Solution: Improving Balance, Reach and Time Up & Go (TUG) Through Exercise as a Way to Decrease Falls Among Geriatric Patients On An Inpatient Psychiatry Unit

Organization: The Johns Hopkins Hospital, Department of Psychiatry Nursing

Type: Acute Care

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IDENTIFICATION:
In response to The Joint Commission National Patient Safety Goal (The Joint Commission, 2008) a group of registered nurses and clinical associates formed the Meyer 6 Falls Committee. Our goal was to examine the risks specific to our patient population and to reduce the risk of patient harm resulting from falls. We found 66-75% of the unit’s patients are at high risk to fall and that the fall rate in our population exceeded benchmarks. In the 12 months preceding the implementation of our project, the fall rate on the unit varied widely from zero falls for two months to a high of 13.54/1000 patient days. The average number of falls/month before the beginning of our program was 7.24/1000 patient days.

The literature supports the significant physical trauma from falls among older adults (age >/= 62 years) and includes pain, fracture and even death (Aschkenasy & Rothenhaus, 2006). Patients suffering with co-morbid psychiatric conditions may be at even greater risk for falling secondary to: poor nutrition, volume depletion, orthostatic vital signs changes (often made worse by the pharmacologic treatment for the person’s psychiatric condition), refusal to participate in physical therapy due to mental health problems and cognitive problems that reduce their ability to adhere to the standard fall reduction program. In today’s health care environment, observers are used to provide immediate assistance to individuals at high risk for falls. However, there are many instances when a patient falls even when accompanied by observers and the cost of providing such services is significant.

The fall rate/1000 patient days on our unit includes all patient services on Meyer6 (not just the geriatric patients participating in the Functional Falls Fitness Exercise group). In the 6 months since the program started, the fall rate ranged from 4.12 falls/1000 patient days to 9.41 falls/1000 patient days with an average of 4.52 falls/1000 patient days.

PROCESS:
Our unit’s Falls Committee reviewed the literature to determine appropriate interventions. We determined that an exercise program would assist in accomplishing our goals of improving balance and strength, reducing falls, increasing activity, improving mood, improving sleep and enhancing the psychiatric milieu. With consultation from the Physical Therapy department, the committee chose the Functional fitness program for older adults (Brill, 2004). This program has multiple modules for strength into function and balance into function and accommodates the needs of a wide variety of patients. Our Falls Committee chose the following metrics to obtain a
baseline assessment and measure change at the conclusion of the program: Time up and go (TUG) and the Tinetti Balance scale as well as a reach test. PT participated in training nursing staff to reliably complete these observations and assessments.

While highly experienced in leading patient groups, committee members spent time learning the exercises and selecting music to enhance the experience. The Functional Fitness Exercise group is open to geriatric patients on the Meyer 6 unit and is held 5 days/week for 45 minutes. Patients who agree to participate are pre-tested on the TUG, Tinetti and Reach test. Attendance is taken and the exercises and number of repetitions noted since progressively increasing the intensity is necessary to reach maximum improvement.

**SOLUTION:**
The Functional Fitness Exercise Group began in May 2008. The Clinical Associates lead the exercise group five days a week while the Registered nurses participate in assessment and acting as spotters for patients who may require assistance to safely participate.

The functional fitness program started 8 months ago. We continue to collect data and although limited, we are showing overall improvement in patient scores.

- 25 patients enrolled in the study in May 2008
- Of the 25, 10 did not meet criteria
- There was an overall average improvement of 157.63%

Our future goals include:

- Increasing levels of exercise based on The Functional Fitness Program
- Introducing exercise equipment (resistance bands, balance bar, step)
- Providing personalized exercise booklets at discharge
- Following up with phone re-assessment