

## AAIM Perspectives

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# Disparities in Salary and Work-Life Integration in Internal Medicine Program Directors Are Associated with Gender and Partner Employment Status



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### INTRODUCTION

Significant gender disparities are present in academic medicine. Women physicians are paid less than their male peers, take longer to advance in their careers, and are less likely to achieve high-ranking faculty or administrative positions.<sup>1-6</sup> Potential factors contributing to such gender disparities include, but are not limited to, differences in time spent on childcare, variations in level of spousal support, fewer female mentors and role models in positions of leadership, implicit bias overt discrimination, and gender stereotype threat.<sup>7,8</sup>

Prior studies have explored such topics to a limited degree in internal medicine program directors (IM-PDs). Responses to the 2010 Association of Program Directors in Internal Medicine (APDIM) survey indicated that women IM-PDs more often reported emotional

exhaustion, depersonalization, and overall burnout.<sup>9</sup> A burnout-focused 2016 APDIM survey did not find gender-specific differences in burnout.<sup>10</sup> However, these questions were not specifically tailored to address gender disparities in other domains. One of the few gender-specific studies of IM-PDs showed that the salaries of women were significantly lower than the salaries of men after controlling for multiple factors, including rank, specialty choice, and age.<sup>11</sup>

We sought to expand on existing literature by surveying IM-PDs with regard to gender disparities in several domains, including demographics, salary, career advancement, satisfaction, quality of life, and work-life balance and integration.

### METHODS

#### Study Participants and Data Collection

Data was collected as part of the 2018 Annual APDIM survey. The survey committee distributed the survey in August 2018 to 392 APDIM program director members (representing 84% of the 465 Accreditation Council for Graduate Medical Education [ACGME]-accredited internal medicine residency programs as of June 30,

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2018). The survey was distributed as a unique emailed link with automated weekly email reminder requests until November 30, 2018.

Core data includes PD demographics (age, gender, academic rank, specialty/subspecialty, other administrative roles, and salary), which are merged with program demographics from ACGME (tenure as program director and census region) and Fellowship and Residency Electronic Interactive Database (FREIDA; program type and trainee gender percentages) prior to deidentification. Since 2012, the survey has also included core questions on burnout with 2 items from the Maslach Burnout Inventory.<sup>12</sup> Responses are assessed with a 7-point Likert scale ranging from “never” to “every day.” These questions have been found to correlate strongly with emotional exhaustion and depersonalization scores from the full Maslach Burnout Inventory.<sup>13,14</sup>

We also collected specific demographic data for the gender-specific analysis, including average hours of work per week, relationship status, partner employment status, and number and age of any children. Additional data on career advancement included minimum academic rank required to become an IM-PD, salary, self-reported importance of specific factors in influencing a decision to accept a role as an IM-PD (rated on a 5-point Likert scale from “not important at all” to “very important”), self-reported impact of the IM-PD role on overall career advancement (rated on a 5-point Likert scale from “very detrimental” to “very beneficial”), and the genders of the people who had the most influence on the decision to become an IM-PD and the decision to hire the respondent as an IM-PD. Questions assessing quality of life included a 5-point Likert scale describing professional/work-related quality of life (ranging from “as bad as it can be” to “as good as it can be”), 5-point Likert scales assessing satisfaction with current job overall, current job as an IM-PD, and balance between personal and professional life (all ranging from “very dissatisfied” to “very satisfied”), and questions about conflict between work and personal responsibilities and how these were resolved, whether in favor of work, personal responsibilities, or both. Scales assessing work-life integration and conflict and conflict resolution were derived from those used in prior studies of physician work-life integration.<sup>15</sup> Scales assessing work-related quality of life and job satisfaction were developed specifically for this study based on the format used in the work-life integration scale and with the input of authors

on this article who had developed the prior scale. All assessment scales were vetted and approved by the APDIM survey committee prior to distribution.

