of everyone who works in the facility for 30 days or more. Even spending one hour in the facility counts as a day. (*For answers to some commonly asked questions about the reporting requirements, see page 27.*)

At some facilities, that 30-day information is not readily available from human resources software. At Harbor-UCLA Medical Center in Torrance, CA, for example, HR information is deleted when an employee leaves, making it difficult — if not impossible — to count them in the vaccination totals, even if they have worked in the facility for at least 30 days.

For **Erika Sweet**, RN, MSN, NP, a nurse practitioner with Employee Health Services, it would be easier to count everyone who worked even one day at the hospital — and she says it would make more sense.

"We screen everybody who walks in the door if they're going to be working on our campus," she says. "They need to meet the same requirements regardless of whether it's one day, one hour, or 50 days."

Yet during pilot testing of the reporting measure, some hospitals also had difficulty counting all the employees, licensed independent practitio-

ners, students and volunteers who had spent at least one day in the facility, says CDC epidemiologist **Megan C. Lindley**, MPH.

"Someone could be in and out for one day and it would be very difficult to capture them," she says. "It's sort of a 'no-win' situation no matter how you try to define the time period. [The question is,] how do we produce data that accurately [reflect] most of the people spending most of the time in the hospital and not make it impossible to report?"

For those who have difficulty with the 30-day rule, this is Lindley's advice: Do the best you can to make the count as complete as you can. And provide feedback to CDC (NHSN@cdc.gov). The measure may be altered in the future, Lindley says.

"We certainly recognize the hard work that facilities are putting in to gather this data," she says. "Now we have a true picture of their experience using this actual measure. This will allow us to take a critical look at the measure, as well as the materials and training we provide."

Barely enough time in the day

Getting started with this new reporting can be time-consuming. Users need a digital certificate, which provides electronic validation and security, and they need to complete training. That was a big change for California hospitals, which previously reported flu vaccination rates by simply recording them on a sheet that was faxed to the California Department of Public Health, says **T. Warner Hudson**, MD FACOEM, FAAFP, medical director of Occupational and Employee Health at the UCLA Health System and Campus in Los Angeles.

"[NHSN] was a lot of steps and a lot of time for somebody who barely has enough time to do things in the day," he says.

Methodist Health System in Omaha, NE, began planning even before the flu season began. **Sue Davis**, MS, BSN, CCRN, NE-BC, service leader for the Learning Center and Employee Health, identified who would gather the required information.

The University of Nebraska will track its nursing, medical and other students who work in the hospital for at least 30 days. The hospital's volunteer office will identify volunteers who work at least 30 days. And the medical staff office will obtain the data about physicians.

"All of it will come back to me and I will have to compile it to actually do the reporting," says Davis, who notes that many of those students and independent professionals may ultimately be counted multiple times because they also work in other facilities.

Among employees, the vaccination rate at Methodist Health System is about 94%, Davis says. Employees are required to wear a mask during patient care if they are not vaccinated — although the same policy does not apply to physicians, she says.

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Editor: **Michele Marill**, (404) 636-6021, (marill@mindspring.com).
Executive Editor: **Gary Evans**, (706) 310-1727, (gary.evans@ahcmedia.com).
Production Editor: **Kristen Ramsey**.
Senior Vice President/Group Publisher: **Donald R. Johnston**.

Editorial Questions

For questions or comments call Michele Marill at (404) 636-6021.

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FAQs: Who to count in vaccine rates?

To help hospitals comply with a new flu vaccination reporting requirement, the Centers for Disease Control answers some frequently asked questions:

What types of nurses are counted as licensed independent practitioners?

All advanced practice nurses should be included in the licensed independent practitioner category. Advanced practice nurses include nurse practitioners, nurse midwives, clinical nurse specialists, and nurse anesthetists.

When are licensed independent practitioners counted as "employees" and when are they counted as "licensed independent practitioners"?

An "employee" is anyone on the payroll and receiving a paycheck from the facility. Regardless of their job duties, if they work at the facility for at least 30 days from October 1 to March 31, these HCP are reported as "employees." The remaining licensed independent practitioners working at the facility for 30 days or more from October 1 to March 31 should be counted in the "non-employee, licensed independent practitioners" category which includes physicians, advanced practice nurses, and physician assistants. Post-residency fellows are also included in this category, unless they are paid directly by the facility, in which case they are employees.

