

BACKGROUND: One in five children is at risk for orthopedic injury, and 80% of emergency department visits involve pain. Evidence concludes a multimodal approach improves pain management satisfaction in this population. This project aimed to implement a standardized, multimodal pain management process for pediatric orthopedic patients.

LOCAL PROBLEM: The project site was a 24-bed adolescent medical-surgical unit at a Magnet-designated pediatric level one trauma and teaching hospital in St. Louis, MO. Inadequate pain management after orthopedic injuries or surgery was a consistent issue. An informal survey of unit nursing staff notably revealed that 100% of nurses felt pain management was insufficient.

METHODS: Guided by the Evidence-Based Practice Improvement (EBPI) model, the project involved unit nursing staff, pediatric orthopedic patients aged 3–18 with acute orthopedic injuries (fractures, trauma, sports injuries), their families, and therapy personnel. Interventions were tailored to educational needs and aimed to standardize pain management. Change was evaluated through chart reviews, surveys, and pre-/post-implementation data on knowledge, pain scores, and satisfaction.

INTERVENTIONS: The intervention introduced a standardized pain management process over nine weeks using a stepwise approach: pre-BPA satisfaction survey, rounding-based satisfaction survey, pre-tip sheet knowledge survey (pharmacologic and non-pharmacologic), tip sheet implementation, post-tip sheet knowledge survey, BPA implementation, and post-BPA satisfaction survey to evaluate system performance and address identified issues.

RESULTS: Pediatric orthopedic patients received non-pharmacological or multimodal pain management more often than pharmacological methods alone, with multimodal approaches linked to lower pain scores. Implementing tip sheets and BPAs significantly improved nursing knowledge and patient satisfaction, highlighting the effectiveness of the educational interventions.

CONCLUSIONS: Implementing a standardized multimodal pain management BPA tool and tip sheets improved patient satisfaction, pain control, and staff knowledge. This approach supports patient- and family-centered care, enhances the healthcare experience, and is recommended for broader use. An educational binder on each inpatient unit is advised to promote sustainability.