This study was deemed exempt by Pearl Institutional Review Board under 45 CFR 46.101(b) category 2 (registered with the US Department of Health and Human Services Office for Human Research Protections as IRB00007772).

## PERSPECTIVES VIEWPOINTS

- Female gender was associated with a significant \$29,177 lower annual salary for Internal Medicine Program Directors (IM-PDs).
- Significant differences in work-life balance and burnout appeared to be more strongly associated with partner employment status than gender.
- These findings offer opportunities both for further study and for advocacy efforts by leaders and educational institutions in the area of gender pay equity and work-life balance/integration.

## Data Analysis

De-identified survey responses of IM-PDs were summarized using descriptive statistics and responses compared for men compared with women across personal, professional, and institutional demographics using logistic regression. Mean difference in salary by gender adjusted for additional administrative roles, American Board of Internal Medicine (ABIM) subspecialty training, academic rank, age, tenure as PD, and hours worked was estimated

using multivariable linear regression. An ordinal logistic regression model using 6 ordered salary categories with the same covariates was used to assess the previous model’s sensitivity to skewness and missing data. Potential differences in career advancement, quality of life, and burnout by gender were assessed using bivariate logistic regression. Subgroup comparisons of quality of life and burnout by gender, partner employment status, and number of children were also made. The threshold for statistical significance was set at 0.01 to account for multiple comparisons, and all analyses were done using SAS statistical software (version 9.4, SAS Institute Inc, Cary, NC).

## RESULTS

Of 274 (70%) responding IM-PDs, 112 (41%) were women. Although full data for nonresponders were not available, public data from ACGME and FREIDA presented in the [Supplementary Table](#), available online, showed no significant difference in PD tenure ( $P = 0.14$ ), program census region ( $P = 0.72$ ), program type ( $P = 0.15$ ), or percentage of female residents ( $P = 0.42$ ).

## Demographics

IM-PD demographics are shown in [Table 1](#) with gender-based comparisons. Female IM-PDs were significantly younger than male IM-PDs (mean [standard deviation, SD] 48.8 [8.4] vs 52.5 [9.3] years;  $P = 0.001$ ) and less likely to have a partner who was

