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Improve pressure ulcer risk assessment to improve care

Staff education must include aides to ensure success

An Indiana initiative to reduce pressure ulcers throughout all areas of healthcare has resulted in a reduction of bedsores at more than 160 home health agencies, nursing homes, and hospitals participating in the project.

With pressure ulcers representing the most commonly reported medical error since Indiana started mandatory reporting in 2006, it made sense to look for ways to increase the identification of the risk of pressure ulcers and improve methods of preventing pressure ulcers, say project participants.

A key component of the Indiana Pressure Ulcer Initiative's collaboration among health care providers, which was launched in June 2008 and concluded in August 2009, was the focus on a pressure ulcer risk assessment at admission. At the start of the project, only 42.1% of participating agencies indicated that they always performed a pressure ulcer risk assessment within 24 hours of admission. After education and training regarding the use of assessment tools, the percentage of agencies performing a risk assessment within 24 hours of admission grew to 71.4%. (**See page 135 for other project results.**)

"We joined the initiative because we were seeing more patients with

EXECUTIVE SUMMARY

The Indiana Pressure Ulcer Initiative reduced the number of pressure ulcers at more than 160 home health agencies, hospitals, and nursing homes in a 15-month period. The initiative included a collaborative effort among the providers to share best practices and develop educational materials related to pressure ulcers.

- Aides play a key role in the monitoring of skin condition and early identification of potential problems.
- Standardized tools, such as the Braden Scale, can be used to accurately identify risk levels.
- Intervention guidelines must be available to all staff members to ensure timely prevention or treatment of pressure ulcers.

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wounds," says **Paula J. Long**, RN, CHCE, administrator of Sullivan County Community Hospital Home Health and Hospice in Sullivan, IN. Not all of the wounds her nurses see are pressure ulcers, but she and her staff recognized the need to incorporate some best practices into their protocols to improve care of wounds, she adds.

Although her nurses were conducting skin assessments of all patients, they were not assessing the risk of pressure ulcer development in patients, points out Long. "One of the first steps we took was to implement the use of the Braden Scale to assess the risk of each patient," she explains.

In her staff education, Long emphasized the need to base interventions on the scores for each individual category of risk included in the Braden Scale, as opposed to the total risk factor score. "A patient may have an overall score that represents a mild risk of developing a pressure ulcer, but the patient's score in the shear and friction category might be severe," she says. "In this case, the nurse needs to focus on reducing the risk in that category," she explains. Interventions include lifting the bed-bound patient as opposed to sliding the patient or have the patients wear protective clothing, such as socks to minimize friction on heels and feet. "If you only look at the overall score, you will miss opportunities to prevent pressure ulcers," she adds.

To make it easy for her nurses to have all of the tools, such as the Braden Scale, documentation forms, intervention guidelines, and patient education material required for the risk assessment, Long developed a Pressure Ulcer Risk Assessment Packet. "I'm a believer in packaging everything you need in one packet, so all the nurse has to do is pick up one envelope," she explains. By pre-packaging everything, the agency saves the nurse time and ensures that she can complete the assessment accurately, she adds. (**See p. 136 for a description of packet.**)

Communication Key To Success

Because the state-sponsored initiative included different types of health care providers, communication among providers improved, says Long. "By standardizing transfer reports and other information, we are aware of the patient's pressure ulcer risk as they are coming to us for care," she says.

As well as coordinating communication among providers, the initiative created online educational programs that home health staff can access, in addition to training provided through their own agencies. "We provided educational courses to all of our nurses and our home health aides," says **Terri Edmiston**, RN, MSN, clinical manager for Parkview Hospital Home Health and Hospice in Huntington, IN. One of the benefits of the pressure ulcer project was the development of tips and training suggestions to make pressure ulcer education more interesting, especially to the aides, she says. (**For educational tips, see p. 136**) "Our aides are an important component of our pressure ulcer program, because they are with the patients more often than the nurses. And because they bathe the

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patients, they have an opportunity to assess the patients' skin for changes," she explains. "We stress the important role they play in the detection of pressure ulcers, since they are our 'eyes' on the patient on a day-to-day basis," she adds.

A key part of pressure ulcer education is the focus on communicating with other members of the patient care team, points out Edmiston. Nurses talk with patients and their families about how to prevent pressure ulcers and monitor skin changes, and the aides reinforce the teaching. "If an aide notices a change in the skin that a nurse should evaluate, the aide documents the change and calls the nurse," she says.

