2020-2021 | Urologists in Training

RESIDENTS AND FELLOWS IN THE UNITED STATES

American Urological Association

American Urological Association (AUA)

American Urological Association, *Urologists in Training-Residents and Fellows in the United States 2020-2021* Linthicum, Maryland, U.S.A., November 4, 2022

Preface

Initially launched in 2014, the American Urological Association (AUA) conducts a specialty-wide Annual Census to collect information on urology workforce, education and practice characteristics from urological care professionals and urologists in training across the globe. Data collected are analyzed, presented at annual meetings and published annually through various formal reports and papers about practicing urologists, urologists in training and other urological care providers. Members of the urological community use the Census data collected to fill in knowledge gaps, support advocacy efforts and advance the science of urology. The Census helps pave the way for clinicians, policymakers, payers and patients to pinpoint patterns and longitudinal variation of the workforce and practice with continuous, effective and reliable information.

This report is about residents and fellows, and provides a profile of urologists in training and the insight into their experiences, needs, choices and expectations. The report is an important source of information for residents, fellows, resident program directors as well as healthcare workforce planners and policy makers.

To ensure future reports will remain timely, representative and relevant to the needs of urologists in training, we encourage you to contribute to this important effort each year. Annual participation further helps trend and compare the career path of urologists over time. Such data provides an unparalleled opportunity to examine the current landscape and predict future supply and demand of care through appropriate training and certification programs.

In return for your effort to report your data, we invite you to review past Census reports available at AUAnet.org/Census.

Thank you for your annual participation in the AUA Annual Census, broad dissemination of AUA Census publications and conducting workforce research using AUA Census data.

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The American Urological Association thanks all the members of the urology community for their continued support and participation in the Annual Census.

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EXECUTIVE SUMMARY

PURPOSE:

The purpose of this report on current urologists in training in the United States is to understand, characterize and compare professional characteristics and challenges urology residents and fellows are facing today.

METHODS:

Data were collected through the AUA Annual Census in two census years, 2020 and 2021. Questions uniquely asked in one year were reported directly based on the respondents in the year. Questions commonly asked in two census years were reported based on the respondents in both years, and the analyses were based on the answers in the year of participation or the second year if the respondent participated in both years. In the AUA Annual Census, urology residents and fellows answered questions related to their demographic characteristics, anticipated practice environments, educational debt, challenges and needs. Professional burnout in residents and fellows was also assessed in this report. Descriptive analyses were performed using IBM-SPSS 27 and Microsoft Excel.

KEY FINDINGS:

A total of 469 U.S. urologists in training, including 324 residents and 145 fellows, completed the AUA Annual Census in 2020 and/or 2021. More than half of the urologists in training reported that their choice in selecting a residency or fellowship program in urology was positively influenced by diversity, such as the presence of other trainees of same race/ethnicity, gender, religion and/or sexual orientation. Among urologists in training who had childbirth during residency, 75.3 percent reported the availability of residency or institutional-paid parental leave. Nearly half of residents and three of four fellows planned to practice in academic medical centers. The top factors influencing the choice of future practice settings for both residents and fellows were a satisfactory work/life balance, geographic location and compensation; only 16.2 percent of urologists in training experienced rotation in or exposure to rural urology practice during residency. Among those who experienced rotation in or exposure to rural urology practice during residency, more than half felt exposure to rural urology practice during residency makes them more likely to consider a job in a rural setting; urologists in training who currently have educational debt of more than $150,000 account for 52.5 percent of residents and 47.5 percent of fellows, slightly higher than percentages reported in 2019. Urologists in training with higher educational debt were more likely to report higher compensation expectations. The top benefits or resources that were believed to help improve well-being and work/life balance were meal plans, ability to attend health appointments during work hours and paid family leave. Professional burnout rates in both residents and fellows in 2021 increased by 1.2 percent and 4.7 percent, respectively, from rates reported in 2019. The highest professional burnout rate in residents was seen during the second postgraduate year (PGY2) of residency (68.8 percent).

DISCUSSION:

The findings from this study provide descriptive accounts of residents' diverse experiences on a variety of topics such as professional preparation, needs and preferences to bridge knowledge gaps, inform urology workforce planning and training, and ultimately improve urological care and health in the United States.

About the American Urological Association (AUA)

THE ORGANIZATION

Founded in 1902, the AUA is a premier urologic association, providing invaluable support to the urologic community.

AUA MISSION

The AUA mission is to promote the highest standards of urological clinical care through education, research and the formulation of health care policy.

AUA VISION

The AUA vision is to be the premier professional association for the advancement of professional urologic patient care.

About the AUA Annual Census

The AUA Annual Census (AUAnet.org/Census) is a systematically designed, specialty-wide survey of urology. The primary goal of the Census is to provide a definitive source of data about the urological community, such as providers' geographic distribution, demographic characteristics, education and training, and patterns of urology practice. The data collected assist in filling knowledge gaps and meeting research needs while ultimately improving patient care.

For more information about the AUA, please visit AUAnet.org.

Glossary

AUA	American Urological Association
PGY	Postgraduate Year
SD	Standard Deviation

List of Tables

T-shirts for the canceled 2020 Annual Meeting were given out as giveaways at the 2022 Annual Meeting.

PURPOSE

Millions of individuals who are affected by urological diseases and conditions, including urological cancers, sexual function/infertility and urinary incontinence, seek the clinical care of urologists. As the population grows and ages, the demand for urologists has intensified.

Urology residency is the most important training in the development of future urologists.

Residency is a time of intensive learning and incredible growth, both personally and professionally, where new urologists dedicate themselves to learning the skills and knowledge they will need to practice urology independently after graduation.

Working conditions in urology residency are challenging as residents face long hours in emotionally demanding and stressful environments, which may result in a significant imbalance of work and personal life, leading to burnout.