**Table 1** Demographic Characteristics of Program Directors and Odds of Being Female (N = 274)

	Male (162)	Female (112)	OR (99% CI)	P Value
<b>PERSONAL</b>				
Age in years: Mean (SD) (N = 272)	52.5 (9.3)	48.8 (8.4)	0.954 (0.918, 0.990)	0.001
Employment Status of Partner (N = 262)				<0.0001
Partner employed, nonphysician	52 (32.1%)	44 (39.3%)	<i>reference</i>	
Partner employed, physician	41 (25.3%)	45 (40.2%)	1.297 (0.603, 2.792)	
Partner not employed	56 (34.6%)	9 (8.0%)	0.190 (0.066, 0.551)	
Not in a relationship	6 (3.7%)	9 (8.0%)	1.773 (0.413, 7.607)	
Number of Children (N = 271)				0.08
0	13 (8.0%)	16 (14.3%)	1.611 (0.554, 4.682)	
1	19 (11.7%)	11 (9.8%)	0.758 (0.258, 2.230)	
2	72 (44.4%)	55 (49.1%)	<i>reference</i>	
3	33 (20.4%)	24 (21.4%)	0.952 (0.415, 2.185)	
4+	23 (14.2%)	5 (4.5%)	0.285 (0.74, 1.100)	
<b>PROFESSIONAL</b>				
Hours worked per week: Mean (SD) (N = 273)	60.2 (13.1)	59.2 (12.2)	0.994 (0.969, 1.019)	0.51
PD Tenure in years: Mean (SD)	6.8 (7.1)	4.7 (4.6)	0.941 (0.886, 1.000)	0.009
Academic Rank at time of PD Appointment				0.94
None	13 (8.0%)	8 (7.1%)	0.845 (0.245, 2.915)	
Instructor	8 (4.9%)	5 (4.5%)	0.858 (0.185, 3.975)	
Assistant Professor	81 (50.0%)	59 (52.7%)	<i>reference</i>	
Associate Professor	49 (30.3%)	35 (31.3%)	0.981 (0.477, 2.016)	
Full Professor	11 (6.8%)	5 (4.5%)	0.624 (0.145, 2.681)	
PD Current Academic Rank (N = 272)				0.21
None	9 (5.6%)	3 (2.7%)	0.523 (0.087, 3.124)	
Instructor	2 (1.2%)	2 (1.8%)	1.568 (0.114, 21.612)	
Assistant Professor	40 (24.7%)	41 (36.6%)	1.607 (0.753, 3.340)	
Associate Professor	69 (42.6%)	44 (39.3%)	<i>reference</i>	
Full Professor	41 (25.3%)	21 (18.8%)	0.803 (0.343, 1.882)	
Other Administrative Roles				
None	73 (45.1%)	53 (47.3%)	1.095 (0.580, 2.066)	0.71
Associate/Vice Chair of Department	35 (21.6%)	30 (26.8%)	1.328 (0.635, 2.775)	0.32
CMO, CQO, or other hospital role	21 (13.0%)	6 (5.4%)	0.380 (0.110, 1.310)	0.04
Chair of department	10 (6.2%)	5 (4.5%)	0.710 (0.167, 3.021)	0.54
Designated Institutional Official	12 (7.4%)	5 (4.5%)	0.584 (0.143, 2.391)	0.33
Assistant or Associate Dean	5 (3.1%)	2 (1.8%)	0.571 (0.065, 5.045)	0.51
Other	26 (16.1%)	14 (12.5%)	0.747 (0.298, 1.874)	0.41
PD Training Program Type (N = 273)				0.37
University-based	83 (51.2%)	68 (60.7%)	<i>reference</i>	
Community-based, university affiliated	56 (34.6%)	35 (31.3%)	0.763 (0.380, 1.531)	
Community-based	16 (9.9%)	6 (5.4%)	0.458 (0.124, 1.685)	
Military	6 (3.7%)	3 (2.7%)	0.610 (0.094, 3.958)	
ABIM-Certified Subspecialty Training? (N = 273)				0.05
No	109 (67.3%)	88 (78.6%)	<i>reference</i>	
Yes	52 (32.1%)	24 (21.4%)	0.572 (0.274, 1.192)	
Annual Salary (N = 271)				0.008
\$225,000 or less	33 (20.4%)	37 (33.0%)	<i>reference</i>	
\$225,001 to \$250,000	28 (17.3%)	26 (23.2%)	0.828 (0.325, 2.108)	
\$250,001 to \$275,000	28 (17.3%)	10 (8.9%)	0.319 (0.103, 0.988)	
\$275,001 to \$300,000	24 (14.8%)	18 (16.1%)	0.669 (0.243, 1.841)	
\$300,001 to \$325,000	15 (9.3%)	11 (9.8%)	0.654 (0.198, 2.159)	
\$325,000 or more	33 (20.4%)	8 (7.1%)	0.216 (0.066, 0.709)	
<b>INSTITUTIONAL</b>				
FREIDA: '17-'18 Female Residents, % (N = 252)	42.4% (8.3%)	43.3% (10.0%)	1.011 (0.975, 1.049)	0.43
FREIDA: Program Type				0.41
University-based	52 (32.1%)	46 (41.1%)	1.378 (0.689, 2.758)	
Community-based, university affiliated	81 (50.0%)	52 (46.4%)	<i>reference</i>	