"We are fortunate to have a good relationship with the hospital's wound care nurses, so we always have experts we can call with questions," says Edmiston. "Not all agencies have this expertise in-house," she adds.

"I am receiving a lot more questions from nurses," admits **Tonya L. Gudell**, RN, WCC, performance improvement coordinator for St. Elizabeth Regional Health and Hospice in Lafayette, IN. As the wound care specialist for the agency, Gudell develops and presents the educational session and serves as a consultant to nurses and aides. "I am also seeing a great improvement in documentation," she adds. Not only are nurses regularly using the Braden Scale to assess pressure ulcer risk, but they also are routinely measuring and properly staging wounds, she says. "We really didn't have patients who developed pressure ulcers in our care, but we tell employees that our focus on assessment and proper intervention helps us do a better job of keeping patients comfortable and reduce their pain," she explains.

The biggest challenge her agency faced was data collection, says Gudell. "We needed a better way to monitor pressure ulcers, especially in our hospice, since those nurses don't use OASIS [Outcome and Assessment Information Set] like the home health nurses," she explains. She worked with their information technology department to develop a data collection tool that became part of their online documentation system. The tool added text to the nurses' notes to prompt the nurse to include a description of the wound, measurement, and staging. "The new format did require some training and the data collection is still a work in progress, but we are now able to monitor our progress throughout the agency," she says.

Gudell is happy that her agency participated in the initiative as a way to identify best practices that could be implemented at St. Elizabeth. "Everyone in other agencies [has] great ideas, and this initiative gave us an opportunity to share with others in order to better care for all patients."

RESOURCES

• *For information on the Indiana State Pressure Ulcer Initiative, go to the Pressure Ulcer Resource Center at http://www.in.gov/isdh/24558.htm. The site contains free resources, such as the educational program developed by the initiative, links to related organizations and associations, data from the project, and a library of articles and presentations that can be used as resources.*
• *For a copy of the Braden Scale, go to any of the educational modules listed in the Pressure Ulcer Resource Center and click on the "tools" button in the upper right hand corner once you start the module. Course 2: "Preventing Pressure Ulcers: Assessment Process" contains the description of how to use the scale.*

SOURCES

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Pressure ulcer initiative results show progress

Adoption of best practices results in fewer ulcers

The Indiana Pressure Ulcer Initiative's collaborative effort to share education and tools to improve the risk identification, prevention, and treatment of pressure ulcers included more than 160 home health agencies, hospitals, and nursing homes. With the focus on education and sharing best practices among the providers, members of the 15-month first phase of the initiative posted

some impressive results that contributed to a drop in reported pressure ulcers throughout the state.
• Always performs risk assessment within 24 hours of admission:
--Prior to participation in initiative: 42.8%
--After participation in initiative: 71.4%
•Always performs risk assessment during length of care; at change of condition:
--Prior to participation in initiative: 14.3%
--After participation in initiative: 57.1%
• Always communicates results of risk and skin assessments to appropriate staff:
--Prior to participation in initiative: 14.3%
--After participation in initiative: 28.6%
• Always includes pressure ulcer training in orientation:
--Prior to participation in initiative: 28.6%
--After participation in initiative: 71.4%
• Always includes pressure ulcer training on an ongoing basis:
--Prior to participation in initiative: 0%
--After participation in initiative: 42.9%
• Always involves nurses' aides in care planning:
--Prior to participation in initiative: 0%
--After participation in initiative: 42.9%
• Always tracks nosocomial ulcers and patients admitted with pressure ulcers:
--Prior to participation in initiative: 14.3%
--After participation in initiative: 51.1%
• Uses a multi-disciplinary team approach to pressure ulcers:
--Prior to participation in initiative: 57.1%
--After participation in initiative: 85.7% ■

