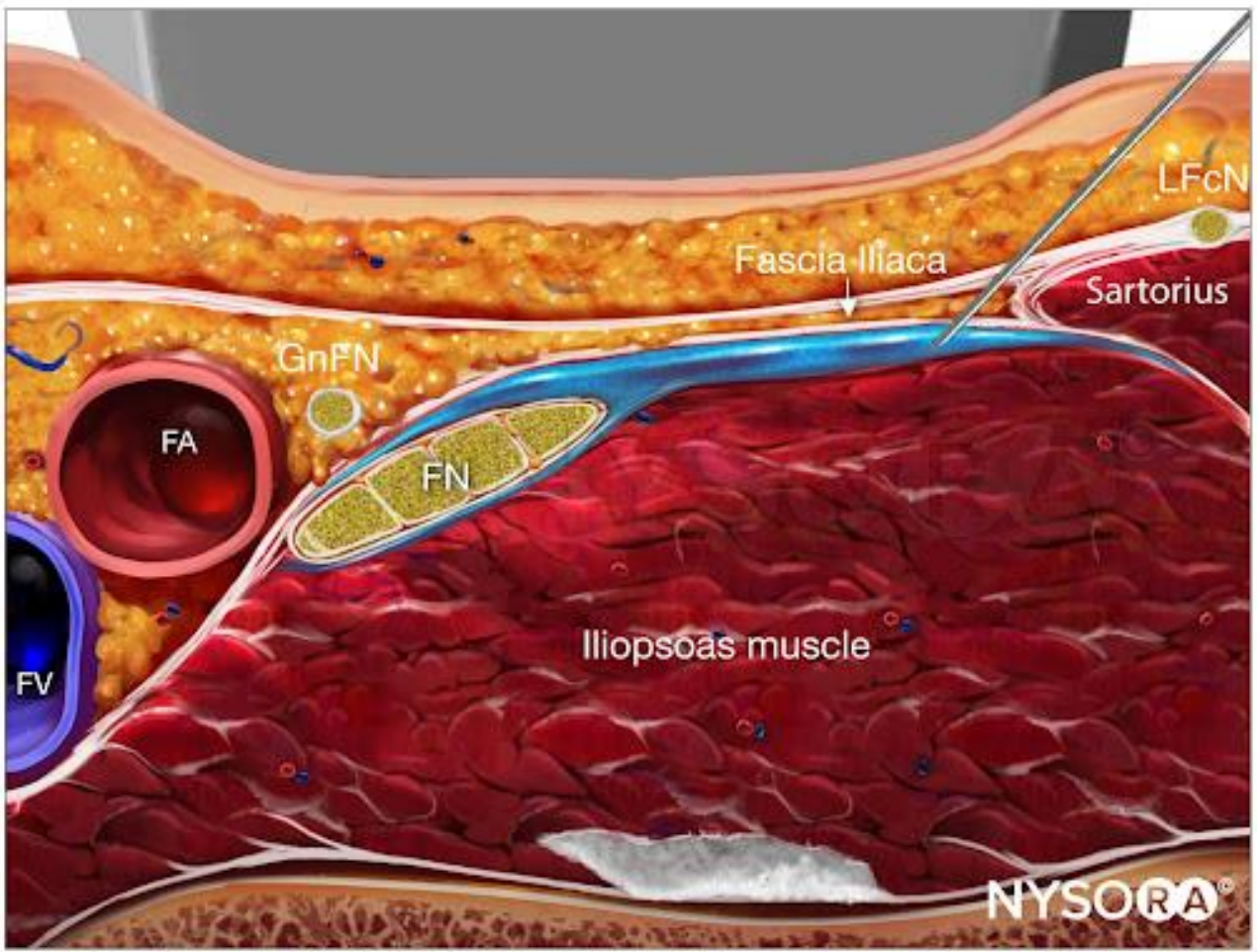


Analyzing Fascia Iliaca Practices in Patients Presenting to Emergency Department with Hip Fractures

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BACKGROUND: Fascia Iliaca Nerve Blocks among other regional anesthesia practices have gained traction as an adjunct for pain control in Emergency Departments within the last 10 years. In this study we look to identify potential racial disparities in fascia iliaca practices in community hospitals in San Diego California ED's.



