



New Jersey Medical School

Trends in Publication Volume Among Residents from Different Specialty Programs who Matched into Pain Medicine Fellowship

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Background

- The American Board of Medical Specialties (ABMS) currently offers Pain Medicine certification for multiple specialties including:
 - Anesthesiology, Physical Medicine and Rehabilitation (PM&R), Neurology, Psychiatry, Family Medicine, Emergency Medicine, Internal Medicine, and Radiology.
- Evaluation of candidates for these fellowship programs entails considering academic achievements, clinical experiences, letters of recommendation, and research contributions
- Recent research has begun to explore factors distinguishing select applicants from others during fellowship applications. Despite the annual release of match data by the NRMP, specific details regarding research output, specifically pain publications, are lacking.
- This study seeks to examine trends in both publication volume and type among residents from different specialties who secured positions in pain fellowship programs.

Methods

- Pain fellowship programs in the US were identified using ASRA Pain Fellowship Directory and Association Pain Program Directors Directory.
- All pain fellows from the graduating class of 2024 were identified from program websites. Residency specialties included were Anesthesiology, PM&R, Neurology, Family Medicine, Emergency Medicine, and Internal Medicine.
 - Psychiatry was excluded due to only one resident obtaining a fellowship position.
- Publication volume, encompassing first and second authorship, publications in specialty specific journals (e.g. Anesthesiology journals for Anesthesiology-trained pain fellows), and total publications, was recorded prior to the end of June in the application year for each fellow, utilizing PubMed and Google Scholar.
- ANOVA was utilized for statistical analysis of 330 fellows from the class of 2024.
- Less than 10% of the total fellows were excluded because their publications could not be identified using this methodology.

Table 1. Publication output in relation to residency specialty

Residency Specialty	Total Publications, mean ± STD	Total Publications in Specialty-Related Journals, mean ± STD	Total Pain Publications, mean ± STD	Total First Author Pain Publications, mean ± STD	Total Second Author Pain Publications, mean ± STD
Anesthesiology	1.24 ± 2.52	0.26 ± 0.71	0.15 ± 0.47	0.05 ± 0.23	0.04 ± 0.19
PM&R	1.67 ± 3.11	0.31 ± 0.97	0.33 ± 1.16	0.11 ± 0.63	0.10 ± 0.33
Emergency Medicine	0.86 ± 0.86	0.14 ± 0.36	0.07 ± 0.27	0	0
Neurology	1.00 ± 1.31	0.25 ± 0.46	0.38 ± 1.06	0.13 ± 0.35	0.25 ± 0.71
Internal Medicine	0.50 ± 1.00	0	0	0	0
Family Medicine	0	0	0	0	0
ANOVA p-value	0.628	0.921	0.438	0.790	0.172
ANOVA F statistic	0.695	0.284	0.968	0.482	1.670

Results

- Number of publications for the Class of 2024 fellows in fellowships programs from specialties were compared (Table 1).
- There was no significant difference in the total number of publications by Class of 2024 fellows based on the specialty (F = 0.69, p = 0.63).
- There was also no significant difference in the number of publications in specialty specific journals by Class of 2024 fellows based on their specialty (F = 0.28, p = 0.92).
- There was no significant difference in the number of pain publications (F = 0.97, p = 0.44) by Class of 2024 fellows based on specialty.
- There was no significant difference in number of first author (F = 0.48, p = 0.79) or second author (F = 1.92, p = 0.09) publications by Class of 2024 fellows based on specialty.

Discussion

- This study describes trends in the publication volume among residents from different specialties who secured positions in pain medicine fellowship.
- Our results suggest that publication volume by residents from different specialties does not have an impact on matching to pain fellowship programs.
- This analysis offers valuable insights into the competitiveness of pain fellowship, as evidenced by the research output among applicants.
- We aim for this analysis to serve as a helpful resource for future applicants navigating the pain medicine fellowship match.

Citations

1. Sandy Christiansen, Scott Pritzlaff, Alexander Escobar, Lynn Kohan, A sudden shift for Pain Medicine fellowships – A recount of the 2024 match, Interventional Pain Medicine, Volume 3, Issue 2, 2024, 100404, ISSN 2772-5944, <https://doi.org/10.1016/j.inpm.2024.100404>.

2. Wahezi SE, Naeimi T, Caparo M, Emerick TD, Choi H, Eshraghi Y, Anitescu M, Patel K, Przkora R, Wright T, Moeschler S, Barad M, Rand S, Oh-Park M, Seidel B, Yener U, Alerte J, Shaparin N, Kaye AD, Kohan L. Trainee Insight into Pain Fellowship Programs: A Critical Evaluation of the Current Educational System by the APPD. Pain Physician. 2024 Jul;27(5):E627-E636. PMID: 39087976.

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