Packets make assessments easy for nurses to perform

Nurses at Sullivan County Community Hospital Home Health and Hospice in Sullivan, IN, don't spend time looking for a copy of the Braden Scale, documentation checklists, pressure ulcer intervention guidelines, or teaching tools — they just pick up a pre-packaged envelope and go.
"The best way to make sure a nurse has everything necessary for a pressure ulcer assessment is to put it together ahead of time," says **Paula J. Long**, RN, CHCE, administrator of the agency. "We actually have two pressure ulcer-related packets," she says. One packet contains tools and information to use for patients who require a risk assessment for pressure ulcers, and the other packet is for patients who already have a pressure ulcer that requires treatment.
Contents of each packet are:
• **Pressure ulcer risk assessment packet:**
- Braden Scale;
- guideline for assessment of skin, lower extremities, medical conditions, medications, and other risk factors associated with pressure ulcers;
- guidelines for interventions based on risk factors, patients goals, and patient input;
- teaching protocol tool to use with patient, family member, or other caregiver;
- care plan with clinical goals.
• **pressure ulcer packet:**
- process checklist that goes to pressure ulcer team manager and outlines actions and time frame;
- a fax physician communication form specifically for pressure ulcers that the nurse completes to include a description of the ulcer, treatment recommendations, nutritional status, and other information the physician will need to order treatment;
• weekly pressure ulcer record on which the nurse documents details of the wound and the treatment;
• intervention guidelines;
• care plan with clinical goals. ■

Keep education fun for aides for successful program

Pressure ulcer education is pretty straightforward for nurses who want up-to-date clinical information that will help them select the best interventions to prevent pressure ulcers and the best treatments to help their patients with ulcers, says **Terri Edmiston**, RN, MSN, clinical manager for Parkview Hospital Home Health and Hospice in Huntington, IN. Finding creative ways to teach aides is a little more of a challenge, because it is necessary to make them see how the educational activity applies to their patient care responsibilities, she adds. The more visual and participatory the activity, the more effective it is, she says.
"I have found three demonstrations that make learning fun — but reinforce the teaching," says Edmiston. The demonstrations that she incorporates into her aides' pressure ulcer classes are:
• Use colored water to demonstrate the different properties of different barrier creams, suggests Edmiston. "Have an aide apply a cream to her hand,

then place the hand in a bowl of colored water," she says. As the aides observe which creams repel water and which absorb water, discuss the specific situations in which to use each cream and why, she adds.

• Because poor nutrition is an indicator of high risk for pressure ulcers, be sure to discuss reasons for poor eating habits, says Edmiston. Poor vision can affect how attractive a meal may appear to the patient, which will diminish the patient's interest in eating, she says. To demonstrate the situation, she smears petroleum jelly on glasses and then has the aides wear them while she serves them food on colored plates. "I will put blue M&Ms on a blue plate to show how hard it might be to see the food," she says. "I will also have aides wear gloves that are too big, to simulate arthritis, and have them try to get the food off the plates," she explains. All of this helps aides understand how they might make food more appealing to their patients, she adds.

• She demonstrates the importance of keeping skin moisturized by placing the dry outer skin of an onion in the bottom of a tube sock and asking the aide to remove it without tearing it, says Edmiston. "This is a very visual demonstration of how important moisturizing the skin is," she points out. ■

JOURNAL REVIEW

Needlesticks increase with stressful environment

As sicker, more complex patients are increasingly cared for by home health nurses, the risk for needlestick injuries also increases. In a recent study, researchers identified the rate of needlestick-type injuries to be 7.6 per 100 nurses. At this rate, researchers estimate that there are nearly 10,000 needlestick injuries each year in home care.[1]

More than 700 home health nurses in the state of New York participated in the study that looked at needlestick injuries that occurred in the previous three years. Fourteen percent of the RNs reported one or more needlestick injuries, but 45.8% of these injuries were not formally reported. Factors contributing to the injuries include a lack of compliance with standard precautions, recapping of needles, exposure to household stressors, exposure to violence, mandatory overtime, and safety climate.

A critical finding of this study was the statistical correlation between needlesticks and exposure to stressful conditions in the patients' household. Nurses reporting household stressors, such as cigarette smoke, unsanitary conditions, air pollution, and vermin, were nearly twice as likely to report needlestick injuries. Most significant was the fact that home health care nurses exposed to violence in their patients' households were nearly three-and-a-half times more likely to also report needlestick injuries, according to the study.

REFERENCE

1. Gershon RRM, Pearson JM, Sherman MF, et al. The prevalence and risk factors for percutaneous injuries in registered nurses in the home health care sector. *American Journal of Infection Control* 2009; 37: 525-533. ■

Guided Care Nurses help chronically ill patients

Nurse-physician collaboration is key to program's success

Older patients who are at high risk for health care utilization are staying healthier and out of the hospital thanks to a new primary care enhancement program called "Guided Care."

The Guided Care model, developed by a team of clinical researchers at Johns Hopkins University, is an interdisciplinary model of health care in which patients are supported by a nurse-physician primary care team that provides coordinated, patient-centered care to at-risk patients for the rest of their lives.