**Table 1** (Continued)

	Male (162)	Female (112)	OR (99% CI)	P Value
Community-based	25 (15.4%)	12 (10.7%)	0.748 (0.271, 2.061)	0.18
Military	4 (2.5%)	2 (1.8%)	0.779 (0.080, 7.593)	
US Census Bureau: Region				0.14
Northeast	48 (29.6%)	36 (32.1%)	0.860 (0.390, 1.896)	
South	47 (29.0%)	41 (36.6%)	reference	
Midwest	42 (25.9%)	17 (15.2%)	0.464 (0.184, 1.168)	
West	23 (14.2%)	18 (16.1%)	0.897 (0.337, 2.390)	
Unincorporated Territory	2 (1.2%)	0 (0%)	—	
Academic Rank Required to become PD				0.14
None	117 (72.2%)	69 (61.6%)	reference	
Instructor	3 (1.9%)	0 (0%)	—	
Assistant Professor	28 (17.3%)	24 (21.4%)	1.453 (0.643, 3.288)	
Associate Professor	2 (1.2%)	2 (1.8%)	1.696 (0.125, 22.952)	
Full Professor	0 (0%)	0 (0%)	—	
Do Not Know	12 (7.4%)	17 (15.2%)	2.402 (0.843, 6.843)	

ABIM = American Board of Internal Medicine; CI = confidence interval; CMO = chief medical officer; CQO = chief quality officer; FREIDA = Fellowship and Residency Electronic Interactive Database; OR = odds ratio; PD = program director; SD = standard deviation.

not employed (8.0% vs 34.6%, odds ratio [OR] 0.19, 99% confidence interval [CI] 0.07-0.55). There were no differences in the number of children that IM-PDs reported having. Men had a statistically significantly longer tenure as PD compared with women (mean [SD] 6.8 [7.1] vs 4.7 [4.6] years;  $P=0.009$ ). Higher salary level was associated with lower odds of being a female IM PD ( $P=0.008$ ). Although a greater proportion of male IM-PDs reported having completed ABIM-certified subspecialty training (32.1% vs 21.4%), this difference was not statistically significant ( $P=0.05$ ). All demographics with a bivariate  $P$  value below 0.25 were included in a multivariable logistic regression model, where partner employment ( $P=0.001$ ) and ABIM-certified subspecialty training ( $P=0.007$ ) showed statistically significant associations with IM-PD gender after adjusting for all other covariates simultaneously.

## Salary

Data regarding IM-PD salaries are presented in [Table 2](#). In adjusted analysis, female IM-PDs had significantly lower annual salaries than male IM-PDs (mean [SD] \$29,177 [\$11,021] less, 99% CI \$57,566 to \$787 less,  $P=0.008$ ), whereas PD age, tenure as a PD, hours worked, academic rank, and training in an ABIM-certified subspecialty were not associated with salary differences (all  $P > 0.60$ ). PDs with other administrative roles did have a significantly higher salary than those without (mean [SD] \$30,806 [\$11,197] more, 99% CI \$1964 to \$59647 more,  $P=0.006$ ). Because this model was only able to use data for the 143 IM-PDs who wrote in their numerical salary, a sensitivity analysis was performed using the categorical salary responses provided by 269 IM-PDs. This multivariable ordinal