The fellowship stage is intensive training after residency, which allows urologists to subspecialize in a specific area of urology.

To prepare the future urology workforce, the American Urological Association (AUA) included current urology residents and fellows in the Annual Census to understand, characterize and compare urology residents and fellows in the United States.

DATA AND METHODS

DATA SOURCES

Data used in the residents and fellows report were collected through the 2020 and 2021 AUA Annual Census, a systematically designed annual survey of urology professionals. The 2019 AUA Census was launched during the 2019 AUA Annual Meeting in Chicago in May 2019 and remained online to both AUA members and nonmembers until September 30, 2019. Each respondent was assigned an identification number prior to the submission of responses to the Census questions. This step ensured no respondent could take the survey more than once. In this report, answers from 324 urology residents and 145 fellows in the United States were analyzed and reported.

DATA ELEMENTS

Data elements include demographics (age, gender and race), education and training, geographic location, the level of educational debt, professional burnout and anticipated practice locations, choices and compensation.

ASSESSMENT OF PROFESSIONAL BURNOUT

Physician burnout has been linked to decreased job performance as well as increased medical errors, interpersonal conflicts and depression. The purpose of including burnout questions in the resident and fellow module of the 2021 AUA Census was to compare the responses with the results of urologists in training as reported in 2019 and practicing urologists as reported in 2021. Maslach Burnout Inventory (MBI) questions, a validated and globally comparable questionnaire, , , were given to all residents and fellows who completed the Census. Burnout was defined as scoring high in either the emotional exhaustion (score ≥ 27) or depersonalization (score ≥ 10) category.

DATA ANALYSIS

Descriptive analyses of data were performed using both IBM-SPSS 27 and MS Excel.

LIMITATIONS

Samples from urology residents and fellows were directly analyzed, and thus the findings in this report may not be generalizable. In addition, most data elements collected in the AUA Annual Census were self-reported and therefore are subject to recall bias.

PRIMARY OBSERVATIONS

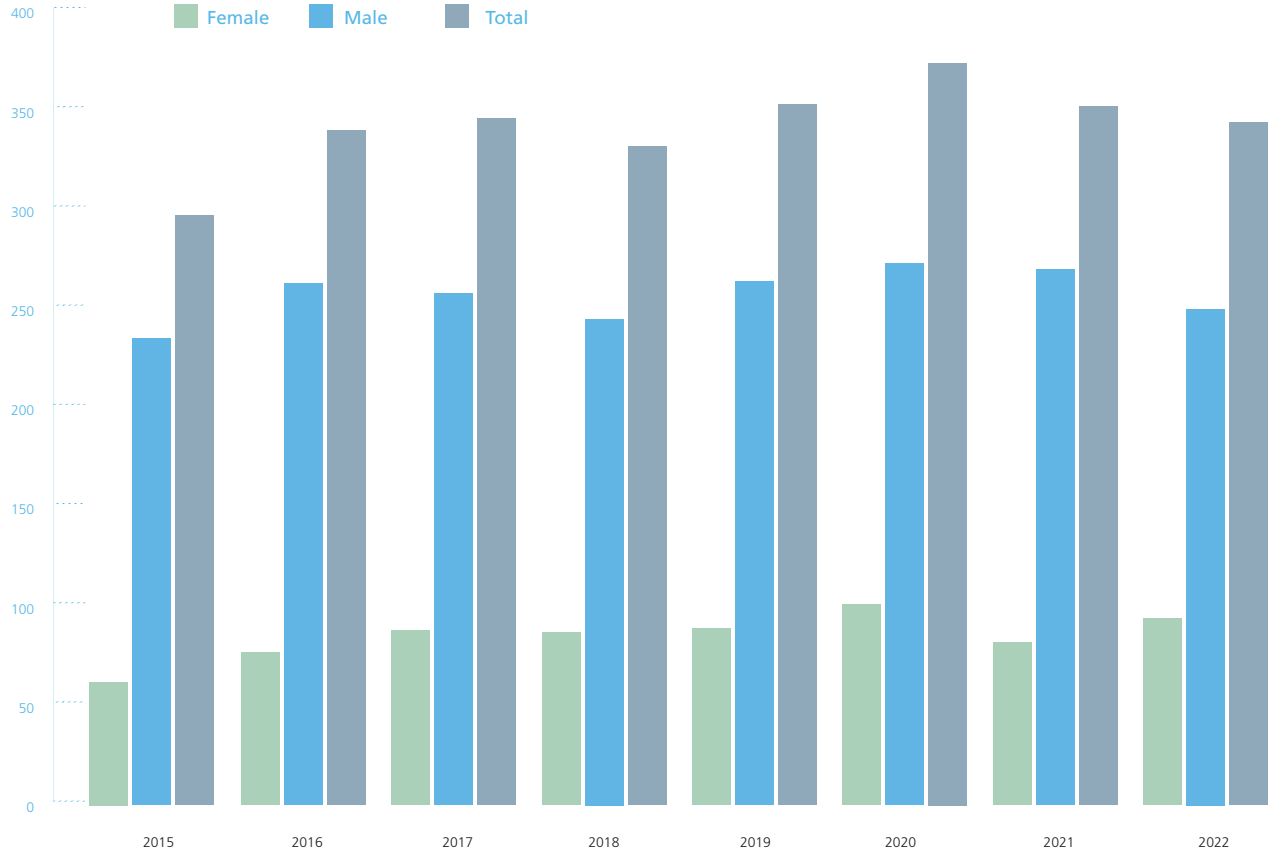
- The average ages of residents and fellows sampled are 31.1 and 34.2 years (TABLE 1-1), respectively, while one-third of the resident respondents are women (TABLE 1-2).
- Approximately 31 percent of urologists in training (31.1 percent of residents and 30.7 percent of fellows) are non-White (TABLE 1-3), which is much higher than 16.7 percent of non-White practicing urologists in the United States.
- Fifty-one percent of residents and 45.8 percent of fellows stated their choice in selecting a residency or fellowship program in urology was positively influenced by diversity such as presence of other trainees of same race/ethnicity, same gender, same religion and/or same sexual orientation (TABLE 1-6).
- Nearly one-third of urologists in training had a child born during their residency (TABLE 2-1).
- On average, women took 5.9 weeks of maternity leave while men took 1.8 weeks of paternity leave when a child was born during residency (TABLE 2-2). Women's length of maternity leave was shorter while men's length of paternity leave was slightly longer than what was reported in 2019 (6.4 weeks and 1.6 weeks, respectively).
- Among urologists in training who had a childbirth experience during residency, 75.3 percent reported the availability of institutional-paid parental leave during residency (TABLE 2-3).
- Most urologists in training felt supported while they experienced childbirth or childcare issues during residency from their co-residents (96.3 percent, TABLE 2-9), residency program (90.2 percent, TABLE 2-10) and residency program director (92.2 percent, TABLE 2-11).
- Nearly half of residents and four in five fellows plan to practice in academic medical centers (TABLE 3-1).
- The top factors influencing the choice of future practice settings for both residents and fellows are a satisfactory work/life balance (Family/Lifestyle/Call Schedule), geographic location and compensation (TABLE 3-4, TABLE 3-5 and TABLE 3-6).
- Approximately 34 percent of urologists in training planned to practice after the age of 70 (TABLE 3-7), more so men (TABLE 3-8 and TABLE 3-9).
- Gender differences in expected annual compensation were seen in both residents and fellows. Men are more likely to report their expected annual compensation over $400,000 (TABLE 3-11 and TABLE 3-12).
- The vast majority of residents (96.0 percent) and fellows (99.3 percent) plan to practice in either urban or suburban areas. Between urban and suburban areas, fellows are more likely to report choosing an urban community as their future practicing area (TABLE 4-1).
- Only 16.2 percent of urologists in training experienced rotation in or exposure to rural urology practice during residency (TABLE 4-4). Among those who experienced rotation in or exposure to rural urology practice during residency, more than half felt exposure to rural urology practice during residency makes them more likely to consider a job in a rural setting (TABLE 4-5).
- The three most helpful strategies to encourage residents to establish a practice in rural locations include lobbying for government-subsidized student loan forgiveness for urologists who establish a practice in rural areas, providing a rural urology rotation during residency and targeting recruitment of rural medical students for urology residency training (TABLE 4-6).
- Urologists in training who currently have educational debt of more than $150,000 account for 52.5 percent of residents and 47.5 percent of fellows (TABLE 5-1), which is slightly higher than percentages reported in 2019.
- Among residents, those with educational debt are more likely to report choosing private practices as their future practice setting, especially as the amount of educational debt increases (TABLE 5-5).
- Urologists in training with higher educational debt are more likely to report higher compensation expectations (TABLE 5-7).

