

Fall Prevention Initiatives in Dementia Care

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ABSTRACT

As a tertiary level inpatient geriatric psychiatry program in a metropolitan area, patients who are admitted come from a variety of settings and present with a wide range of problems including frequent falls. The unit based quality improvement committee of our shared governance organization, is responsible for responding to quality improvement data by developing appropriate initiatives to improve nursing practice and patient care. Incidents of patient fall reached as high as 18 per month necessitating staff to take on fall prevention for quality improvement. A Fall Prevention/Restraint Task Force (FRPTF) was created to examine existing problems and current practices related to fall prevention and restraint use. The guiding principal for the task force was to train staff on evidence-based strategies to decrease fall incidents. Initiatives, including application of person-centered care, creation of intense-bed monitoring rooms and restraint-free fall prevention strategies proved successful in decreasing fall incidents to less than 5 per month.

BACKGROUND

The Geriatric Psychiatry program, located in the Johnston R. Bowman Health Center at RUSH University Medical Center, evaluates and treats older adults with acute mental illness and problematic adjustments in later life. Although a majority of the patients are 62 and older, younger patients with dementia and decreased functional abilities are also admitted. As a tertiary referral center, many patients admitted to the unit not only have behavioral problems but also have complex medical co-morbidities that greatly increase their risk for falls. With incidents of patient falls reaching as high as 18 in a month, the unit-based quality improvement committee chose to aggressively address this issue. Our journey started in summer of 2003 with the creation of a Fall/Restraint Prevention Task Force (FRPTF), comprised of the Unit Director, Clinical Nurse Coordinator (CNC) and staff nurses. Its responsibility was to examine existing problems related to falls, evaluate current practices and implement restraint-free fall prevention strategies.

PROCESS

Recognizing that falls are only symptoms of a problem, members of the FRPTF know that reducing falls can be a daunting undertaking. It requires keen assessment, careful interventions and interdisciplinary participation to succeed. Falls are generally related to any one or a combination of these factors: patient characteristics (e.g. behaviors, history of falls, medical complications), environment, and treatment (e.g. medication use and procedures). The FRPTF examined these factors to determine what could be done to strengthen current effective practices and initiate innovative strategies for fall prevention.

PERSON-CENTERED CARE

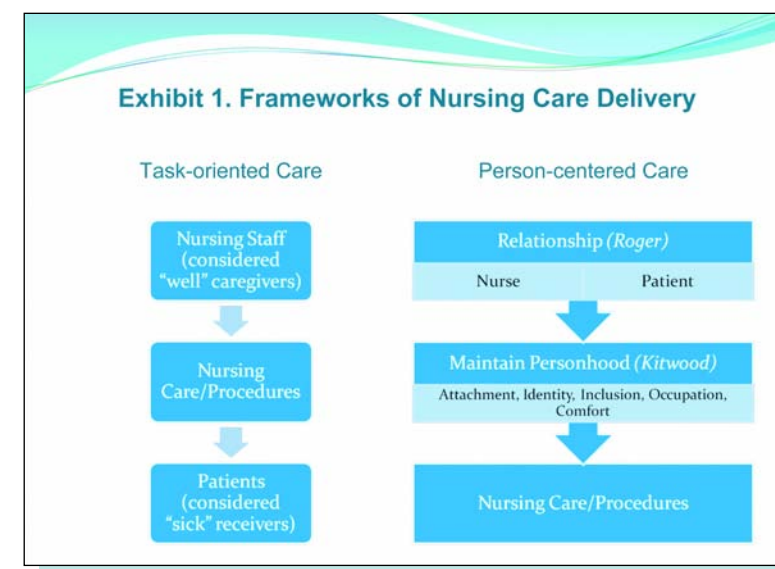
Falls due to intrinsic factors, those which are related to the patient himself, are often obvious (e.g. poor vision, gait disturbances, weakness, etc.). However, for patients with dementia, many of the problems that are communicated verbally, such as pain and the need to urinate, are otherwise expressed behaviorally. Inadvertently, problematic behaviors, such as agitation can increase a person's risk for falls especially when combined with decreased cognitive ability and unsteady gait. Therefore, understanding the language of behavior becomes an integral part in fall prevention among patients with dementia.

With this in mind, staff adopted the philosophy of "Person-centered Care," a relationship-based culture of care grounded in the works of Carl Roger and Tom Kitwood.

