

# Supplemental ERAS® Application: Evaluation of Past Experiences

## Introduction

This data report summarizes the AAMC's findings from the second year of piloting the Past Experiences section of the supplemental Electronic Residency Application Service® (ERAS®) application. During the ERAS 2022-2023 application cycle, applicants applying in 14 specialties¹ had the opportunity to answer new questions through the supplemental ERAS application to better capture their experiences and interests in the residency application.² The goals from the use of these new questions were to align the application content with the programs' missions and with what's required for success and satisfaction in residency, as well as to create an application that is easier to use and that facilitates the holistic review of high volumes of applications.

This report describes the information applicants reported in their supplemental ERAS application during the 2022-2023 cycle. It does not reflect any specialty requirements or expectations, nor does it include data on how the content may have affected interview or match rates. Therefore, future applicants should not use the results presented here to guide their choices about which experiences to pursue or report on their residency application.

The purpose of the Past Experiences section of the supplemental ERAS application is to help programs get a more complete picture of each applicant by asking applicants to identify the experiences that have shaped who they are, that were instrumental in their career development, or that influenced their career goals.

Completion of the Past Experiences section was optional, and applicants were asked to provide information about:

- Up to five meaningful experiences and answers to a series of structured questions to characterize
  those experiences (e.g., the type of experience, start and end dates). Applicants were asked to
  share additional details by using three distinct drop-down menus to define the characteristics of
  each experience in the following three categories: experience type, focus area, and key
  characteristic. Applicants were also asked to write a short essay (300-character limit) explaining
  the meaningfulness of each experience listed.
- Other impactful life experiences (750-character-limit essay) they encountered or overcame on their journey to residency and additional information about their background or life experiences not captured elsewhere in the application.

This document summarizes answers to the following questions based on results from the first stage of evaluation of the Past Experiences section:

- 1. How many meaningful experiences did applicants include?
- 2. How many applicants selected each experience type?
- 3. How many applicants selected each focus area?
- 4. How many applicants selected each key characteristic?
- 5. How many types of experiences did applicants tend to report?
- 6. How many meaningful experience essays were written? What was the typical amount of time for these experiences? What themes did applicants write about?
- 7. How many applicants wrote an essay describing impactful experiences? What themes did applicants write about?



Data and key results from each evaluation question are summarized in the tables below. Those results, along with data from applicant, advisor, and program director surveys and focus groups, will be used to refine future iterations of the Past Experiences section of the supplemental ERAS application. (Percentage values in tables may not total 100% due to rounding and cells with fewer than five observations.)

#### Methods

# **Sample**

As of Oct. 3, 2022, most applicants to participating specialties participated in the supplemental ERAS application and included content on their past experiences; however, applicant participation varied by specialty and ranged from 74%-97% (Table 1). The demographic composition of the specialty-specific samples was comparable to that of the respective 2022-2023 ERAS populations (Tables 2 and 3).



Table 1. Number and Percentage of Applicants Who Completed the Past Experiences Section, by Specialty

	Applicants Who Completed Past Experiences Section as of Sept. 16, 2022			
Specialty <sup>1</sup>	Percentage Number		Applicants as of Oct. 3, 2022	
Adult Neurology	92%	1,852	2,005	
Anesthesiology	96%	3,275	3,415	
Dermatology	97%	966	1,001	
Diagnostic Radiology	95%	2,184	2,291	
Interventional Radiology	95%	382	401	
General Surgery	92%	4,479	4,866	
Internal Medicine - Categorical	91%	15,943	17,538	
Internal Medicine/Psychiatry	92%	236	257	
Neurological Surgery	93%	405	435	
Orthopedic Surgery	97%	1,559	1,603	
Pediatrics	93%	4,254	4,589	
Physical Medicine and Rehabilitation	96%	961	1,006	
Psychiatry	92%	3,370	3,665	
Public Health and General Preventive Medicine	74%	95	128	

<sup>1.</sup> Applicants could apply to more than one specialty and were included in each specialty they applied to.



Table 2. Number and Percentage of Applicants Who Completed the Past Experiences Section, by Race/Ethnicity and Specialty

			Perce	ntage (Numb	er) of Applica	ants by Race	/Ethnicity		
Specialty <sup>1</sup>	White Only <sup>2</sup>	Asian	Black or African American	American Indian or Alaska Native	Native Hawaiian or Other Pacific Islander	Multiple Race/ Ethnicity <sup>3</sup>	Hispanic, Latino, or of Spanish Origin	Other Race/ Ethnicity	Unknown Race/ Ethnicity
Adult Neurology	31% (581)	43% (796)	7% (129)	0.3% (6)	4	8% (152)	9% (162)	9% (160)	2% (46)
Anesthesiology	44% (1,432)	29% (953)	9% (291)	0.7% (23)	0.2% (7)	10% (336)	11% (371)	6% (209)	2% (70)
Dermatology	41% (396)	28% (268)	11% (111)	1% (9)	0.5% (5)	11% (111)	10% (98)	9% (86)	3% (30)
Diagnostic Radiology	43% (936)	33% (728)	6% (137)	0.5% (10)	0.5% (10)	10% (213)	9% (193)	7% (159)	3% (57)
Interventional Radiology	45% (172)	30% (114)	6% (24)			8.38% (32)	7.59% (29)	8.90% (34)	2.88% (11)
General Surgery	44% (1,978)	26% (1,154)	9% (393)	1% (42)	0.3% (15)	11% (508)	13% (595)	8% (340)	2% (108)
Internal Medicine - Categorical	27% (4,232)	46% (7,300)	10% (1,585)	0.4% (56)	0.2% (25)	7% (1,141)	10% (1,536)	7% (1,163)	2% (360)
Internal Medicine/ Psychiatry	36% (86)	29% (68)	13% (30)			6% (15)	10% (23)	8% (18)	54% (10)
Neurological Surgery	39% (157)	26% (107)	11% (43)			11% (46)	13% (53)	8% (33)	4% (16)
Orthopedic Surgery	58% (911)	19% (298)	8% (127)	1% (16)	0.4% (6)	9% (143)	9% (139)	5% (81)	2% (28)



Table 2. Number and Percentage of Applicants Who Completed the Past Experiences Section, by Race/Ethnicity and Specialty (continued)