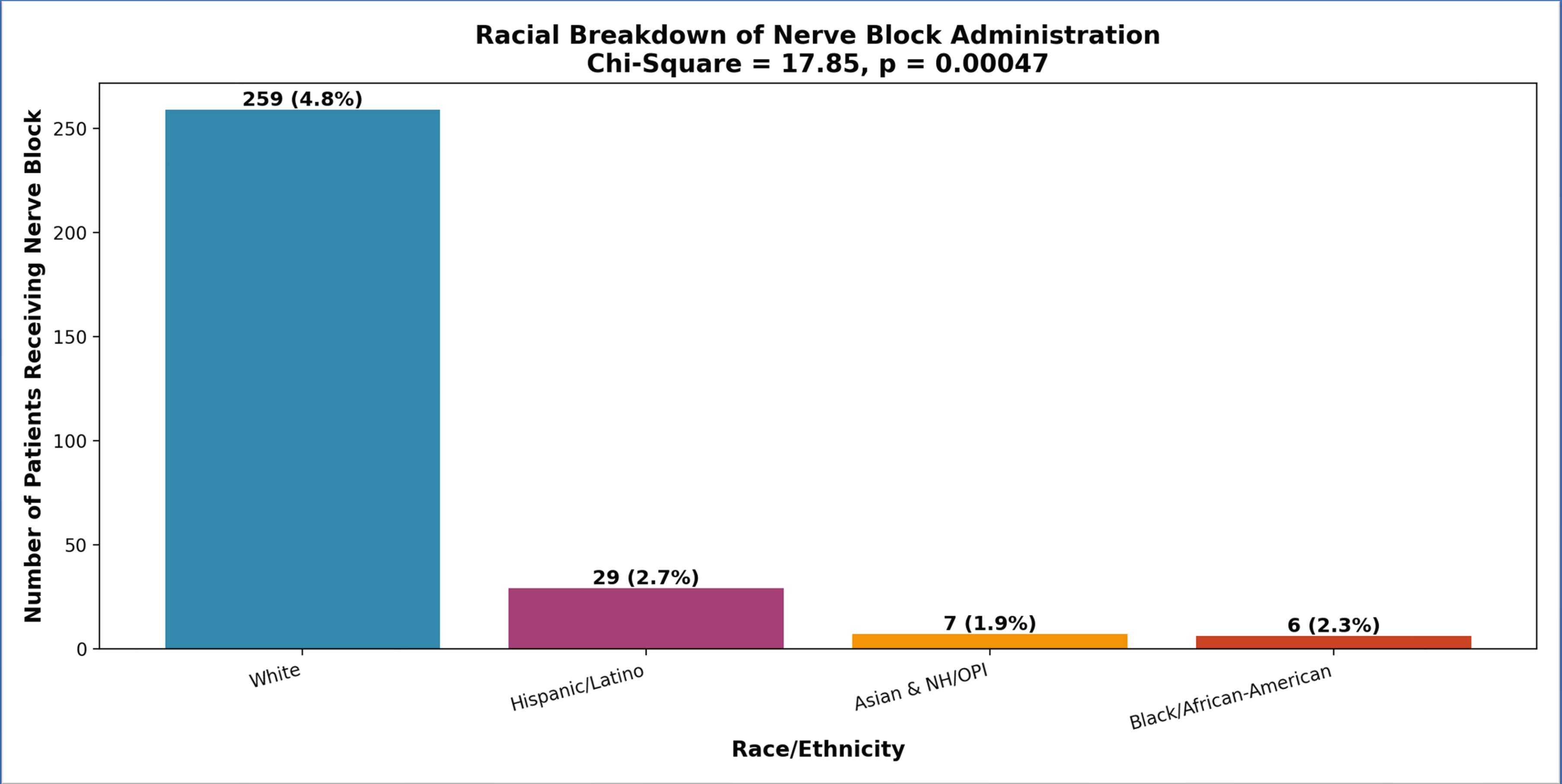
METHODS

- 1. Collected retrospective data from HealthConnect, the Kaiser Permanente EMR Database
- 2. Identify patients 18 years or older that visited San Diego KP ED's between January 1 2017 and December 31st 2023, had Hip Fracture Diagnosis, Bupivacaine was included in ED order or ED provider notes that included Nerve Block Verbiage
- 3. Chart Review to confirm Nerve Block procedure

