CASE STUDY

Porter Adventist Hospital
Centura Health

Continuous Quality Improvement Results in Sustainable Fall Prevention Program

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INTRODUCTION

Inpatient falls are considered a serious threat to patient safety and are a major focus of process improvement initiatives. Effective fall prevention programs require assessment of risk factors associated with falls and evidence-based, risk-stratified interventions that are tailored for individual patients.[1] In a busy clinical environment, clinical nurses face many challenges associated with fall prevention interventions[2]; however, a nurse's clinical judgment is one of the most effective methods for determining patient fall risk.[3]

Porter Adventist Hospital recognizes the important role of nurses in patient safety and has successfully tailored a quality improvement (QI) program for fall prevention hospital wide. The following case history describes the hospital's continuous QI efforts since 2010 to ensure patient safety and reduce preventable falls.

METHODS

Clinical setting

This is a 368-bed facility that provides patient care to the city of Denver and surrounding communities and is part of a larger integrated 15-hospital system (Centura).

Fall prevention timeline

2010
- Performed systematic literature review
- Selected new fall risk assessment tool
- Developed risk-stratified interventions associated with patient fall risk

2011
- March 2011 – Modified fall prevention policy (updated tool/interventions)

2012-2014
- Updated fall prevention program in place 2014
- Ordered new beds hospital wide
- Education provided to staff on appropriate use of beds

2015
- August 2015 – Launched "Just Culture" tool kit
- October – All surgical patients and patients aged 65+ considered high fall risk for the first 48 hours and must have the fall prevention bundle implemented

RE-EDUCATION

Systematic literature review

A systematic literature review was conducted in 2010 to assess best practices in fall prevention and the most effective fall risk assessment tool for the clinical environment. The Hendrich II tool was identified as a suitable tool for assessing fall risk, and risk-stratified interventions were developed as a result of the literature review.

Assessment and adoption of fall risk assessment tool

Once the Hendrich II was identified as the fall risk assessment tool of choice, several pilot units were selected, and staff were educated on use of the tool and risk-stratified fall prevention interventions. After the pilot units approved of the tool, it was implemented house wide. The fall prevention policy was updated in July 2013 to include use of the Hendrich II tool and risk-stratified interventions.

Education

The hospital has placed a strong focus on education of staff to enhance patient safety. After implementation of the revised fall prevention program, a member of the fall prevention team rounded on all units with a falls cart. During this rounding process, the fall prevention team member discussed various interventions and the evidence behind why risk-stratified interventions were important, and provided visual reminders of fall prevention efforts in the form of seasonal posters. In addition, the fall prevention team member discussed the importance of appropriate risk assessment and shared quarterly fall data to demonstrate the results of evidence-based efforts.

Additional education was provided to all staff via computer modules, which explained appropriate use of the Hendrich II tool and highlighted risk-specific interventions.

Updated technology

Information technology was updated, and if a patient was identified as high fall risk, the electronic medical record would immediately direct the nurse to implement a standardized set of fall prevention interventions.

During the process of updating technology, staff noted that bed and chair alarms were not working appropriately because the equipment was outdated. In 2013, facility leadership approved the request to update technology and ensure functional bed and chair alarms. To do this, new beds* were selected by staff.

*Stryker S3® Med/Surg Bed configured to include Chaperone® Bed Exit with Zone Control® and iBed® Awareness Smart Bed Monitoring Systems (Stryker Corporation, Kalamazoo, MI)

METHODS continued

A bed fair was held to assess different beds, and all staff had an opportunity to test different beds and vote on the fleet most appropriate for their facility.

Once the beds were delivered, each licensed and nonlicensed direct patient caregiver was trained on how to appropriately use the bed.