Are other licensed contract workers/non-employees such as nurses, technicians, therapists, etc. reported?

Non-employee licensed or credentialed providers other than physicians, advanced practice nurses, and physician assistants are not required to be reported.

Would you count instructors who accompany students to a healthcare facility if the instructors do not otherwise work at the facility?

No. These individuals would be categorized as other contract personnel since they are there to teach and/or supervise the students. If they are physically in the facility for 30 days or more from October 1 to March 31, they could be reported in the optional "other contract personnel" category, if desired.

Should physician fellows and residents be included?

Yes. Physician fellows (post-residency) are categorized as licensed independent practitioners, unless they are paid directly by the facility, in which case they are employees. Residents and interns not on the facility's payroll are categorized as students/trainees.

Many of our HCP also work at another facility in town. Must they be reported by every facility at which they work?

Yes. These reports describe vaccination rates among HCP working at a specific facility, so all eligible HCP must be counted by each facility where they work.

Should I count an employee who starts at my facility after October 1, or leaves their position after October 1?

Yes. All employees, non-employee licensed independent practitioners, and non-employee students and volunteers aged 18 and older who physically work at the facility for 30 days or more from October 1 through March 31, regardless of exact stop and start dates, should be counted.

If an employee works half days, 5 times a month, must this be counted as 5 working days a month or 2.5 days a month?

If a HCW is physically present in the facility for any part of a day, this is counted as working one day. Therefore, the employee would be counted as working five days a month. The measure reporting period lasts for six months (October 1 to March 31), so you would include this employee in the denominator since he/she will have worked at least 30 days during the reporting period.

Should clergy members be included in the volunteer category of the non-employee group?

Yes. If they are physically in the facility for 30 days or more from October 1 to March 31, any unpaid HCP who are in the facility in a formal capacity (board member, auxiliary member, shadower, etc.) are considered volunteers.

Are contractors such as housekeeping staff, environmental services staff, construction workers, etc. required to be included?

No. The non-employee, non-LIP category is only for students/trainees and volunteers aged 18 and older. Non-licensed contract personnel can be reported in the optional "other contract personnel" category, if desired.

[Editor's note: For more information, the CDC has an online toolkit, webinars and slides at www.cdc.gov/nhsn/hps_Vacc.html.] ■

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Like many other hospitals, Methodist Health will wait until March to report. As of mid-January, CDC said that just 225 facilities had begun monthly reporting. There are about 5,000 community hospitals in the United States, according to the American Hospital Association.

Statements of vaccination are OK

In some ways, CDC succeeded in easing the burden of reporting. Hospitals can accept a written or electronic statement from employees, licensed professionals, or others that they received the vaccine outside the hospital (from primary care physicians, pharmacies or elsewhere).

That allows the hospital to capture some vaccinations that previously were not recorded, says **Melanie Swift**, MD, director of the Vanderbilt Occupational Health Clinic in Nashville. For example, as new employees, volunteers or students begin working during the October-to-March flu season, they can simply attest that they were already vaccinated.

"We had never previously measured vaccination among students or non-employed licensed independent practitioners, so the reporting requirement has stimulated us to do that," she says. "Since their vaccines are largely administered through their school or other sources, the self-reporting provision is extremely helpful in this group as well."

Tracking non-employees is particularly challenging. At Harbor-UCLA Medical Center, for example, students and trainees come from about six nursing schools, the UCLA School of Medicine, and numerous other programs for allied health professionals.

And what about nursing instructors who occasionally visit to observe students? CDC says to treat them as "other" contractors, a category that doesn't have to be reported to CMS. For now.

"Other contract workers" include some individuals who work closely with patients, such as agency nurses and housekeepers, says Lindley. "We are not including them currently because our pilot findings demonstrated that it was difficult for the hospitals to accurately track those data."

That's the same reason that other licensed independent professionals, such as occupational or respiratory therapists, aren't included in the LIP category. Different states have different licensing categories and criteria, she says.

But as the measure evolves, new definitions may capture many of those other health care workers, she says. At the end of this flu season, CDC plans to conduct a formal evaluation of the reporting process, she says.

