

"I've been blocked!": Establishing a Regional Anesthesia Service Line for Hip Fracture Patients

Figures

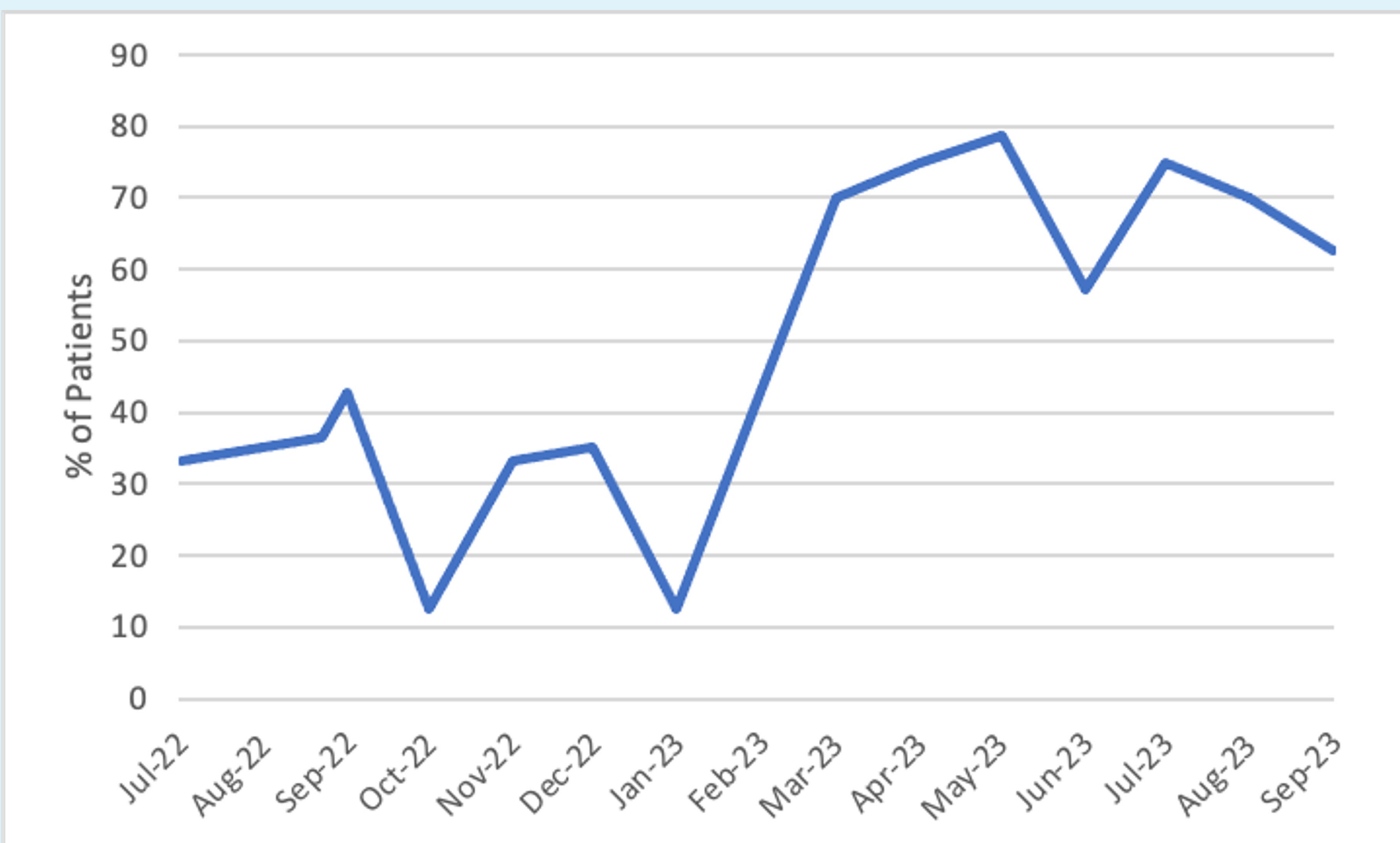


Figure 1: Percentage of patients who received a peripheral nerve block within 4 hours of diagnosis