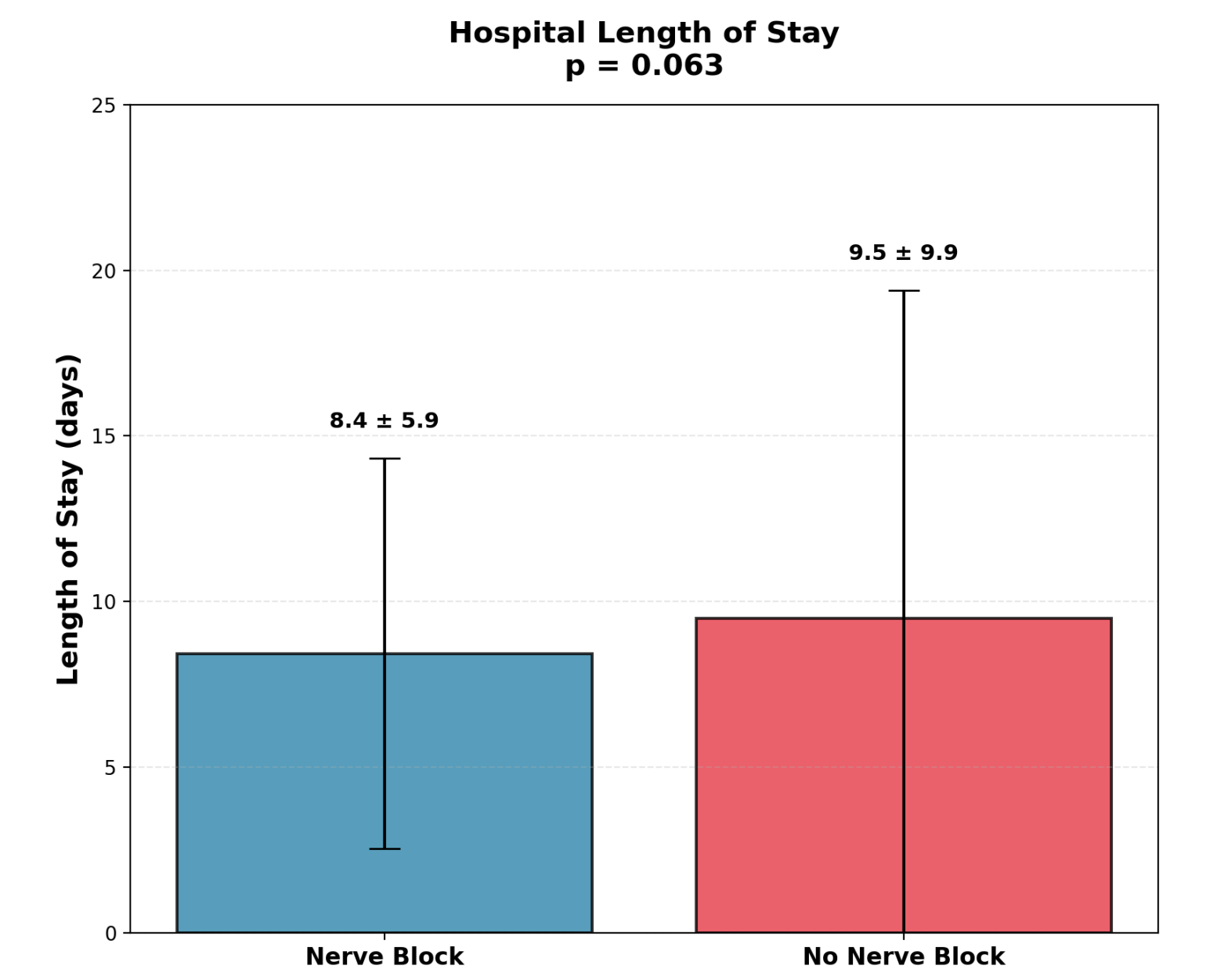