"We're speaking with users on a daily basis," she says. "We're definitely aware of the issues that they're encountering and taking all that into account." ■

New norovirus strain a threat in hospitals

Outbreaks spike, lead to unit closures

A novel strain of norovirus is posing new challenges for hospitals and underscores the importance of vigilant hand hygiene and environmental cleaning.

This winter, norovirus outbreaks have caused unit closures in hospitals in the United Kingdom and Canada and sickened more than a million people in Britain alone. The virus causes more hospital-based outbreaks than any other organism and is the primary culprit in hospital unit closures. It also is the most common cause of foodborne outbreaks. (*See related story, p. 29.*)

"We have seen a new strain of norovirus emerge that has quickly become the leading cause of outbreaks both here in the U.S. and in other countries," says **Aron J. Hall**, DVM, MSPh, epidemiologist with the viral gastroenterology team in the Division of Viral Diseases in the Centers for Disease Control and Prevention in Atlanta. "Any time there is a new strain that emerges there is the chance for an increase in activity, so we're watching it very closely."

Norovirus outbreaks typically spike during he winter months, but this year the outbreaks began early. By the end of December, 538 hospital outbreaks had been reported in the UK, according to the Health Protection Agency, a public health organization.

Australia also reported the norovirus cases persisted into the summer months, the HPA said. The new strain has been dubbed Sydney 2012, as it first appeared in Australia in March 2012.

By January, the new strain was having an impact in US hospitals and long-term care centers. In Marin County, CA, for example, an out-

break at a long-term care center sickened dozens of people and contributed to two deaths, according to news reports.

"We have seen plenty of outbreaks reported and some have included some severe outcomes, including deaths," says Hall, who notes that new strains are sometimes more virulent.

HC outbreaks linked to deaths

Norovirus is a longstanding problem in health care, but public health authorities still struggle to understand its scope. A new surveillance system logged 2,259 acute gastroenteritis outbreaks in 42 states and the District of Columbia in 2009 and 2010. Norovirus was the cause in almost 90% of those with a known etiology.[1]

CDC has a network of 10 sentinel states that provide information on outbreaks of norovirus and other common pathogens. The surveillance "will hopefully help us determine the magnitude of the season faster than in the past," Hall says.

Nursing homes are at the greatest risk of norovirus outbreaks. In the 2009-2010 U.S. surveillance, 86% of the norovirus outbreaks occurred in long-term care. About 5% of the outbreaks occurred in hospitals. A study of 407 long-term care outbreaks in 2009 and 2010 found that the outbreaks were associated with higher mortality and hospitalization at the nursing homes.[2]

Surveillance in the United Kingdom revealed a great burden of transmission in hospitals, as well. From 1992 to 2000, 40% of norovirus outbreaks occurred in hospitals while 39% were in long-term care facilities. Person-to-person transmission was much more common than foodborne spread.[3]

Health care workers were as likely to become infected as patients, but elderly patients or residents suffered the greatest severity of illness.

"Deaths were only reported from outbreaks in health-care institutions. The populations in these institutions differ from those found in other settings by virtue of their greater age or presence of other underlying diseases," the authors noted. "While norovirus infection is not likely the principal cause of death in most cases, this infection might constitute an additional burden on patients already weakened by other conditions and thus become an important contributory factor."

Infection control for norovirus outbreaks

Controlling an outbreak of norovirus requires vigilant cleaning, hand hygiene, contact precautions and cohorting of patients, the Centers for Disease Control and Prevention recommends. CDC recomendations for norovirus include:

- Using soap and water for hand hygiene after providing care or having contact with patients suspected or confirmed with norovirus gastroenteritis.
- Wearing gowns and gloves when entering a patient care area.
- Increasing the frequency of cleaning and disinfection of patient care areas to twice daily and frequently touched surfaces to three times daily, using products approved by the EPA for healthcare settings.
- Cleaning and disinfecting surfaces starting from the areas with a lower likelihood of norovirus contamination (such as tray tables, counter tops) to areas with highly contaminated surfaces (such as toilets and bathroom fixtures). Change mop heads when new solutions are prepared or after cleaning large spills of emesis or fecal material.
- Excluding ill personnel from work for a minimum of 48 hours after the resolution of symptoms. Once personnel return to work, the importance of performing frequent hand hygiene should be reinforced.
- Establishing protocols for staff cohorting in the event of an outbreak of norovirus. Ensure staff care for one patient cohort on their ward and do not move between patient cohorts. (Patient cohorts may include symptomatic, asymptomatic exposed, or asymptomatic unexposed patient groups).
- Excluding non-essential staff, students, and volunteers from working in areas experiencing outbreaks of norovirus.