PERSON-CENTERED CARE

This culture is centered on being in the moment with the person rather than getting caught up in — and controlled by — an endless "to do" list of tasks. It allows a deeper understanding of why a person behaves the way he does.

A team of nurses and a mental health worker attended a "Train the Trainer" seminar on Person-centered Care, and in turn, educated all nursing staff on how to apply this philosophy in patient care. See Exhibit 1 for a comparison of task-oriented and person-centered nursing care delivery.



ENVIRONMENT

In addition to the standard of care used for fall prevention (see Exhibit 2) within the medical center, the FRPTF introduced these initiatives to modify the environment and provide a safer and more relaxing atmosphere.

- Discriminate use of light and background music was utilized to provide a soothing ambience
- The medication dispensing system was moved out of the central patient area
- Wireless phones were provided to nursing staff to decrease stimulation in milieu
- Low beds (see Exhibit 3) with bed alarms and soft floor mats on the sides were used
- A six-bed intense monitoring area, free of furniture, was created for closer observation of patients who have a higher risk of falls or being restrained physically due to behavior or medical reasons
- Staffing pattern of day and evening shifts was reconfigured to provide a full time night shift monitor for these rooms
- The FRPTF developed a decision tree for use of low beds and intense monitoring rooms. See Exhibits 4 and 5.
- Carefoam chairs (Carefoam, Inc., Ontario, Canada) that cradle patients in the comfort of a lambs-wool pad were introduced. These chairs (see Exhibit 6) provide patients with a sense of security thereby decreasing their restlessness and unwanted attempts to get up without assistance.

Exhibit 2. Standard of Care: Fall Prevention

- Fall risk assessment; eliminate identified risk factors if possible
- Call light within reach
- Non-skid footwear
- Side rails as necessary
- Personal items within reach
- Bathroom/nightlight on at night as appropriate
- Maintain good fluid intake to prevent dizziness/postural hypotension
- Anticipate need for toileting; establish toileting schedule if possible
- Physical/occupational therapy as indicated
- Assist in preparation of meals
- Ensure adequate and proper use of equipments and assistive devices (raised toilet seat, walker, bed in low position and locked brakes, bed/chair alarm, bedside commode, etc.)
- Assist in exercise programs, including strength and range-of-motion exercises
- Environment free of clutter
- Patient education on fall prevention measures consistent with medical condition

Exhibit 3. Low Bed



Exhibit 4. Decision Tree for Use of Low Bed and Intense Monitoring Room

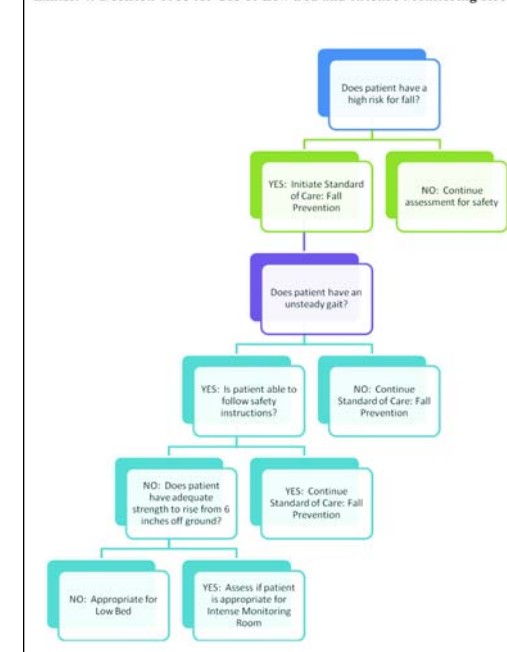


Exhibit 5. Intense Monitoring Rooms for Fall Prevention

- **To be considered:**
 - Patients with unsteady gait and
 - Had a fall incident within the last 6 months
 - Are unaware of own physical/body limitations
 - Frequently attempt to get up unassisted at night
 - Suffer from poor or interrupted sleep
 - Able to routinely rise from low bed and attempt to ambulate
 - Observed to place legs over/between side rails at night
- **NOT to be considered:**
 - Patients with
 - Steady gait
 - Good sleep hygiene
 - Need for frequent turning due to inability to change position independently
 - Use of physical restraints
 - Patients with unsteady gait but
 - Able to follow safety instructions
 - Makes no attempt to get out of bed during the night without assistance

