

Utilization of peripheral nerve block for ambulatory shoulder surgery in the U.S.

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Introduction

- **Benefits of peripheral nerve block (PNB)**
 - Improves postoperative pain relief¹
 - Less postoperative opioid consumption²
 - Decreases unplanned admission rate^{3,4}
 - Shorter post-anesthesia care unit stay³
- **Difficulties of implementing PNB**
 - Financial barriers for patients of vulnerable socio-economic status
 - Lack of resources for some facilities¹

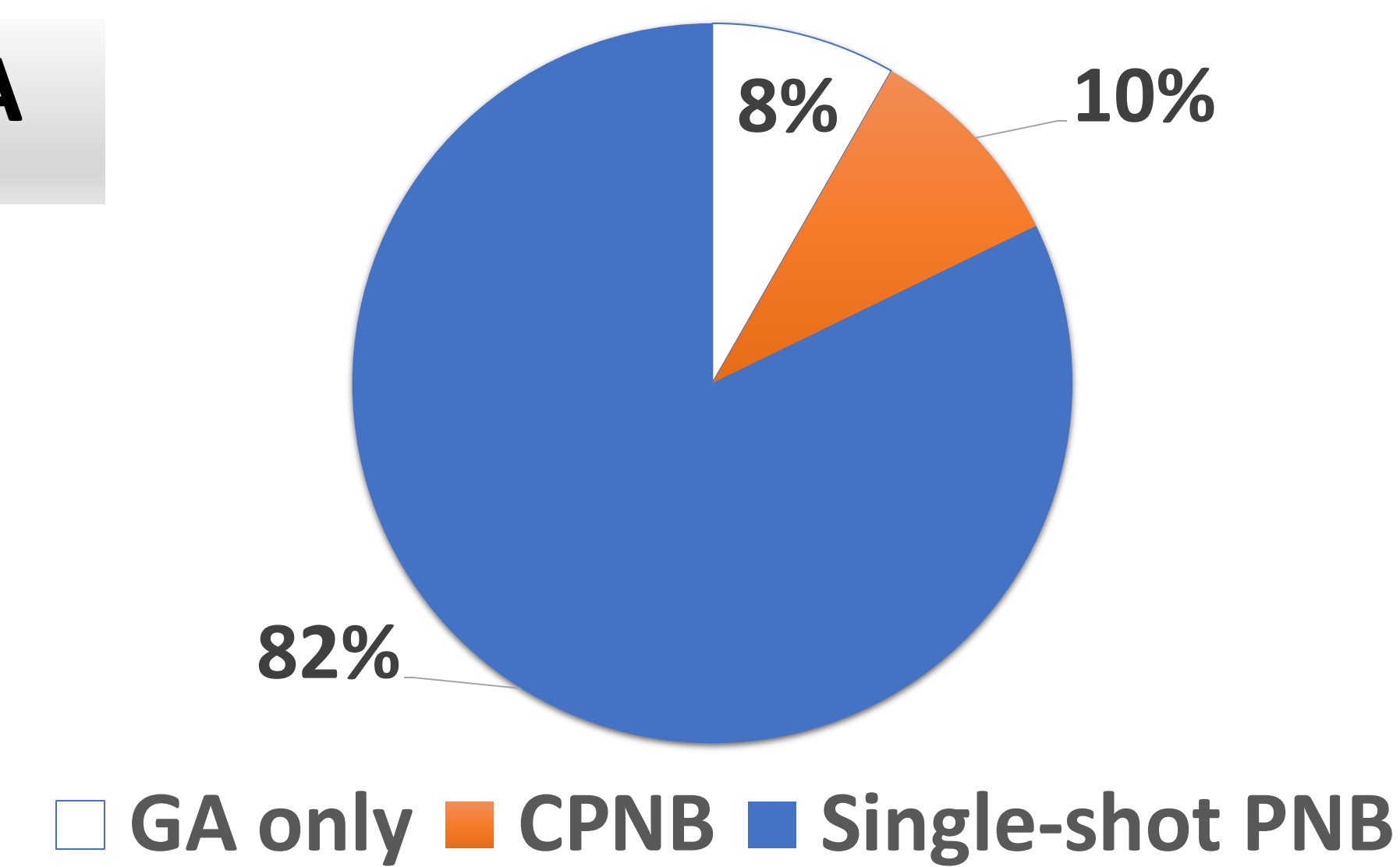
Methods

- **Data source:** Nationwide Ambulatory Surgery Sample from 2019 to 2020.
- **Samples:** Discharge records of adults who received major shoulder surgery under general anesthesia and/or regional anesthesia.
- **Analysis:** Weighted logistic regression model of whether patients received PNB via single-shot or continuous catheter (CPNB).

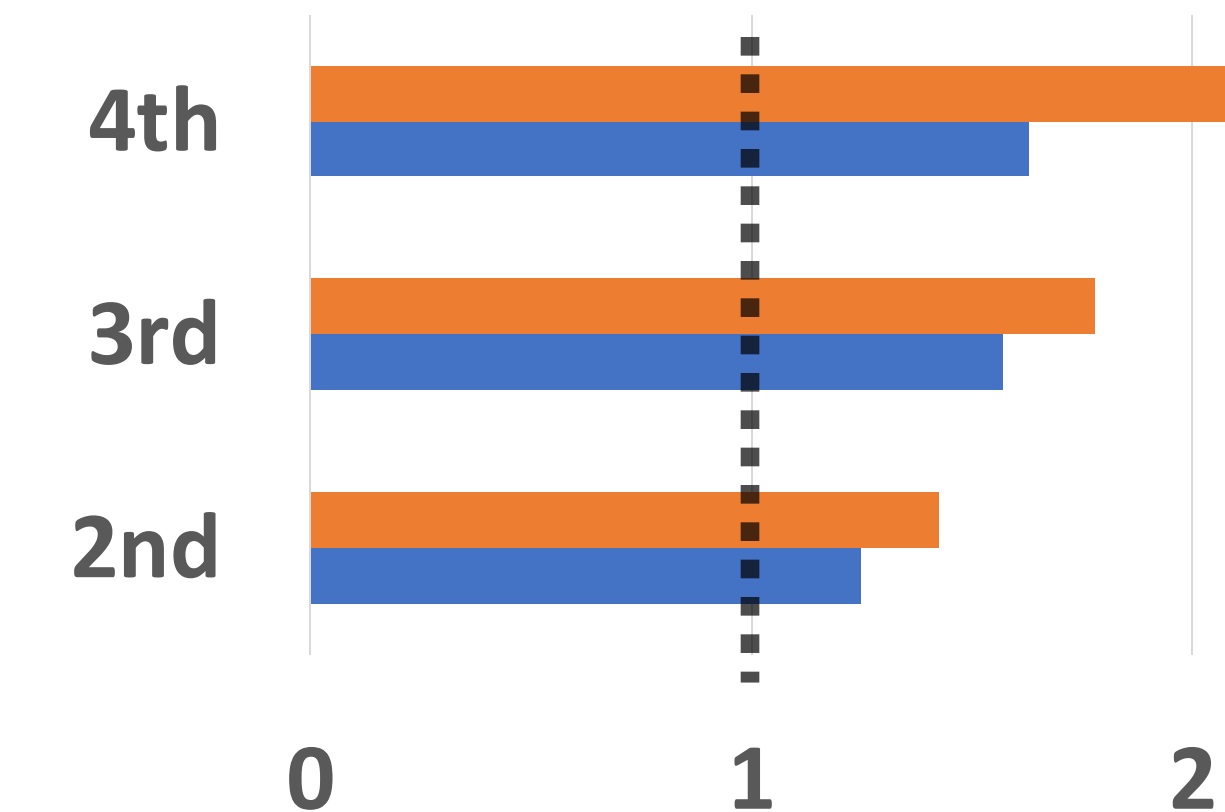
Results

- > 190,000 cases
- Average age 55.8 y.o.
- Male 58.6%
- White 81.2%
- Private insurance 50.3%
- B-E: odds ratio