		Percentage (Number) of Applicants by Race/Ethnicity							
Specialty <sup>1</sup>	White Only <sup>2</sup>	Asian	Black or African American	American Indian or Alaska Native	Native Hawaiian or Other Pacific Islander	Multiple Race/ Ethnicity <sup>3</sup>	Hispanic, Latino, or of Spanish Origin	Other Race/ Ethnicity	Unknown Race/ Ethnicity
Pediatrics	41% (1,732)	32% (1,376)	9% (400)	0.6% (27)	0.1% (6)	9% (377)	12% (496)	6% (235)	2% (80)
Physical Medicine and Rehabilitation	42% (400)	32% (306)	9% (84)	0.6% (6)		11% (103)	11% (109)	6% (62)	2% (20)
Psychiatry	34% (1,147)	36% (1,211)	12% (411)	0.9% (30)	0.3% (9)	10% (326)	11% (372)	7% (220)	2% (80)
Public Health and General Preventive Medicine	24% (23)	45% (43)	15% (14)			8% (8)	9% (9)	6% (6)	

- 1. Applicants could apply to more than one specialty and were included in each specialty they applied to.
- 2. Individuals may select more than one race or ethnicity, causing the total percentage to be greater than 100%. In addition, the "White Only" category includes applicants who only selected White as their race/ethnicity category.
- 3. The "Multiple Race/Ethnicity" category includes those students who selected more than one race/ethnicity category.
- 4. Dashes indicate cells with fewer than five observations.



Table 3. Number and Percentage of Applicants Who Completed the Past Experiences Section, by Gender, Applicant Type, and Specialty

	Percentage (Number) of Applicants by:							
	Gender				Applicant Type			
Specialty <sup>1</sup>	Men	Women	Declined to Indicate	Another Gender Identity	MD	DO	IMG	
Adult Neurology	54% (998)	46% (852)	2		36% (664)	13% (249)	51% (939)	
Anesthesiology	65% (2,126)	35% (1,126)			62% (2,020)	21% (670)	17% (568)	
Dermatology	33% (318)	67% (648)			76% (737)	14% (132)	10% (97)	
Diagnostic Radiology	74% (1,608)	26% (575)			64% (1,401)	16% (360)	19% (423)	
Interventional Radiology	80% (304)	20% (78)			59% (225)	18% (69)	23% (88)	
General Surgery	56% (2,488)	44% (1,980)		0.3% (11)	54% (2,425)	16% (717)	30% (1,337)	
Internal Medicine - Categorical	54% (8,557)	46% (7,374)		0.05% (8)	29% (4,575)	15% (2,330)	57% (9,038)	
Internal Medicine/ Psychiatry	50% (118)	49% (115)			37% (88)	11% (26)	52% (122)	
Neurological Surgery	70% (285)	29% (119)			77% (313)	4% (18)	18% (74)	
Orthopedic Surgery	78% (1,217)	22% (342)			75% (1,173)	19% (290)	6% (96)	
Pediatrics	28% (1,207)	71% (3,038)		0.2% (9)	46% (1,955)	18% (759)	36% (1,540)	
Physical Medicine and Rehabilitation	66% (639)	33% (319)			45% (429)	37% (359)	18% (173)	
Psychiatry	48% (1,605)	52% (1,738)		0.7% (23)	49% (1,655)	19% (632)	32% (1,083)	
Public Health and General Preventive Medicine	57% (54)	43% (41)			23% (22)	8% (8)	68% (65)	

<sup>1.</sup> Applicants could apply to more than one specialty and were included in each specialty they applied to.

<sup>2.</sup> Dashes indicate cells with fewer than five observations.



### **Analysis**

Data were analyzed separately for each specialty because applicant pools and application processes differ by specialty. Descriptive statistics, including frequencies, percentages, means, and standard deviations (SDs), were used to investigate applicant responses. The magnitude of the differences between groups was evaluated with Cohen  $d^3$  We investigated possible differences by the following categories: applicant type (using MD as the referent group), gender (using men as the referent group), and race/ethnicity (using White as the referent group).

### Results

### How many experiences did applicants include?

Over 90% (31,764/35,075) of applicants included four or five experiences.<sup>4</sup> As shown in Table 4, applicants reported an average of 4.64 (SD = 0.74) experiences in the supplemental ERAS application. Across all specialties, all subgroups reported more than four experiences, on average, although there were some small differences by gender, racial/ethnic group, or applicant type within specialties (see Appendix A for details):

- DOs occasionally reported slightly fewer experiences than MDs in Dermatology, Internal Medicine

   Categorical, Internal Medicine/Psychiatry, and Orthopedic Surgery specialties. International medical graduates (IMGs) occasionally reported slightly fewer experiences than MDs in Dermatology, Interventional Radiology, Orthopedic Surgery, Physical Medicine and Rehabilitation, and Public Health and General Preventive Medicine Specialties.
- Women occasionally reported slightly more experiences than men in Physical Medicine and Rehabilitation and Public Health and General Preventive Medicine. Applicants who indicated another gender identity occasionally reported slightly more experiences than men in Psychiatry.
- American Indian or Alaska Native applicants occasionally reported slightly more experiences than White applicants in Anesthesiology. Hispanic, Latino, or of Spanish Origin applicants occasionally reported slightly more experiences than White applicants in Internal Medicine/Psychiatry.
- Black or African American applicants occasionally reported slightly fewer experiences than White applicants in Interventional Radiology and Psychiatry. Hispanic, Latino, or of Spanish Origin applicants occasionally reported slightly fewer experiences than White applicants in Interventional Radiology.



Table 4. Number of Applicants and Mean Number of Past Experiences, by Specialty

Specialty	Number	Mean	Standard Deviation
Adult Neurology	1,852	4.64	0.74
Anesthesiology	3,258	4.61	0.73
Dermatology	966	4.84	0.52
Diagnostic Radiology	2,184	4.64	0.71
Interventional Radiology	382	4.71	0.59
General Surgery	4,479	4.68	0.69
Internal Medicine - Categorical	15,943	4.63	0.75
Internal Medicine/Psychiatry	236	4.72	0.65
Neurological Surgery	405	4.69	0.7
Orthopedic Surgery	1,559	4.70	0.68
Pediatrics	4,254	4.68	0.71
Physical Medicine and Rehabilitation	961	4.64	0.75
Psychiatry	3,370	4.65	0.73
Public Health and General Preventive Medicine	95	4.56	0.90



## What number and percentage of applicants selected each experience type?

- As shown in Figure 1, the applicants reported a variety of experience types among their five most meaningful experiences. Those reported most often were volunteer/service/advocacy experiences (27%), education/training experiences (17%), and work experiences (16%).
- As shown in Figure 1, applicants' reporting a variety of experience types was consistent across specialties.
- Table B.1 provides a complete list of the numbers and percentages of experience types by specialty.