- The top benefits or resources that are believed to help improve well-being and work/life balance are meal plans, ability to attend health appointments during work hours and paid family leave (TABLE 6-1).
- It was reported that 49.5 percent of residents and 55.6 percent of fellows faced difficulty attending personal medical, mental or dental appointments (TABLE 6-2).
- Approximately 48 percent of urologists in training have access to urology-specific call rooms at all hospital sites (TABLE 6-5), with minor gender differences in access reported (TABLE 6-6 and TABLE 6-7).
- Approximately 88 percent of urologists in training would choose medicine as their career again if given the opportunity (TABLE 7-1).
- Among those who would choose medicine as their career again, a vast majority (98.4 percent of residents and 94.4 percent of fellows) would choose urology again as their medical specialty (TABLE 7-4).
- Of the urologists in training, 53 percent considered revisiting their career or specialty choice at some point during residency, most commonly during the second postgraduate year (PGY2) of residency (TABLE 7-7).
- Professional burnout rates in both residents and fellows in 2021 increased by 1.2 percent and 4.7 percent, respectively, from rates reported in 2019 (TABLE 8-3).
- The percentage of professional burnout is relatively higher in residents (48.2 percent) and lower in fellows (32.5 percent) (TABLE 8-4), compared to practicing urologists (36.7 percent), as reported in 2021.
- The highest professional burnout rate in residents was seen during PGY2 of residency (68.8 percent) (TABLE 8-5), which may be the reason that urologists in training were most likely to revisit their career or specialty choice during the second postgraduate year (PGY2) of residency (TABLE 7-7).

RESULTS

Urology resident population in the United States

Number of residents to enter urologist workforce by graduation year:



(Data source: AUA resident master files 2015 to 2021.)

SURVEY SAMPLES IN THIS STUDY

Number of respondents from urologists in training who completed the AUA Annual Census between 2020 and 2021:

Composition of Respondents

Level of Training	Samples of Urologists in Training					
	Respondents to Questions Only in 2020 Census		Respondents to Questions Only in 2021 Census		Respondents to Questions in Both 2020 and 2021 Census	
	Number	Percent (%)	Number	Percent (%)	Number	Percent (%)
Residents	**254**	**100.0**	**166**	**100.0**	**324**	**100.0**
Surgery Intern	44	17.3	26	15.7	64	19.8
PGY2	33	13.0	16	9.6	33	10.2
PGY3	45	17.7	28	16.9	54	16.7
PGY4	70	27.6	49	29.5	86	26.5
Chief Resident	62	24.4	47	28.3	87	26.9
Fellows	**82**	**100.0**	**77**	**100.0**	**145**	**100.0**
Total	**336**		**243**		**469**	

(Data source: The 2020 and 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

Section 1: Demographics and Family Relationships

Primary Observations

- The average ages of residents and fellows sampled are 31.1 and 34.2 years (TABLE 1-1), respectively, while one-third of the resident respondents are women (TABLE 1-2).
- Approximately 31 percent of urologists in training (31.1 percent of residents and 30.7 percent of fellows) are non-White (TABLE 1-3), which is much higher than 16.7 percent of non-White practicing urologists in the United States.
- Fifty-one percent of residents and 45.8 percent of fellows stated their choice in selecting a residency or fellowship program in urology was positively influenced by diversity such as presence of other trainees of same race/ethnicity, same gender, same religion and/or same sexual orientation (TABLE 1-6).

