

**Evaluating the Effectiveness of a
Safe Pain Control After Surgery Patient Education Risk Reduction Program**

**Sponsor: American College of Surgeons (ACS) Division of Education Patient Education Program
and Health Care Service Corporation (HCSC) Risk Identification and Outreach (RIO) Program**

Surgical Patient Education Program

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Abstract

Background: Opioids have been the first choice for providing analgesia postoperatively. Their use is often accompanied by adverse drug events including misuse, abuse, mortality, and diversion. For musculoskeletal procedures, pain can be substantial, and many patients come to surgery already using high doses of pain control medications placing them at a higher risk for adverse events. Direct patient education on minimizing opioids and using alternatives has led to significant reduction in opioid use with no increase in pain scores or change in satisfaction scores.

Objective: This study aims to minimize opioid use in surgery using current evidence focused on four main domains including patient education and expectation setting; baseline assessment; optimization of perioperative non-opioid pain management; and support for opioid minimization post-discharge. Site, procedure, and patient-specific factors will identify the most effective strategies reducing post-surgical opioid use for patients undergoing musculoskeletal procedures and maximize new methods for patient and surgeon engagement.

Methods: A multi-component intervention will be implemented across a five-state network to minimize perioperative opioid use among select musculoskeletal hip, knee, and spine procedures. Patient education to set expectations, follow a functional pain plan, use alternatives to opioids, and dispose when complete, will be evaluated including barriers and enablers to implementation. This prospective study will collect baseline data on patient risk factors, patient opioid prescription fills and service use pre and post-surgery to measure the impact of patient education interventions over time. A quasi-experimental time series design will evaluate opioid sparing pain control education to matched samples analyzed using current procedural terminology (CPT) codes. Surgeon reported prescribing and patient education methods will be measured pre and post exposure to trainings and resources.

Results: This study aims to identify the effectiveness of pre-operative evidence-based, education to surgical patients undergoing a musculoskeletal procedure. We anticipate that the outcomes of this study can guide future education programs focused on opioid sparing multimodal pain control and system communication improvements as well as educational plans between insurance providers, surgical professionals, and patients.