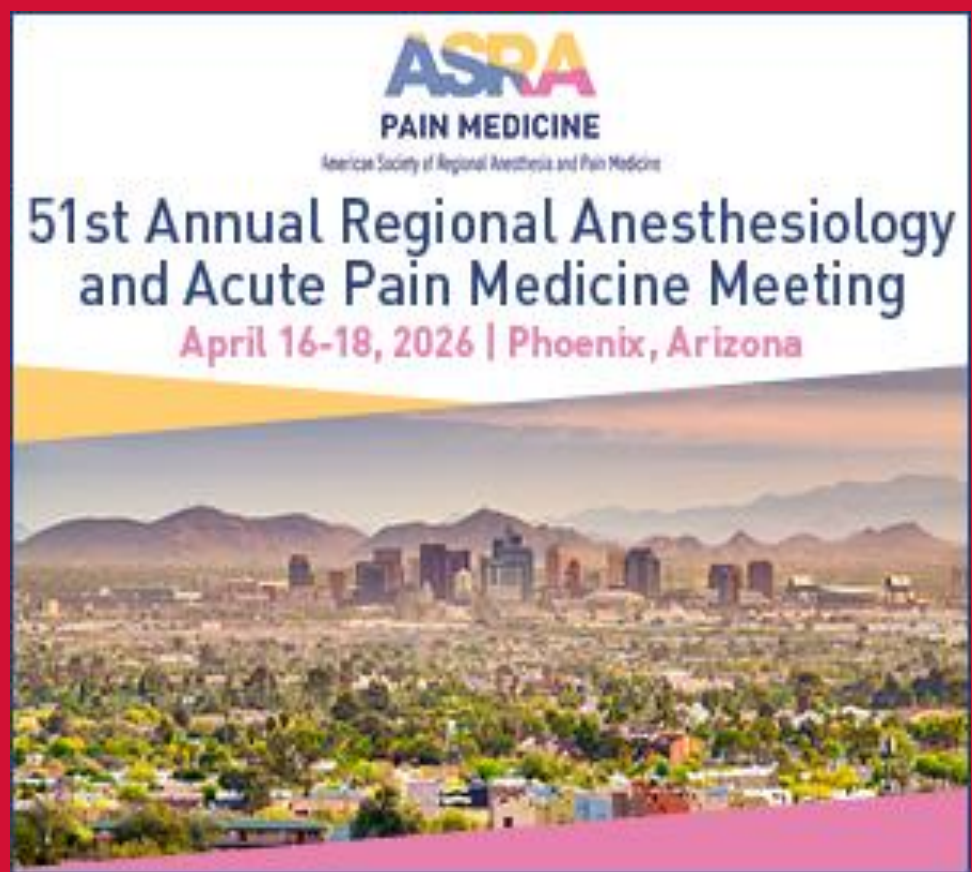


Regional Anesthesia Exposure in U.S. Anesthesiology Residency Programs and Its Association with RAAPM Fellowship Pursuit

Shreya Desai, BS¹ ; Alejandro Hallo-Carrasco, MD¹ ; Philopateer Ibrahim, BS¹ ; Andrew Lee, BA¹; Kalyna Leshcuk, BS¹ ; Nisha Narayanan, BS¹ ; Charles T Williams, BS¹ ; Aditi Master, MD¹ ; Nivetha Srinivasan, MD¹ Alexander Stone, MD²; Michael A. Akerman, MD³; Jean D. Eloy¹ ; Hari Kalagara, MD³; Christine L. Hunt, DO³

¹Rutgers New Jersey Medical School, Newark, NJ; ²Brigham and Women's Hospital, Boston, MA; ³Cooperman Barnabas Medical Center, Livingston, NJ; ⁴ Mayo Clinic, Jacksonville, FL



INTRODUCTION

- **Regional Anesthesia and Acute Pain Medicine (RAAPM) fellowships have experienced persistently high vacancy rates**, with nearly half of available positions remaining unfilled in the 2024 match.
- **This study evaluates anesthesiology residency program characteristics associated with greater pursuit of RAAPM fellowship training.**

MATERIALS & METHODS

- **Retrospective cross-sectional study of all ACGME-accredited U.S. anesthesiology residency programs.**
- **Program-level data were collected from publicly available sources**, including program websites and institutional materials; programs were contacted directly when information was unavailable.
- **Residency programs' characteristics** were analyzed and compared with the number of residents matching into RAAPM fellowships (2023–2025) to identify factors associated with higher fellowship pursuit.