TABLE 1-1

Age Distribution

Age Range	Urologists in Training			
	Residents		Fellows	
	Number	Percent (%)	Number	Percent (%)
< 30	93	28.7	0	0.0
30-31	109	33.3	5	3.4
≥ 32	122	37.7	140	96.6
Total	324	100.0	145	100.0

Mean and Standard Deviation (SD)	Mean	SD	Mean	SD
	31.1	2.8	34.2	2.4

(Data source: AUA Annual Census 2020 and 2021–unweighted samples from the resident and fellow module.)

TABLE 1-2

Gender

Gender	Urologists in Training			
	Residents		Fellows	
	Number	Percent (%)	Number	Percent (%)
Male	216	66.7	88	69.1
Female	108	33.3	57	30.9
Total	**324**	**100.0**	**145**	**100.0**

(Data source: AUA Annual Census 2020 and 2021–unweighted samples from the resident and fellow module.)

TABLE 1-3

Race

Race	Urologists in Training			
	Residents		Fellows	
	Number	Percent (%)	Number	Percent (%)
White	213	68.9	97	69.3
Asian	66	21.4	31	22.1
Black	16	5.2	7	5.0
Other Races including Multiple Race	14	4.5	5	3.6
Total	**324**	**100.0**	**145**	**100.0**

(Data source: AUA Annual Census 2020 and 2021–unweighted samples from the resident and fellow module.)

TABLE 1-4

Hispanic Ethnicity

Ethnicity	Urologists in Training			
	Residents		Fellows	
	Number	Percent (%)	Number	Percent (%)
Not Hispanic	293	91.6	132	91.0
Hispanic	27	8.4	13	9.0
Total Reported	**320**	**100.0**	**145**	**100.0**
Not Reported	4		0	
Total	**324**		**145**	**145**

(Data source: AUA Annual Census 2020 and 2021–unweighted samples from the resident and fellow module.)

TABLE 1-5

Relationship Status

Relationship Status	Urologists in Training			
	Residents		Fellows	
	Number	Percent (%)	Number	Percent (%)
Married or Partnered	229	71.3	111	76.6
Single	90	28.0	31	21.4
Divorced/Separated	2	0.6	3	2.1
Total Reported	**321**	**100.0**	**145**	**100**
Not Reported	3		0	
Total	**324**		**145**	

(Data source: AUA Annual Census 2020 and 2021–unweighted samples from the resident and fellow module.)

TABLE 1-6

Influence of Diversity in Selecting a Residency or Fellowship Program in Urology (by Training Status)

Diversity Influence	Urologists in Training			
	Residents		Fellows	
	Number	Percent (%)	Number	Percent (%)
Diversity Was a Positive Influence on My Decision	76	51.0	33	45.8
Diversity Had No Impact on My Decision-Making	70	47.0	39	54.2
Diversity Was a Negative Influence on My Decision	3	2.0	0	0.0
Total Reported	**149**	**100.0**	**72**	**100.0**
Not Reported (Prefer Not to Answer)	17		5	
Total	**166**		**77**	

(Data source: The 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

TABLE 1-7

Influence of Diversity in Selecting a Residency or Fellowship Program in Urology (by Gender)

Diversity Influence	Urologists in Training			
	Female		Male	
	Number	Percent (%)	Number	Percent (%)
Diversity Was a Positive Influence on My Decision	60	69.0	49	36.6
Diversity Had No Impact on My Decision-Making	25	28.7	84	62.7
Diversity Was a Negative Influence on My Decision	2	2.3	1	0.7
Total Reported	**87**	**100.0**	**134**	**100.0**
Not Reported (Prefer Not to Answer)	5		17	
Total	**92**		**151**	

(Data source: The 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

TABLE 1-8

Influence of Diversity in Selecting a Residency or Fellowship Program in Urology (by Race)

Diversity Influence	Urologists in Training			
	Non-White		White	
	Number	Percent (%)	Number	Percent (%)
Diversity Was a Positive Influence on My Decision	48	65.8	58	42.6
Diversity Had No Impact on My Decision-Making	25	34.2	75	55.1
Diversity Was a Negative Influence on My Decision	0	0.0	3	2.2
Total Reported	**73**	**100.0**	**136**	**100.0**
Not Reported (Prefer Not to Answer)	4		17	
Total	**77**		**153**	

(Data source: The 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

Section 2: Childbirth and Childcare during Residency

Primary Observations

- Nearly one-third of urologists in training had a child born during their residency (TABLE 2-1).
- On average, women took 5.9 weeks of maternity leave while men took 1.8 weeks of paternity leave when a child was born during residency (TABLE 2-2). Women's length of maternity leave was shorter while men's length of paternity leave was slightly longer than what was reported in 2019 (6.4 weeks and 1.6 weeks, respectively).
- Among urologists in training who had a childbirth experience during residency, 75.3 percent reported the availability of institutional-paid parental leave during residency (TABLE 2-3).
- Most urologists in training felt supported while they experienced childbirth or childcare issues during residency from their co-residents (96.3 percent, TABLE 2-9), residency program (90.2 percent, TABLE 2-10) and residency program director (92.2 percent, TABLE 2-11).