Figure 1. Percentage of experiences, by experience type (n = 160,957).



### What number and percentage of applicants selected each focus area?

- As shown in Figure 2, the applicants reported a variety of focus areas among their five meaningful experiences. The focus areas reported most often were medical education (18%), community involvement/outreach (18%), and clinical/translational science (15%).
- As shown in Figure 2, applicants' reporting a variety of focus areas was consistent across specialties.
- Table B.2 provides a complete list of the numbers and percentages of focus areas by specialty.

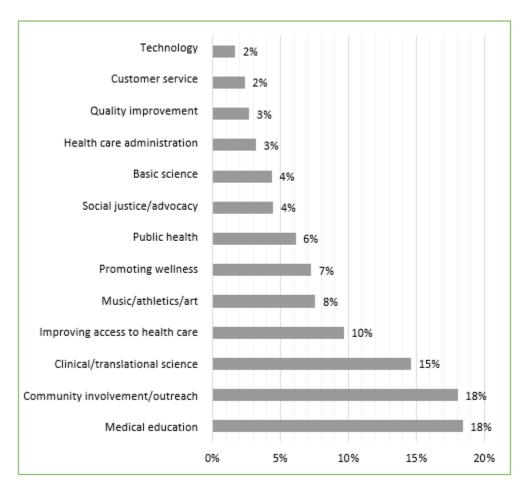


Figure 2. Percentage of experiences, by focus area (n = 157,284).



## What number and percentage of applicants selected each key characteristic?

- As shown in Figure 3, the applicants reported a variety of key characteristics of their five meaningful experiences. The key characteristics reported the most often were teamwork and leadership (19%), empathy and compassion (14%), and critical thinking and problem solving (13%).
- As shown in Figure 3, applicants' reporting a variety of key characteristics was consistent across specialties.
- Table B.3 provides a complete list of the numbers and percentages of key characteristics by specialty.

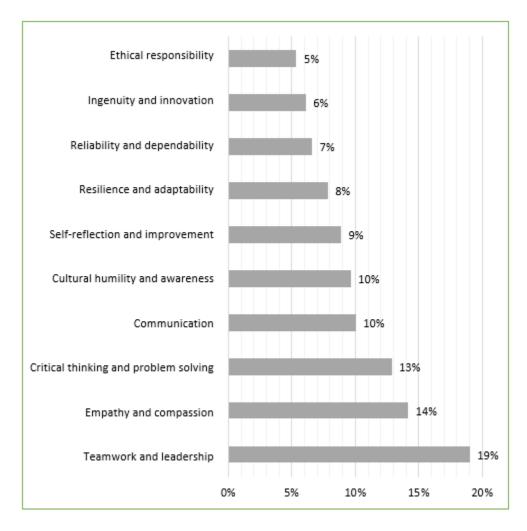


Figure 3. Percentage of experiences, by key characteristic (n = 160,490).



# How many types of experiences did applicants tend to report?

Table 5 shows that for applicants who reported four or five most meaningful experiences, the
majority reported four or five experience types (54%), focus areas (66%) and key characteristics
(91%). This suggests that most applicants highlighted a wide range of experiences rather than a
narrow range of experiences in the supplemental ERAS application.

Table 5. Number and Percentage of Different Experience Types, Focus Areas, and Key Characteristics by Number of Meaningful Experiences

Number of Meaningful	Total Number of	N	umber of Different Se	elections
Experiences by Category	Applicants <sup>1</sup>	1 or 2	3	4 or 5
Experience Type				
4	5,052	20% (1,030)	49% (2,490)	30% (1,532)
5	26,701	9% (2,321)	33% (8,802)	58%(15,578)
Total	31,753	11% (3,351)	36% (11,292)	54% (17,110)
Focus Area				
4	5,031	17% (864)	41% (2,071)	42% (2,096)
5	26,659	7% (1,955)	22% (5,925)	70% (18,779)
Total	31,690	9% (2,819)	25% (7,996)	66% (20,875)
Key Characteristic				
4	5,044	3% (173)	22% (1,112)	75% (3,759)
5	26,680	1% (241)	5% (1,449)	94% (24,990)
Total	31,724	1% (414)	8% (2,561)	91% (28,749)

<sup>1.</sup> These values exclude applicants who left the related section blank.



### How many essays describing meaningful experiences were written?

• Over 99% (161,642/162,300) of applicants submitted an essay describing their past meaningful experiences. Applicants used almost all of the 300 characters available for these essays (mean = 284.0, SD = 24.2).

#### What was the typical amount of time for these experiences?

- Experiences were usually either daily (reoccurring) (46%) or weekly (recurring) (30%).
- For all experience types except education/training (median = 2.7 months), the median number of months spent on their experiences was more than a year, and this trend held across experience types.

# How many applicants wrote an essay on other impactful life experiences, and what themes did applicants include in those essays?

- About 56% (19,560/35,075) of applicants wrote an essay on their other impactful life experiences, which is a decrease relative to the proportion who wrote an essay on these experiences in year 1.
   This difference may be due to outreach to the community that emphasized how not every applicant is expected to answer this question.
- Overall, there were no differences in the proportions of applicants who wrote an essay on their other impactful life experiences by gender, but there were differences in the response rate by race/ethnicity and applicant type.
  - Sixty-one to 71% of applicants from groups underrepresented in medicine and only 42% of White applicants wrote the essay.
  - About 50% of DO applicants and 72% of IMG applicants and only 44% of MD applicants wrote the essay.
- Applicants used most of the 750 characters available for the essay (mean = 698.1, SD = 95.5). The length of the essays did not meaningfully differ by gender, race/ethnicity, or applicant type.
- As shown in Table 6, most essays were related to sustained and/or critical experiences that applicants encountered and were consistent with the original intent of the purpose of the essay. However, several themes emerged that did not align with the original intent of the essay, such as academic struggles and getting accepted to an MD- or DO-granting school and residency (hereafter referred to as "medical school/residency"). This suggests that applicants and advisors need more information about the intent of the essay and what content is (or is not) expected and that program directors do not expect all applicants to respond with an essay.