In a three-year randomized, controlled trial involving 49 physicians and 904 older patients, researchers at the Johns Hopkins Bloomberg School of Public Health found patients who were treated using the Guided Care model cost health insurers 11% less than patients who received the usual care, according to **Chad Boult**, MD, MPH, MBA, principal investigator for the study and creator of the Guided Care model.

The Guided Care patients in the study, on average, experienced 24% fewer hospital days, 37% fewer skilled nursing facility days, 15% fewer emergency

department visits, and 29% fewer home health care episodes.

"The key to success in the Guided Care model is to create a close relationship with the patient. The interventions of the model rely on evidenced-based guidelines for chronic conditions tailored to each patient. The nurse, the physician, and the patient can work within the model and produce good outcomes," says **Cecelia M. Daub**, RN, BSN, CCM, MA, Guided Care nurse at Kensington Medical Center of Kaiser Permanente's mid-Atlantic states region.

Daub participated in the randomized, controlled trial of Guided Care at Johns Hopkins and now works with four doctors in a primary care practice managing about 60 patients.

She visits the patients in their homes — involving family members and caregivers if possible — sees them when they come for their primary care visits and goes over what the doctor told them, accompanies them to specialist appointments whenever possible, visits them in the hospital, and even meets them in the emergency department.

"We take a holistic approach to care and work with the patients in their home environment, surrounded by their loved ones," she says.

The Guided Care model uses predictive modeling software to identify patients older than 65 with chronic conditions and who are at high risk for health care utilization. Patients typically have hypertension, diabetes, congestive heart failure, chronic obstructive pulmonary disorder or coronary artery disease, or a combination of several conditions.

When patients are identified for the program, the nurse visits them in their home and conducts a comprehensive geriatric assessment and home safety evaluation.

"By seeing what they have to manage in the home environment, we get tremendous insight into what is going on. If there is a caregiver, a spouse, or a child involved with the patient's care, we invite them to the initial session," she says.

The initial evaluation usually takes between an hour and a half and three hours.

"We customize the evaluation to the patient and the caregiver and the complexity of the patient's medical condition. When I conduct an evaluation, I leave an entire morning or afternoon free so the patient and caregiver will have a chance to get answers to all their questions. It sets up a very nice platform for a close relationship," she says.

When Daub completes the in-home assessment, she develops a preliminary care guide using evidence-based guidelines, then meets with the primary care physician to collaborate on a care guide.

"We see a lot of things in the home and bring the information back to the physicians. They are very appreciative. The physician may have been treating the patient for many years, but when we go into the home, we may find a situation that he or she wasn't aware of. By working together, we can develop a plan to address the patient's issues," she says.

Working with the physician, the nurse develops an action plan and shares it with the patient. The plan includes a medication list the patient can follow as well as information on physical activity, diet, recommended procedures, and follow up with specialists.

Daub encourages the patients to keep their action plan in a convenient location and bring it with them to specialists appointments or if they go to the emergency department.

"The action plan becomes a point of communication between the different health care providers the patient sees and helps with continuity of care," she says.

By meeting with patients in their homes, the Guided Care nurses find out information they'd never discover during a telephone conversation, Daub points out.

"Medication reconciliation is of tremendous importance with the geriatric population because many patients are on multiple medications and get them mixed up. When we conduct in-home medication reviews, we may see pill bottles that are expired and other combinations of problems that could affect the patient's conditions. When I'm in the home, I can see what's going on and get to the bottom of their problems," she says.

Sometimes Daub knows that a physician has told the patient to use a walker or a cane at home and observes that he or she isn't doing it.

"This becomes an opportunity for a coaching session. Depending on the circumstances, I might discuss it with the patient at the time or follow up later," she says.

She may recommend a fall prevention class or educate the patient on the importance of safety in preventing falls.

"Because I'm in the home and have a good relationship with the patients, I can focus in on what they need to do to stay safe and healthy. Doctors don't have the time to coax their patients into following their advice," she says.

She works with the patients to identify red flags that indicate they should call Daub or their doctor. For instance, she educates diabetics about safe blood sugar levels and what to do when blood sugar is higher or lower. She encourages them to check their feet regularly and call her if there's an open wound. She tells patients who have coronary artery disease to call her if they have an increase in chest discomfort or palpitations.

"I educate them on monitoring activities they can do for themselves and give them guidelines for when to call me. I get more information and make a recommendation," she says.

The physicians decide on the frequency of monitoring that is included in the care guide. For instance, if the patient is on Coumadin, the physician indicates how often they need blood tests.