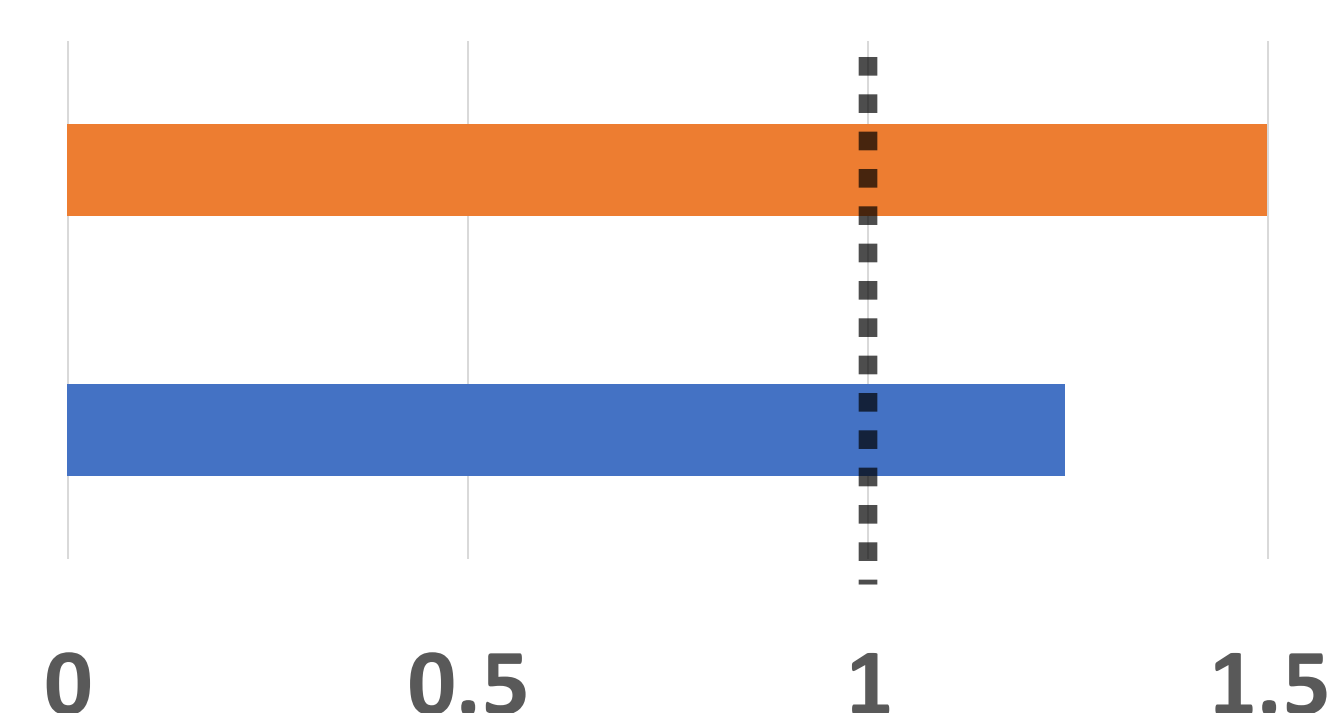
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