### TCAB in Action

# Reducing Falls Among Outpatients

A volunteer transports patients from the parking lot to their exercise programs.

By Whitney M. Zant, MBA, RRT

igns displaying the number of consecutive days elapsed without an inpatient fall line the walls of Seton Southwest Hospital, a 17-bed facility in Austin, Texas. Upon admission, bedside nursing staff evaluate all inpatients for fall risk using the Hendrich II Fall Risk Model, which takes into account factors such as confusion and use of medications like benzodiazepines and antiepileptics. We wondered if we could spread this focus on fall prevention to the outpatient services setting.

The issue became critical in May 2008, when two outpatients in our pulmonary rehabilitation program fell on hospital grounds. One of the patients had just finished her workout. The other, an elderly gentleman, fell as he entered the hospital, alerting us and his family that he could no longer walk safely from the parking lot to the pulmonary rehabilitation program. Neither patient was injured in falling.

We addressed fall prevention within the Transforming Care at the Bedside (TCAB) initiative. Seton Southwest Hospital hosts a weekly TCAB meeting to which multidisciplinary teams are invited to bring their problems. Our pulmonary rehabilitation staff presented our concerns at one of these meetings, and as a result, we were selected to be the first outpatient TCAB interdisciplinary team to work on falls at our hospital.

### **RISKS FOR PULMONARY REHAB OUTPATIENTS**

Pulmonary rehabilitation patients typically have chronic pulmonary disease. They experience hypoxia, shortness of breath, and extreme fatigue and are dependent on supplemental oxygen. Anxiety and depression often accompany respiratory problems. These factors combine to greatly increase the risk of impairments in activities of daily living. For example, these patients not only have to carry an oxygen tank while walking, they are often so short of breath that they are unable to walk more than a few steps.

Falls in the outpatient setting in this population are especially common. Most pulmonary rehabilitation patients are older than age 65 and falls are a serious concern in this population.<sup>2-6</sup> Our concern was how

to get these patients safely to and from their vehicles when they came to Seton Southwest for their exercise programs.

### THE TRANSPORTER SOLUTION

The hospital's multidisciplinary TCAB team performed a "snorkel," or brainstorming session, and came up with several ideas to address this problem: hiring a valet parking service, moving patient parking to the front of the hospital, strategically placing chairs along the route to the program to allow the patient to rest, and enlisting volunteer services to help with transporting patients. The pulmonary rehabilitation team delved deeper into these options and found that a valet parking system would cost more than \$40,000 a year, which was much too high. We then decided to perform a small test of change using a volunteer transporter.

We explained our requirements to Della Needham, the director of Seton Southwest's volunteer services. We hoped to find one person who could be the program's dedicated transporter. This person had to be physically fit for transporting patients, dedicated to



Mel Simms (right) takes Emily Halton (center) to pulmonary rehabilitation for her exercise program after she is brought to Seton Southwest Hospital by her daughter (left). Photo courtesy of Whitney M. Zant.

## **Transforming Care**

patient safety, and respectful of patients' dignity. We wanted a transporter who had the ability to make a patient feel important, not inadequate.

Needham knew the man for the job: Mel Simms. He had the perfect combination of personality and physical attributes. Retired from the local sheriff's department, Simms had been trained in handling many different personalities. He knew how to get patients safely indoors, whether by using a wheel-chair or just walking with them to pulmonary rehabilitation.

The transporter program began with a luncheon at the hospital for the current pulmonary rehabilitation patients and their families. At this luncheon, a nurse evaluated each patient using the Hendrich II tool to determine her or his fall risk. Simms was introduced as the "valet service transporter" for the pulmonary rehabilitation program. The patients were given maps showing where to park so Simms could meet and walk with them to their exercise programs.

Simms was given a cell phone so that patients could call him from the parking lot when they were ready to be escorted. (Patients who don't have a cell phone call before they leave home.) Simms learned each patient's automobile model, color, and license plate number. A bench where family members could drop off patients to wait for Simms was strategically placed outside the hospital.

### **OUTCOMES**

June 20, 2008, was the official start date for the pulmonary rehabilitation fall prevention program with Simms as the valet transporter. Since then (194 days at the time of this writing) no patients in the pulmonary rehabilitation program have fallen outside on the grounds at Seton Southwest.

We have accomplished our goal of getting pulmonary rehabilitation patients safely to and from their vehicles. Even when patients feel strong enough to make it without help, Simms is there waiting for them.

Simms has become an integral part of the pulmonary rehabilitation team. One of his biggest accomplishments is helping patients sustain their belief in their strengths and maintain their self-esteem. Patients now know their ability to walk to and from their vehicles won't compromise their participation in the pulmonary rehabilitation program.

### PATIENT EDUCATION

In October 2008, at a Halloween celebration and educational event, we shared the Hendrich II scores with the patients and their families. They learned about the assessment tool and how it defines fall risk and received literature packets containing statistics on falls and a safety checklist for evaluating their home environments.

All pulmonary rehabilitation patients are now evaluated for fall risk upon entry to the program. They are taught how to prevent falls in their homes. Patients are encouraged to share their experiences and concerns about falls and other safety issues in their personal environments. They learn what medications might result in dizziness and the importance of undergoing routine eye examinations.

### **LOOKING BEYOND THE TRANSPORT PROGRAM**

This program sparked a cultural change for the pulmonary rehabilitation department. Our focus has expanded from preventing falls in the inpatient setting to the outpatient setting and beyond, to the home.

Many patients coming to facilities for outpatient services are at high risk for falls. An assessment tool needs to be developed to assess fall risk for the outpatient population. The Hendrich II tool was designed for inpatients and may not be appropriate for evaluating fall risk in outpatients. When we evaluated our pulmonary rehabilitation outpatients, the results were exactly the opposite of what the Hendrich II model predicted: patients who had fallen scored lower on the scale than those who had not, whereas patients who scored high had not fallen either within the department or when going to or from the parking lot. Perhaps this was a coincidence, or perhaps the high-scoring patients were aware of their limitations and took precautions. The latter explanation is supported by the fact that patients with high scores were walked or brought in a wheelchair to and from the pulmonary rehabilitation program by a family member or friend.

Whitney M. Zant is manager of respiratory therapy, cardiopulmonary, and neurodiagnostic services at Seton Southwest Hospital in Austin, TX. Contact author: wzant@seton.org.

#### REFERENCES

- Hendrich AL, et al. Validation of the Hendrich II Fall Risk Model: a large concurrent case/control study of hospitalized patients. Appl Nurs Res 2003;16(1):9-21.
- 2. Hausdorff JM, et al. Gait variability and fall risk in community-living older adults: a 1-year prospective study. *Arch Phys Med Rehabil* 2001;82(8):1050-6.
- Hornbrook MC, et al. Preventing falls among communitydwelling older persons: results from a randomized trial. Gerontologist 1994;34(1):16-23.
- National Center for Injury Prevention and Control, Centers for Disease Control and Prevention. *Injury topics*. http:// www.cdc.gov/injury.
- National Center for Injury Prevention and Control, Centers for Disease Control and Prevention. Falls among older adults: an overview. http://www.cdc.gov/HomeandRecreationalSafety/ Falls/adultfalls.html.
- Stevens JA, et al. The costs of fatal and non-fatal falls among older adults. *Inj Prev* 2006;12(5):290-5.