"Our system of technology allows me to put in reminders for myself. I can see the specialty visit notes and know what that physician has in the patient's plan, she says.

Daub reminds the patients to get regular screenings and procedures, such as mammograms or flu shots, and educates them on safety issues.

"I make suggestions such as installing grab bars in the home. If they don't accept the idea right away, I remind them later on. I check the smoke alarms and make sure they get new batteries if needed," she says.

She has contact with each patient a minimum of once a month but sees some patients much more frequently if necessary.

"I follow the patient in the outpatient setting, through any inpatient admissions, and help with the transition in care," she says.

Since she's located in the same office as the primary care physicians, when patients give permission, Daub accompanies them to their doctor visits, and then brings the patients back to her office to go over what the doctor said and make sure they understand it.

If the doctor changes the medication or the treatment plan, Daub can print out an updated action plan for the patient to follow.

"The Kaiser center I work in has primary care physicians with a laboratory, X-ray, and mammography downstairs. There's a same-day surgery and cataract surgery center here, and many of the specialists are next door. This kind of access to care is particularly helpful in providing continuity and cohesiveness of care to the geriatric population or anyone with mobility issues. If one of my patients has an appointment with a neurologist, I can easily walk over and sit in on it," Daub says.

Recently, a woman Daub was following was picking up her medication refill at the pharmacy and asked to see Daub because she wasn't feeling well.

"I took one look at her and knew she was in trouble. She told me her chest felt heavy and she wasn't breathing normally, so I was afraid she was on the verge of a cardiac event," she says.

She notified the primary care physician who saw the patient immediately and sent her to the emergency department.

During her conversation with the patient, Daub asked her why she was at the pharmacy and found out the woman had been out of her beta blocker for three days.

"She felt comfortable telling me but didn't mention it to the primary care doctor or the emergency room physician. This was a crucial piece of the emergency room treatment, but nobody would have known it if I hadn't had a close relationship with the patient," Daub says.

Daub informed the emergency department physician of the missed medication and educated the woman about the importance of taking care of her medicine. She got the woman's daughter involved in assuring that her mother gets her medications refilled promptly.

Patients can call Daub on her office phone when they need to within regular business hours, and she encourages them to do so.

"My patients appreciate the fact that when they call, there is a personal connection. It's the consistency. They aren't calling in to a call center. They know that they can always get a message directly to me in my voicemail," she says.

She also asks patients for permission to share private health information with their caregivers so there are no barriers to communication between the patient, the caregivers, and the nurse. When she gets a call that patients are going to the emergency room, Daub meets them whenever possible.

"Patients often have trouble explaining their situation and their medical history. I can give their background information to the emergency room physicians, and they love it. It really helps them treat the patients in an effective and efficient manner," she says.

Guided Care nurses follow patients for the rest of their lives.

When patients are hospitalized, Daub doesn't actively manage the care but brings information

to the treatment team.
"I'm in a listening role for what will happen after discharge. I find out if the patients will be able to go back to the same living situation, if any home modification will be needed, if the caregiver will have more responsibility than in the past, and work with all parties to achieve the best outcome," she says.
Her close relationship with her patients often helps with end-of-life issues. She tells of one diabetic patient who had a recurring abdominal infection. "He'd go to rehab and work hard and something would happen again. One day I visited him in the hospital and he said, 'Please call them off. I just want to go home.' The family wasn't around and he was able to say what he really wanted. He was putting on a good face for his family and doing whatever the doctor asked him to do," she says.
Daub talked to the man's doctor, who had a discussion with him, then set up hospice care in the home.
"He was surrounded by his whole family. His wife made his favorite meal. A few days later he went into a coma and died at home. It was a dignified and happy death," she says.
(More information about Guided Care is available at http://www.GuidedCare.org. The three-year trial of Guided Care was funded by a public-private partnership of the Agency for Healthcare Research and Quality, the National Institute of Aging, the John A. Hartford Foundation, the Jack and Valeria Langeloth Foundation, Kaiser Permanente Mid-Atlantic States Region, Johns Hopkins HealthCare, and the Roger C. Lipitz Center for Integrated Health Care.) ■

