

"Why Stop at 75%?"

Improving Peripheral Nerve Blocks Service for Hip Fractures

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Introduction

Hip fractures are a major public health issue in the U.S., with over 300,000 cases annually, primarily affecting individuals over 65 years old [1].

The American Academy of Orthopedic Surgeons (AAOS) recommendation [2]:

- Multimodal analgesia, including preoperative nerve blocks, for managing hip fracture pain.
- Acceptable nerve blocks include Fascia Iliaca Compartment Block (FICB) and Femoral Nerve Block (FNB).

Benefits of FICB:

- Decreases pain severity.
- Reduces the need for parenteral opioids.
- Lowers the incidence of postoperative complications.

Institutional goals (based on 2021 AAOS guidelines):

- Provide preoperative peripheral nerve blocks (PNB) in the Emergency Department within 4 hours of hip fracture diagnosis in at least 75% of patients.
- Optimize patients for surgery within 24 hours,

per AAOS recommendations

Timeline

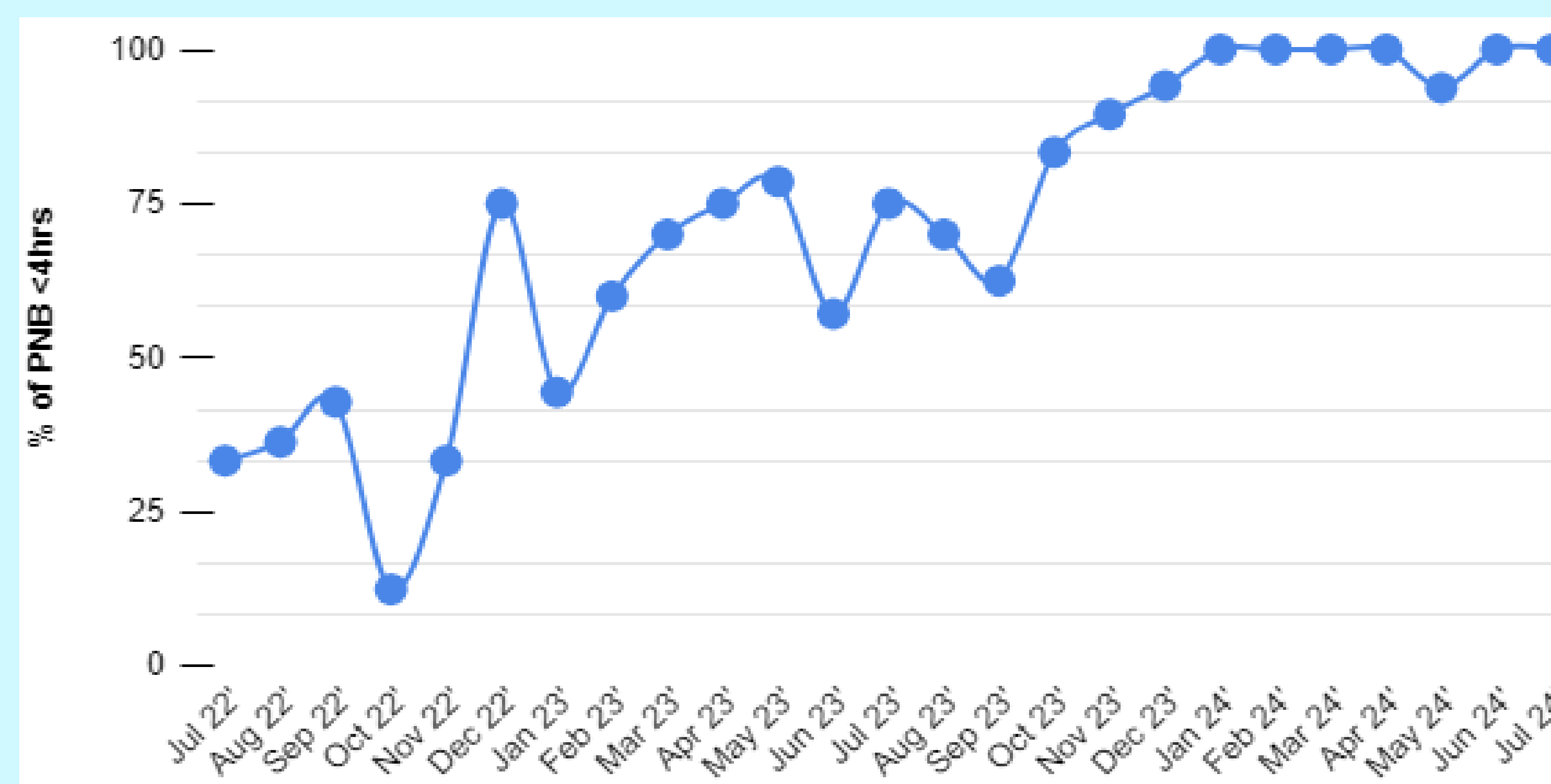
Winter 2022: Started multidisciplinary discussions.

Feb 2023: Started offering PNBs during work hours and trained staff.

Spring 2023: Formed a team to standardize pre-op evaluations..

June 2023: Expanded PNB to 24/7 service..

Sept 2023: Equipped ED with "block kits" for quick PNB access.



Discussion

Pre-Intervention Status:

PNB rate in ED within 4 hours of hip fracture diagnosis was 12% to 42%.

Intervention Approach:

- **Collaboration:** Established a regional anesthesia service through multidisciplinary discussions.
- **Education:** Trained medical teams on the importance of early PNB for pain management.
- **24/7 Service:** Implemented a system for round-the-clock PNB availability.
- **Resources:** Ensured sufficient staff and equipment for effective PNB delivery.

Outcome:

- Achieved **75% PNB rate within 4 hours** by October 2023.
- Consistently maintained above this rate throughout 2023 and 2024.

References

- [1] Moreland BL, Legha JK, Thomas KE, Burns ER. Hip Fracture-Related Emergency Department Visits, Hospitalizations and Deaths by Mechanism of Injury among Adults Aged 65 and Older, United States 2019. *J Aging Health*. 2023 Jun;35(5-6):345-355. doi: 10.1177/08982643221132450. Epub 2022 Oct 10. PMID: 36210739; PMCID: PMC10083185.
- [2] American Academy of Orthopaedic Surgeons Management of Hip Fractures in Older Adults Evidence Based Clinical Practice Guideline. <https://www.aaos.org/hipfxcpq> Published 12/03/2021