

## The Limited Academic Footprint of Hospital Medicine: Where Do We Go From Here?

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What has been the scholarly output of academic hospital medicine faculty (AHMF) and what academic rank have they achieved at US academic medical centers (AMCs)? Sumarsono et al<sup>1</sup> address these questions and add to the growing body of literature exposing the limited academic footprint of hospitalists.

The authors performed a cross-sectional analysis of AHMF affiliated with the top 25 internal medicine training programs (as determined by the physician networking service doximity.com) and used Scopus to determine number of publications, citations, and H-index (a metric of productivity) for each faculty member. They also evaluated predictors for promotion. In contrast, most prior research on this topic relies on data obtained by survey methodology.<sup>2-5</sup>

Among 1554 AHMF from 22 AMCs, 42 (2.7%) were full professors and 140 (9.0%) were associate professors. The number of publications per AHMF was noticeably low, with a mean of 6.3 and median of 0 (interquartile range, 0-4). The authors found that H-index, completion of chief residency, and graduation from a top 25 medical school were independently associated with promotion.

The authors only evaluated AHMF among the most academically rigorous AMCs, an approach that likely overestimates scholarly output of hospitalists across all US AMCs. Conversely, if we presume that promotion is more difficult at these major AMCs, the results may underestimate academic rank of AHMF nationally. Additionally, the authors did not distinguish faculty by tracks (eg, clinician-investigators, clinician-educators), which often have different criteria for academic promotion.

These findings are worryingly consistent with prior reports, despite the tremendous expansion of the field.<sup>2-4</sup> A 2008 survey of academic hospitalists found that 4% of respondents were full professors and 9% were associate professors, values nearly identical to the results in this current analysis,<sup>4</sup> suggesting enduring barriers to academic advancement.

We are left with the following questions provoked by this body of literature: How can hospitalists increase their scholarly output and climb the promotional ladder? And how can we increase the academic footprint of hospital medicine? We recently proposed the following strategies based on a survey of academic groups participating in the Hospital Medicine Re-engineering Network (HOMERuN) survey<sup>5</sup>: (1) expand hospital medicine research fellowships, which will provide graduates with research skills to justify dedicated time for research and aid their ability to obtain independent funding; (2) formalize

mentorship between research faculty in hospital medicine and other internal medicine disciplines with robust track records for research; (3) invest in research infrastructure and data access within and between institutions; and (4) encourage hospital medicine group leaders to foster academic growth by incentivizing faculty to perform research, present their work at national conferences, and publish manuscripts with their findings.

Although an increase in scholarly output should contribute to higher academic rank, hospitalists routinely make other invaluable contributions beyond clinical care to AMCs, including medical education, hospital leadership, quality improvement, clinical innovation, and social justice advocacy. Also, hospitalists are increasingly disseminating their contributions via newer mediums (eg, social media, podcasts) that arguably have greater reach than traditional scholarship outlets. We believe that promotion committees should update their criteria to reflect the evolution of academic contribution and integrate these within traditional promotion pathways.

Finally, we must address federal funding mechanisms, which currently favor specialty-specific funding over funding that would be more applicable to hospital medicine researchers. Funding agencies are largely specialty- or disease-specific, with limited options for broader-based research.<sup>6</sup> Additionally, grant-review committees are largely comprised of specialists, with few generalists and fewer hospitalists. These limitations make it difficult to “argue” the necessity of hospital medicine research. One concrete step would be for the National Institutes of Health (NIH) to create an Office for Hospital Medicine Research, analogous to the Office of Emergency Care Research, which works across NIH institutes and centers to foster research and research training for the emergency setting.

With these strategies, we are hopeful that hospital medicine will continue to expand its academic footprint and be recognized for its ever-growing contributions to the practice of medicine.

Disclosures: The authors reported no conflicts of interest.

### References

1. Sumarsono A, Keshvani N, Saleh SN, et al. Scholarly productivity and rank in academic hospital medicine. *J Hosp Med*. 2021;16(9):545-548. <https://doi.org/10.12788/jhm.3631>
2. Chopra V, Burden M, Jones CD, et al. State of research in adult hospital medicine: results of a national survey. *J Hosp Med*. 2019;14(4):207-211. <https://doi.org/10.12788/jhm.3136>
3. Miller CS, Fogerty RL, Gann J, et al, the Society of General Internal Medicine Membership Committee. The growth of hospitalists and the future of the society of general internal medicine: results from the 2014 membership survey. *J Gen Intern Med*. 2017;32(11):1179-1185. <https://doi.org/10.1007/s11606-017-4126-7>
4. Reid MB, Misky GJ, Harrison RA, Sharpe B, Auerbach A, Glasheen JJ. Mentorship, productivity, and promotion among academic hospitalists. *J Gen Intern Med*. 2012;27(1):23-27. <https://doi.org/10.1007/s11606-011-1892-5>
5. Shannon EM, Chopra V, Greysen SR, et al. Dearth of hospitalist investigators in academic medicine: a call to action. *J Hosp Med*. 2021;16(3):189-191. <https://doi.org/10.12788/jhm.3536>
6. Levinson W, Linzer M. What is an academic general internist? Career options and training pathways. *JAMA*. 2002;288(16):2045-2048. <https://doi.org/10.1001/jama.288.16.2045>

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Received: July 10, 2021; Revised: July 16, 2021; Accepted: July 19, 2021

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