

CHANGES IN THE LANDSCAPE OF CLINICAL BACKGROUNDS OF PAIN MEDICINE FELLOWS FROM 2019-2024

Vasanth Selvam DO¹, Nivetha Srinivasan MD², Aditi Master MD²,
Alejandro Hallo-Carrasco MD², Jean Daniel Eloy MD²

Good Samaritan University Hospital¹, Rutgers New Jersey Medical School²

INTRODUCTION

- The dynamic field of pain medicine benefits from the diverse clinical backgrounds of physicians, such as anesthesiology, PM&R, neurology, and other specialties.
- There has been a noticeable shift in the clinical backgrounds of residents pursuing pain medicine
- This study aims to provide an analysis of pain medicine fellows and program directors from 2020 to 2024.

METHODS

- We assessed public data from ACGME-accredited pain programs, focusing on the backgrounds of fellows from the graduating classes of 2020 to 2024.
- Additional information was gathered from social media platforms of programs and professional networking sites to identify further fellows.
- Collected information included gender, race, residency specialties, and fellowship graduation years
- Linear regression analysis was applied to assess trends in the distribution of fellows across specialties.

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Table 1. Pain Medicine Fellows from the Classes of 2020 to 2024, Categorized by Clinical Background

	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
Specialty	N(%)	N(%)	N(%)	N(%)	N(%)
Anesthesiology	109(73.7%)	137(71.7%)	128(62.4%)	168(64.1%)	194(57.9%)
PM&R	35(23.7%)	49(25.7%)	67(32.7%)	83(31.7%)	109(32.5%)
EM	1(0.7%)	0(0.0%)	3(1.5%)	5(1.9%)	14(4.2%)
Neurology	2(1.4%)	3(0.0%)	4(2.0%)	4(1.5%)	8(2.4%)
Other (FM, IM, psych, preventative)	1(1.4%)	2(0.0%)	3(1.5%)	2(0.8%)	8(2.4%)
Family Medicine	1(0.7%)	1(0.5%)	1(0.5%)	0(0.0%)	2(0.6%)
Psychiatry	0(0.0%)	1(0.5%)	1(0.5%)	1(0.4%)	1(0.3%)
Preventative Medicine	0(0.0%)	0(0.5%)	1(0.5%)	0(0.0%)	1(0.3%)
Internal Medicine	0(0.0%)	0(0.0%)	0(0.0%)	1(0.4%)	4(1.2%)

Table 2. Total Number of Pain Medicine Fellows from the Classes of 2020 to 2024, Categorized by Region

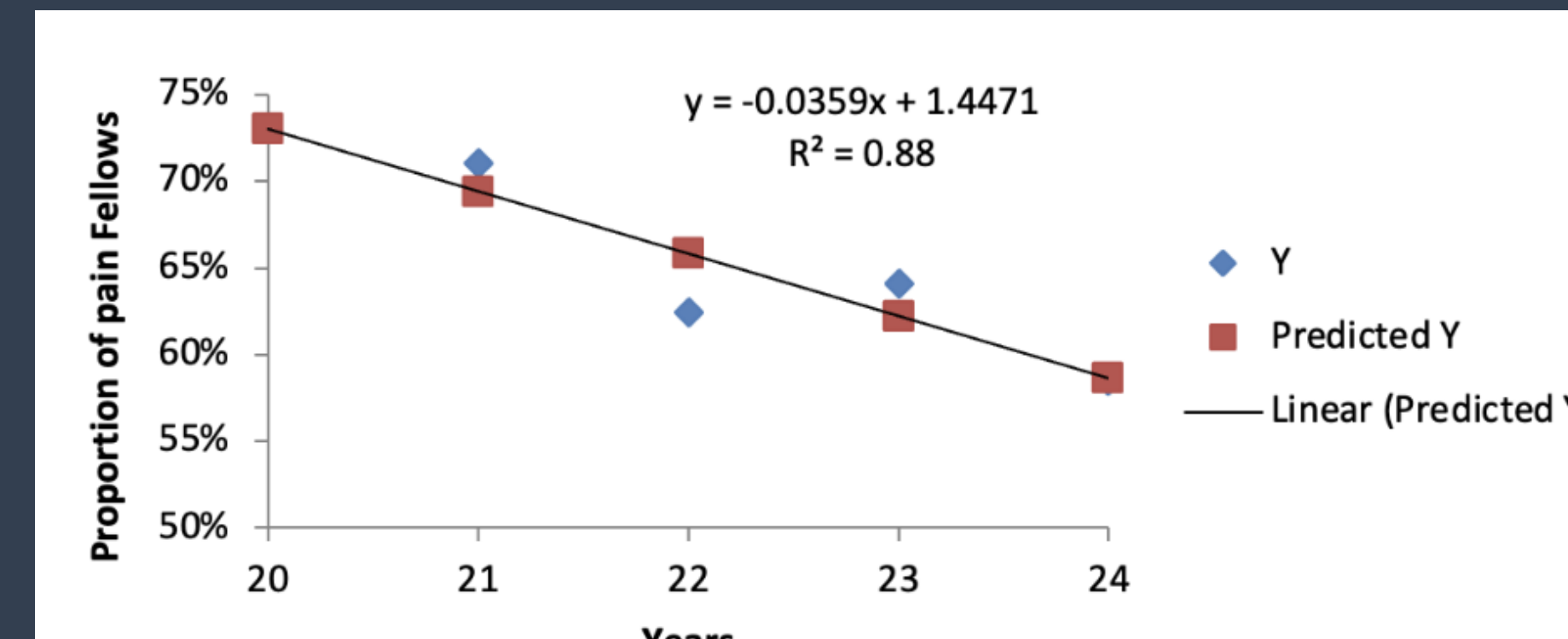
	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
Total Fellows	148	191	205	262	333
% of total fellows captured	42.9%	52.9%	60.8%	72.4%	93.0%
Region	N(%)	N(%)	N(%)	N(%)	N(%)
Northeast	63 (42.6%)	68(35.6%)	80(39.0%)	97(37.0%)	109 (32.5%)
Midwest	35(23.65%)	45(23.6%)	37(18.1%)	48(18.3%)	76(22.7%)
South	33(22.3%)	53(27.8%)	64(31.2%)	76 (29.0%)	110 (32.8%)
West	17(11.49%)	22(11.5%)	23(11.2%)	36(13.7%)	35(10.5%)
Other Countries/Military	0(0.0%)	3(1.6%)	1(0.5%)	5(1.9%)	3 (0.9%)