# Table 6. Percentage and Number of Themes in Applicants' Other Impactful Experiences Essays

Theme of Other Impactful Experiences Essay	Percentage (Number) of Applicants <sup>1</sup>
Persistence/resilience in response to various obstacles/challenges	25% (4,845)
Personal illness or illness/death of family member	23% (4,485)
Getting accepted to medical school/residency	20% (3,843)
Financial hardships	14% (2,724)
Academic struggles, including testing	12% (2,404)
First generation pursuing higher education/career in medicine	10% (1,940)
Assimilating to a new country/culture	9% (1,713)
Family-related difficulties	8% (1,588)
Balancing family stressors and medical school	5% (983)
Pursuing residency in the United States as an international medical graduate	5% (939)
Challenges associated with sociopolitical conditions, natural disasters, and the COVID-19 pandemic	4% (750)
Experienced/observed disparities in access to health care	3% (680)
Challenges related to identity/racism/discrimination	3% (553)
Educational disadvantage	2% (398)
Growing up in rural/underserved areas	1% (286)
Interruptions to medical education because of COVID-19	1% (268)
Volunteer work/community involvement	1% (192)
Extracurricular activities	1% (137)
Healthy lifestyle, well-being	1% (137)

<sup>1.</sup> Each essay could contain more than one theme, so the total percentage is more than 100%.



# Conclusions and Next Steps

These analyses show that the responses in the Past Experiences section of the supplemental ERAS application may add value by providing new information about applicants and standardizing the way applicant experience information is collected. Most applicants included the maximum number of meaningful experiences. The experiences they reported highlighted a variety of experience types, focus areas, and key characteristics. Most applicants who responded to the other impactful experiences essay provided relevant information, but some did not appear to understand the purpose of that essay, suggesting a need for better instructions and guidance. The findings suggest that revising questions in the Past Experiences section could add value to the holistic review process and focus the application content on information that is mission aligned.



## **Notes**

- 1. The Obstetrics and Gynecology and Emergency Medicine specialties did not participate in the Past Experiences section during the 2022-2023 ERAS cycle.
- 2. Responses to questions in the Past Experiences section were shared with the participating programs applicants applied to across all specialties except Emergency Medicine and Obstetrics and Gynecology.
- 3. Cohen J. Statistical Power Analysis for the Behavioral Sciences. 2nd ed. Mahwah, NJ: Lawrence Erlbaum Associates; 1988.
- 4. These values include 87 applicants who applied only to either the Obstetrics and Gynecology specialty or the Emergency Medicine specialty, even though these two specialties did not have access to data from the Past Experiences section in the 2022-2023 ERAS cycle.



# Appendix A

Mean Number of Experiences and Effect Sizes, by Specialty and Demographic Characteristics



Table A.1. Mean Number of Experiences, by Specialty and Applicant Race/Ethnicity

		Number of I	Number of Experiences		
Specialty and Race/Ethnicity	Number of Applicants	Mean	Standard Deviation	Cohen d¹	
Adult Neurology	,		<u>'</u>		
American Indian or Alaska Native	6	5	0	*	
Asian	796	4.72	0.68	-0.15	
Black or African American	129	4.57	0.81	0.05	
Hispanic, Latino, or of Spanish Origin	162	4.49	0.90	0.15	
Native Hawaiian or Other Pacific Islander	2			*	
White Only <sup>3</sup>	581	4.61	0.74		
Other Race/Ethnicity	160	4.56	0.80	0.06	
Multiple Race/Ethnicity <sup>4</sup>	152	4.57	0.75	0.05	
Unknown Race/Ethnicity	46	4.54	0.81	0.09	
Anesthesiology					
American Indian or Alaska Native	23	4.74	0.62	-0.21	
Asian	953	4.66	0.71	-0.08	
Black or African American	291	4.52	0.80	0.10	
Hispanic, Latino, or of Spanish Origin	371	4.57	0.75	0.04	
Native Hawaiian or Other Pacific Islander	7	4.71	0.49	*	
White Only	1,432	4.60	0.73		
Other Race/Ethnicity	209	4.65	0.75	-0.07	
Multiple Race/Ethnicity	336	4.64	0.73	-0.05	
Unknown Race/Ethnicity	70	4.56	0.83	0.05	
Dermatology					
American Indian or Alaska Native	9	4.56	1.01	*	
Asian	268	4.87	0.50	-0.12	
Black or African American	111	4.77	0.60	0.07	
Hispanic, Latino, or of Spanish Origin	98	4.86	0.45	-0.10	
Native Hawaiian or Other Pacific Islander	5	5	0	*	
White Only	396	4.81	0.54		
Other Race/Ethnicity	86	4.87	0.48	-0.12	
Multiple Race/Ethnicity	111	4.86	0.52	-0.09	
Unknown Race/Ethnicity	30	4.83	0.59	-0.04	



Table A.1. Mean Number of Experiences, by Specialty and Applicant Race/Ethnicity *(continued)* 

		Number of E	Experiences	
Specialty and Race/Ethnicity	Number of Applicants	Mean	Standard Deviation	Cohen d¹
Diagnostic Radiology				
American Indian or Alaska Native	10	4.80	0.42	*
Asian	728	4.72	0.66	-0.13
Black or African American	137	4.59	0.70	0.06
Hispanic, Latino, or of Spanish Origin	193	4.51	0.89	0.15
Native Hawaiian or Other Pacific Islander	10	4.50	0.85	*
White Only	936	4.63	0.71	
Other Race/Ethnicity	159	4.72	0.69	-0.13
Multiple Race/Ethnicity	213	4.65	0.74	-0.03
Unknown Race/Ethnicity	57	4.44	0.78	0.25
Interventional Radiology				
American Indian or Alaska Native				*
Asian	114	4.80	0.48	-0.19
Black or African American	24	4.50	0.59	0.34
Hispanic, Latino, or of Spanish Origin	29	4.55	0.87	0.20
Native Hawaiian or Other Pacific Islander				*
White Only	172	4.70	0.59	
Other Race/Ethnicity	34	4.76	0.55	-0.11
Multiple Race/Ethnicity	32	4.81	0.47	-0.21
Unknown Race/Ethnicity	11	4.73	0.65	*
General Surgery				
American Indian or Alaska Native	42	4.71	0.60	-0.08
Asian	1,154	4.76	0.59	-0.16
Black or African American	393	4.71	0.63	-0.08
Hispanic, Latino, or of Spanish Origin	595	4.61	0.81	0.07
Native Hawaiian or Other Pacific Islander	15	4.73	0.59	*
White Only	1,978	4.66	0.69	
Other Race/Ethnicity	340	4.67	0.76	-0.01
Multiple Race/Ethnicity	508	4.69	0.65	-0.04
Unknown Race/Ethnicity	108	4.67	0.68	-0.01