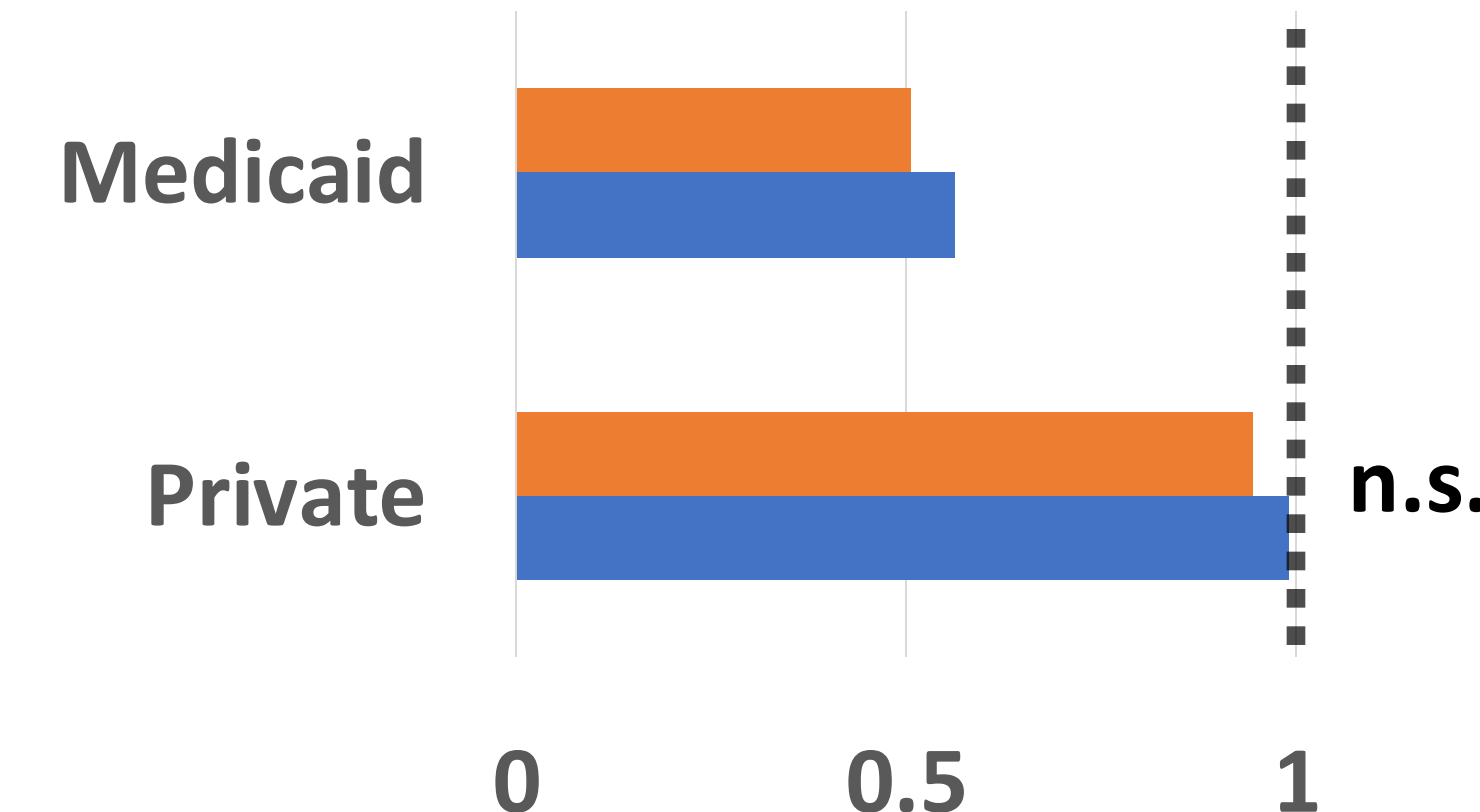
B. Income (vs. 1st)