**Table 2** Multivariable Linear Regression Model for Salary (Continuous) [N = 143]

Analysis of Maximum Likelihood Parameter Estimates						
Parameter	Estimate	Standard Error	Wald 99% Confidence Limits		Wald $\chi^2$	P Value
Intercept	\$259,342.30	\$11,523.94	\$229,658.60	\$289,026.00	506.46	<0.0001
Female PD	-\$29,176.70	\$11,021.44	-\$57,566.00	-\$787.33	7.01	0.0081
Other Admin Role(s)	\$30,805.94	\$11,197.10	\$1,964.12	\$59,647.76	7.57	0.0059
ABIM-Certified Subspecialty Training	-\$6,834.27	\$13,261.91	-\$40,994.70	\$27,326.14	0.27	0.6063
Academic Rank						
Assistant Professor	-\$3,734.02	\$13,129.59	-\$37,553.60	\$30,085.56	0.08	0.7761
Instructor	-\$29,495.50	\$45,987.62	-\$147,952.00	\$88,960.78	0.41	0.5213
None	-\$8,496.97	\$25,843.72	-\$75,066.00	\$58,072.04	0.11	0.7423
Professor	\$6,650.54	\$14,822.50	-\$31,529.70	\$44,830.76	0.20	0.6537
Age	-\$160.51	\$665.00	-\$1,873.43	\$1,552.41	0.06	0.8093
Tenure as PD	-\$217.65	\$1,171.92	-\$3,236.30	\$2,801.01	0.03	0.8527
Hours Worked/Week	-\$212.19	\$441.99	-\$1,350.67	\$926.29	0.23	0.6312

ABIM = American Board of Internal Medicine; PD = program director.

logistic regression model indicated consistent conclusions for IM-PD gender ( $P = 0.005$ ) and administrative roles ( $P = 0.003$ ). For a male PD, the odds of being in the next highest salary group compared to all lower salary groups combined were 1.9 times greater than for a female PD, holding all other variables in the model constant. In this model, the academic rank of professor was also associated with increased odds of being in the next highest salary category ( $P = 0.008$ ).

### Career Advancement, Quality of Life, and Burnout

No gender-based comparisons of career advancement, quality of life, and burnout were statistically significant. Although a greater proportion of women than men reported that their decision to become a PD was influenced by potential for career advancement in education (71% vs 57%) and by a previous role in education (81% vs 70%), these differences were not statistically significant ( $P = 0.02$  and  $P = 0.03$ , respectively). There were no statistically significant gender-related differences in overall professional quality of life, satisfaction with overall job, satisfaction with PD job, or satisfaction with balance of personal and professional life (all  $P > 0.27$ ). We also found no gender-related differences in self-reported burnout ( $P = 0.92$ ). Although a greater proportion of women than men reported experiencing a conflict between work and personal responsibilities in the past 3 weeks (77.7% vs 64.8%), this difference was not statistically significant ( $P = 0.02$ ). There were no statistically significant differences in the way IM-PDs resolved any work/personal conflicts (in favor of work, in favor of personal responsibility or in a way that met both).

Additional information presented in Table 3, estimated from multivariable logistic regression models adjusting for gender, partner employment, and number of children, demonstrates that IM-PDs with physician partners had significantly higher odds of being somewhat or very satisfied with work-life balance than IM-PDs with employed nonphysician partners (OR 2.78, 99% CI 1.22-6.32,  $P = 0.001$ ). IM-PDs with partners employed as nonphysicians had significantly higher odds of a conflict between work and personal responsibilities than those with unemployed partners (OR 3.78, 99% CI 1.32-10.80,  $P = 0.001$ ). IM-PDs who were not in a relationship had significantly higher odds of burnout than those who were in a relationship with an employed physician (OR 5.89, 99% CI 1.15-30.07,  $P = 0.005$ ).

### DISCUSSION

In this study of IM-PDs, we found substantial gender-based differences in salary but not in job satisfaction, quality of life, or burnout. Although disappointing, these observations regarding salary disparities are not unexpected, as similar disparities are well described across many professions in academic medicine even