TABLE 2-1

Children Born during Residency

Parental Status	Urologists in Training	
	Number	Percent (%)
Yes	78	32.1
No	165	67.9
Total	**243**	**100.0**

(Data source: The 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

TABLE 2-2

Number of Weeks Taken off When a Child Was Born during Residency (by Gender)

Parental Status	Urologists in Training	
	Female	Male
Median Number of Weeks	6.0	2.0
Mean Number of Weeks	5.9	1.8
Standard Deviation	1.2	1.6
Number of Urologists in Training with Childbirth during Residency	21	57
Number of Urologists in Training with Childbirth outside Residency	0	1.0
Number of Urologists in Training with No Children/Unreported	71	94

(Data source: The 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

TABLE 2-3

Availability of Paid Maternity and Paternity Leave from Residency Program or Institution

Availability of Paid Family Leave	Urologists in Training	
	Number	Percent (%)
Both Maternity and Paternity Leave	232	75.3
Maternity Leave Only	31	9.9
Paternity Leave Only	3	0.1
Neither	46	14.7
Total Reported	**312**	**100.0**
Not Reported (I Don't Know)	157	
Total	**469**	

(Data source: The 2020 and 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

TABLE 2-4

Availability of Paid Maternity and Paternity Leave during Residency (by Gender)

Availability of Paid Family Leave	Urologists in Training			
	Female		Male	
	Number	Percent (%)	Number	Percent (%)
Both Maternity and Paternity Leave	81	71.1	154	77.8
Maternity Leave Only	17	14.9	14	7.1
Neither	16	14.0	30	15.1
Total Reported	**114**	**100.0**	**198**	**100.0**
Not Reported	51		106	
Total	**165**		**304**	

(Data source: The 2020 and 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

TABLE 2-5

Parental Leave during Residency and Requirement to Make up Call Days

Make up Call Days	Urologists in Training	
	Number	Percent (%)
Yes	36	44.0
No	50	56.0
Total Reported	**86**	**100.0**
Not Applicable or Unknown	157	69.9
Total	**243**	

(Data source: The 2020 and 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

TABLE 2-6

Childcare Arrangement (by Training Status)

Arrangement	Urologists in Training			
	Residents		Fellows	
	Number	Percent (%)	Number	Percent (%)
I Do Not Have Childcare Needs	119	72.1	35	46.1
Stay-at-Home Parent	22	13.3	8	10.5
Nanny, Au Pair, Relative or Other	16	9.7	21	27.6
Daycare	8	4.8	12	15.8
Total Reported	**165**	**100.0**	**76**	**100.0**
Not Reported	1		1	
Total	**166**		**77**	

(Data source: The 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

TABLE 2-7

Childcare Arrangement (by Gender)

Arrangement	Urologists in Training			
	Female		Male	
	Number	Percent (%)	Number	Percent (%)
I Do Not Have Childcare Needs	67	72.8	87	58.4
Stay-at-Home Parent	2	2.2	28	18.8
Nanny, Au Pair, Relative or Other	13	14.1	24	16.1
Daycare	10	10.9	10	6.7
Total Reported	**92**	**100.0**	**149**	**100.0**
Not Reported	0		2	
Total	**92**		**151**	

(Data source: The 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

TABLE 2-8

Difficultness with Childcare Arrangements since the COVID–19 Pandemic

Arrangement	Urologists in Training			
	Residents		Fellows	
	Number	Percent (%)	Number	Percent (%)
Yes	21	42.9	23	54.8
No	28	57.1	19	45.2
Total Reported	**49**	**100.0**	**42**	**100.0**
Not Applicable or Unknown	117		35	
Total	**166**		**77**	

(Data source: The 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

TABLE 2-9

Supportive of Having Children during Residency by Co-Residents

Supportive of Having Children during Residency	Urologists in Training	
	Number	Percent (%)
Yes	103	96.3
No	4	3.7
Total Reported	**107**	**100.0**
Not Applicable or Unknown	136	
Total	**243**	

(Data source: The 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

TABLE 2-10

Supportive of Having Children during Residency by Residency Program

Supportive of Having Children during Residency	Urologists in Training	
	Number	Percent (%)
Yes	138	90.2
No	15	9.8
Total Reported	**153**	**100.0**
Not Applicable or Unknown	90	
Total	**243**	

(Data source: The 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

TABLE 2-11

Supportive of Having Children during Residency by Residency Program Director

Supportive of Having Children during Residency	Urologists in Training	
	Number	Percent (%)
Yes	142	92.2
No	12	7.8
Total Reported	**154**	**100.0**
Not Applicable or Unknown	89	
Total	**243**	

(Data source: The 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

TABLE 2-12

Institutional Policy on Finding Time to Pump/Store Breast Milk during the Workday in Place

Has Policy on Pump/Store Breast Milk	Urologists in Training	
	Number	Percent (%)
Yes	42	57.5
No	31	42.5
Total Reported	**73**	**100.0**
Not Applicable or Unknown	170	
Total	**243**	

(Data source: The 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

TABLE 2-13

Difficulty in Finding Time to Pump/Store Breast Milk during the Workday

Difficulty Finding Time to Pump/Store Breast Milk	Urologists in Training	
	Number	Percent (%)
Yes	16	76.2
No	5	23.8
Total Reported	**21**	**100.0**
Not Applicable or Unknown	222	
Total	**243**	

(Data source: The 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

TABLE 2-14

Institutional Lactation Facilities in Place

Lactation Facilities	Urologists in Training	
	Number	Percent (%)
Yes	136	95.9
No	6	4.1
Total Reported	**142**	**100.0**
Not Applicable or Unknown	101	
Total	**243**	