[*Editor's note: For additional CDC recommendations and tools to fight norovirus go to:* www.cdc.gov/HAI/organisms/norovirus.html.] ■

European hospitals may have higher norovirus attack rates because of differences in their design, says Hall. For example, private rooms are more common in U.S. hospitals. But there also has been better surveillance of norovirus in Europe, he says. "It may well be a problem in hospitals that is underappreciated in the U.S.," he says.

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VHA tackles risks of HC violence

'It can be a very rapid progression.'

There is predictability in "unpredictable" violence. Clear warning signs emerge as a patient progresses from unhappy to agitated to aggressive, and health care workers can learn to defuse the situation before an incident turns violent.

That is the essence of the Veterans Health Administration's extensive violence prevention program, which is the focus of increased attention and resources.

Acts of violence that plague health care don't typically stem from a thought-out plan. They just erupt, says **Lynn M. Van Male**, PhD, director of the VHA's Behavioral Threat Management Program in Portland, OR.

"It goes from grievance to ideation," she says. "[Patients] get the idea that violence is the way to solve the problem. Then they breach, they start breaching protocol, etiquette and physical barriers. Then they attack. It can be a very rapid progression. The good news is that it can be turned around at any stage."

Employees need training to identify the warning signs and learn how to respond, Van Male says. The VHA is revamping its tracking of sexual assaults and other violent assaults, risk assessments and security precautions to comply with the 2012 law, the Honoring America's Veterans and Caring for Camp Lejeune Families Act.

Every VHA facility must complete a Workplace Behavior Risk Assessment tool, appoint a Disruptive Behavior Committee to respond to the risks, and report violent incidents.

GAO: Many rapes not reported

Merely having a policy isn't enough. In 2011, a General Accounting Office (GAO) report criticized the VHA for gaps in reporting, patient screening and security. The GAO found reports of 284 sexual assaults between January 2007 and July 2010 at five VA medical facilities, including 67 allegations of rape. Two-thirds of the rape cases were not reported to the VA Office of Inspector General and most were not reported to VHA leadership, as required, the GAO said.

The GAO also found some VHA alarms that didn't function properly, understaffing of VHA police, and inadequate information on the past legal history of patients. Of the rape allegations, 25 were patient on patient assaults, 13 were employee on patient, and one was patient on employee. There were also 83 allegations of patients inappropriately touching employees.[1]

Amid broader concerns about sexual assaults in the military, the report put the VHA under the spotlight.

"All veterans and employees need to be treated with the utmost respect in every facility," **Richard L. Eubank**, national commander of the Veterans of Foreign Wars, a retired Marine and Vietnam combat veteran from Eugene, OR, said when the report became public. "This is a zero tolerance issue, and nothing less is acceptable to the VFW."

Many of the groping or touching incidents involve patients who have dementia, psychosis, or other cognitive deficits, says Van Male. The VHA has streamlined its reporting to help address the incidents, she says. "VHA has required all sexual assaults, alleged or suspected, be reported immediately to the police and within two hours the police have to report that to the integrated operation center," she says.

Task force targets high risks

The centerpiece of a violence prevention program is a multidisciplinary task force, says **David Drummond**, PhD, associate professor of psychiatry at Oregon Health & Sciences University in Portland, who helped design the VHA violence

prevention program at the Portland VA Medical Center.

The task force is led by a senior clinician, but includes security, legal counsel, and a union representative or frontline employee. Employees who feel threatened by a particular patient can bring their concerns to the Disruptive Behavior Committee. Similarly, an Employee Threat Assessment Team looks into concerns about co-workers.

"It's their task to decide what risk, if any, is posed by an individual and what mitigation strategies if any are appropriate to be able to manage that risk," says Van Male.

Each VA hospital must conduct a workplace behavioral risk assessment to determine the high-risk areas. Common targets: the emergency department, mental health units, and long-term care.

"We want our policies about mandatory training to align with the need in the workplace," she says.

