

Preoperative Optimization in Total Joint Arthroplasty: A 5-Year Review

Adam R English, Ryan Cady, John Alexander Reimer, Thomas Michael Lewandowski, Matthew Francis Fleming, Erik Paul Severson

INTRODUCTION:

In 2018, our regional critical-access hospital began utilizing preoperative education nurses to ensure all preoperative orthopaedic protocols were being captured, regardless of if the provider completing the history and physical was within the system or outside the system. This process was started on the day the patient scheduled their procedure, which was often 6 weeks prior to their surgery, leading to earlier identification and treatment of potential issues that could impact their surgery and potentially lead to cancellation on the day of surgery. Additionally, whenever our preoperative protocols changed, or were updated, it was much easier to educate our team of nurses instead of providers, many of which were not within our healthcare system.

METHODS:

Methods: Utilizing our electronic health record and building a working smart note within the system, 3500 patients met with our preoperative education nurses on the day surgery was scheduled. In this review, the nurse updated all relevant patient information and completed all preoperative orthopaedic protocols as identified and approved by our interdisciplinary team (surgeon, anesthesia, therapy, nursing, social workers). Example of preoperative protocols completed included skin and dental questionnaires, recent HgbA1c, discharge disposition prediction tools, BPH management and identification of undiagnosed sleep apnea. Medications were also reviewed with instructions on perioperative management given based on the medication, recent labs, and guidelines from Rheumatology or other specialties. Any issues identified that could not be addressed in time of the surgery date prompted our surgery scheduler to move the surgery back to accommodate this.

RESULTS:

Results: This 5-year review of over 3500 patients will explain the tool that is used to optimize patients, provide data on outcomes after implementation of the tool, and describe lessons that were learned while decreasing our same-day surgery cancellation rate from 9% to 2% (annually).

DISCUSSION AND CONCLUSION:

Conclusion: Preoperative optimization of patients undergoing total joint arthroplasty is becoming more and more important as more total joints are done in an outpatient setting. It is imperative that any risk factors that could lead to complications be identified early in the perioperative process as it can lead to an increase in same-day cancellations and poor patient outcomes. By using a process built into the electronic health record, orthopaedic programs can ensure that all orthopaedic protocols are addressed while still having the patient history and physical performed by any provider, both within and outside your health system.