#### Submission Title:

*Emergency Physician Authorship in the New England Journal and Journal of the American Medical Association* 

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## Abstract

### **Introduction and Purpose**

Emergency Medicine (EM) is still a relatively young specialty, and there are numerous ways one may evaluate the growing influence of EM researchers on the field of medicine (e.g. increased number of federally funded research studies). We reviewed articles in NEJM and JAMA before and after a decade interval to assess trends in EM author contributions to these high impact US-based, general medical journals.

### Methods

The lead investigator from a community-based, EM training facility conducted a structured review of publications in NEJM and JAMA to compare the number of EM first authors during the first six months of 2008 and 2018. The following article types were included in our analysis: meta-analyses, systematic reviews, original research, case series, and case reports. Publication characteristics collected included: journal name, year, month, volume, issue, title, first author specialty, total number of authors, and the type of article published. We determined the specialty of the lead author for each publication by reviewing the listed affiliation department. A second blinded study author reviewed a sample of 25 articles to assess for inter-observer agreement (kappa). Categorical variables were analyzed by chi-square.

#### Results

Study authors reviewed 276 articles; 178 from NEJM, 148 randomized trials, and 140 were from 2008. The most common specialties represented as first author were cardiology 43 (15.6%) and oncology 26 (9.4%). Only six articles (2.1%) had EM first authors. In 2008 NEJM had one (1.1%) EM first author and in 2018 there were two

(2.2%)(p=0.5). In 2008 JAMA had one (2.0%) EM first author and in 2018 there were two (4.2%)(p=0.5). There were no significant differences with respect to the proportion of first EM authors that appeared in NEJM vs. JAMA overall during the two time periods (p=0.4) and the proportion of EM authors that appeared in both journals in 2008 vs 2018 (p=0.4). There were no significant differences in the proportion of EM first authors for NEJM vs JAMA in 2008 (p=0.7) and 2018 (p=0.5), respectively. Inter-rater reliability (kappa) was almost perfect for classification of EM first author (1.0), specialty type (0.95), and type of study (1.0).

## Conclusion

Within our study sample for 2008 and 2018, we found that there was a paucity of first author representation for emergency medicine in NEJM and JAMA.