Exhibit 6. Carefoam Chair



Carefoam, Inc., Ontario, Canada

TREATMENT FACTORS

Fall prevention requires an interdisciplinary approach tailored to individual risk factors. For better understanding of the relationship between medical and psychiatric issues, each patient is assigned a psychiatrist and an internist; both of whom are specialized in geriatric care. Consultants from other specialties are also available when needed. A thorough medication review and modification of medication usage, especially with psychotropics is done. Physical and occupational therapy for rehabilitation is provided when indicated. Nursing care plans were strengthened to clearly articulate interventions that are unique to each individual. If possible, formal and informal caregivers are included in interdisciplinary team meetings to discuss effective measures for continuity of care. These measures are further reinforced in discharge instructions.

When a fall occurs, a comprehensive post fall assessment is done to identify factors associated with the fall and reevaluate or modify plans to prevent future incidents. The FRPTF reviews each fall occurrence and makes recommendations for interventions when needed.

RESULTS AND RECOMMENDATIONS

Exhibit 7 shows the timeline of the initiation of specific fall prevention strategies. It is noted that even with the use of low beds, bed alarms and intense monitoring rooms, fall incidents may still go above the average. However, fewer patients fell in the intense monitoring rooms (see Exhibit 8) and did not sustain injury. Upon record review, the same individuals sustained many of the falls and were frequently, associated with agitation, unsteady gait and attempts to ambulate without assistance. Not until the introduction of the Carefoam chairs did fall incidents dramatically dropped below the average. Interestingly, this decrease can be attributed to the fact that frequent fallers did not sustain any fall incident with the use of the Carefoam chairs during their subsequent hospitalizations. Using these chairs lessened agitation and made it harder for a person to get up without assistance.

Exhibit 7. Fall Graph (January 2005 – February 2007)

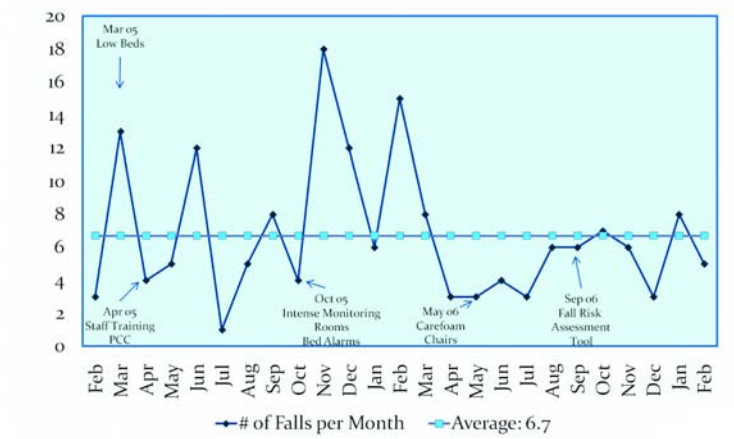
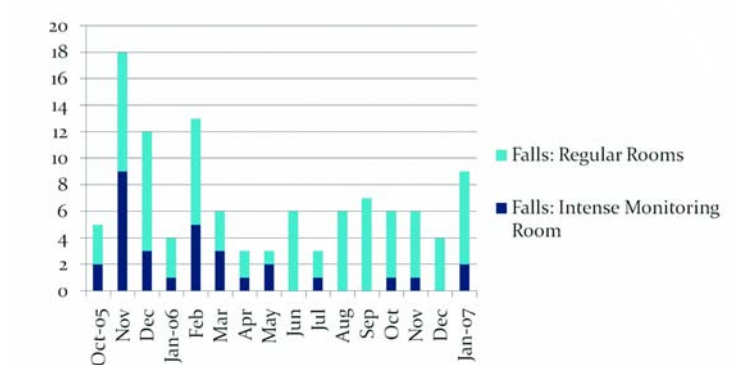


Exhibit 8. Comparison of Falls



In conclusion, we recognize that there is no single intervention that can effectively prevent a fall. Therefore, we recommend that because falls are multifactorial in nature, a strong fall prevention program should have an interdisciplinary approach and tailored to each individual need. It requires commitment and persistent hard work from all staff members to succeed. But seeing the results of our efforts, we felt empowered and satisfied knowing that we made a difference and possibly saved someone's life. And so, our journey continues.