



# Publication Trends Among Emergency Medicine Residents, Fellows, and Graduates and Its Relationship to Future Academic Achievement

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## INTRODUCTION

The ACGME places great emphasis on research throughout residency. One reason this emphasis is placed on research is the practice of evidence based medicine. As future physicians practicing evidence based medicine, it is imperative residents know how to interpret and produce research themselves. The long term impacts of this scholarly activity on future careers of residents is unknown.

## OBJECTIVES

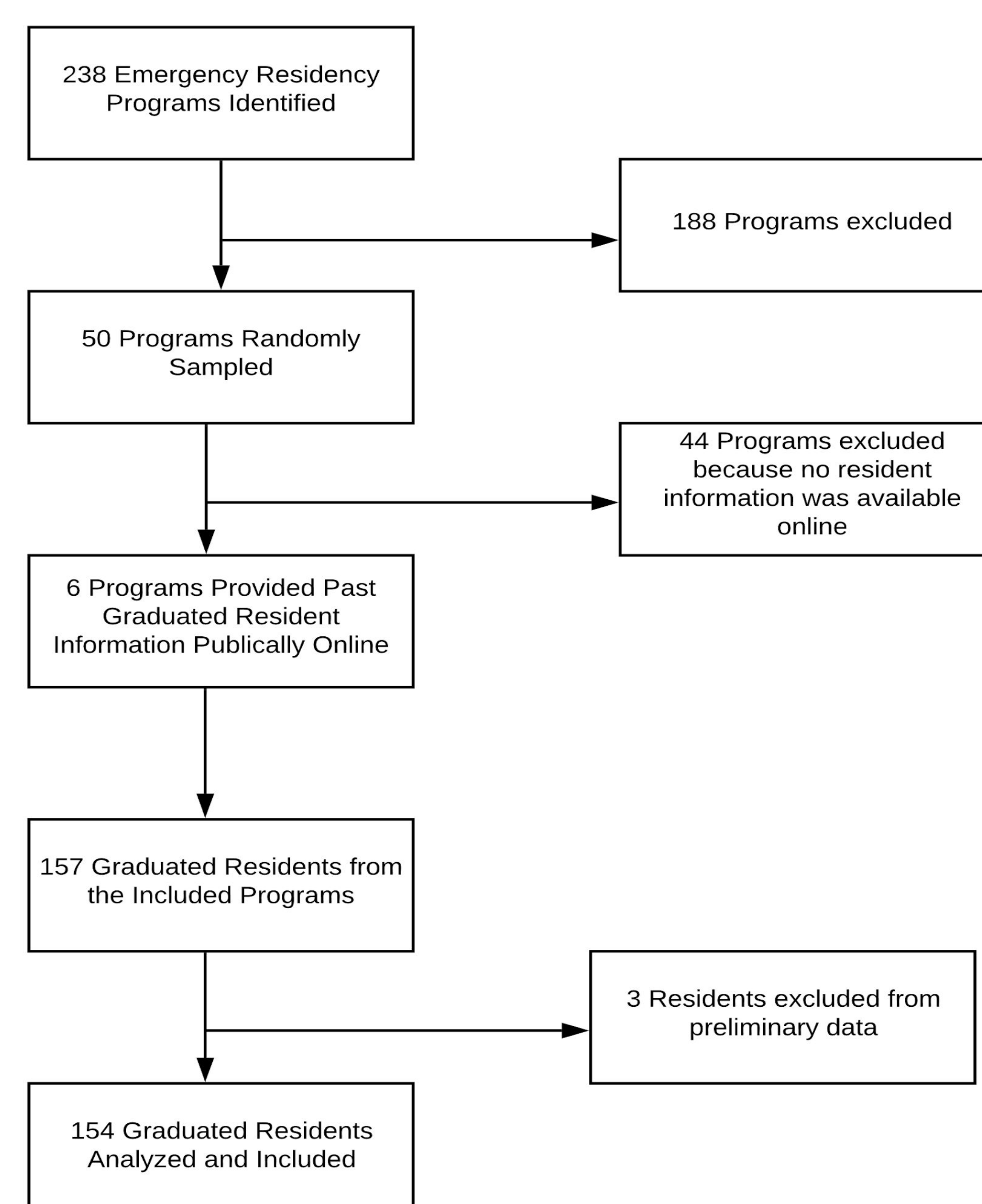
The objective of our study was to provide a baseline assessment of the current research characteristics and practices in Emergency Medicine residency program graduates and how that may correlate to future pursuit of fellowship and career in academia.