Remote monitoring cuts costs for chronically ill

Project extends the reach of health care providers

Following the success of a program that provides remote monitoring of chronically ill patients in poverty-stricken rural areas, Roanoke Chowan Community Health Center in Ahoskie, NC, is replicating the program at six other community health centers in North Carolina.
The program monitors vital signs and other data as determined by the patient's primary care physician using remote monitoring devices placed in the patients' homes. Nurses review the data daily and intervene.
In the original pilot project, hospitalizations decreased by 38%, total charges for health care were reduced by 70%, and hospital bed days dropped by 50% among the 65 patients for whom the health center could obtain data, says **Bonnie Perry Britton**, MSN, RN, telehealth clinical network director/development director for the health center.
"We don't have an affiliation with a hospital so we can't get emergency department data. We can get data from our local hospital, but if the patient went to another hospital, we had no way to obtain the data," Britton says.
"We do know that one of the main reasons for the decrease in cost is that if patients went to the emergency room and were hospitalized, their length of stay was shorter," she says.
The three-year pilot project was conducted with a grant from the North Carolina Health and Wellness Trust Fund Commission, which utilizes the state's share of the national tobacco settlement to fund programs that promote preventive health.
Medicare beneficiaries represented the largest number of patients in the pilot program , followed by indigent patients and Medicaid patients.
The health center rotated the monitors every six to seven months.
The new program, which started July 1, will monitor about 400 Medicaid patients with cardiovascular disease over a three-year period, leaving the monitors in place for about six months at a time.
"North Carolina Medicaid is our partner in this program to supply financial data on all health care expenditures, including emergency department visits, hospitalizations, and primary care provider visits," Britton says.
The program will be replicated at Green County Health Care, Kinston Community Health Center, Tri-County Community Health Center, Rural Health Group, Cabarrus Community Health Center, and Bertie Rural Health Group.
The telehealth program was instrumental in improving the health of residents of three rural counties that are among the poorest in the state, Britton adds.
The center is a federally qualified health center serving four counties in northeast North Carolina, an area that leads the state in heart disease, diabetes, and childhood obesity.
The median family income in the counties served by Roanoke Chowan Community Health Center is $21,000 a year, and 21% of the population is

uninsured.
"We have only a 41% high school completion rate, which means that people grow up and go right into poverty. It's a vicious cycle," she says.
"The center provides primary care and mental health services as well as operating a program that provides medication and supplies for indigent patients and conducting outreach into the community to screen residents for hypertension, cardiovascular disease, and HIV," Britton says.
"One of the obstacles we have to overcome is that patients have difficulty accessing care for a number of reasons. There is only one public transportation system in the area, and many residents have to pay someone to drive them to see the doctor. For the poorest families, that can be a challenge and a problem," Britton says.
The North Carolina Health and Wellness Trust purchased 25 in-home monitors for the pilot project to monitor patients with cardiovascular disease, diabetes, and hypertension.
Primary care physicians identify patients who are eligible for the telemonitoring program, develop a plan of care, and determine what parameters to use for the biometric data that will be monitored. The information is faxed to a nurse case manager, who gets the patient's consent to participate, goes to the patient's home, installs the unit, and teaches the patient to use it.
Patients use the device daily Monday through Friday to collect whatever data the physician determines are appropriate and answer a series of questions.
For instance, the machine will ask if the patient is short of breath. If the patient says no, it shifts to another question. If yes, the patient answers a series of questions developed by the primary care physician and the telehealth team.
The telehealth nurse checks the server regularly, and if there is an alert indicating that the patient is having problems, she contacts the patient immediately to verify what is going on. She may ask the patient what he has eaten that day, whether he's taken his medications, or other questions that will help her determine what interventions the patient needs.
The nurse educates the patients on diet, medication compliance, or whatever else may have triggered the alert and notifies the physician if she feels more interventions are needed or if the physician may need to change the patient's medication.
The physician reviews the situation and may ask the patient to come in for a visit, or may send a change of medication to the patient's pharmacy.
"In our experience, this has increased medication compliance because the patients don't have to come into the office for the doctor to adjust their medication. They don't have to travel from home, possibly paying as much as $30 for transportation, then pay for the office visit as well. Many patients will skip their medication when they run out or not see the doctor when they don't feel well simply because they can't afford it," she says.
Britton attributes the success of the pilot to the fact that, unlike the majority of telemonitoring projects, the program is driven by the primary care provider.
"The physicians designed the protocols that the telemonitoring nurses use. They determined which data to track for each patient and which questions to ask. Nobody knows the patient better than their primary care provider," she says.
Many telehealth projects follow patients for only 60 days, according to Britton.
"Our average is six to seven months, during which time patients receive daily reminders. The nurses develop a close relationship with their patients, who often say that the nurse is the first person who has cared enough to help them manage their disease," she says.
When patients monitor their vital signs on a daily basis using the telemonitoring equipment, it keeps them aware of their disease and what they need to keep it under control, Britton points out.
"Our program is not just about vital signs. The telemonitoring equipment asks the patients questions designed to give us insight into the patient's daily routine and the social setting. Our nurses have the information they need to help the patient manage their disease and to get them tied into other resources and programs that can assist them," she says.
The first telehealth monitors in the second phase of the program were installed in August and will be redeployed to other patients at the end of January.
The health center is working with East Carolina University and Wake Forest University to analyze data from the program.
The health center chose a different vendor for the telemonitoring equipment for the second phase of the program because it needed equipment that would enable it to quickly manage the volume of data that will be gathered by the new program, Britton says.
"Our new vendor's products seamlessly integrate