(Data source: The 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

TABLE 2-15

Areas in Which (Negative) Differential Treatment Was Experienced during Residency (Multiple Selection)

Differential Treatment	Urologists in Training	
	Number	Percent (%)
No Negative Treatment Experienced	152	65.2
Negative Treatment Experienced	81	34.8
Gender	52	22.3
Race/Ethnicity	30	12.9
Pregnancy/Childcare	18	7.7
Religious Affiliation	6	2.6
Gender Expression/Gender Identity/Sexual Orientation	2	0.9
Total Reported	**233**	**100.0**
Not Reported	10	
Total	**243**	

(Data source: The 2021 AUA Annual Census–unweighted samples from the resident and fellow module.) Sums from numbers and percentages may contrast with calculated totals due to intrinsic rounding errors.

Section 3: Anticipated Professional Choices and Compensation

Primary Observations

- Nearly half of residents and four in five fellows plan to practice in academic medical centers (TABLE 3-1).
- The top factors influencing the choice of future practice settings for both residents and fellows are a satisfactory work/life balance (Family/Lifestyle/Call Schedule), geographic location and compensation (TABLE 3-4, TABLE 3-5 and TABLE 3-6).
- Approximately 34 percent of urologists in training planned to practice after the age of 70 (TABLE 3-7), more so men (TABLE 3-8 and TABLE 3-9).
- Gender differences in expected annual compensation were seen in both residents and fellows. Men are more likely to report their expected annual compensation over $400,000 (TABLE 3-11 and TABLE 3-12).

TABLE 3-1

Planned Type of Practice

	Urologists in Training			
	Residents		Fellows	
Future Practice Settings	Number	Percent (%)	Number	Percent (%)
Academic Medical Centers	115	46.9	106	80.9
Private Practices	81	25.0	7	5.3
Hospitals	28	8.6	14	10.7
Military	11	3.4	1	0.7
Others	10	3.1	3	2.1
Total Decided	**245**	**100.0**	**133**	**100.0**
Undecided	79		14	
Total	**324**		**145**	

(Data source: The 2020 and 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

TABLE 3-2

Gender Differences in Planned Type of Practice in Residents

Future Practice Settings	Residents			
	Male		Female	
	Number	Percent (%)	Number	Percent (%)
Academic Medical Centers	76	45.5	39	50.0
Private Practices	61	36.5	20	25.6
Hospitals	17	10.2	11	14.1
Military	6	3.6	5	6.4
Others	7	4.2	3	3.8
Total Decided	**167**	**100.0**	**78**	**100.0**
Undecided	47		30	
Total	**214**		**108**	

(Data source: The 2020 and 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

TABLE 3-3

Gender Differences in Planned Type of Practice in Fellows

Future Practice Settings	Fellows			
	Male		Female	
	Number	Percent (%)	Number	Percent (%)
Academic Medical Centers	65	81.3	41	80.4
Private Practices	5	6.3	2	3.9
Hospitals	8	10.0	6	11.8
Military	0	0.0	1	2.0
Others	2	2.5	1	2.0
Total Decided	**80**	**100.0**	**51**	**100.0**
Undecided	7		5	
Total	**87**		**56**	

(Data source: The 2020 and 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

TABLE 3-4

Factors Influencing the Choice of Practice (by Training Status)

Influencing Factors	Urologists in Training			
	Residents		Fellows	
	Number	Percent (%)	Number	Percent (%)
Family/Lifestyle/Call Schedule	296	91.4	116	80.0
Geographic Location	281	86.7	121	83.4
Compensation	249	76.9	90	62.1
Academic Setting	161	49.7	103	71.0
Local Urologist Supply	141	43.5	41	28.3
Contractual Obligations	106	32.7	28	19.3
Quality of Research	89	27.5	60	41.4
Malpractice Climate	58	17.9	16	11.0
Others	8	2.5	3	2.1

(Data source: The 2020 and 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

Respondents could select more than one answer, so the total number of counts may differ from the total number of residents and fellows.

TABLE 3-5

Gender-Specific Factors Influencing the Choice of Practice in Residents

Influencing Factors	Residents			
	Male		Female	
	Number	Percent (%)	Number	Percent (%)
Family/Lifestyle/Call Schedule	196	90.7	100	92.6
Geographic Location	189	87.5	92	85.2
Compensation	169	78.2	80	74.1
Academic Setting	108	50.0	53	49.1
Local Urologist Supply	100	46.3	41	38.0
Contractual Obligations	76	35.2	30	27.8
Quality of Research	60	27.8	29	26.9
Malpractice Climate	44	20.4	14	13.0
Others	6	2.8	2	1.9

(Data source: The 2020 and 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

Respondents could select more than one answer, so the total number of counts may differ from the total number of residents and fellows.

TABLE 3-6

Gender-Specific Factors Influencing the Choice of Practice in Fellows

Influencing Factors	Fellows			
	Male		Female	
	Number	Percent (%)	Number	Percent (%)
Family/Lifestyle/Call Schedule	69	78.4	47	82.5
Geographic Location	72	81.8	49	86.0
Compensation	55	62.5	35	61.4
Academic Setting	63	71.6	40	70.2
Quality of Research	40	45.5	20	35.1
Local Urologist Supply	23	26.1	18	31.6
Contractual Obligations	20	22.7	8	14.0
Malpractice Climate	11	12.5	5	8.8
Others	2	2.3	1	1.8

(Data source: The 2020 and 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

Respondents could select more than one answer, so the total number of counts may differ from the total number of residents and fellows.