**Table 3** Logistic Regression Models on PD Gender and Partner Employment Status

Contrast	Somewhat/Very Satisfied with balance of personal & professional life [N = 260]			Conflict between work & personal responsibilities in last 3 weeks? [N = 260]			Conflict resolved in favor of both? [N = 257]			Burnout? [N = 259]					
	OR	99% Confidence Limits	P Value	OR	99% Confidence Limits	P Value	OR	99% Confidence Limits	P Value	OR	99% Confidence Limits	P Value			
Female PD vs Male PD	1.40	0.67	2.89	1.76	0.76	4.11	0.08	0.81	0.40	1.67	0.46	1.04	0.48	2.25	0.90
Not in relationship vs Employed Nonphysician	1.25	0.28	5.68	0.23	0.04	1.19	0.02	1.17	0.26	5.35	0.79	2.53	0.54	11.97	0.12
Not in relationship vs Employed Physician	0.45	0.10	2.11	0.54	0.11	2.72	0.33	0.46	0.10	2.18	0.20	5.89	1.15	30.07	0.01
Not in relationship vs Unemployed	0.68	0.14	3.44	0.86	0.16	4.58	0.82	0.53	0.11	2.70	0.32	3.32	0.62	17.89	0.07
Employed Physician vs Employed Nonphysician	2.78	1.22	6.33	0.42	0.16	1.13	0.02	2.53	1.13	5.69	0.00	0.43	0.17	1.06	0.02
Employed Physician vs Unemployed	1.51	0.58	3.92	1.59	0.61	4.14	0.22	1.15	0.45	2.93	0.70	0.56	0.20	1.62	0.16
Employed Nonphysician vs Unemployed	0.55	0.21	1.39	3.78	1.32	10.80	0.00	0.46	0.18	1.13	0.03	1.31	0.50	3.46	0.47

OR = odds ratio; PD = program director.

after accounting for factors such as specialty, academic rank, and work hours.<sup>3,16-18</sup> Our findings are also similar to data from the 2012 APDIM survey results, which found persistent gender-based salary differences for IM-PDs from 2008 through 2012.<sup>11</sup> This persistent disparity is important to acknowledge and points to the importance of targeted interventions to advocate strongly for gender equity in pay.

Compared to prior literature reporting increased prevalence of work-home and work-personal conflicts among women compared with men in several specialties,<sup>19-22</sup> we found no significant gender-based differences in work-home conflict. However, we found that IM-PDs with partners employed as nonphysicians were markedly more likely to report work-home conflicts than those with unemployed partners. Female IM-PDs in this study were more likely than men to have an employed partner, similar to other reports in the literature.<sup>23</sup> Although work-home conflicts may primarily be seen in the setting of differential partner employment status (regardless of gender), gender-based disparities in partner employment status may be a factor contributing to previous observations of gender-based differences in work-home conflict. Other gender-based factors including conflict with a spouse's/partner's career, childcare and/or elder care responsibilities, and unequal time spent on domestic chores may also be important.<sup>24,25</sup>

We also found that IM-PDs who were not in a relationship were substantially more likely to report symptoms of burnout than those who were in a relationship with an employed physician. This did not appear to be driven by gender. It is important to recognize the difference between physician burnout and work-home conflict. Burnout and work-life integration are intimately related, yet there is not a 1:1 relationship between these items. Although overlapping factors may contribute to burnout and work-home conflict, there are likely also unique factors influencing each of these issues.<sup>26,27</sup> There are multiple validated measures of burnout and overall well-being for physicians, and 1 area for future research is the development of a validated tool for the specific measurement of work-home conflict.

There are several limitations to this study including the relatively small sample size. Given that this study included 70% of all IM-PDs across the country, we believe that the findings are likely still generalizable to most IM-PDs. There are likely additional elements of salary difference not captured by the demographic section of the survey such as pay/protected time for other administrative roles and the nature of those roles, as well as differences in compensation by subspecialty not accounted for by self-reported completion of ABIM-certified subspecialty training alone. Given that we did find that those IM-PDs with other administrative roles reported significantly higher pay, additional

investigation into the nature of these roles may be helpful. However, these roles may not specifically be associated with gender disparities because we saw no significant differences between the percentage of male and female IM-PDs reporting other administrative roles such as associate/vice chair of a department, chair of department, assistant/associate dean, and others. Gender-based differences in subspecialty and the differences in pay associated with these subspecialties could not be adequately addressed due to limited numbers of subspecialty-trained PDs and inadequate information on the procedural/nonprocedural nature of each of these subspecialties (eg, "cardiology" subspecialty could include either nonprocedural practice such as preventive cardiology or procedural practice such as electrophysiology or interventional cardiology).