Violent incidents — shouting, physical aggression, even shootings — can seem to come as suddenly as a lightning strike. A brooding patient strikes out or a visitor arrives with a score to settle. But training can help health care workers identify the warning signs. So far, the VHA has trained more than 22,000 employees in violence prevention.

The skills begin with an enhanced sense of customer service, explain Drummond and Van Male. A patient may be upset over a perceived slight, or a prolonged wait, or a visitor may become angry when their loved one's condition deteriorates.

The goal is to deescalate the situation. "They are expressing a grievance in an unacceptable manner. Maybe they have a psychiatric disturbance. Maybe they have chronic pain. Maybe the rest of their life is falling apart," says Drummond.

"We would be able to say, 'We want to get you the help you need. We'll get you a different doctor. How about I hook you up with the psychiatric department and see if we can help you with your sleep problem and your depression?' Sometimes that's all it needed. They're asking for help in a really bad way," he says.

"A lot of times they'll say, 'You're the first person who ever listened to me. No one has ever listened to me before,'" he says.

Flagging records prevents harm

What if you can't diffuse the situation with some calm conversation? With role-playing techniques, the VHA trains health care workers to handle an aggressive patient and to protect themselves from physical harm.

Meanwhile, the VHA makes use of a "flagging" system pioneered by Drummond. A flag in electronic patient records identifies those few who have multiple violent outbursts. When they arrive in an outpatient clinic or emergency department, they receive expedited treatment – accompanied by preventive measures, such as the presence of a security guard.

The new measures led to a 92% reduction in violent incidents.[2] "We virtually eradicated violence in this high risk group," Drummond says.

The VHA continues to use the flagging system, as do some private hospitals. Reporting and tracking events is critical to the prevention of future incidents — and reporting is a focus of the 2012 directive.

"People go into health care because they care," say Van Male. "And we don't want them to be afraid to come to their jobs and care for people."

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Many states banning mandatory RN overtime

But is that enough to combat fatigue?

As concern grows about fatigue and its impact on patient safety, 17 states have enacted laws or regulations to restrict mandatory overtime. But that alone may not reduce nurses' work hours — or even end the use of mandatory overtime.

Bans on mandatory overtime have produced some improvements in work hours, nursing research shows, but it's still not clear how much impact the new laws are having, says **Sung-Heui Bae**, PhD, MPH, RN, assistant professor at the University at Buffalo (NY) School of Nursing. "Having a policy in place doesn't guarantee the implementation of a policy," she says.

Meanwhile, nursing unions are reporting con-

tinued use of mandatory overtime, despite state laws.

"Even though the language may be in the law, some nurses are still fearful that if they report a violation of the law they'll be retaliated against," says **Janet Haebler**, RN, MSN, associate director for state government affairs at the American Nurses Association in Silver Spring, MD.

In 2004, an Institute of Medicine report said nurses should not work more than 12 hours in a 24-hour period or more than 60 hours in seven days.[1] Yet financial and staffing difficulties weigh heavily on hospitals and lead to excessively long shifts, nursing experts say.

"I think the hospitals would suggest that it's the bottom line, that they can't afford to fill more [nursing] slots," says Haebler. "I would suggest that shouldn't be the case. They clearly should recognize that RN staffing is critical to patient outcomes and [reduced] length of stay. RN staffing saves money."

Half of RNs work voluntary overtime

Hospitals were put on notice about the risks of extended work days and long work hours when The Joint Commission accrediting agency issued a Sentinel Event Alert in 2011. The Joint Commission didn't recommend specific limits on shifts or work hours, but advised hospitals to assess fatigue-related risks and give staff input in work schedules.

Yet long work hours remain commonplace for nurses. About one in three (31%) newly licensed nurses work more than 40 hours per week (or more than three 12-hour shifts), Bae and her colleagues found.[2] In earlier research, they found that 41% of nurses worked more than 40 hours per week and almost one in 10 (9%) worked 61 hours or more.[3]

Newly licensed nurses who worked in states with mandatory overtime rules were 59% less likely to work forced overtime than nurses in states without regulations, an indication that the restrictions are working. But Bae cautioned that more research is needed on the effectiveness. She has found that total work hours can be actually higher in states that restricted mandatory overtime compared with those without regulations.