the information gathered from patients, their electronic medical records, and Medicaid, giving us easy access to data," Britton says.
Roanoke Chowan Community Health Center created a telehealth manual for the new program and is handling the installation and training on the monitors.
Roanoke Chowan nurses are conducting the initial assessment of all patients in the new program and will monitor all of the patients in the new program. When interventions are needed, they will be conducted by nurses and physicians at the individual health centers who are familiar with the patients.
"Based on anecdotal information and the data we were able to access in the pilot project, we expect the program will show significant reduction in charges and total Medicaid expenditures among the patients in the program. Remote monitoring is an extremely cost-effective way to extend the reach of rural health care workers and improve public health," Britton says.
(For more information, contact: Bonnie Perry Britton, MSN, RN, telehealth clinical network director, Roanoke Chowan Community Health Center. e-mail: bbritton@uhseast.com.) ■

Health care tops in injuries on the job

New push for safe patient handling law

Being a nurse's aide or orderly is the most injury-prone job in America. Those aides are four times as likely to be injured on the job as the average worker, and their rate of injury tops freight haulers and handlers, and construction laborers.
It is more hazardous to lift patients than it is to hoist crates or move furniture because many hospitals and long-term care facilities still do not have adequate lift equipment, safety experts say. The resulting musculoskeletal disorder (MSD) injuries boost the injury tally for general medical and surgical hospitals to the top. They reported 268,800 injuries in 2007, according to the U.S. Bureau of Labor Statistics (BLS) — the highest total of any industry group.
While it would be reassuring at least if injury rates were declining, the evidence of that is slight. The overall downward trend in work-related injuries is mostly due to changes in record keeping, according to an analysis of BLS data.
"There's an epidemic of health care worker injury in the United States, even with the data we've got — even if you don't correct the inconsistencies in the BLS data," says **William Charney**, DOH, a national occupational health consultant based in Newfane, VT, and author of The Handbook of Modern Hospital Safety — Second Edition (CRC Press, 2009). "One-tenth of the work force files a workers' compensation claim every year," he reports.
To combat the greatest source of injuries in health care, a coalition has formed to support the federal Nurse and Health Care Worker Protection Act of 2009, or HR 2381. It follows a stream of state laws. In August, Illinois became the 10th and most recent state to enact legislation related to safe patient handling. The Illinois bill, which becomes effective on Jan. 1, 2010, requires hospitals and nursing homes to conduct risk assessments and develop strategies to reduce patient handling injuries.
State-by-state efforts have built momentum, but a national law is necessary to create consistency and spur a U.S. Occupational Safety and Health Administration standard, says **Marsha Medlin**, RN, MPA, founder of the Coalition for Health Care Worker and Patient Safety (CHAPS, president of Safe Lifting Solutions, a consulting firm based in Mechanicsburg, PA, and director of medical products for Ergolet, a patient handling equipment manufacturer based in Minneapolis.
"Historically, I have been against legislating things that should be common sense," says Medlin, who also is a former hospital CEO. "But [progress] has been so slow. We can't let another health care worker suffer a disabling injury. It's up to us to protect them."
Proponents of the new legislation are making their case with data, scientific evidence, and personal

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stories. They assert that voluntary adoption of safe patient handling has been too slow.

In the top 10 occupations with the most injuries and illnesses that involve days away from work, nurses' aides rank third and registered nurses rank 10th.

A 2006 Washington state study found that MSD injuries were costing the state's hospitals and nursing homes $32.8 million a year, and that the workers' compensation claims rate was almost four times higher than for general industry.1

When Medlin was vice president of clinical services for a system of about 60 hospitals, she examined the workers' compensation data and discovered that about half of the claims were related to patient handling. She became a proponent of safe patient handling programs, equipment, and training.

