The Effects of Pre-operative Orientation on Outcomes for Joint Replacement Surgery Patients

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Objectives

- Discuss the importance of pre-operative joint replacement orientation
- Evaluate the effects of a pre-operative orientation program on patient outcomes related to length of stay (LOS), rehabilitation progress and discharge disposition
Relevance

- Pre-operative teaching programs have shown to optimize patient outcomes
  - Increased knowledge scores and physical therapy participation (Lewis, Gunta & Wong, 2002)
  - Less analgesia use, earlier ambulation, more frequent participation with exercises, shorter LOS, perceived improvement in ability to cope (Thomas, Burton, Withdrow, & Adkisson, 2004)
  - Reduced anxiety levels (Spalding, 2003)
Setting

• **Salinas Valley Memorial Healthcare System**
  
  • District hospital located in a rural agricultural city in Salinas, California
  • Approximately 200+ bed capacity
  • Average census of 110-120 patients

• **Joint Replacement Program**
  
  • A group of 10 Orthopedic Surgeons conducted 272 surgeries in 2011
    
    o 90 Total Hip Replacements
    o 182 Knee Replacements
Pre-operative Joint Replacement Orientation

- Prepare patients for the complete experience of total hip and knee replacement surgery
- A collaborative PowerPoint presentation with hands-on training offered twice a month lasting 1.5hrs
- Low attendance rate noted for 1st quarter 2011 due to class being optional
- This performance improvement project aimed to assess effect on patient outcomes
The target population for this project was inpatients who underwent total joint replacement surgery from January to April 2011.
Methods

- Data collected through retrospective review of medical records
- Convenience sample of 61 joint replacement patients from January to April 2011
- Abstracted patient information related to LOS, discharge disposition, rehabilitation progress of joint flexion and extension and distance ambulated
Preliminary Findings

Mean Maximum Distance Ambulated (ft)

- Attended
- Did not Attend
Achieved Target Range of Flexion
Equal or Greater than 90 Degrees
Preliminary Findings

- Results show that pre-operative orientation has positive effects on patient’s rehabilitation progress.
- Among patients attending class 50% were discharged to home, 31% to an acute rehab facility, and 19% to a skilled nursing facility.
- No statistical difference was found in average LOS:
  - 3.13 for attending versus 3.10 for not attending.
Discussion

• Lack of statistical difference in LOS may be attributed to consistent use of joint replacement care maps

• Improved achievement of targeted rehabilitation outcomes may be attributed to leg strengthening exercises taught in class
Implications

- Results may encourage future joint replacement patients to participate in pre-operative orientation
- May provide support for other surgical programs to adopt a similar orientation process
References


