Fall Prevention Education Class on a Psychiatric Unit

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Mercy Health Saint Mary’s – FY2016

• Serve residents in 13 counties
• 22,000+ inpatient discharges
• 20,000+ surgeries
• 84,000+ emergency department visits
• 31,300+ urgent care visits
• 1.1+ million outpatient visits
• Top quartile in national peer group in H-CAHPS patient satisfaction for:
  – Rate Hospital
  – Would Recommend Hospital

Source: Mercy Health Saint Mary’s financial reporting and Press Ganey

Hospital Overview

An integrated health care system in west Michigan:

• 2nd largest integrated health care system in Kent county with $450M annual net revenue
• Achieved Magnet® designation on May 15, 2013
• Top Hospitals for Leapfrog 2013
• Teaching hospital – 371 beds with ~4,000 associates – including 116 adult psychiatric and 15 neonatal ICU beds
• 20 operating rooms between main campus and ASC with 2 da Vinci surgical systems
  • We have an additional 4 rooms that we will be bringing on slowly in 2017
• Progressive leader in cancer care, neurosciences, orthopedics, kidney transplant, diabetes and endocrine care, and behavioral health
• Comprehensive clinical integration model aligning more than 500 employed and independent providers into Clinically Integrated System with at risk contracts
  • Mercy Health Physician Partners – employed group of 250+ primary and specialty care physicians and 150+ Advance Practice Providers
  • Affinia Health Network – a membership organization unifying employed and independent physicians in the region into a clinically integrated network

Source: mercy health saint mary’s financial reporting and press ganey
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 track 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


References Cont...

Acknowledgements

• Heather Gates BSN, RN
• Kevin Hengeveld MSN, RN: PMU CNL: Unit Statistics
• Justin Jackson OTR: Pine Rest Christian Mental Health Services Activity Therapy
• Carrie Mull BSN, RN: PMU Clinical Service Manager
• Brooke L. Slawinski MA: Literature Statistics

Why we do what we do...