Medlin also spoke to injured nurses, which she says was a "humbling experience. They're angry, they're confused, they need help," she says. Medlin herself developed a ruptured disc during a 25-year career which began as an ICU nurse.

A patient handling standard?

The Nurse and Health Care Worker Protection Act would require the U.S. Occupational Safety and Health Administration to create a patient handling standard, much the way the Needlestick Safety and Prevention Act triggered a revision of the Bloodborne Pathogens Standard.

Health care employers would be required to maintain a safe patient handling and injury prevention program, including risk assessment and hazard identification, and "to purchase, use, maintain, and have accessible an adequate number of safe lift mechanical devices." The act also provides for reporting of injuries, training of health care workers, and an annual evaluation of the program.

"Some people have asked whether this was an effort to raise the ergonomics standard again. This is not about ergonomics," says **Anne Hudson,** RN, a back-injured nurse from Coos Bay, OR, who founded WING USA (Work Injured Nurses' Group), a strong advocate of the legislation. "This is about removing disastrous lifting from the backs of health care workers."

The American Hospital Association has opposed the bill as being too restrictive. "Though well intentioned, the measure contained unreasonably strict guidelines that could jeopardize — and even prevent — proper patient care," the AHA said in a position paper.

CNE QUESTIONS

9. What is a key point in educating staff on the use of the Braden Scale, according to Paula J. Long, RN, CHCE, administrator of Sullivan County Community Hospital Home Health and Hospice in Sullivan, IN?
   A. Utilize the Braden Scale at every visit.
   B. The overall total score is an accurate indicator of risk.
   C. Ask the family caregiver to complete the assessment tool.
   D. Evaluate risk based on individual category scores, not only the overall score.

10. What type of improvement was reported when home health agencies were asked to report their inclusion of aides in care planning prior to and after participation in Phase I of the Indiana Pressure Ulcer Initiative?
   A. Increase from 0% to 42.9%
   B. Increase from 10% to 25%
   C. Increase from 18.3% to 34.5%
   D. No change

11. When teaching aides about pressure ulcers, how can you ensure that the aides remember the points you want to make, according to Terri Edmiston, RN, MSN, clinical manager for Parkview Hospital Home Health and Hospice in Huntington, IN?
   A. Incorporate fun activities into the class
   B. Use visual demonstrations to reinforce teaching
   C. Show how the information in the class applies to an aide's responsibilities
   D. All of the above

12. Why does Paula J. Long, RN, CHCE, administrator of Sullivan County Community Hospital Home Health and Hospice in Sullivan, IN, recommend creating specific-use packets for nurses?
   A. It helps meet accreditation requirements.
   B. It keeps the supply room neat.
   C. It saves the nurse time and ensures that she has all forms.
   D. It standardizes information that nurses use.

Answer Key: 9. D; 10. A; 11. D; 12. C.

Health care employers often have the misguided notion that patient safety is a higher priority than employee safety, says **Lynda Enos**, RN, MS, COHN-S, CPE, nursing practice consultant/ergonomist with the Oregon Nurses Association in Tualatin. In fact, employee safety also enhances patient safety, she says.

The bill provides a framework and an important mandate, she says. "It's broad enough so it gives the employer some choice as to how they tackle the problem," she says.

Politically, it has been overshadowed by health care reform, but proponents point to the coalition as a sign of coordinated support. "No one has listened to us until recently. That's what's changed for us," says **Genevieve Gipson**, RN, Med, RNC, director of the National Network of Career Nursing Assistants in Norton, OH. "Nursing assistants have been talking about this for years."

With no ergonomics or patient handling standard, OSHA enforcement to reduce the hazards has been minimal. In April 2002, then-U.S. Secretary of Labor Elaine Chao announced a "four-pronged" approach to ergonomic hazards that would include enforcement under the "general duty" clause in the Occupational Safety and Health Act. ■

CNE OBJECTIVES

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

1. Identify particular clinical, ethical, legal, or social issues pertinent to home health care.
2. Describe how those issues affect nurses, patients, and the home care industry in general.
3. Describe practical solutions to the problems that the profession encounters in home care and integrate them into daily practices. ■

CNE INSTRUCTIONS

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 semester's activity with the **March** issue, you must complete the evaluation form provided in that issue and return it in the reply envelope provided to receive a credit letter. ■

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