

Implementing a Patient Falls Program

Case Studies

The following studies were independently conducted and incorporated Carroll low beds as a successful falls intervention.

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St. Clair Hospital – Fall Reduction and Injury Prevention

Challenge:

- Evaluate patient falls to determine what could be done differently to prevent each fall from occurring.

Method:

- Through weekly meetings, gather data to evaluate factors impacting falls
- Identify trends related to falls within the organization
- Initiate process and protocol changes to prevent future falls and fall injuries
- Educate caregivers and ancillary staff including dietary, housekeeping, and escorts
- Create a biweekly falls newsletter to highlight improvements and areas for improvement

Strategies:

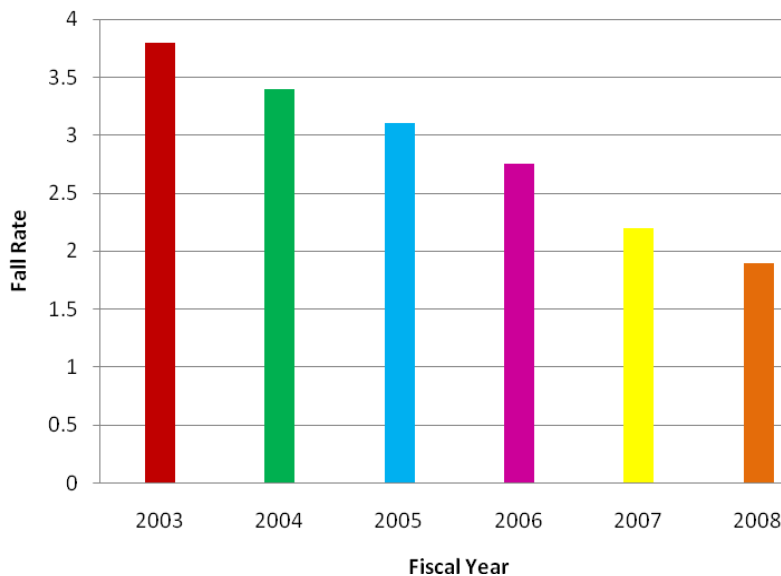
- Score patients upon admission and ongoing to determine fall risk
- Communicate each patient's fall risk to staff
- Implement visual cues
 - Red slippers
 - Leaf magnets on doors
 - Leaf stickers on patient's allergy band

Interventions:

- Purchased Spirit low beds to be used with all fall risk patients
- Low beds must always be in low position with floor mats beside bed
- Each patient care unit has low beds and more are brought in as needed
- Beds have bed exit alarms
- Hip protectors for orthopaedic patients at risk for falls
- 2 hour toileting schedule

Final Results:

- 34% decrease in the number of falls
- 50% decrease in fall injuries
- Fall rate fell from 4.8 to 1.9, national benchmark is 3.5



*St. Clair Hospital
Pittsburgh, Pennsylvania
Peggy Jenkins, RN, MSN, CMSRN*

*This study was presented at the 2008
"Transforming Fall Prevention Practices
Conference", Clearwater Beach Florida.*

*The conference is held annually, hosted by the
University of South Florida and the Patient Safety
Center of Inquiry.*

Low Beds – An Integral Part of A Fall Prevention Program

Problem:

- High fall rate of 15.5 per 1,000 bed days of care.
- Several serious fall injuries within short period of time.
- 38% of patient falls were occurring during the night shift.
- Fall rate was three times higher than National VA benchmark of 5.5.

Action Plan:

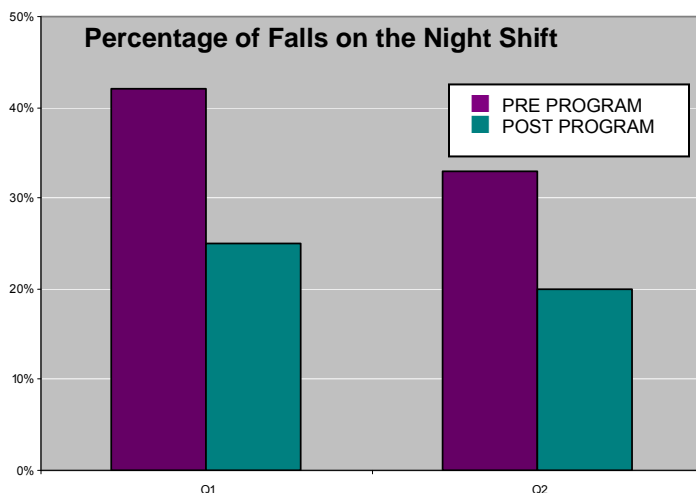
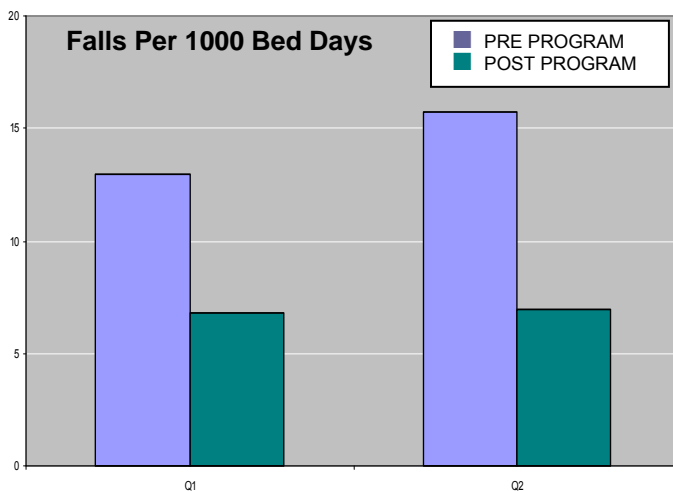
- Implement a hospital-wide Fall Prevention Program.
- Re-educate staff about Morse Falls Scale, incident reporting, and incontinence program.
- Perform patient falls assessments upon admission, transfers, and when falls occur.
- Identify fall-risk patients with a green I.D. bracelet and a sign on patient room doors.

Equipment Implemented:

- Purchased low hospital beds: Spirit (8.75" low) and Arro (6.75" low).
- Installed Bed Exit Alarms.
- Used floor Fall Pads.

Final Results:

- Fall rate dropped to 3.5 per 1,000 bed days of care.
- No serious injuries related to falls were reported within a 6-month period.
- Reduced patient falls during the night shift by 40%.
- "Low beds certainly contributed to lowering our fall and fall-injury rates. I certainly feel low beds helped in achieving 'no serious patient injury. The Spirit bed has proven to be a winner, especially with wheelchair bound and shorter patients - today's patient population wants to be as independent as they can."



M. Dawley, Risk Manager
VA Medical Center
New York

*This study was presented at the 2006
"Transforming Fall Prevention Practices
Conference", Clearwater Beach Florida.*

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The Utilization & Effectiveness of Low Beds in an Acute Care Hospital

Problem

- Falls among acute care patients generally range from 2.3 to 7 falls per 1,000 patient days⁽¹⁻⁴⁾. Falls are the leading cause of injury in hospitals, with approximately 30% of inpatient falls resulting in injury, and 5% of falls resulting in serious injury^(5, 6).

Objective

- Can falls from bed and their related injuries be reduced using height adjustable low beds in an acute care setting?

Time Frame

- Three months commencing July 1, 2006 and ending Sept 30, 2006

Test Location

- An acute care hospital in Tulsa, Oklahoma
- Units studied were 9-East Medical, and 11-East Cardiac Step-Down

Project Facilitator

- Dr. Rein Tideiksaar

Equipment Used

- A fixed number of Carroll low hospital beds, and a fixed number of standard hospital beds (not low) were used
- Carroll low beds used in the study had low heights ranging from 6.75"-8.75" (without a mattress)

Test Subjects

- Acute care patients ranging from 18 to 90 years-old with varying fall risks
- Each patient was given a falls risk assessment upon admission
- Patients with the highest fall risks were placed in low-height beds.

Data Collection

- Nursing staff on units 9-East and 11-East were trained to report all patient falls to the nurse manager
- All falls data was recorded, tracked, and analyzed by the nurse manager using a computer-based fall reporting log

Definition of a Fall

- "Any unplanned descent to the floor"
- Falls are reported as such whenever a patient is observed falling, or a patient is found lying on the floor

Levels of injury

Class I → No injury reported

Class II → Minor injury: a small scrape, abrasion, or bruise which heals without treatment within a few days