Overtime rules are often regulated by the state's department of labor rather than the department of health, and enforcement may be lax, she says. Nurses may have more on-call hours, or may be asked to work voluntary overtime, she says.

"Although it's voluntary overtime, they may feel like they have to work," she says.

About half of all nurses (52%) worked voluntary overtime, averaging an extra seven hours per week, the study found. There was no significant link between voluntary overtime and mandatory overtime restrictions.

The study was based on survey data from 34 states and was part of the RN Project, a longitudinal study sponsored by the Robert Wood Johnson Foundation to investigate nurses' career patterns.

Mandatory overtime and nursing work hours can impact turnover, but they also have broader implications, says Bae. "The nurses with better working conditions can provide better patient care," she says. "That's why working hours or mandatory overtime are not only about nurses' wellbeing and health, [but] ultimately it has impact on patient care and patient safety."

RNs must monitor fatigue

The bottom line: Reducing nurses' work hours is a complex issue. And it's one that requires collaboration between employers and employees, says Bae.

Fatigue can set in with repeated shifts of 12 hours or more that leave too little time for sleep between shifts, regardless of the reason for the schedule, says **Alison Trinkoff**, ScD, MPH, BSN, RN, FAAN, professor at the University of Maryland School of Nursing in Baltimore and a leading research of the impact of working conditions in health care.

"It really doesn't matter whether someone makes you do it or you volunteer to do it, it's not a good idea to work a lot of very long shifts," she says. "There's enough data to show that people who are working successive 12 hour shifts get fatigued."

In a 2006 study, Trinkoff and colleagues found that 17% of nurses worked mandatory overtime, most often with less than two hours notice.[4] Some 14% of the nurses worked 50 or more hours a week, and about one in four (29%) reported working six or seven consecutive days at least once in the past month. Overall, 17% of the nurses in the sample of 2,273 nurses in the Nurses Worklife and Health Study reported exceeding the limits suggested by the Institute of Medicine panel.

Nurses who are 50 or older were less likely to

work shifts of 12 hours or longer. "Anecdotally, nurses have said regretfully that they are so tired and they really wonder if they can keep it up or provide their best care," says Trinkoff.

The ANA also seeks to educate nurses about fatigue and its risks, says Haebler. "We worry greatly about nurse fatigue," she says. "Our position is that regardless of the number of hours worked, each RN has an ethical responsibility to consider his or her fatigue level when deciding whether to accept an assignment."

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See one, do one — and save your back

Training cuts repositioning injuries

The most dangerous patient handling task is also the most frequent – and the most mundane. Nurses and nursing aides reposition patients throughout their shift, and that repositioning often leads to back and shoulder injuries. By focusing on strategies to reduce the risk, Barnes-Jewish Hospital in St. Louis demonstrated that those injuries can be reduced dramatically.

"It's an activity that's performed the most often in a nurse's day," says **Lynn Canada**, RN, BSN, worker's compensation coordinator at Barnes-Jewish, who presented her findings at the fall conference of the Association of Occupational Health Professionals in Healthcare (AOHP). "There's always some kind of repositioning going on when you're giving care."

Shoulder injuries account for about 13% of work-related musculoskeletal injuries among

Work conditions improve at magnet hospitals

Staffing better, work hours still high

Creating a better work environment for nurses pays off. A new study found that magnet hospitals have better staffing, and nurses who work there have higher job satisfaction and less burnout.

Researchers at the University of Pennsylvania analyzed the surveys of more than 26,000 nurses at 567 hospitals in four states.[1] Nurses at magnet hospitals reported a better work environment, based on such factors as support and leadership of nurse managers and nurse–physician relations.

Nurses at magnet hospitals were 18% less likely to be dissatisfied with their jobs and 13% less likely to experience burnout. The number of patients per nurse was significantly lower in magnet hospitals in states without required staffing levels. (California law sets minimum staffing ratios.)

"Three decades of evidence showing superior outcomes for Magnet hospitals place this organizational innovation into a class all of its own as best practice, which deserves the attention of hospital leaders, nurses, and the public," the authors concluded.

The magnet designation is a recognition program of the American Nurses Credentialing Center, a subsidiary of the American Nurses Association, and is based on such factors as nursing leadership, professional development and quality improvement. About 7% of U.S. hospitals have attained magnet status.