Table A.1. Mean Number of Experiences, by Specialty and Applicant Race/Ethnicity *(continued)* 

		Number of I	Experiences	
Specialty and Race/Ethnicity	Number of Applicants	Mean	Standard Deviation	Cohen d¹
Internal Medicine - Categorical	·			
American Indian or Alaska Native	56	4.45	0.89	0.17
Asian	7,300	4.69	0.70	-0.14
Black or African American	1,585	4.61	0.77	-0.03
Hispanic, Latino, or of Spanish Origin	1,536	4.57	0.83	0.02
Native Hawaiian or Other Pacific Islander	25	4.56	0.65	0.04
White Only	4,232	4.59	0.77	
Other Race/Ethnicity	1,163	4.59	0.80	0.00
Multiple Race/Ethnicity	1,141	4.63	0.76	-0.05
Unknown Race/Ethnicity	360	4.59	0.77	0.00
Internal Medicine/Psychiatry	·			
American Indian or Alaska Native				*
Asian	68	4.69	0.72	0.00
Black or African American	30	4.80	0.66	-0.17
Hispanic, Latino, or of Spanish Origin	23	4.91	0.42	-0.42
Native Hawaiian or Other Pacific Islander				*
White Only	86	4.69	0.62	
Other Race/Ethnicity	18	4.67	0.69	*
Multiple Race/Ethnicity	15	4.73	0.7	*
Unknown Race/Ethnicity	10	4.80	0.63	*
Neurological Surgery				
American Indian or Alaska Native				*
Asian	107	4.67	0.70	0.00
Black or African American	43	4.60	0.76	0.09
Hispanic, Latino, or of Spanish Origin	53	4.74	0.68	-0.10
Native Hawaiian or Other Pacific Islander				*
White Only	157	4.67	0.75	
Other Race/Ethnicity	33	4.85	0.44	-0.29
Multiple Race/Ethnicity	46	4.76	0.52	-0.14
Unknown Race/Ethnicity	16	4.88	0.34	*



Table A.1. Mean Number of Experiences, by Specialty and Applicant Race/Ethnicity *(continued)* 

		Number of I	Experiences	
Specialty and Race/Ethnicity	Number of Applicants	Mean	Standard Deviation	Cohen d¹
Orthopedic Surgery				
American Indian or Alaska Native	16	4.63	0.81	*
Asian	298	4.70	0.61	0.03
Black or African American	127	4.72	0.74	0.00
Hispanic, Latino, or of Spanish Origin	139	4.68	0.74	0.06
Native Hawaiian or Other Pacific Islander	6	4.67	0.82	*
White Only	911	4.72	0.66	
Other Race/Ethnicity	81	4.69	0.72	0.04
Multiple Race/Ethnicity	143	4.76	0.64	-0.06
Unknown Race/Ethnicity	28	4.39	1.07	0.37
Pediatrics				
American Indian or Alaska Native	27	4.59	0.89	0.10
Asian	1,376	4.73	0.66	-0.09
Black or African American	400	4.58	0.82	0.12
Hispanic, Latino, or of Spanish Origin	496	4.64	0.73	0.04
Native Hawaiian or Other Pacific Islander	6	5	0	*
White Only	1,732	4.67	0.70	
Other Race/Ethnicity	235	4.68	0.72	-0.01
Multiple Race/Ethnicity	377	4.68	0.69	-0.01
Unknown Race/Ethnicity	80	4.55	0.84	0.16
Physical Medicine and Rehabilitation				
American Indian or Alaska Native	6	5	0	*
Asian	306	4.61	0.80	0.06
Black or African American	84	4.70	0.58	-0.06
Hispanic, Latino, or of Spanish Origin	109	4.61	0.79	0.07
Native Hawaiian or Other Pacific Islander				*
White Only	400	4.66	0.74	
Other Race/Ethnicity	62	4.66	0.70	0.00
Multiple Race/Ethnicity	103	4.59	0.85	0.09
Unknown Race/Ethnicity	20	4.30	1.13	0.38



Table A.1. Mean Number of Experiences, by Specialty and Applicant Race/Ethnicity *(continued)* 

		Number of E	xperiences	
Specialty and Race/Ethnicity	Number of Applicants	Mean	Standard Deviation	Cohen d¹
Psychiatry				
American Indian or Alaska Native	30	4.70	0.65	-0.03
Asian	1,211	4.66	0.73	0.03
Black or African American	411	4.52	0.84	0.21
Hispanic, Latino, or of Spanish Origin	372	4.61	0.75	0.10
Native Hawaiian or Other Pacific Islander	9	4.89	0.33	*
White Only	1,147	4.68	0.69	
Other Race/Ethnicity	220	4.64	0.74	0.06
Multiple Race/Ethnicity	326	4.60	0.75	0.11
Unknown Race/Ethnicity	80	4.73	0.62	-0.08
Public Health and General Preventive Medicing	ne			
American Indian or Alaska Native				*
Asian	43	4.65	0.78	-0.15
Black or African American	14	4.43	1.02	*
Hispanic, Latino, or of Spanish Origin	9	4.67	0.71	*
Native Hawaiian or Other Pacific Islander				
White Only	23	4.52	0.9	
Other Race/Ethnicity	6	4.17	1.6	*
Multiple Race/Ethnicity	8	4.75	0.71	*
Unknown Race/Ethnicity				*

<sup>1.</sup> Asterisks indicate cells where Cohen d was not computed because of fewer than 20 observations per group.

<sup>2.</sup> Dashes indicate cells with fewer than five observations.

<sup>3.</sup> The category "White Only" includes applicants who only selected White as their race/ethnicity.

<sup>4.</sup> The category "Multiple Race/Ethnicity" includes applicants who selected more than one race/ethnicity.



