

California Health Improvement Project (CHIP)

Implementing a Pre-Operative Screening Pathway to Identify Mild Cognitive Impairment

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Dementia Deferred

Mild cognitive impairment (MCI) is a key factor in post-operative delirium, with an incidence of 5-44%. Cognitive impairment is an early marker for dementia and frequently overlooked in pre-operative assessment.

- It is projected that by 2030, >400,000 patients will have undergone elective total joint replacement (TJR) and greater than 60% will be over the age of 65.
- In 2013, an estimated 5.1 million persons >65 years of age had dementia and by 2050, that number is expected to triple.
- In 2013 Sixth leading cause of death in the US.
- In 65 years and older, 2/3 of the dementia population are women.
- In 2010 Average annual cost of care (direct/informal) for those >70 years, in the US, \$157-\$210 billion.

The lack of a programmatic approach of identification and intervention for MCI has resulted in increased length of stay, institutionalization, morbidity and mortality.

Project Description

Create a pre-operative screening process for elective surgical patients >65 years of age, that includes:

- Formalized pre-operative screening and identification of MCI
- Modifications of care to decrease the incidence of delirium and functional decline.

Goal and Objectives

Utilize a standardized care path to identify patients and minimize the deleterious impacts of the surgical episode of care for patients over age 65, with identified MCI.

Output-oriented Objectives:

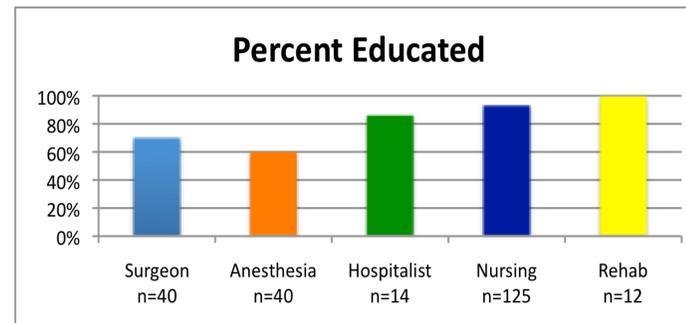
- Complete staff and physician education 10/2015-2/2016
- Complete medication and recovery protocol 2/28/16
- Initiate patient screening 2/28/16

Outcome-oriented Objectives:

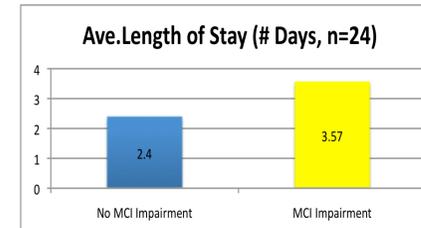
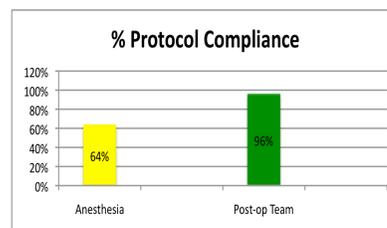
- 80% of patients >65 are offered screening through pre-operative packet information and pre-op class by 6/2016.
- Average length of stay (ALOS) will be 2.5 days for all patients by 6/2016 (same as non-MCI patients)
- Care path adherence by health care team at 75% by 6/2016.

Outputs & Outcomes

Outputs Achieved



Outcomes Achieved



Goals and Objectives Summary: Organized an interdisciplinary team with orthopedic surgeons, anesthesiologists, neurosciences physician and team, rehabilitation, nursing, pharmacy and nutrition, that developed a pre-operative screening process by December 2015. This same team, developed a treatment protocol and provided education via electronic memos and presentations, From mid-January through the end of February 2016. Screening of patients started March 1, 2016.

Specific/measurable: 95% of patients were offered screening via pre-operative informational packets, pre-op education class and phone calls. ALOS was 3.57 days, higher than goal.

Relevance to practice: 75% of our patient population is in age range for risk and there was no process in place to identify these patients who may be at risk for faster onset of dementia.

Study period: November 2015 through June 30, 2016 for screening and protocol development through completion of data collection.

It is noted there may be a correlation between education and protocol compliance. No number was determined for the pilot group as this was a voluntary screening and the topic can be intimidating for a group of patients who desire joint replacement. This was a small sample (n=24), but as a trial, shows promise for the future. This project has become a research project, approved by the Western Institutional Review Board and supported by the organization.

Lessons Learned

- Educate everyone (family, patient, physicians, staff) and monitor continuously
- Use the marketing and PR team
- Must have a clinical champion-surgeon
- Measure and hold people accountable for care
- Engage staff and celebrate successes

REPEAT EACH STEP FREQUENTLY



Neurosciences Design Team



Clinical Team

About My Organization

Hoag Orthopedic Institute (HOI) was established November 2010 as a community surgical hospital with 70 beds and nine operating rooms designed and equipped specifically for orthopedic care. HOI is a joint venture between orthopedic surgeons, a non-profit hospital, including hospitalists, and direct care teams. We are staffed with a culturally diverse care team with over 290 FTE's. Over the past 3 years, HOI has remained the highest volume total joint replacement facility in California (>5000/year). We have achieved numerous national awards for quality, cost effectiveness and patient satisfaction.

Mission: To restore, improve and enhance the health and mobility of individuals with musculoskeletal conditions and diseases through excellence in care and outcomes, clinical innovation, research and advocacy.

Contact Me

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