It is important for future research and advocacy to address gender-associated salary disparities. National movements such as TIME'S UP Healthcare and #BeEthical, among others, will ideally lead to greater awareness of such disparities and increase accountability on the part of leaders and institutions to ensure gender equity in salary and other areas.<sup>28,29</sup> Interventions and advocacy for the improvement of physician work-life integration and reduction of work-home conflicts are also essential for physicians of both genders. Career development programs—both those specifically tailored for women physicians and those developed for physicians of both genders—aim to improve participant skills in negotiating work-home conflict and develop leadership skills.<sup>30-32</sup> Such programs could be expanded to all academic institutions and offered to every physician on an opt-out basis. Several physician leaders and medical societies have developed position statements and processes to address gender disparities as well as physician burnout and work-life integration,<sup>33-36</sup> and such position statements should be adopted and endorsed by all medical societies and academic medical centers.

## CONCLUSION

In this national survey of IM-PDs, we found significant gender-based differences in PD salary but no differences in career advancement, quality of life, or burnout. There are multiple potential reasons for salary differences, but regardless of the reason, future interventions should target gender-based salary disparities in an attempt to achieve gender pay equity.

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**Supplementary Table** Data for All APDIM Member Programs by 2018 Survey Completion (N = 392)

	Program Director Responded?*		P Value**
	No (N = 118)	Yes (N = 274)	
ACGME: PD tenure, years	7.1 (5.4, 8.7)	5.9 (5.0, 6.9)	0.14
ACGME: Filled positions	59.0 (50.2, 67.8)	63.2 (56.9, 69.5)	0.31
ABIM: '15-'17 program pass rate, % (N = 357)	90.8 (89.0, 92.6)	90.3 (89.1, 91.5)	0.54
FREIDA: Number of interviews (N = 390)	233.1 (197.9, 268.3)	248.9 (226.2, 271.5)	0.33
FREIDA: '17-'18 USMD residents, % (N = 364)	35.4 (26.9, 43.9)	48.5 (42.6, 54.4)	0.001
FREIDA: '17-'18 female residents, % (N = 364)	42.0 (39.8, 44.1)	42.8 (41.3, 44.2)	0.42
US Census Bureau: Region			0.72
Midwest	32 (27%)	59 (22%)	
Northeast	37 (31%)	84 (31%)	
South	32 (27%)	88 (32%)	
West	16 (14%)	41 (15%)	
US Territory	1 (1%)	2 (1%)	
ACGME: VA affiliation			0.06
No	86 (73%)	172 (63%)	
Yes	32 (27%)	102 (37%)	
FREIDA: Program type			0.15
University-based	29 (25%)	98 (36%)	
Community-based	18 (15%)	37 (14%)	
Military	2 (2%)	6 (2%)	
Community-based, university-affiliated	69 (58%)	133 (49%)	
FREIDA: Offer preliminary positions			0.43
No	41 (35%)	107 (39%)	
Yes	77 (65%)	167 (61%)	
FREIDA: USMLE Step 1 average (N = 367)			0.26
201-220	26 (23%)	47 (18%)	
221-240	76 (68%)	175 (68%)	
>240	9 (8%)	34 (13%)	

ABIM = American Board of Internal Medicine; ACGME = Accreditation Council for Graduate Medical Education; APDIM = Association of Program Directors in Internal Medicine; FREIDA = Fellowship and Residency Electronic Interactive Database; PD = program director; USMD = United States medical doctor; USMLE = United States Medical Licensing Examination; VA = Veteran's Affairs.

\*Mean (99% confidence interval) or count (percent) for numeric or nominal responses, respectively

\*\*Satterthwaite t test or Fisher's Exact Test for numeric or nominal responses, respectively