Table 3. Pain Medicine Fellows from the Classes of 2020 to 2024, Categorized by Gender and Race

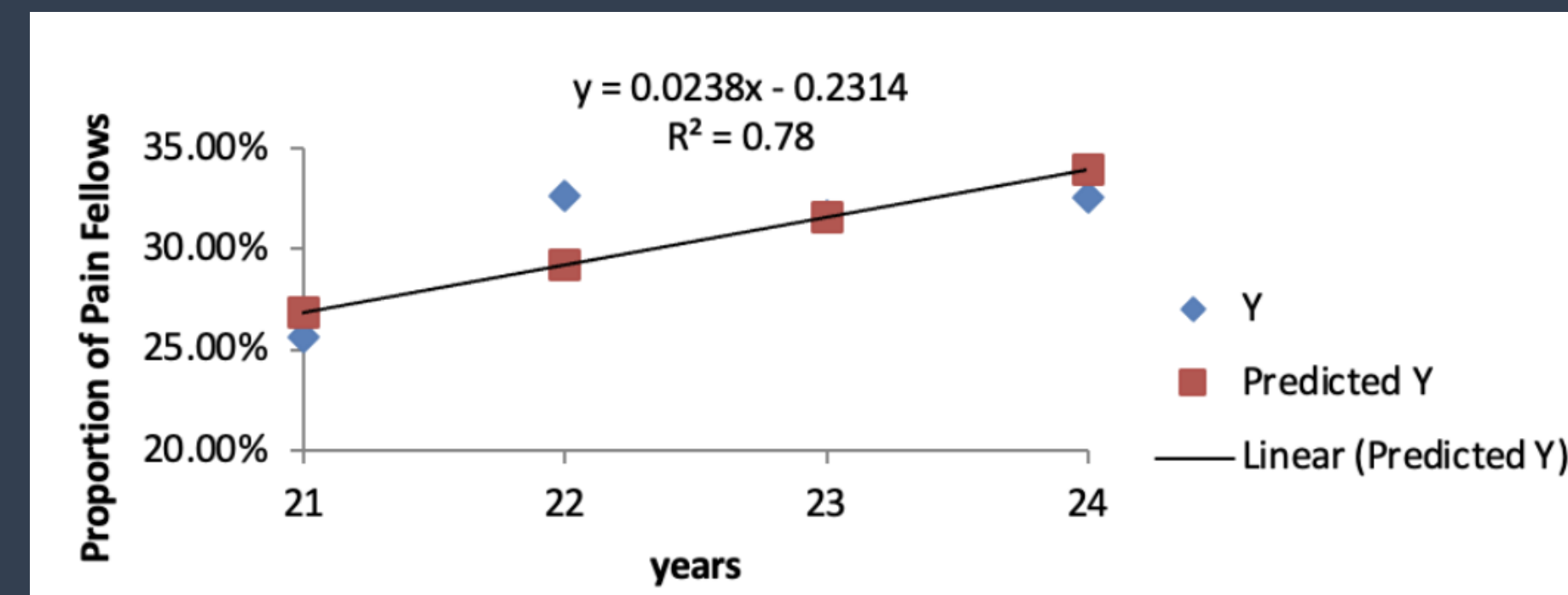
	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
Gender	N(%)	N(%)	N(%)	N(%)	N(%)
F	40(27%)	47(24.6%)	37(18.1%)	63(24.1%)	71(21.2%)
M	108(73.0%)	144(75.4%)	168(82.0%)	199(76.0%)	262(78.2%)
Race	N(%)	N(%)	N(%)	N(%)	N(%)
White	65(43.92%)	89(46.6%)	112(54.6%)	121(46.2%)	154(46.0%)
Black	11(7.43%)	7(3.7%)	9(4.4%)	13(5.0%)	23(6.9%)
Hispanic	1(0.7%)	6(3.1%)	8(3.9%)	21(8.0%)	12(3.6%)
Asian	55(37.2%)	80(41.9%)	58(28.3%)	90(34.4%)	110(32.8%)
Other	16(10.8%)	9(4.7%)	18(8.8%)	17(6.5%)	34(10.2%)

