

## REDUCING FALLS

### MERCY HEALTH CENTER

- ◆ Oklahoma City, OK
- ◆ 351 licensed beds
- ◆ [www.mercyok.com](http://www.mercyok.com)

Mercy Health Center is a full-service tertiary hospital that serves a six-county area with a 1.04 million population. It is part of Sisters of Mercy Health System

## STEEEP

### Safe

Decrease in number of patients falling and associated injuries.

### Timely

Pharmacists on the floors can consult with doctors and nurses more readily.

### Efficient

Money saved from decreased fall rate.

### THE PROBLEM

Falls are a serious problem for older people, composing the largest single category of reported incidents in hospitals, according to the Joint Commission. Falls pose an even greater risk for older hospitalized patients. Even with daily fall-risk assessments, Mercy Health Center had more than twice the rate of injury-related falls than other hospitals of its size—2.4 injury falls per 1,000 patient days in late 2004 versus 1.1 for similar hospitals.

### THE SOLUTION

The solution was to improve the hospital's fall prevention program by assessing the pharmacological effects of patient medications on fall risk. The Pharmacy Fall Prevention Program, where clinical pharmacists and nurses work collaboratively to generate a medication-specific fall risk score for each admission, is designed to reduce medication-related falls and their associated injuries and improve quality of care.

### RESULTS

- » 49 percent decrease in total falls.
- » 36 percent decrease in falls leading to injury.
- » Nearly \$400,000 saved annually.
- » Injury falls decreased from an average of 1.7 percent in October 2005 to 0.88 percent per 1,000 patient days for the medical/surgical units by December 2006.

### BACKGROUND

Some hospitalized patients are at high risk for falling, which can adversely affect their quality of life. Mercy Health Center was experiencing about twice the rate of patient falls than other similar-sized institutions, despite having a falls and restraints committee in place and nurses assessing patients for fall risk each day. In 2004, Teri Round, RN, director of specialty services, suggested a clinical pharmacist be appointed to the falls committee.

Hospital pharmacist Burl Beasley joined the committee and quickly suggested patients be assessed for fall risk based on their medications. Several medication classes commonly given in the hospital are recognized to contribute to the risk of falls by causing sedation, dizziness, altered gait and balance and impaired cognition. Older patients, who may be weaker and who suffer from multiple conditions or are on multiple medicines, are at particular risk.

*The notion:* search the literature to find a tool to rate medicines in terms of fall risk and supplement the hospital's current way of assessing fall risk. "The problem was nobody had done that before," says Beasley, who scoured the literature and developed a way to classify medications, along with a screening system. The result was the Medication Fall Scale, a summary of a patient's risk of falling due to medicines in a single numeric value. The hospital tested the tool and the project was designed to comply with the Joint Commission's National Patient Safety Goals of reducing the risk of patient harm resulting from falls.

## TEAM MEMBERS

- » **Burl Beasley**  
Chair, Clinical Pharmacist
- » **Linda Fanning, RN**  
Nursing Administration
- » **Donna Poole, RN**  
Informatics Nurse
- » **Frederick Delafield, MD**  
Physician Liaison,  
Falls and Restraints
- » **Keith Madison, PharmD**  
Pharmacy Director
- » **Teri Round, RN**  
Nursing Administration
- » **Edna Patatanian, PharmD**  
Associate Professor

## PRINCIPLES OF PERFORMANCE EXCELLENCE

### Creation of a High-Reliability Culture

Sometimes you just need a different perspective to fix a problem. Bringing in a clinical pharmacist made sense for several reasons, says Round. First, “when you look at the falls literature, medication pops out,” she says. Second, having pharmacists educate nursing staff was critical, she says, “nurses responded to them, it was interactive.” Physicians also quickly bought into the expertise the pharmacists provided.

Pharmacist Beasley saw the problem and by working with nursing and information technology departments, designed a daily computerized report that calculated a Fall Risk Medication Score (MFRS). As part of nurses’ daily effort to assess patient fall risk, a new admission, a change in medication or a newly ordered one, triggers a MFRS. The computer tallies results based on numeric value assigned to medications in database, and reports are generated to clinical pharmacists for patients with a 6 or greater MFRS. About 15 percent of patients receive full medication reviews by a pharmacist, who then makes recommendations to physicians on how to reduce fall risk, including suggested changes in drugs, doses, laboratory monitoring and increased patient and family education.

Adding the MFRS into the nurses’ daily patient fall risk assessment went smoothly. “It was adapted very easily,” says frontline nurse, Emily Eriksson. “Pharmacy was doing all the work. It was very beneficial to the nurses.” After all, even with nurses previously assessing fall risk with the Morse Fall Scale, Mercy’s fall rate still was high. One important reason why the introduction of this intervention went without hitches was a change Mercy made previously—decentralizing the role of pharmacists. “To do this program, you have to be on the floor,” Beasley says. Mercy’s clinical pharmacists are on the units; they work with nurses and physicians daily, rather than being stationed in the basement of the hospital. As a result, the pharmacist and the nurse already worked together in establishing automatic medication dispensing and bar coding. “It’s a cultural revolution,” notes Keith Madison, Mercy’s pharmacy director. “This is change management.” When you have clinicians on the floor at the point of care, information is collected on a real-time basis and potential problems can be solved then, Round agrees.

“This program is huge for patient safety,” says Eriksson. “It’s huge for nursing and it’s huge for the patient. We can advocate keeping patients safe. We’re also much more aware of a patient at risk for falling now.” If a patient is at risk for falling, nurses complement the pharmacists’ recommendations with practical strategies, from lowering a patient’s bed, outfitting patients with green armbands, placing “Look at Me Please”

magnets on patient doors, setting bed alarms and other strategies to alert others of the patient’s risk. “We look at patients individually, not en masse,” says Round.

### CONTINUAL IMPROVEMENT

Decentralizing clinical pharmacy was a huge step for Mercy Health Center. “Decentralization is a natural progress for what we need to do,” says Round. After pharmacy and nursing worked to implement automatic dispensing, bar coding and other early wins on patient units, it made sense to target patient falls. More recently, Mercy has targeted assisted falls, or falls involving both a patient and someone assisting a patient. This involved increased education and equipment to help keep patients and staff safe. Adding a sitter program—hospital volunteers or others to come in and sit with patients at-risk for falls—could also be in the offing.

The team also is looking to adapt the effort to fit within the emergency department and outpatient areas. Additionally, the falls prevention program is being considered for implementation in other Mercy system hospitals. “If things are getting stale, step back and look at it differently,” says Round. “And get the right people involved.”