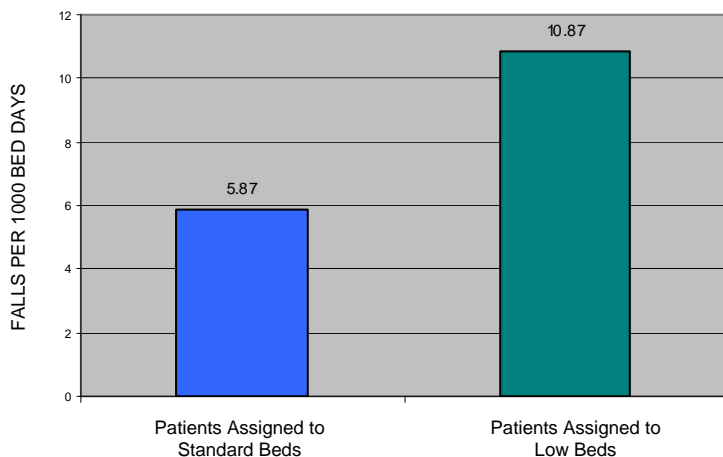
Class III → Moderate injury: a suspected bone injury requiring an x-ray, but no evidence of fracture is seen, a laceration that requires suturing and medical treatment, or an IV site which infiltrates post fall requiring treatment.

Class IV → Major injury: a confirmed fracture of any bone or head injury, or a change in neurological status.

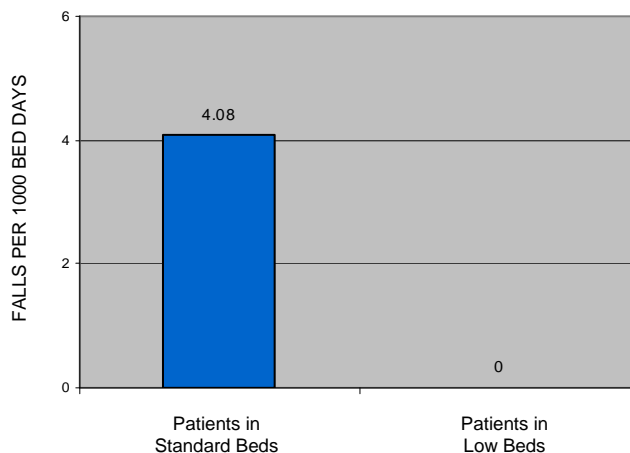
Final Results

- Patients assigned to low beds had a much higher overall fall rate than patients assigned to standard beds. This result is likely due to the fact that the patients assigned to low beds were high fall-risk patients.
- Falls that were not related to bed/bed transfers occurred in hallways, showers, bathrooms, and from chairs.
- The fall rate for falls from bed or during bed transfers was 0 (zero) for patients in low beds, and 4.08 for patients in standard beds.
- 56% of falls from standard beds resulted in injury. Injuries included scrapes, abrasions, skin tears, and bone fracture.
- 65% of overall falls, and 100% of falls from bed, were related to bathroom activity.
- Results showed that Carroll low beds were effective in preventing falls. The beds were kept in the low position, floor mats and bed alarms were employed. Bed alarms alerted nurses to patient 'roll outs' from bed. The low beds were 'nurse friendly' and facilitated caregiving tasks. Incorporating a low bed into an organization's fall prevention program is crucial to the success and sustainability of preventing injurious falls.

ALL REPORTED PATIENT FALLS



FALLS FROM BED/BED TRANSFERS



Dr. Rein Tideiksaar Credentials:

Dr. Rein Tideiksaar has been active in the area of fall prevention for over fifteen years. He has directed numerous research projects on falls and has developed fall prevention programs in assisted living, home care, acute care, and nursing facility settings. Dr. Tideiksaar has written numerous articles and book chapters on falls and related topics. He is the author of *Falls in Older People: Prevention and Management*, Third Edition (Health Professions Press, 2002). From 2000 to 2003, Dr. Tideiksaar was the Senior Vice President of Fall Prevention and Injury Reduction Systems, ElderCare Companies, Inc., Point Pleasant Beach, New Jersey. Prior to 2000, he was Director of Geriatric Educational and Clinical Programs and Director of the Falls and Immobility Program, Department of Geriatrics, Southwest Medical Associates, Inc., Las Vegas, Nevada. He has also served as Director of Geriatric Care Coordination, Sierra Health Services, Inc., Las Vegas, Nevada, and Director of the Falls and Immobility Program, Department of Geriatrics and Adult Development, Mount Sinai Medical Center, New York, New York. Dr. Tideiksaar obtained a doctorate from Columbia Pacific University and a physician assistant certification from the State University of New York at Stony Brook. Dr. Tideiksaar completed his geriatric training at the Parker Jewish Geriatric Institute, New Hyde Park, New York.