## METHODS

We used Doximity to find residency programs available in Emergency Medicine. 50 programs were then chosen at random for our sample. Investigators utilized information available online to obtain the graduated resident's name for 2013, 2014, and 2015. For programs where this information was unavailable, we emailed the program contact listed on the website once weekly for six weeks to give adequate time for acquisition of the information. Data was extracted through a Google form in a blind and duplicate fashion for each graduate's baseline characteristics such as fellowship pursuit, career in academia, H-index, etc.

## CHARTS AND FIGURES

### Flow Chart for Included Graduates



Publication Trends (n=206)	
Mean number of total publications for all graduates	0.78
Mean number of publications before residency	0.14
Mean number of publications during residency	0.25
Mean number of publications after residency	0.39
2013 Graduates	
Prior to Residency	0.09
During Residency	0.11
Post Residency	0.23
Total Average	0.41
2014 Graduates	
Prior to Residency	0.2
During Residency	0.44
Post Residency	0.63
Total Average	1.27
2015 Graduates	
Prior to Residency	0.13

Table 1. Sample Characteristics of Emergency Medicine Graduates (n=206)

Gender of Emergency Medicine Graduates	Female	69 (33.5%)
	Male	137 (66.5%)
Degree Type of Emergency Medicine Graduates	DO	123 (59.7%)
	MD	83 (40.3%)
H-Index of Graduates	0	150 (72.8%)
	1	40 (19.4%)
	2	10 (4.9%)
	3	1 (0.5%)
	4	3 (1.5%)
	6	1 (0.5%)
Pursuit of a Fellowship	No	187 (90.8%)
	Yes	19 (9.2%)
Fellowship Type (n=19)*	Anesthesia	1 (5.3%)
	Ultrasound	4 (21.1%)
	Emergency Medical Services	6 (31.6%)
	Health Policy	2 (10.5%)
	Medical Toxicology	3 (15.8%)
	Palliative	1 (5.3%)
	Pediatrics	2 (10.5%)
	Disaster Medicine	1 (5.3%)
	Pre-hospital	1 (5.3%)
	Total Number of Publications	0
1		40 (26.0%)
2		11 (7.1%)
3		6 (3.9%)
Career in Academia	4+	6 (3.9%)
	No	175 (85.0%)

## RESULTS

Our study found the majority of Emergency Medicine graduates did not pursue a fellowship or a career in academia. The majority of graduates had an H-index of 0 and over half of the graduates had no publications. Additionally, most Emergency Medicine graduates in our sample were male and received a D.O. degree.

## CONCLUSION

The average research experiences for matched Emergency Medicine Residents in 2018 was 2.5 whereas the average experiences for all matched applicants was 3.3. Our study additionally found the average number of publications for EM graduates to be 0.87. If research is regarded as an important quality for residency applicants to have, this can potentially increase the number of Emergency Medicine graduates pursuing careers in academia, fellowships, and continuing research throughout their careers. Additionally, a greater emphasis placed on research throughout residency may help residents feel more comfortable using evidence based medicine and contributing to research as practicing physicians.

## REFERENCES

1. Home - The Match, National Resident Matching Program. The Match, National Resident Matching Program. <https://www.nrmp.org/>. Accessed November 20, 2019.