Table A.2. Mean Number of Experiences, by Specialty and Applicant Gender

			ber of riences	
Specialty and Gender	Number of Applicants	Mean	Standard Deviation	Cohen d¹
Adult Neurology				
Man	998	4.60	0.79	-0.12
Woman	852	4.69	0.68	
Another gender identity	<b></b> <sup>2</sup>			*
Declined to answer				*
Anesthesiology				
Man	2,126	4.59	0.75	
Woman	1,126	4.65	0.70	-0.08
Another gender identity				*
Declined to answer				*
Dermatology				
Man	318	4.82	0.55	
Woman	648	4.84	0.50	-0.04
Another gender identity				*
Declined to answer				*
Diagnostic Radiology				
Man	1,608	4.62	0.73	
Woman	575	4.70	0.66	-0.11
Another gender identity				*
Declined to answer				*
Interventional Radiology			•	
Man	304	4.69	0.62	
Woman	78	4.79	0.47	-0.18
Another gender identity				*
Declined to answer				*
General Surgery				
Man	2,488	4.66	0.70	
Woman	1,980	4.71	0.67	-0.07
Another gender identity	11	5	0	*
Declined to answer				*
Internal Medicine - Categorical	-		-	
Man	8,557	4.60	0.78	
Woman	7,374	4.67	0.70	-0.09
Another gender identity	8	4.75	0.71	*
Declined to answer				*



Table A.2. Mean Number of Experiences, by Specialty and Applicant Gender *(continued)* 

		Number of Experiences		
Specialty and Gender	Number of Applicants	Mean	Standard Deviation	Cohen d¹
Internal Medicine/Psychiatry				
Man	118	4.65	0.73	
Woman	115	4.77	0.56	-0.18
Another gender identity				*
Declined to answer				*
Neurological Surgery				
Man	285	4.71	0.65	
Woman	119	4.65	0.81	0.08
Another gender identity		-		*
Declined to answer		-		*
Orthopedic Surgery				
Man	1,217	4.68	0.70	
Woman	342	4.78	0.62	-0.15
Another gender identity		-		*
Declined to answer		-		*
Pediatrics				
Man	1,207	4.63	0.79	
Woman	3,038	4.69	0.68	-0.08
Another gender identity	9	4.67	0.71	*
Declined to answer				*
Physical Medicine and Rehabilita	tion			
Man	639	4.58	0.82	
Woman	319	4.76	0.59	-0.25
Another gender identity				*
Declined to answer				*
Psychiatry				
Man	1,605	4.58	0.80	
Woman	1,738	4.71	0.65	-0.18
Another gender identity	23	4.78	0.60	-0.28
Declined to answer				*



Table A.2. Mean Number of Experiences, by Specialty and Applicant Gender *(continued)* 

		Number of Experiences		
Specialty and Gender	Number of Applicants	Mean	Standard Deviation	Cohen d¹
Public Health and General Preven	tive Medicine			
Man	54	4.43	1.02	
Woman	41	4.73	0.67	-0.35
Another gender identity		-		*
Declined to answer				*

<sup>1.</sup> Asterisks indicate cells where Cohen d was not computed because of fewer than 20 observations per group.

<sup>2.</sup> Dashes indicate cells with fewer than five observations.



Table A.3. Mean Number of Experiences, by Specialty and Applicant Type

			mber of eriences	
Specialty and Applicant Type	Number of Applicants	Mean	Standard Deviation	Cohen d¹
Adult Neurology				
MD	664	4.64	0.71	
IMG <sup>2</sup>	939	4.67	0.75	-0.04
DO	249	4.53	0.80	0.15
Anesthesiology				
MD	2,020	4.66	0.66	
IMG	568	4.51	0.87	0.19
DO	670	4.53	0.78	0.18
Dermatology				
MD	737	4.87	0.44	
IMG	97	4.71	0.74	0.26
DO	132	4.72	0.67	0.26
Diagnostic Radiology				
MD	1,401	4.68	0.67	
IMG	423	4.62	0.79	0.08
DO	360	4.55	0.78	0.18
Interventional Radiology				
MD	225	4.75	0.54	
IMG	88	4.61	0.72	0.22
DO	69	4.71	0.55	0.07
General Surgery				
MD	2,425	4.73	0.62	
IMG	1,337	4.63	0.78	0.14
DO	717	4.61	0.71	0.18
Internal Medicine - Categorical	•			
MD	4,575	4.68	0.65	
IMG	9,038	4.63	0.77	0.07
DO	2,330	4.53	0.64	0.21
Internal Medicine/Psychiatry	, ,			
MD	88	4.73	0.58	
IMG	122	4.74	0.70	-0.02
DO	26	4.58	0.64	0.25
Neurological Surgery	,			
MD	313	4.68	0.73	
IMG	74	4.69	0.62	-0.01
DO	18	4.89	0.32	*



Table A.3. Mean Number of Experiences, by Specialty and Applicant Type (continued)

		Number of Experiences		
Specialty and Applicant Type	Number of Applicants	Mean	Standard Deviation	Cohen d¹
Orthopedic Surgery				
MD	1,173	4.76	0.60	
IMG	96	4.54	0.87	0.29
DO	290	4.50	0.86	0.35
Pediatrics				
MD	1,955	4.72	0.63	
IMG	1,540	4.65	0.76	0.10
DO	759	4.60	0.78	0.17
Physical Medicine and Rehabilitation				
MD	429	4.73	0.63	
IMG	173	4.43	1.01	0.36
DO	359	4.62	0.72	0.16
Psychiatry				
MD	1,655	4.72	0.64	
IMG	1,083	4.58	0.84	0.19
DO	632	4.61	0.72	0.16
<b>Public Health and General Preventive Med</b>	icine			
MD	22	4.68	0.72	
IMG	65	4.46	0.99	0.25
DO	8	5	0	*

<sup>1.</sup> Asterisks indicate cells where Cohen *d* was not computed because of fewer than 20 observations per group.

<sup>2.</sup> IMG = international medical graduate.



