

LETTER TO THE EDITOR

Prevalence of Change in Orthopaedic Subspecialty Fellowship Preference During Residency Training: A Survey Study

Dear Editor

The trend toward increasing specialization amongst orthopaedic trainees has been well described (1,2). While prior studies have investigated motivations for fellowship choice amongst trainees and how those motivations change with time, no studies have looked to uncover how often the actual fellowship choice changes during residency training (2). We aimed to determine if residents are likely to change subspecialty preference between the beginning of their first year of training and applying for the fellowship, and if so, at what point this occurs.

After approval was obtained from our institutional review board, an electronic survey (Qualtrics, Provo, Utah) was distributed to all post-graduate year (PGY) 4 and 5 residents at 145 United States MD orthopedic residencies. Based on National Resident Match Program (NRMP) data from 2016, there is an average of 4.4 residents per class year per program, with an estimated 1,276 potential participants (3). Participants were first asked about their post-graduate year, then ranked up to 3 orthopaedic subspecialties they would have chosen for fellowship training upon starting their orthopaedic residency, then which subspecialty they applied to at the end of their residency, and finally, those who applied to a subspecialty that was not their first choice listed as a PGY1 resident were asked to indicate at what point in residency their preference changed. All nine subspecialty choices (arthroplasty, foot/ankle, hand, oncology, pediatrics, shoulder/elbow, spine, sports, trauma) were options as well as a "No Fellowship/General" option.

Responses were received from a total of 124 PGY4 and PGY5 residents. Of these, 62/124 (50%) were from PGY4 residents, and 62/124 (50%) were from PGY5 residents. Sports, arthroplasty, and hand were the most frequent specialties ranked as a first choice [Table 1]. Of respondents, 54.8% matched into the subspecialty ranked first as a PGY1 resident, 66.9% matched into one of their top two, and 75% matched into one of their top three. Pediatric orthopedics (83%),

spine (75%), and sports/arthroplasty (55% each) were the subspecialties that, when ranked highest as a PGY1, were most commonly matched into as a senior resident. Foot/ankle (75%), shoulder/elbow (61%), and spine (38%) were the most commonly matched into subspecialties not in a participant's top 3 preferences as a PGY1. Twenty-eight participants did not match in one of their top three preferences listed as PGY1s, of which 58% reported changing their fellowship preference at the end of their PGY2 or the beginning of their PGY3 year of residency [Table 2].

Our findings show that preferences for orthopaedic subspecialties often do not change from when a resident enters their first year of training to when they

Table 1. Rates of highest ranked and top three highest ranked fellowship choices as PGY1 residents

Fellowship	Ranked First (%)	Ranked Top Three (%*)
Arthroplasty	20 (16)	62 (50)
Hand	20 (16)	43 (35)
Foot/Ankle	0 (0)	10 (8)
Oncology	1 (1)	11 (9)
Pediatric	6 (5)	18 (15)
Shoulder/Elbow	4 (3)	33 (27)
Spine	8 (7)	20 (16)
Sports	44 (36)	74 (60)
Trauma	15 (12)	60 (48)
No Fellowship	6 (5)	14 (11)

*Percent of time fellowship choice was present, in any position, within a respondent's top three.

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Table 2. Reported timing of change for respondents not applying into one of top three PGY1 preferences	
Time of Preference Change	Number of Respondents (%)
End of 1 st Year	1 (3)
Start of 2 nd Year	1 (3)
End of 2 nd Year	10 (32)
Start of 3 rd Year	8 (26)
End of 3 rd Year	4 (13)
Start of 4 th Year	3 (13)

ultimately apply for the fellowship. When selecting a training program, trainees need to keep this in mind, as they are unlikely to change preferences during training. Training programs should also seek to expose trainees to all sub-specialties prior to the beginning of the PGY3 year, as a preference change is unlikely to occur beyond this point.

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