

# **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, Withdraw, & 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
    - 90 Total Hip Replacements
    - 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 1<sup>st</sup> quarter 2011 due to class being optional
- This performance improvement project aimed to assess effect on patient outcomes

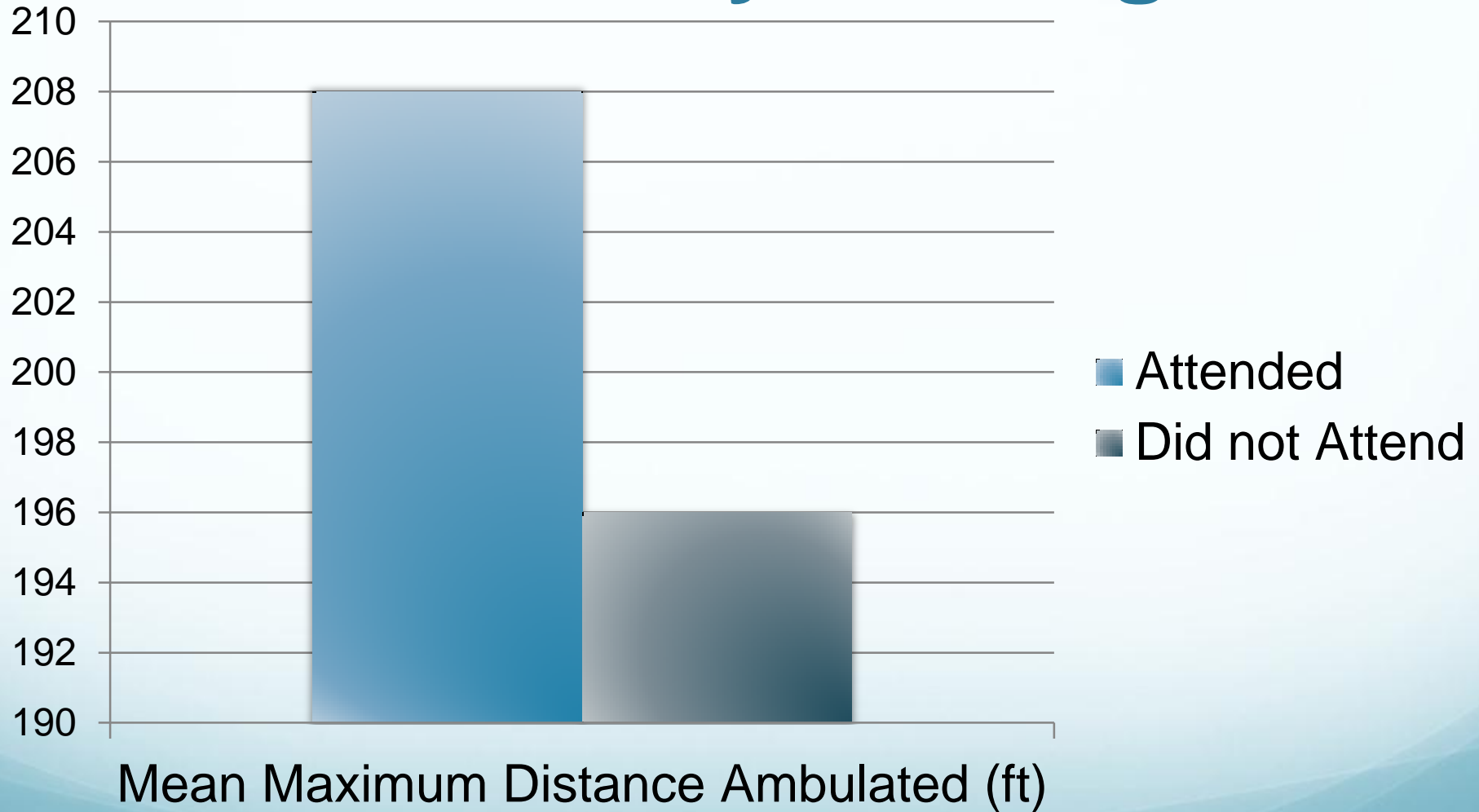
# Target Population

The target population for this project was inpatients who underwent total joint replacement surgery from January to April 2011.