Magnet hospitals do not necessarily correspond with shorter working hours, however. A study of 837 nurses at 14 magnet and 157 non-magnet hospitals did not find a significant difference in work hours, although magnet hospitals had less mandatory overtime, on call duty and physical demands.[2]

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nurses, according to the U.S. Bureau of Labor Statistics. That is second only to back injuries, which represent 53% of MSDs.

Canada began by analyzing the injuries related to patient handling. About 42% of them occurred during repositioning.

Ergonomist **Diane Haudrich**, CES, then visited high-risk units." She found that some caregivers were not raising the bed [to allow for proper posture]," says Canada. "They didn't get help, they just tried to do it themselves. They didn't ask the patient to assist when they were able."

The hospital has adjustable beds that are designed to make transfers safer — but the nurses weren't using those features, Canada says. For example, when possible, nurses could lower the patient's head to allow gravity to help with the repositioning. (This isn't possible with patients who have had a stroke or head injury or surgery, she notes.)

Nurses also had placed a quilted pad under patients and were trying to use that to reposition them — even though the quilting made it more difficult to budge the mat (and the patient).

To train nurses in the proper techniques, Haudrich and Canada visited units and piggybacked onto training for new medications or devices. Or they brought lunch for the busy nurses and then demonstrated correct repositioning. For example, they showed how raising the bed to hip level and placing one foot in front of another could allow the caregiver to use the hips and not just the shoulder and back, Canada says.

The results were dramatic. "We had no injuries due to repositioning in the units that participated," says Canada.

Six months after the training, Haudrich and Canada conducted new observations in the units. The caregivers were still using the proper techniques 80% to 90% of the time.

"It's been a very successful program," says Canada, who notes, "It can be done with very little cost." ■

Nurses suffer high rate of depression

Work stress, pain are factors

Nurses suffer from depression at twice the rate as the general population, a problem that contributes to nurse burnout, low productivity and staff turnover, nursing researchers say.

Long work hours, high stress, pain and sleep deprivation are factors in the high rates of depression among nurses, says **Susan Letvak**, PhD, RN, FAAN, associate professor and chair of Adult Health Nursing at the University of North Carolina Greensboro.

Pain and depression also are costly for hospitals and the nation's health care system, she says. Letvak calculated that pain and depression result in reduced productivity of $14,339 per nurse. On a national basis, that would amount to a loss of about $22.7 billion.[1]

In her survey of 1,171 registered nurses in North Carolina, which included a depression questionnaire, Letvak found that 18% of the nurses had symptoms of at least mild to moderate depression. One-third of those nurses (6% of the total) had moderately severe or severe depression.[2] Depression affects 9% of the general population, with a rate of major depression of 4%, according to the Centers for Disease Control and Prevention.3

A burden of that magnitude should get the attention of hospital leadership, says Letvak. But there's still a fear of stigma around depression, even among nurses, so the problem is often under-reported and unrecognized, she says.

"They're afraid to come forward," Letvak says. Nurses may be reluctant to go to an employee assistance program, which means that wellness and employee health programs should provide awareness and counseling, she says.

Help nurses cope with stress

Why do nurses have a high rate of depression? Work factors play a role, says **Naomi Swanson**, PhD, chief of the Organizational Science and Human Factors Branch at the National Institute for Occupational Safety and Health (NIOSH) in Cincinnati.

Long shifts (12 hours or more) and heavy workload among nurses are associated with depression, she says. "Those are known correlates of sleep problems, and sleep problems are highly correlated with depression," she says.

Nurses also cope with stress, particularly if they deal with trauma and death in the emergency department or intensive care unit, Swanson says. Yet they have to hide their emotions to project calmness and competence, she says. "What they're showing on the outside may not necessarily match what they're feeling on the

inside," she says.

Letvak did not find a difference in depression rates among units, but she concurs that the chronic exposure to grief has an impact. "The emotional burden is just tremendous. I think that leads to higher rates of depression," she says.

Pain and other physical problems contribute to the problem of depression. Letvak found that more than two-thirds (71%) of the nurses work with musculoskeletal pain — and 18% of them had pain that was moderate to severe (5 or higher on an 11-point pain scale).