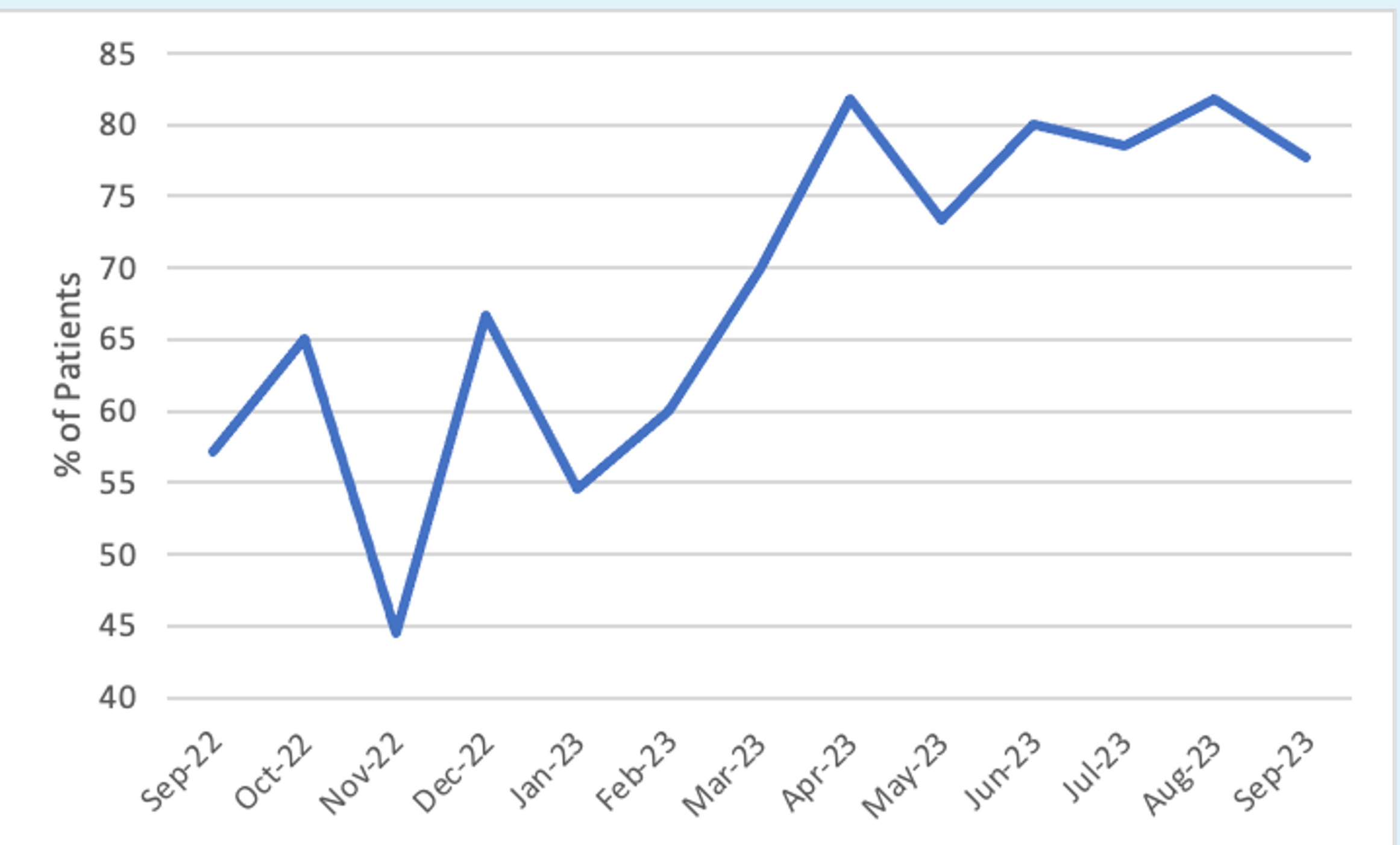


Figure 2: Percentage of patients who went from ED to OR within 24 hours of diagnosis

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Introduction

The American Academy of Orthopaedic Surgeons (AAOS) clinical practice guidelines on management of hip fractures published in 2021 provides a strong recommendation for regional anesthesia as part of a multimodal approach to preoperative pain control. Regional anesthesia, specifically the fascia iliaca block, is associated with decreased pain severity, need for parenteral opioids, and lower incidences of delirium and postoperative complications.

Based on the AAOS clinical practice guidelines, our institution set forth to streamline care for this subset of patients. This included peripheral nerve block in the Emergency Department (ED) and standardized preoperative evaluation/optimization. Our aim was to provide preoperative regional anesthesia in the ED within 4 hours of hip fracture diagnosis in at least 75% of patients at all times. In addition, we aimed to have 75% of patients go from the ED to OR within 24 hours of diagnosis.



Post Intervention Outcome

Our pre-intervention rate of preoperative nerve block within 4 hours of hip fracture diagnosis was about 10-30% (Figure 1). We saw a steady increase after initiating educational sessions and establishing a standard workflow with the orthopedics PA. In Spring of 2023 we reached our goal of providing nerve blocks to 75% of patients within 4 hours during weekday working hours. It was at this time that we committed to providing the service 24/7. We found that providing regional anesthesia while the patient was still in the ED allowed for easier post-procedure monitoring.

We also saw a steady increase in the proportion of patients who went from the ED to OR within 24 hours (Figure 2). We achieved our goal of 75% of patients in the Spring of 2023. We attribute this to the establishment of a dedicated team of hospitalists familiar with preoperative testing guidelines and direct communication with the anesthesia department. We are proud to announce that our institution received a Joint Commission Center of Excellence in hip fracture status in February 2023.

References

American Academy of Orthopaedic Surgeons Management of Hip Fractures in Older Adults Evidence Based Clinical Practice Guideline. <https://www.aaos.org/hipfxcpq>
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