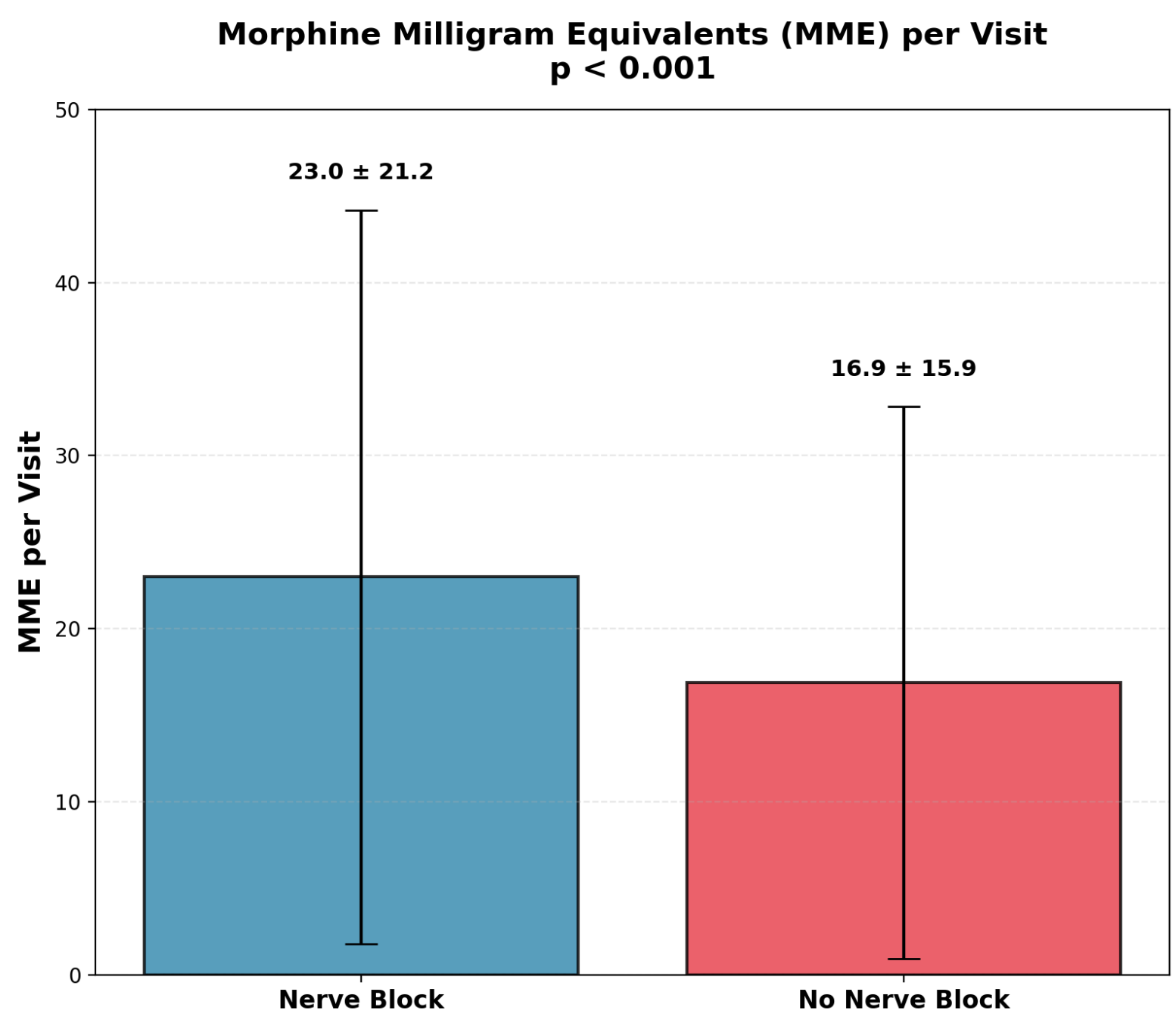