RESULTS

- Fellowship match outcomes were identified for **45 anesthesiology residency programs with publicly available data across the past three fellowship match cycles**. Among these programs, most were university-based (57.8%) and large programs (>10 residents/year, 60%). An in-house RA fellowship was present in 35.6% of programs. Regional Anesthesia (RA)-trained leadership was uncommon (PD: 4.4%; APD: 8.9%).
- Nearly 47% of programs produced no RA fellows, while **the top five programs accounted for 45% of all matches**, indicating substantial variability in fellowship output.
- **Predictors of fellowship pursuit: A greater number of dedicated RA rotations correlated with higher fellowship matching ($p = 0.497$, $p = 0.0005$) (Figure 1)**, demonstrating a dose-response relationship (mean matches: 0.74 with 1 block, 2.56 with 2 blocks, 3.62 with 3 blocks). **Programs with an in-house RA fellowship also showed higher match rates (2.62 vs 1.43, $p = 0.045$) (Figure 2)**, while RA-trained leadership and faculty numbers were not significantly associated with fellowship output.

Figure 1.- Dedicated RA Blocks vs Fellowship Matches

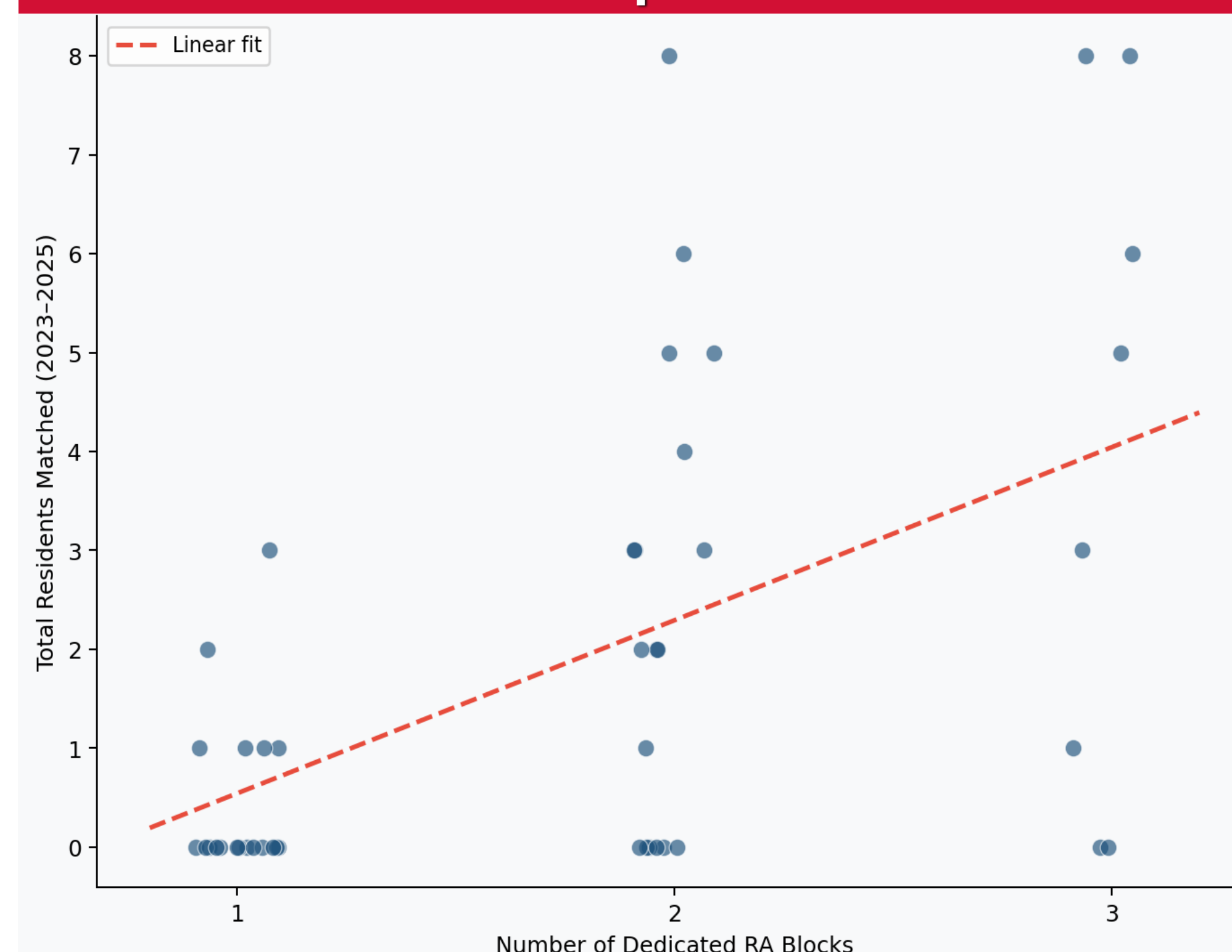
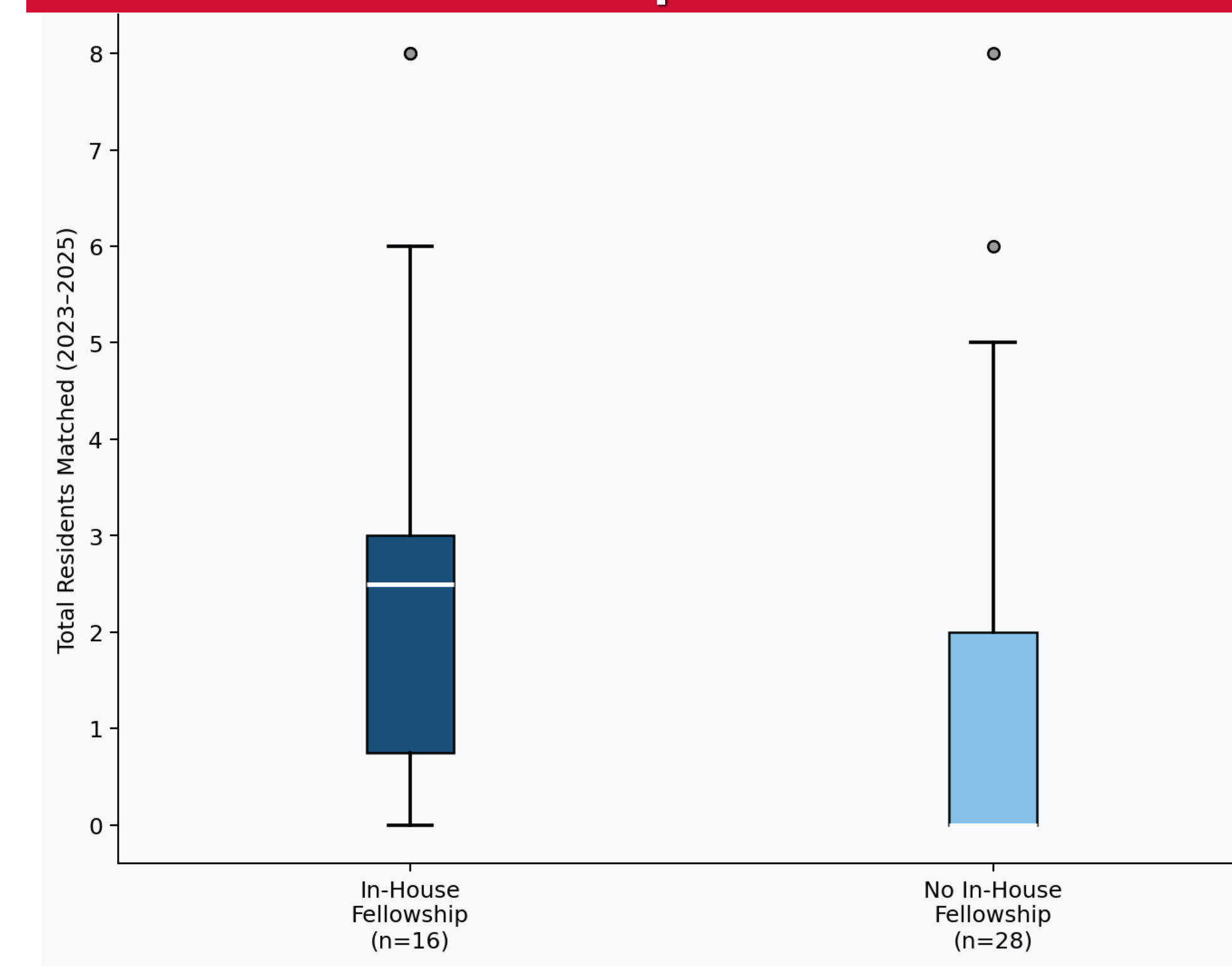


