

Hospital Overview Cont...

- Mercy Health Saint Mary's achieved Exemplar status in 2014 for its NICHE program
- Mercy Health Saint Mary's has been a NICHE hospital since 2010
- NICHE is the premier designation indicating a hospital's commitment to excellence in the care of patients 65-years-and-older



Mercy Health Saint Mary's Psychiatric Medical Unit (PMU) Overview

- 28 bed licensed psychiatric unit of Mercy Health Saint Mary's
- In partnership with Pine Rest Christian Mental Health Services
- Dedicated to the Grand Rapids and larger regional community
- Same level of acute medical care as a general medical unit, but with a greater patient mobility and social interaction
- Therapeutic program and interventions designed to treat acute mental illness needs.

Photographs of the PMU Space Arrangement



The Consequence of Patient Falls

- “Every year in the United States, hundreds of thousands of patients fall in hospitals, with 30-50% resulting in injury.”
- “Injured patients require additional treatment and sometimes prolonged hospital stays.”
- “The Average cost of a fall with an injury is about \$14,000.”



Fall Rates on Psychiatric Medical Units

- **National Fall Rates:**
 - 4.5 to 25 falls per 1000 patient days
- **Intrinsic Factors:**
 - Dementia, adverse reactions from psychotropic medications, sensory deficits, as well as dehydration and malnutrition from self-care deficits
- **Extrinsic Factors:**
 - Distances to mobilize to the common area
 - Absence of safety equipment with self harm potential
- **Situational Factors:**
 - Behavioral impulses, compulsions, mood overriding cognitive reasoning.

Fall Rate History: Mercy Health Saint Mary's PMU

- **PMU Baseline Fall Rate:**
 - 6.7 falls per 1000 patient days (Thru October 2015)
- **Baseline Tools and Interventions**
 - Morse Fall Scale Assessment
 - Identification of Behavioral Fall Risks
 - Wheelchair: Offset Weakness
 - Bed and Chair Alarms
 - Fall Pads at Bedside
 - Line of Sight Vigilance
 - 1:1 Staff Monitoring
 - P.T. and O.T. referrals



New Idea

Activity Therapy Fall Prevention Class Trial: 2013

• **Initial Barriers to Success**

- Staff Productivity Standards Limits Time Investment
- Space Limitations in Activity Therapy Room
- Staffing Logistics for Conducting Class
- Inconsistent Scheduling of Class Time

• **Accomplishment: Creation and Knowledge of a Working Idea!**



Lean Process Excellence

Evidence Based Quality Improvement Project

• **Plan:**

- "Targeted falls" to include all falls
- Falls/1000 patient days
- Root Cause of Falls

• **Do:**

- Implementation of an evidenced based fall prevention class

• **Study:**

- Expert determination of class duration, frequency, content

• **Act:**

- MHSM acute care hospital units considering implementation
- Nursing staff offering exercise follow-up on evening shift



Literature Review

Systematic Review

- "...no single (fall safety) intervention is fully supported by current evidence"
- "...multifactorial interventions may reduce falls by 18% to 31%"
- Meta-Analysis: "**Borderline statistical significance**"



Supportive Research

Additional Exercise with Fall Prevention Interventions

- **Objective:** Evaluate effectiveness of fall prevention exercise program
- **Design:** Randomized controlled trial with subgroup analysis
- **Methods:** Intervention and control group measured for functional mobility, balance upon referral and then again prior to discharge
- **Results:** Intervention group had **nearly 50% lower falls** than their control group
- **Conclusion:** "Exercise program provided in addition to usual care may assist in the prevention of falls"



Supportive Research Cont...

Patient Education to Prevent Falls among Older Hospital Inpatients

- **Objective:** Evaluate if multi-media education with professional follow-up assists in fall prevention
- **Design:** Randomized control trial
- **Methods:** Compare the results between 3 groups
 - Multimedia patient education program combined with trained health professional follow-up
 - Patient education materials alone
 - Usual fall prevention care
- **Results:** Falls were **reduced by 50%** among cognitively intact multimedia program patient group with professional follow-up
- **Conclusion:** Patient education with health professional follow-up reduced falls among patients with intact cognitive function

PMU Fall Prevention Class Objectives

- **Reduce unit wide all-cause fall frequency and injury**
- **Increase fall risk awareness of patients and caregivers**
- **Increase overall physical activity**



PMU Methods in Fall Reduction

Fall Education Exercise Class (1 hour, 2x/week)

- **Introduction:** Attendee self-introduction and fall experience
- **General Education:** Fall Causality and Fall prevention
- **Exercises:** Group Exercises and Individual Stations
- **Teach-back:** Attendee sharing, fall statistics and facts, fall prevention



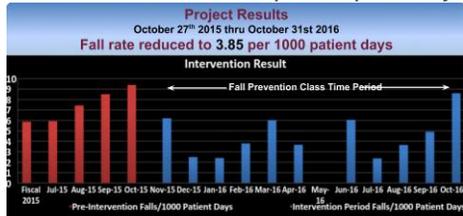
Teach-back!



Project Results

October 27th 2015 through October 31st 2016

Falls reduced from 6.7 to 3.85 per 1000 patient days



Current Limits to Quality Improvement Project

- **Consistency of class format**
- **Consistency of staffing**
- **Consistency of patient attendance**
- **Communication from class to caregiving team**
 - Individual patient fall risk follow-up



Further Involvement

- Develop anonymous participant identifiers to tract direct fall prevention effect of program participants
- Train AT, PT, OT therapy staff beyond present instructors to ensure class staffing
- Incorporate therapy fall prevention recommendations from class into nursing plan of care, assessment and intervention

References

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Why we do what we do...