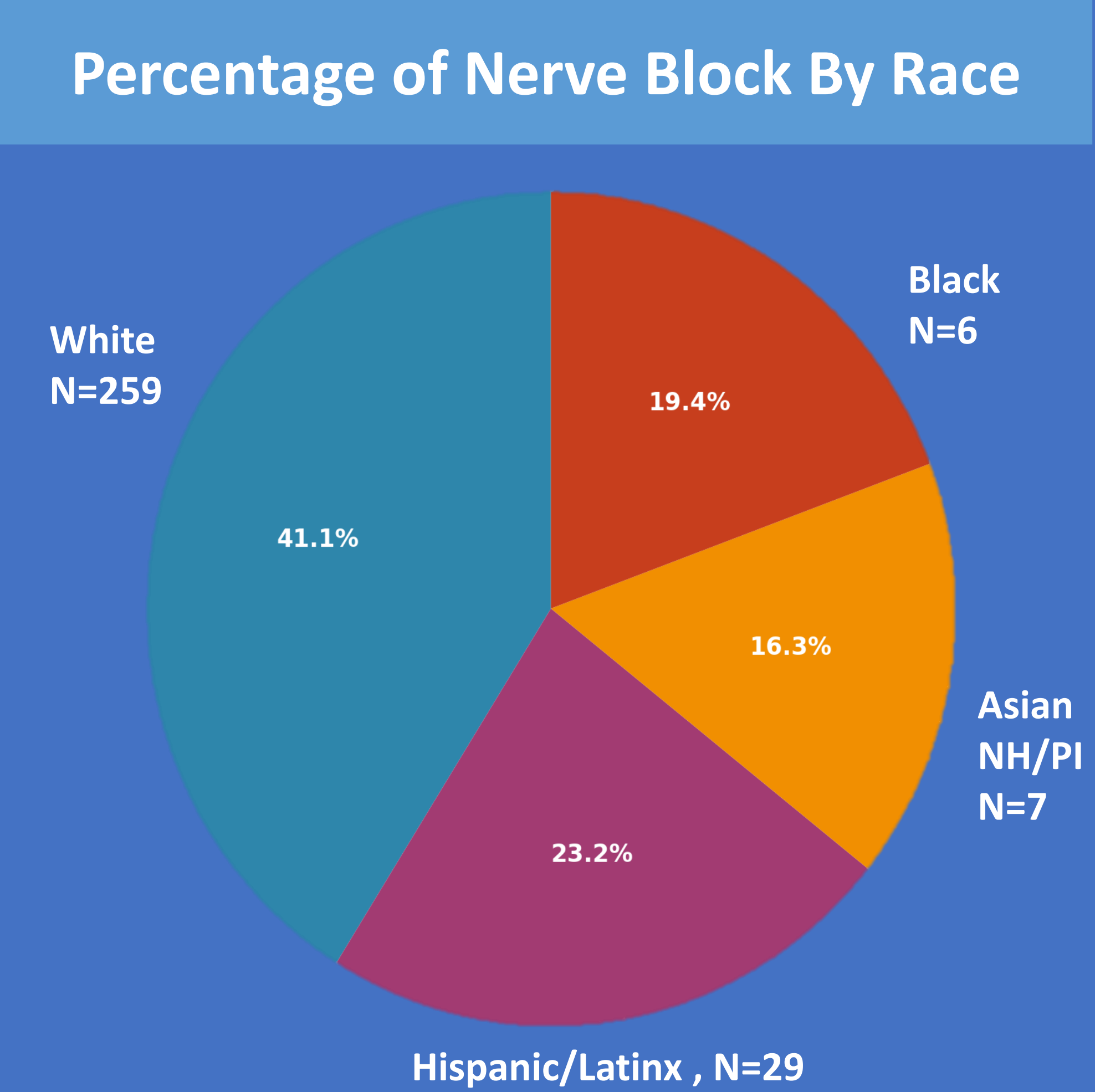
RESULTS

