Improving Adherence to Fall Prevention Interventions in a Certified Stroke Center

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BACKGROUND

➢ Each year 700,000 to 1 million hospitalized patients will experience a fall during their hospitalization (Clancy, 2013)

➢ Annually, falls have an estimated cost of $20 billion and are associated with increased risk of morbidity and mortality (Spriva, et al., 2014)

➢ Spriva et al., (2014) concluded that staff education and training had a positive impact on fall reduction and improved communication between caregivers

➢ Prior to the intervention in June 2016, the certified stroke unit (3 East) within a 254-bed hospital, had 24 falls in an 8 month period during fiscal year 2016.

GAP ANALYSIS

➢ Direct observation of rooms and patients at risk for falls indicated that not all fall prevention interventions were in place
➢ Lack of consistency in who is responsible for fall prevention interventions
➢ Deficit in staff knowledge related to patient fall risk

QUESTION

What strategies are effective in decreasing the rate of falls in stroke and telemetry units; and to improve nursing staff knowledge and adherence to fall prevention interventions based on existing evidence-based fall-prevention guidelines?
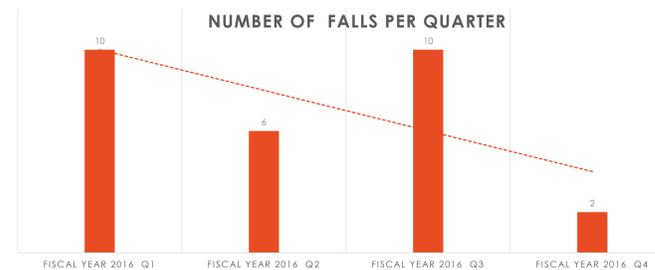
INTERVENTIONS

1. Provided education to staff in meetings
2. Created a poster on fall interventions that was posted in a staff area.
3. Written pre and post survey on fall prevention interventions
4. Real time education of staff at the bedside
5. 50 patient/room audits for each phase

RESULTS

Aim: To decrease the average number of falls on a 30 bed stroke unit by 50%

❖ Significant reduction in number of falls in 4th quarter fiscal year 2016 (implementation phase)
❖ Number of falls per month decreased from 3 to 1.25 (55% reduction) in 3.5 months
❖ During intervention, longest time without a fall was 52 days
❖ No falls occurred while the Clinical Nurse Leader (CNL) student was present

NUMBER OF FALLS PER QUARTER

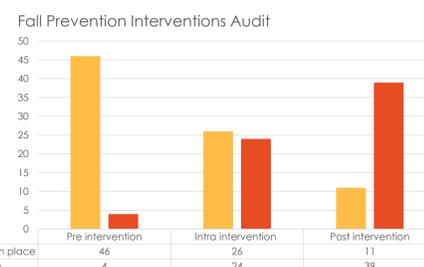| FISCAL YEAR 2016 Q1	FISCAL YEAR 2016 Q2	FISCAL YEAR 2016 Q3	FISCAL YEAR 2016 Q4
10	6	10	2

Aim: To improve nursing staff knowledge of fall prevention interventions by 30%

❖ Pre and post written knowledge surveys completed by nursing staff showed a significant improvement of 8.38% (t=-2.685, df=25, p=0.013). Mean scores rose from 80.48% to 88.86%.
❖ Overall goal of improving staff knowledge was **not** met due to high initial knowledge scores.
❖ There was a 37% improvement on a key question: Do all high fall risk patients have a risk score greater than 8?
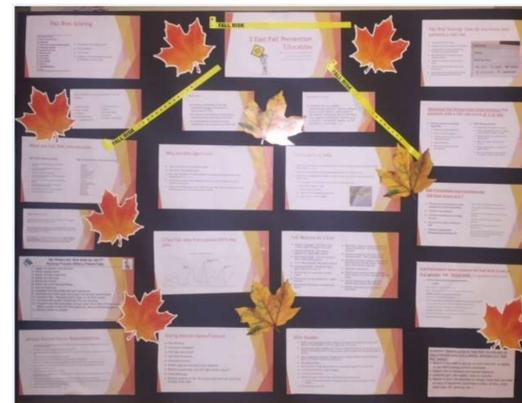
Aim: Improve adherence to existing evidence-based fall prevention interventions by 30%

❖ Prior to the intervention only 8% had all fall prevention interventions in place and after the intervention, 78% had the fall prevention interventions in place.
❖ There was a 70% improvement in staff adherence to fall prevention interventions
❖ 100% compliance observed on: Call bell in sight and reach, yellow fall band on patient, nonslip slipper socks on patient feet or in room, and room free of clutter and tripping hazards
❖ Most common missing fall prevention intervention: Gait belt in room (88% compliance after interventions)

Fall Prevention Interventions Audit

	Pre intervention	Intra intervention	Post intervention
some fall interventions not in place	46	26	11
all fall interventions in place	4	24	39

SUSTAINABILITY

➢ Continue fall audits and real time staff education by the bedside:
  ➢ Identify staff who had potential to continue weekly audits and real time education; professional development coordinator (PDC)
  ➢ Empower the PDC by recognition, sharing results, and teaching/reinforcing the value of audits and real time education

NURSING IMPLICATIONS

❖ **Practice**
  ➢ Evidence based fall prevention interventions are only effective if all interventions are applied at all times for high risk patients

❖ **Education**
  ➢ Emphasize significance of falls and the importance of fall prevention interventions to create sense of urgency among staff
  ➢ Review specific staff responsibilities to clarify each role in fall prevention and to promote team work
  ➢ Provide Individualized real time education to sustain high staff adherence and motivation

❖ **The value of CNL role for fall reduction**
  ➢ Elevating level of practice by providing consistent staff coaching and mentoring by the bedside
  ➢ Promoting change by applying change theory, removing the identified gaps and barriers, monitoring and analyzing outcomes, and integrating analysis results.

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