Nurses with pain and other health problems, such as allergies, headaches, high blood pressure and joint pain, were more likely to be depressed, as were obese nurses. Low job satisfaction also was associated with depression.

Raise awareness, lower stigma

In her survey, Letvak says some of the nurses commented that they didn't realize they were depressed. That finding points to the need for greater awareness, she says.

"How sad it is that these nurses who are under tremendous stress have the pain of depression but aren't aware of it," she says.

Wellness programs should incorporate mental health screening with other health risk assessments, she says. Awareness programs also can seek to remove the stigma of mental illness, she says.

While it's important to help individuals receive the care and support they need to cope with depression, employers also should seek ways to improve the work environment through better staffing levels and scheduling, Swanson says.

Focus groups can help identify the stresses and work problems affecting nurses, she says. "A good place to start is by asking the nurses themselves where the problems lie," she says.

REFERENCES

1. Letvak SA, Ruhm CJ, Gupta SN. Nurses' presenteeism and its effects on self-reported quality of care and costs. *Amer Jrl Nurs* 2012;112:30-38.

2. Letvak S, Ruhm CJ, McCoy T. Depression in hospital-employed nurses. *Clin Nurse Special* 2012;26:177-182

3. Centers for Disease Control and Prevention. Current depression among adults – United States, 2006 and 2008. *MMWR* 2010;59:1229-1259. ■

CNE INSTRUCTIONS

Nurses participate in this CNE/ CME program and earn credit for this activity by following these instructions.

1. Read and study the activity, using the provided references for further research.
2. Log on to **www.cmecity.com** to take a post-test; tests can be taken after each issue or collectively at the end of the semester. *First-time users will have to register on the site using the 8-digit subscriber number printed on their mailing label, invoice or renewal notice.*
3. Pass the online tests with a score of 100%; you will be allowed to answer the questions as many times as needed to achieve a score of 100%.
4. After successfully completing the last test of the semester, your browser will be automatically directed to the activity evaluation form, which you will submit online.
5. Once the completed evaluation is received, a credit letter will be e-mailed to you instantly. ■

CNE OBJECTIVES

After reading each issue of Hospital Employee Health, the nurse will be able to do the following:

- identify particular clinical, administrative, or regulatory issues related to the care of hospital employees;
- describe how the clinical, administrative and regulatory issues particular to the care of hospital employees affect health care workers, hospitals, or the healthcare industry at large;
- cite solutions to the problems faced in the care of hospital employees based on expert guidelines from relevant regulatory bodies, or the independent recommendations of other employee health professionals. ■

COMING IN FUTURE MONTHS

■ OSHA renews push for I2P2

■ A hospital takes a stand on fatigue

■ Updated guidelines on post-exposure after needlesticks

■ Safe patient handling for pediatrics

■ Drowsy driving and health care workers

CNE QUESTIONS

1. According to **Megan C. Lindley**, MPH, CDC epidemiologist, regarding the issue of measuring influenza vaccination rates, what should employee health professionals do if they cannot determine which students or volunteers were at the facility for 30 days?
   A. Count all students or volunteers who were at the facility for at least one day.
   B. Do your best to comply with the measure, identifying other departments that could help provide that information.
   C. Count students and volunteers who were in the facility at the end of each month.
   D. Don't report vaccination rates for students and volunteers if data is missing.

2. Which of the following is true about norovirus?
   A. It causes more hospital-based outbreaks than any other organism.
   B. It requires airborne precautions.
   C. In hospitals, it is primarily spread by food services.
   D. It has developed resistance to virtually all antibiotics

3. According to **Lynn M. Van Male**, PhD, director of the VHA's Behavioral Threat Management Program in Portland, OR, what is the role of the Disruptive Behavior Committee at a hospital?
   A. To determine what disciplinary action should be taken against disruptive employees.
   B. To make recommendations to hospital leadership about policies related to disruptive physicians.
   C. To determine the risk of violence posed by a particular patient and how to best reduce that risk.
   D. To conduct ongoing research into disruptive behavior and patient violence.

4. According to a study by **Sung-Heui Bae**, PhD, MPH, RN, assistant professor at the University at Buffalo (NY) School of Nursing, what proportion of nurses work voluntary overtime?
   A. 26%
   B. 41%
   C. 52%
   D. 77%