TABLE 3-7

Age of Planned Retirement

Age Range (Years)	Urologists in Training	
	Number	Percent (%)
≤ 59	29	6.2
60-64	83	17.7
65-69	197	42.0
70-74	115	24.5
≥ 75	45	9.6
Total	**469**	**100.0**

(Data source: The 2020 and 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

TABLE 3-8

Gender Differences in Age of Planned Retirement in Residents

Age Range (Years)	Residents			
	Male		Female	
	Number	Percent (%)	Number	Percent (%)
≤ 59	12	5.6	5	4.6
60-64	34	15.7	22	20.4
65-69	84	38.9	50	46.3
70-74	63	29.2	24	22.2
≥ 75	23	10.6	7	6.5
Total	**216**	**100.0**	**108**	**100.0**

(Data source: The 2020 and 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

TABLE 3-9

Gender Differences in Age of Planned Retirement in Fellows

Age Range (Years)	Fellows			
	Male		Female	
	Number	Percent (%)	Number	Percent (%)
≤ 59	4	4.5	8	14.0
60-64	16	18.2	11	19.3
65-69	36	40.9	27	47.4
70-74	23	26.1	5	8.8
≥ 75	9	10.2	6	10.5
Total	**88**	**100.0**	**57**	**100.0**

(Data source: The 2020 and 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

TABLE 3-10

Expected Annual Compensation

Expected Annual Compensation	Urologists in Training			
	Residents		Fellows	
	Number	Percent (%)	Number	Percent (%)
≤ $250,000	29	9.7	15	10.6
$250,001-$300,000	42	14.1	20	14.1
$300,001-$350,000	93	31.2	56	39.4
$350,001-$400,000	80	26.8	35	24.6
> $400,000	54	18.1	16	11.3
Total Reported	**298**	**100.0**	**142**	**100.0**
Not Reported	26		3	
Total	**324**		**145**	

(Data source: The 2020 and 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

TABLE 3-11

Gender-Specific Expected Annual Compensation in Residents

Expected Annual Compensation	Residents			
	Male		Female	
	Number	Percent (%)	Number	Percent (%)
≤ $250,000	13	6.6	16	16.0
$250,001-$350,000	89	44.9	46	46.0
$350,001-$400,000	54	27.3	26	26.0
> $400,000	42	21.2	12	12.0
Total Reported	**198**	**100.0**	**100**	**100.0**
Not Reported	18		8	
Total	**216**		**108**	

(Data source: The 2020 and 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

TABLE 3-12

Gender-Specific Expected Annual Compensation in Fellows

Expected Annual Compensation	Fellows			
	Male		Female	
	Number	Percent (%)	Number	Percent (%)
≤ $250,000	8	9.2	7	12.7
$250,001-$350,000	45	51.7	31	56.4
$350,001-$400,000	22	25.3	13	23.6
> $400,000	12	13.8	4	7.3
Total Reported	**87**	**100.0**	**55**	**100.0**
Not Reported	1		2	
Total	**88**		**57**	

(Data source: The 2020 and 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

Section 4: Desired Community Setting and Rural Practice

PRIMARY OBSERVATIONS

- The vast majority of residents (96.0 percent) and fellows (99.3 percent) plan to practice in either urban or suburban areas. Between urban and suburban areas, fellows are more likely to report choosing an urban community as their future practicing area (TABLE 4-1).
- Only 16.2 percent of urologists in training experienced rotation in or exposure to rural urology practice during residency (TABLE 4-4). Among those who experienced rotation in or exposure to rural urology practice during residency, more than half felt exposure to rural urology practice during residency makes them more likely to consider a job in a rural setting (TABLE 4-5).
- The three most helpful strategies to encourage residents to establish a practice in rural locations include lobbying for government-subsidized student loan forgiveness for urologists who establish a practice in rural areas, providing a rural urology rotation during residency and targeting recruitment of rural medical students for urology residency training (TABLE 4-6).

TABLE 4-1

Choice of Future Community Settings

	Urologists in Training			
	Residents		Fellows	
Future Community Settings^	Number	Percent (%)	Number	Percent (%)
Rural	11	4.0	1	0.7
Suburban	144	52.2	48	34.3
Urban	121	43.8	91	65.0
Total Reported	**276**	**100.0**	**140**	**100.0**
Unsure	48		5	
Total	**324**		**145**	

(Data source: The 2020 and 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

^Level of rurality was self-perceived by survey respondents rather than measured by population size.

TABLE 4-2

Choice of Future Community Settings in Residents by Gender

Future Community Settings^	Residents			
	Male		Female	
	Number	Percent (%)	Number	Percent (%)
Rural	7	3.8	4	4.4
Suburban	101	54.6	43	47.3
Urban	77	41.6	44	48.4
Total Reported	**185**	**100.0**	**91**	**100.0**
Unsure	31		17	
Total	**216**		**108**	

(Data source: The 2020 and 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

TABLE 4-3

Choice of Future Community Settings in Fellows by Gender

Future Community Settings^	Fellows			
	Male		Female	
	Number	Percent (%)	Number	Percent (%)
Rural	1	1.2	0	0.0
Suburban	29	33.7	19	35.2
Urban	56	65.1	35	64.8
Total Reported	**86**	**100.0**	**54**	**100.0**
Unsure	2		3	
Total	**88**		**57**	

(Data source: The 2020 and 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

TABLE 4-4

Rotation in or Exposure to Rural Urology Practice during Residency

Rotation or Exposure to Rural Urology Practice	Urologists in Training	
	Number	Percent (%)
Yes	53	16.2
No	275	83.8
Total Reported	**328**	**100.0**
Not Reported	8	
Total	**336**	

(Data source: The 2020 AUA Annual Census–unweighted samples from the resident and fellow module.)

