Impact of Hospital Medicine on Trends in Infectious Diseases and Other Subspecialty Fellowship Applications

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Introduction
- In the last 10 yrs, hospital medicine has expanded & is now larger than any internal medicine (IM) subspecialty
- How has growth of hospital medicine impacted IM resident career choice?
- Are fewer graduating residents pursuing ID fellowship, or subspecialty fellowships in general?
- What are trends in gender and race/ethnicity in applicants to ID & other subspecialty fellowships?
- We examined these questions by analyzing national trends in applications to subspecialty fellowships

Methods and Materials
- Data time frame: Ten years (2009 – 2018)
- Data sources: We obtained data on the number of fellowship applicants from the Electronic Resident Application Service (ERAS) and the number of matched applicants from the National Resident Matching Program (NRMP) for match registrants in eight IM subspecialties: Cardiology, Endocrinology, Gastroenterology, ID, Pulmonary/Critical Care, Hematology/Oncology, Nephrology, Rheumatology
- Exclusions: Allergy/Immunology, Geriatrics, and Palliative Care were not included since these fellowships are not exclusive to IM residents, and Geriatrics and Palliative Care only recently joined the NRMP.
- Inclusions: Data obtained for US medical graduates (USMG including MD and DO and Canadian applicants) and international medical graduates (IMG).
- Gender & Race/Ethnicity data: The numbers of female and underrepresented in medicine (UIM) applicants to fellowship were obtained from ERAS. UIM included applicants who self-identified as Black, Hispanic, Native American, and Pacific Islander.

Results
- The total number of unique applicants to subspecialty fellowships initially trended down but then has increased over the last 2 years (from 5894 in 2009 to a low of 5160 in 2016 and then has increased back to 5732 as of 2018); while USMG applications are rising, IMG applications are declining. [Figure 1]
- This number of matched applicants is increasing for both USMG and IMG; this is commensurate with the increase in the number of positions offered in the match [data not shown.] Thus, the subspecialty workforce is increasing.
- In ID, initial decreases in applications and matches reversed after converting to an “all-in” match (i.e. positions could no longer be offered outside the Match). [Figure 1]

Discussion
- The percentage of female fellow applicants has remained stable over time at 36-39%, and is higher in ID than in other subspecialties (between 49-56%). For ID, there has been no significant change in trend over time. [Figure 2]
- The percentage of total applicants self-identifying as underrepresented in medicine (UIM) remains stably low at 9-10% but is in fact slightly higher in ID (10-15%). [Figure 3]

References
5. Electronic Residency Application Service (ERAS) Applicants to Internal Medicine Subspecialties, AAMC ERAS. Private data request.