Figure 1. Linear Regression of Proportion of Pain Fellows from 2020 to 2024 who are:

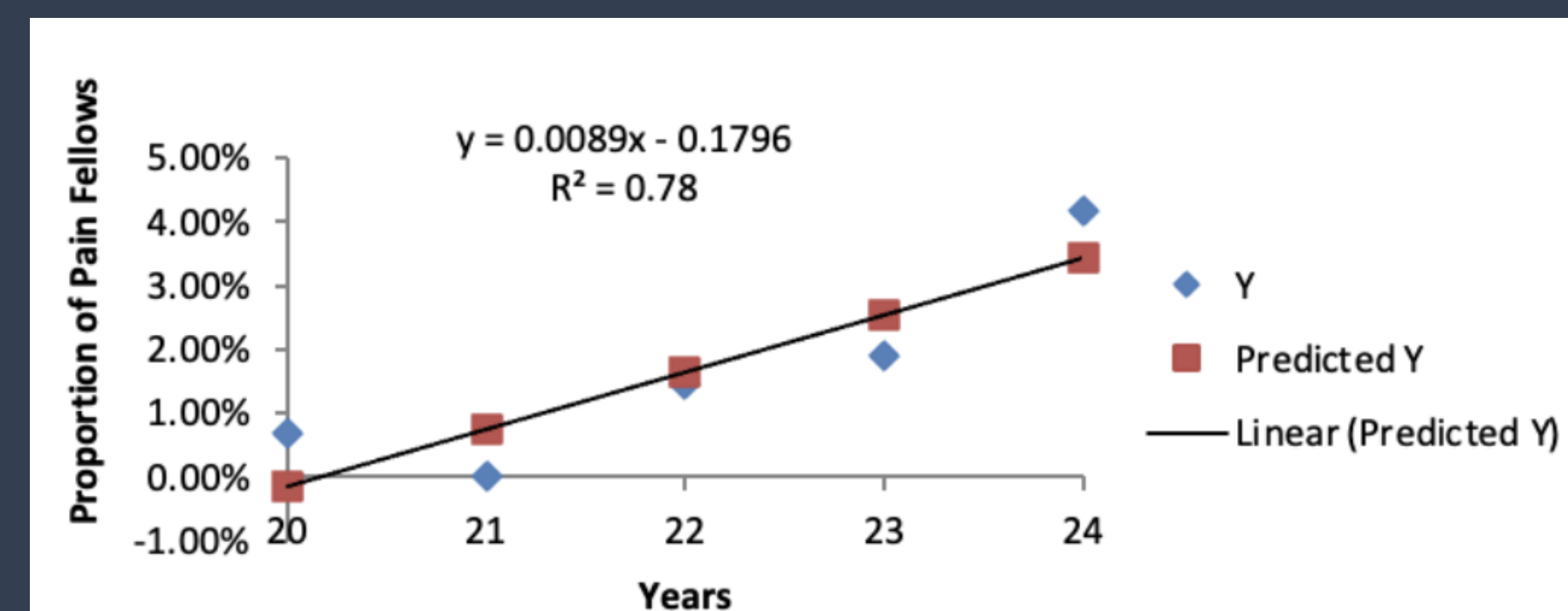
A) Anesthesia-trained



B) PM&R-trained



C) EM-trained



RESULTS

- There has been a **notable decline in the proportion of anesthesiology residents** matching into pain fellowships.
- In 2020, 73% of pain medicine fellows were former anesthesiology residents; by 2024, this decreased to 59% ($p < 0.05$, figure 1a).
- In contrast, The representation of PM&R and EM residents have significantly increased in pain fellowships ($p < 0.05$, figure 1b, 1c).
- Specifically, the proportion of PM&R residents increased from 23% to 32%, and EM residents rose from 0.7% to 4.2% (Table 1).
- No significant changes were observed in the representation of residents from other specialties, including neurology, family medicine, and psychiatry.
- No significant differences were found in the demographic analysis (Tables 2,3).
- As of 2024, 82% of pain medicine fellowship program directors are anesthesiologists, 14% are from PM&R, with the remainder from neurology and psychiatry.

CONCLUSION

- **The decline in anesthesiology residents entering pain medicine fellowships and the increase in fellows from PM&R and EM backgrounds suggest a shifting landscape in the field.**
- This trend may reflect evolving interests among residents and changes in the structure of training.
- The decreasing interest among anesthesiology residents could be influenced by economic factors such as increases in general anesthesiology salaries and job availability.
- The predominance of anesthesiologists among fellowship program directors highlights their influence in the field, though the rising presence of PM&R and EM fellows indicates a diversification of approaches in pain management.
- Continued monitoring of these trends is essential for understanding their long-term impact on fellowship training and patient care.