Figure 2.- Fellowship Matches: Inhouse Fellowship vs None



DISCUSSION

- **Regional anesthesia curriculum structure appears to influence fellowship pursuit.** Programs with a greater number of dedicated RA rotations and those with an in-house RA fellowship demonstrated higher RAAPM fellowship match rates, suggesting that increased exposure and institutional infrastructure may promote subspecialty interest.
- **Substantial variability exists across residency programs in RA training opportunities and outcomes.**

TAKEAWAYS

Expanding dedicated regional anesthesia training opportunities during residency may strengthen the pipeline of residents pursuing RAAPM fellowships.

Improving mentorship, subspecialty infrastructure, and transparency of regional anesthesia training may represent key opportunities to support resident engagement in RAAPM.

REFERENCES

1. Pritzlaff, S ; Declining pain medicine fellowship applications from 2019 to 2024 ; *Pain practice : the official journal of World Institute of Pain* ; 2025 ; [PMC11683513](#)
2. Nguyen KT ; Assessment of the Accessibility and Content of Both ACGME Accredited and Nonaccredited Regional Anesthesiology and Acute Pain Medicine Fellowship Websites ; *J Educ Perioper Med* ; 2021 ; [PMC8168570](#)
3. Regional Anesthesiology & Acute Pain Medicine Data Report. SF match - residency and Fellowship Matching Services. Accessed November 21, 2025.