# Appendix B

Percentage and Number of Experiences, by Specialty



# Table B.1. Percentage and Number of Experiences, by Experience Type and Specialty

Table B.1.a. For Adult Neurology, Anesthesiology, Dermatology, Diagnostic Radiology, Interventional Radiology

		Percentage (Number) of Experiences					
Experience Type	Adult Neurology	Anesthesiology	Dermatology	Diagnostic Radiology	Interventional Radiology		
Education/training	20% (1,673)	14% (2,083)	12% (574)	14% (1,394)	15% (264)		
Military service	<1% (33)	1% (173)	<1% (23)	<1% (51)	<1% (8)		
Other extracurricular activity, club, hobby	12% (1,012)	16% (2,340)	12% (582)	15% (1,524)	15% (276)		
Professional organization	3% (276)	3% (470)	4% (189)	4% (374)	5% (93)		
Research	15% (1,254)	13% (1,937)	19% (902)	16% (1,654)	16% (284)		
Teaching/mentoring	10% (833)	12% (1,804)	13% (591)	12% (1,218)	12% (219)		
Volunteer/service/advocacy	24% (2,059)	26% (3,913)	29% (1,333)	24% (2,435)	22% (400)		
Work	16% (1,400)	15% (2,204)	10% (467)	14% (1,407)	14% (246)		
Total	8,540	14,924	4,661	10,057	1,790		



# Table B.1. Percentage and Number of Experiences, by Experience Type and Specialty *(continued)*

Table B.1.b. For General Surgery, Internal Medicine - Categorical, Internal Medicine/Psychiatry, Neurological Surgery, and Orthopedic Surgery

	Percentage (Number) of Experiences					
Experience Type	General Surgery	Internal Medicine - Categorical	Internal Medicine/ Psychiatry	Neurological Surgery	Orthopedic Surgery	
Education/training	16% (3,370)	20% (14,344)	19% (215)	15% (276)	10% (733)	
Military service	<1% (162)	<1% (281)	<1% (3)	<1% (10)	1% (93)	
Other extracurricular activity, club, hobby	14% (2,904)	11% (8,203)	12% (129)	15% (275)	17% (1,244)	
Professional organization	4% (750)	3% (2,380)	3% (37)	5% (90)	3% (236)	
Research	15% (3,211)	12% (8,967)	13% (139)	24% (452)	18% (1,308)	
Teaching/mentoring	12% (2,432)	9% (6,921)	9% (96)	12% (226)	13% (924)	
Volunteer/service/advocacy	24% (5,041)	26% (18,880)	26% (289)	20% (372)	25% (1,800)	
Work	14% (2,966)	18% (13,480)	18% (196)	10% (183)	13% (944)	
Total	20,836	73,456	1,104	1,884	7,282	



# Table B.1. Percentage and Number of Experiences, by Experience Type and Specialty *(continued)*

Table B.1.c. For Pediatrics, Physical Medicine and Rehabilitation, Psychiatry, and Public Health and General Preventive Medicine

	Percentage (Number) of Experiences						
Experience Type	Pediatrics	Physical Medicine and Rehabilitation	Psychiatry	Public Health and General Preventive Medicine			
Education/training	17% (3,318)	15% (673)	17% (2,606)	26% (110)			
Military service	<1% (42)	<1% (34)	<1% (85)	2% (10)			
Other extracurricular activity, club, hobby	12% (2,313)	15% (663)	13% (2,023)	6% (24)			
Professional organization	3% (597)	4% (190)	3% (494)	3% (14)			
Research	11% (2,270)	11% (477)	12% (1,929)	10% (41)			
Teaching/mentoring	11% (2,230)	11% (481)	10% (1,502)	8% (34)			
Volunteer/service/advocacy	30% (5,980)	28% (1,247)	29% (4,507)	23% (99)			
Work	15% (3,034)	15% (652)	16% (2,433)	23% (97)			
Total	19,784	4,417	15,579	429			



# Table B.2. Percentage and Number of Experiences, by Focus Area and Specialty

Table B.2.a. For Adult Neurology, Anesthesiology, Dermatology, Diagnostic Radiology, and Interventional Radiology

		Percentage	(Number) of Ex	periences	
Focus Area	Adult Neurology	Anesthesiology	Dermatology	Diagnostic Radiology	Interventional Radiology
Basic science	5% (426)	4% (636)	4% (201)	5% (506)	5% (91)
Clinical/translational science	17% (1,455)	13% (1,870)	16% (719)	15% (1,481)	14% (247)
Community involvement/outreach	16% (1,341)	19% (2,739)	19% (873)	17% (1,687)	15% (262)
Customer service	2% (150)	3% (478)	2% (86)	3% (274)	3% (59)
Health care administration	4% (305)	3% (418)	2% (96)	3% (256)	3% (47)
Improving access to health care	9% (766)	9% (1,325)	11% (506)	8% (820)	7% (126)
Medical education	20% (1,668)	18% (2,633)	17% (789)	20% (1,943)	23% (408)
Music/athletics/art	7% (583)	9% (1,253)	7% (316)	9% (869)	9% (152)
Promoting wellness	6% (530)	7% (1,076)	6% (287)	6% (585)	5% (96)
Public health	6% (497)	5% (696)	5% (251)	4% (411)	4% (71)
Quality improvement	2% (205)	3% (431)	2% (99)	2% (241)	3% (46)
Social justice/advocacy	4% (307)	4% (641)	6% (290)	4% 393)	4% (75)
Technology	2% (132)	2% (291)	1% (56)	4% (347)	4% (73)
Total	8,365	14,487	4,569	9,813	1,753



# Table B.2. Percentage and Number of Experiences, by Focus Area and Specialty (continued)

Table B.2.b. For General Surgery, Internal Medicine - Categorical, Internal Medicine/Psychiatry, Neurological Surgery, Orthopedic Surgery

	Percentage (Number) of Experiences							
Focus Area	General Surgery	Internal Medicine - Categorical	Internal Medicine/ Psychiatry	Neurological Surgery	Orthopedic Surgery			
Basic science	5% (1,011)	4% (3,005)	4% (48)	9% (173)	4% (284)			
Clinical/translational science	15% (3,153)	16% (11,446)	15% (158)	19% (359)	17% (1,209)			
Community involvement/outreach	16% (3,286)	17% (11,986)	17% (188)	15% (277)	19% (1,337)			
Customer service	3% (580)	2% (1,529)	2% (18)	1% (23)	3% (207)			
Health care administration	3% (529)	4% (2,800)	3% (36)	2% (34)	3% (183)			
Improving access to health care	9% (1,839)	10% (7,232)	9% (97)	7% (134)	8% (583)			
Medical education	20% (4,166)	19% (13,582)	17% (187)	19% (347)	17% (1,235)			
Music/athletics/art	9% (1,741)	7% (4,660)	7% (78)	10% (177)	12% (846)			
Promoting wellness	6% (1,227)	7% (4,851)	9% (100)	4% (76)	6% (418)			
Public health	5% (1,044)	7% (4,948)	7% (70)	4% (69)	4% (302)			
Quality improvement	3% (526)	3% (2,060)	3% (28)	2% (41)	2% (155)			
Social justice/advocacy	4% (886)	4% (2,562)	5% (55)	4% (77)	3% (211)			
Technology	2% (400)	1% (1,055)	1% (14)	3% (62)	2% (174)			
Total	20,388	71,716	1,077	1,849	7,144			