Re-education

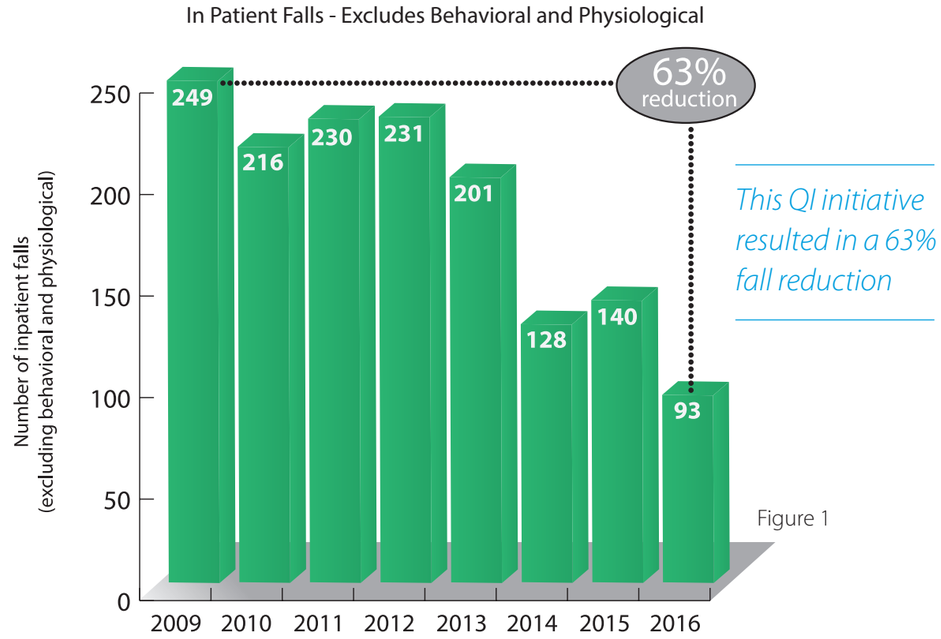
In 2014, hospital-wide re-education was provided on how to appropriately use the Hendrich II fall risk assessment tool and all risk-stratified fall prevention interventions; however, specific emphasis was placed on heightening awareness on the risk of accidental falls with toileting. The Hendrich Upright program was used, which included an interactive 1-hour training program with a post test. If a nurse failed the post test twice, a manager conducted 1:1 training, and the associate was then given the post test again to ensure competency and understanding.

"Just Culture" toolkit

In August 2015, members of the Falls Committee assessed fall trends and went back to the unit-based practice council to stress the fact that staff needed to stay with patients on the toilet. The Clinical Management Committee launched a "Just Culture" tool kit, which provides managers with a structured algorithm for formal discussion with any nurse with trend of falls.

RESULTS

The QI efforts for hospital wide fall prevention have been successful, with a relative reduction of 63% from 2009 to 2016 (Figure 1). Fall challenges have been successful across multiple units (Figure 2).



This QI initiative resulted in a 63% fall reduction

Figure 1

RESULTS continued

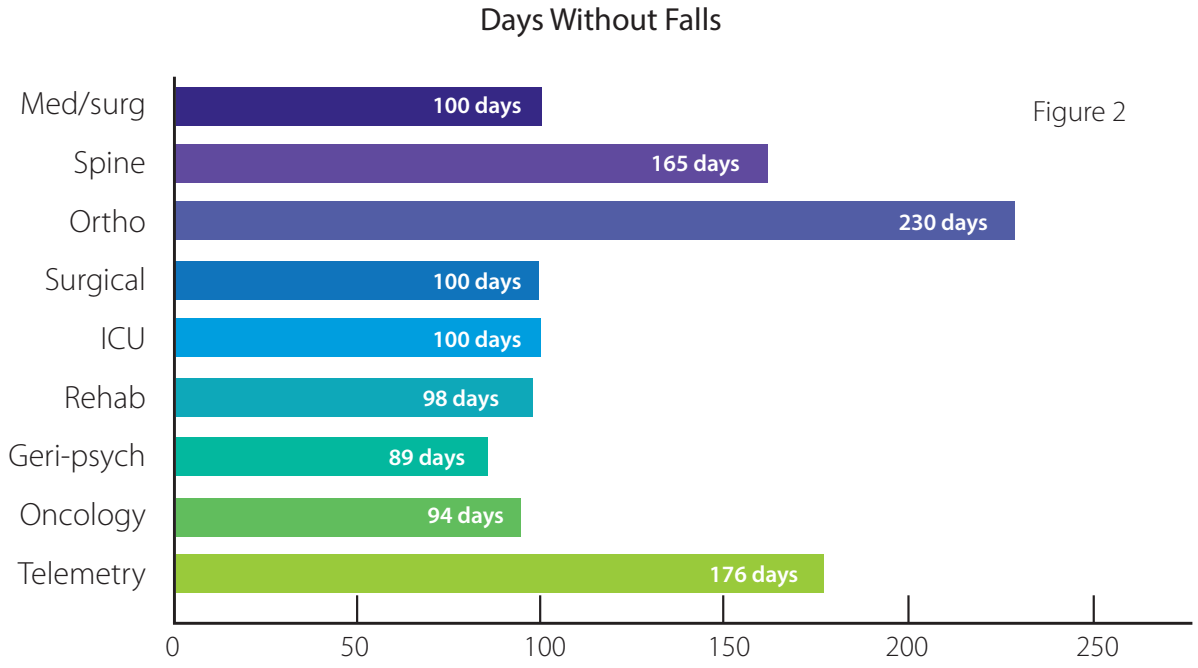


Figure 2

CLINICAL IMPLICATIONS

All patients at high risk of falls must have the following fall prevention bundle implemented:

- Bed alarm activated
- Nonskid footwear applied
- Instructed to call for assistance
- Toileting schedule initiated/staff must stay with patient while on toilet
- Patient/family educated on fall prevention

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