- A total of 7084 hip fractures were identified, of these, 301 (4.4%) received a fascia iliaca nerve block
- We found a statistically significant association between race and nerve blocks received for hip fracture, ($\chi^2(3, N = 6,783) = 17.85, p = 0.00047$).
- Regarding adjuvant opiate medication, we found a statistically significant increase in the use of parenteral opiate medications in patients that received a nerve block as compared to those who did not $p < 0.001$.
- Average Age
 - Nerve Block: 79 (SD 11.23)
 - w/o Nerve Block: 77 (SD 12.31)

There are statistically significant racial differences in the administration of fascia iliaca nerve blocks for hip fractures in the Emergency Department.



Race Group	No Nerve Block	Nerve Block	(%)	p-value
Asian & Native Hawaiian/Other Pacific Islander	359	7	366 (5.1%)	
Black/African-American	259	6	265 (3.7%)	
Hispanic/Latino/Spanish origin	1040	29	1069 (14.9%)	
White	5125	259	5384 (75.3%)	
Total	6783	301 (4.25%)	7084	p = 0.00047



Discussion

- White patients are more likely to receive regional anesthesia than Asian, Black, and Hispanic patients suggesting early inequity
- Statistically significant increase in opioid administration may be signaling that pain control is not adequate, thus prompting regional anesthesia
- No statistical difference in length of stay, however this was entire hospitalization and would be beneficial to look at ED LOS

Reference.

1. Racial-Ethnic Disparities in Opioid Prescriptions at Emergency Department Visits for Conditions Commonly Associated with Prescription Drug Abuse | PLOS ONE. (n.d.). Retrieved July 9, 2024, from <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0159724>

2. Nguyen, L. H., Dawson, J. E., Brooks, M., Khan, J. S., & Telusca, N. (2023). Disparities in Pain Management. *Anesthesiology Clinics*, 41(2), 471–488. <https://doi.org/10.1016/j.anclin.2023.03.008>

3. Patanwala, A. E., Kain, S. M., & Erstad, B. L. (2010). Intravenous Opioids for Severe Acute Pain in the Emergency Department. *Annals of Pharmacotherapy*, 44(11), 1800–1809. <https://doi.org/10.1345/aph.1P438>

4. Regional anesthesia in the emergency department outside the operating theatre—PMC. (n.d.). Retrieved July 9, 2024, from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10328532/>

5. Geriatric trauma G-60 falls with hip fractures: A pilot study of acute pain management using femoral nerve fascia iliac blocks. (n.d.). Retrieved October 7, 2024, from <https://ojs-ovid-com.kaiserpermanente.idm.oclc.org/article/01586154-201512000-00028/HTML>

6. Schaar, A. N., Finneran, J. J., & Gabriel, R. A. (2023). Association of race and receipt of regional anesthesia for hip fracture surgery. *Regional Anesthesia and Pain Medicine*, 48(8), 392–398. <https://doi.org/10.1136/rapm-2022-104055>