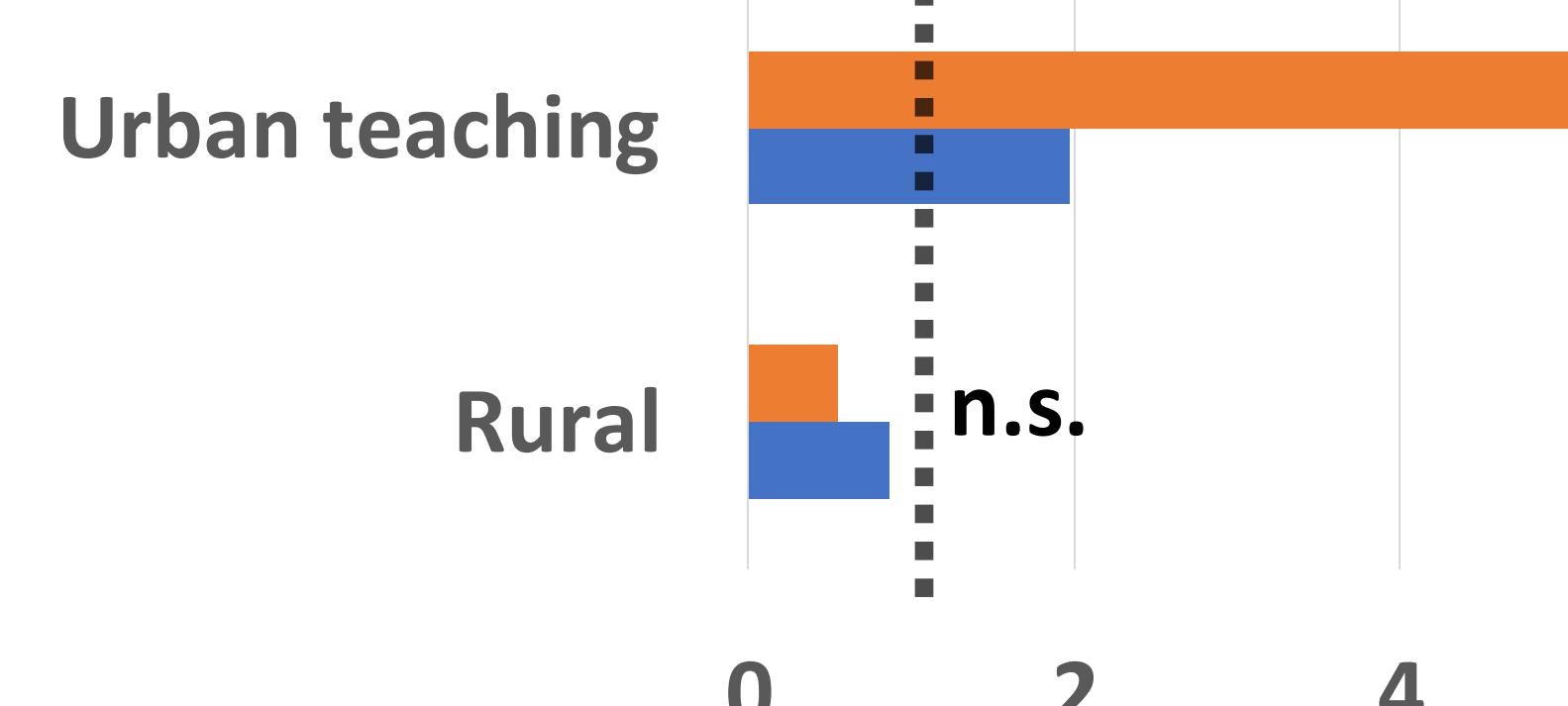
C. Chronic pain (vs. no)



D. Insurance (vs. Medicare)



E. Hospital (vs. urban nonteaching)



Conclusions

- Patients with low income and those with Medicaid have lower odds of receiving PNB.
- Patients with chronic pain are more likely to receive PNB.
- There is a higher odds of using PNB in urban teaching hospitals than non-teaching hospitals.

Implications

- Improving insurance coverage and reimbursement for regional anesthesia
- Supporting training and education
- Advancing knowledge and techniques

References

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2. Liu Z, et al. *Front Med.* 2022;9:1032253.
3. Hadzic A, et al. *Anesthesiology.* 2005;102(5):1001-1007.
4. Hamilton GM, et al. *Anesthesiology.* 2019;131(6):1254-1263.