# Table B.2. Percentage and Number of Experiences, by Focus Area and Specialty *(continued)*

Table B.2.c. For Pediatrics, Physical Medicine and Rehabilitation, Psychiatry, and Public Health and General Preventive Medicine

	Pe	ercentage (Numb	er) of Experience	es
Focus Area	Pediatrics	Physical Medicine and Rehabilitation	Psychiatry	Public Health and General Preventive Medicine
Basic science	4% (684)	3% (144)	4% (590)	2% (9)
Clinical/translational science	12% (2,336)	12% (538)	12% (1,899)	20% (84)
Community involvement/outreach	22% (4,170)	19% (810)	19% (2,932)	14% (59)
Customer service	2% (402)	2% (101)	2% (354)	1% (5)
Health care administration	3% (605)	3% (122)	2% (377)	3% (14)
Improving access to health care	10% (1,989)	8% (359)	9% (1,430)	10% (43)
Medical education	16% (3,170)	19% (808)	15% (2,298)	19% (81)
Music/athletics/art	7% (1,283)	10% (425)	7% (1,129)	3% (13)
Promoting wellness	8% (1,609)	10% (452)	11% (1,639)	7% (32)
Public health	7% (1,278)	5% (195)	6% (970)	13% (56)
Quality improvement	3% (517)	3% (122)	3% (390)	2% (10)
Social justice/advocacy	6% (1,078)	4% (177)	7% (1,049)	4% (16)
Technology	<1% (184)	2% (85)	1% (213)	1% (5)
Total	19,305	4,338	15,270	427



# Table B.3. Percentage and Number of Experiences, by Key Characteristic and Specialty

# Table B.3.a. For Adult Neurology, Anesthesiology, Dermatology, Diagnostic Radiology, and Interventional Radiology

	Percentage (Number) of Experiences						
Key Characteristic	Adult Neurology	Anesthesiology	Dermatology	Diagnostic Radiology	Interventional Radiology		
Communication	10% (857)	10% (1,447)	9% (417)	10% (969)	9% (168)		
Critical thinking and problem solving	14% (1,168)	12% (1,756)	13% (594)	13% (1,337)	13% (232)		
Cultural humility and awareness	9% (734)	10% (1,464)	11% (520)	8% (836)	7% (127)		
Empathy and compassion	14% (1,151)	14% (2,030)	13% (604)	13% (1,260)	12% (218)		
Ethical responsibility	5% (459)	5% (753)	6% (279)	5% (469)	5% (89)		
Ingenuity and innovation	7% (571)	6% (900)	9% (402)	8% (796)	9% (159)		
Reliability and dependability	6% (543)	7% (1,076)	6% (299)	7% (749)	8% (140)		
Resilience and adaptability	8% (677)	8% (1,211)	7% (319)	7% (710)	7% (126)		
Self-reflection and improvement	9% (803)	9% (1,322)	7% (326)	9% (936)	9% (160)		
Teamwork and leadership	18% (1,564)	20% (2,934)	19% (870)	20% (1,977)	21% (366)		
Total	8,527	14,893	4,630	10,039	1,785		



# Table B.3. Percentage and Number of Experiences, by Key Characteristic and Specialty (continued)

Table B.3.b. For General Surgery, Internal Medicine - Categorical, Internal Medicine/Psychiatry, Neurological Surgery, and Orthopedic Surgery

	Percentage (Number) of Experiences					
Key Characteristic	General Surgery	Internal Medicine - Categorical	Internal Medicine/ Psychiatry	Neurological Surgery	Orthopedic Surgery	
Communication	9% (1,780)	10% (7,525)	9% (98)	9% (163)	9% (645)	
Critical thinking and problem solving	13% (2,802)	14% (9,950)	14% (156)	16% (295)	13% (982)	
Cultural humility and awareness	9% (1,901)	9% (6,557)	10% (110)	7% (135)	8% (613)	
Empathy and compassion	12% (2,594)	14% (10,490)	15% (166)	9% (175)	12% (890)	
Ethical responsibility	5% (1,060)	6% (4,026)	6% (63)	5% (97)	5% (348)	
Ingenuity and innovation	7% (1,443)	5% (3,942)	6% (67)	10% (187)	7% (520)	
Reliability and dependability	8% (1,579)	6% (4,372)	5% (56)	7% (137)	9% (632)	
Resilience and adaptability	9% (1,775)	8% (5,800)	6% (69)	10% (180)	8% (578)	
Self-reflection and improvement	9% (1,817)	9% (6,702)	10% (105)	7% (131)	8% (564)	
Teamwork and leadership	20% (4,069)	19% (13,778)	19% (207)	21% (389 )	21% (1,516)	
Total	20,820	73,142	1,097	1,889	7,288	



# Table B.3. Percentage and Number of Experiences, by Key Characteristic and Specialty *(continued)*

Table B.3.c. For Pediatrics, Physical Medicine and Rehabilitation, Psychiatry, and Public Health and General Preventive Medicine

	Percentage (Number) of Experiences					
Key Characteristic	Pediatrics	Physical Medicine and Rehabilitation	Psychiatry	Public Health and General Preventive Medicine		
Communication	11% (2,135)	9% (411)	10% (1,556)	8% (33)		
Critical thinking and problem solving	11% (2,245)	11% (478)	12% (1,789)	16% (70)		
Cultural humility and awareness	11% (2,123)	10% (434)	11% (1,772)	12% (52)		
Empathy and compassion	15% (3,018)	16% (690)	16% (2,536)	12% (53)		
Ethical responsibility	5% (1,055)	4% (196)	6% (907)	6% (24)		
Ingenuity and innovation	5% (1,059)	7% (299)	6% (924)	6% (26)		
Reliability and dependability	7% (1,302)	7% (292)	6% (860)	4% (17)		
Resilience and adaptability	8% (1,484)	7% (324)	7% (1,072)	8% (34)		
Self-reflection and improvement	8% (1,660)	9% (415)	9% (1,410)	10% (41)		
Teamwork and leadership	18% (3,624)	20% (895)	18% (2,726)	18% (77)		
Total	19,705	4,434	15,552	427		