# Methods

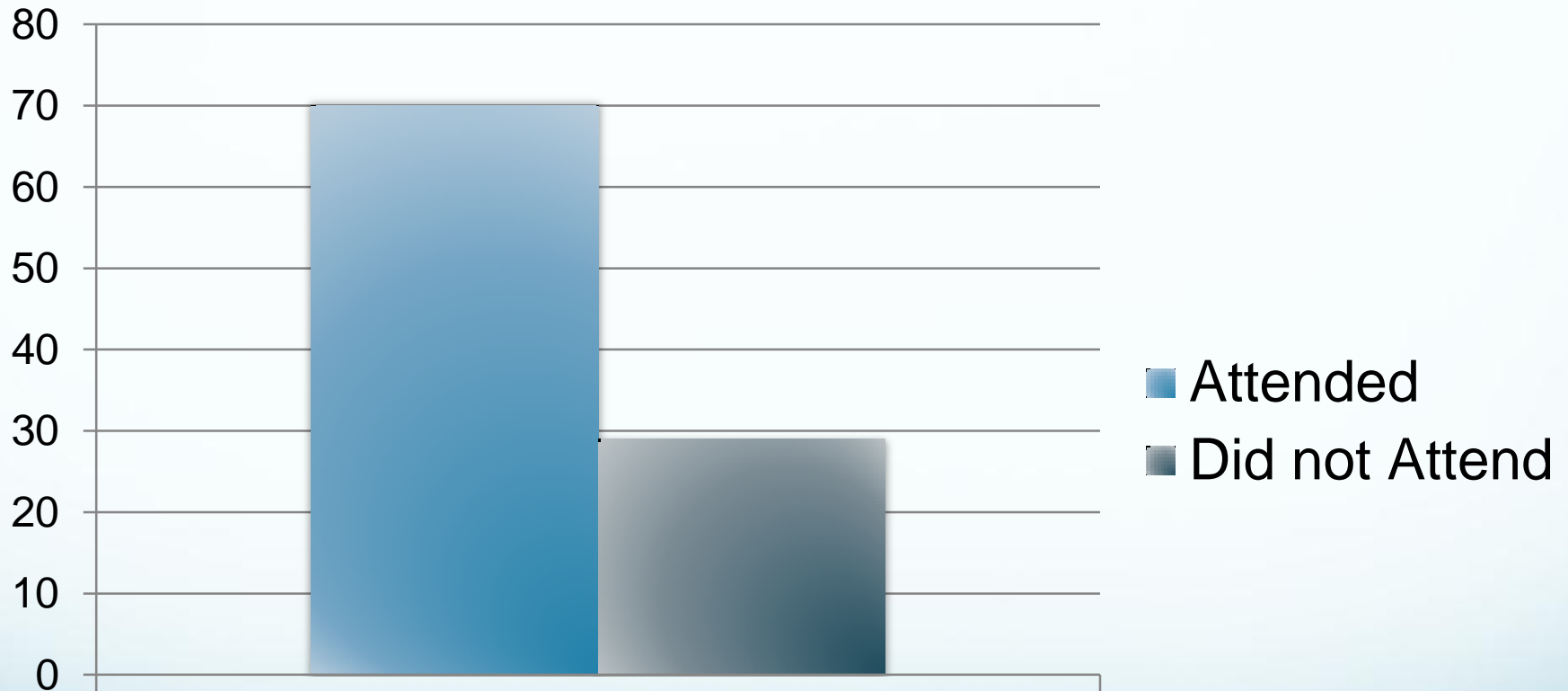
- Data collected through retrospective review of medical records
- Convenience sample of 61 joint replacement patients from January to April 2011
- Abstracted patient information related to LOS, discharge disposition, rehabilitation progress of joint flexion and extension and distance ambulated

# Preliminary Findings





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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

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