TABLE 4-5

Exposure to Rural Urology Practice during Residency and Likelihood to Consider a Job in a Rural Setting

Increased Likelihood of Considering Rural Urology Practice	Urologists in Training	
	Number	Percent (%)
Yes	23	51.1
No	22	48.9
Total Reported	**45**	**100.0**
Not Reported	291	
Total	**336**	

(Data source: The 2020 AUA Annual Census–unweighted samples from the resident and fellow module.)

Reported respondents are those who had a rural rotation or exposure to urology practice for rural patients during their residency.

TABLE 4-6

Helpful Strategies to Encourage Residents to Establish a Practice in Rural Locations (Multiple Selection)

Helpful Strategies	Urologists in Training			
	Residents		Fellows	
	Number	Percent (%)	Number	Percent (%)
Lobby for Government-Subsidized Student Loan Forgiveness for Urologists Who Establish a Practice in Rural Areas	186	73.2	56	68.3
Provide a Rural Urology Rotation during Residency	171	67.3	47	57.3
Target Recruitment of Rural Medical Students for Urology Residency Training	130	51.2	52	63.4
Establish Urology Residency Programs in Rural Areas	96	37.8	32	39.0
Others	2	0.8	3	3.7

(Data source: The 2020 AUA Annual Census–unweighted samples from the resident and fellow module.)

Respondents could select more than one answer, so the total number of counts may differ from the total number of residents and fellows.

TABLE 4-7

Level of Contact with Job Recruiters during Residency

Level of Job Recruiter Contact	Urologists in Training			
	Residents		Fellows	
	Number	Percent (%)	Number	Percent (%)
No Contact	78	30.7	11	13.4
Low Amount of Contact	111	43.7	35	42.7
Moderate Amount of Contact	50	19.7	28	34.1
High Amount of Contact	15	5.9	8	9.8
Total	**254**	**100.0**	**82**	**100.0**

(Data source: The 2020 AUA Annual Census–unweighted samples from the resident and fellow module.)

Respondents could select more than one answer, so the total number of counts may differ from the total number of residents and fellows.

Section 5: Educational Debt

Primary Observations

- Urologists in training who currently have educational debt of more than $150,000 account for 52.5 percent of residents and 47.5 percent of fellows (TABLE 5-1), which is slightly higher than percentages reported in 2019.
- Among residents, those with educational debt are more likely to report choosing private practices as their future practice setting, especially as the amount of educational debt increases (TABLE 5-5).
- Urologists in training with higher educational debt are more likely to report higher compensation expectations (TABLE 5-7).

TABLE 5-1

Current Educational Debt

Educational Debt	Urologists in Training			
	Residents		Fellows	
	Number	Percent (%)	Number	Percent (%)
None	94	29.7	44	31.2
< $50,000	15	4.7	9	6.4
$50,000-$100,000	23	7.3	11	7.8
$100,001-$150,000	18	5.7	10	7.1
$150,001-$200,000	35	11.1	10	7.1
$200,001-$250,000	43	13.6	16	11.3
> $250,000	88	27.8	41	29.1
Total Reported	**316**	**100.0**	**141**	**100.0**
Not Reported	8		4	
Total	**324**		**145**	

(Data source: The 2020 and 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

TABLE 5-2

Gender Differences in Current Educational Debt in Residents

Educational Debt	Residents			
	Male		Female	
	Number	Percent (%)	Number	Percent (%)
None	64	30.3	30	28.6
< $50,000	10	4.7	5	4.8
$50,000-$100,000	15	7.1	8	7.6
$100,001-$150,000	12	5.7	6	5.7
$150,001-$200,000	26	12.3	9	8.6
$200,001-$250,000	20	9.5	23	21.9
> $250,000	64	30.3	24	22.9
Total Reported	**211**	**100.0**	**105**	**100.0**
Not Reported	5		3	
Total	**216**		**108**	

(Data source: The 2020 and 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

TABLE 5-3

Gender Differences in Current Educational Debt in Fellows

Educational Debt	Fellows			
	Male		Female	
	Number	Percent (%)	Number	Percent (%)
None	28	33.3	16	28.1
< $50,000	7	8.3	2	3.5
$50,000-$100,000	5	6.0	6	10.5
$100,001-$150,000	6	7.1	4	7.0
$150,001-$200,000	5	6.0	5	8.8
$200,001-$250,000	9	10.7	7	12.3
> $250,000	24	28.6	17	29.8
Total Reported	**84**	**100.0**	**57**	**100.0**
Not Reported	4		0	
Total	**88**		**57**	

(Data source: The 2020 and 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

TABLE 5-4

Concerns about Educational Loan Repayment/Forgiveness (by Gender)

	Fellows			
	Male		Female	
Concern of Repayment/Forgiveness	Number	Percent (%)	Number	Percent (%)
It Is a Major Concern	58	22.8	29	35.4
It Is Somewhat of a Concern	73	28.7	17	20.7
It Is a Minor Concern	36	14.2	7	8.5
It Is Not a Concern	87	34.3	29	35.4
Total	**254**	**100.0**	**82**	**100.0**

(Data source: The 2020 AUA Annual Census–unweighted samples from the resident and fellow module.)

TABLE 5-5

Current Educational Debt and Choice of Future Practice Settings in Residents

	Educational Debt							
	None		≤ $250,000		> $250,000		Total Reported	
Choice of Future Practice Settings	Number	Percent (%)	Number	Percent (%)	Percent (%)	Percent (%)	Percent (%)	Percent (%)
Academic Medical Centers	34	47.9	48	48.0	31	42.5	113	46.3
Private Practices	16	22.5	35	35.0	29	39.7	80	32.8
Hospitals	6	8.5	12	12.0	10	13.7	28	11.5
Military	8	11.3	3	3.0	0	0.0	11	4.5
Other	7	9.9	2	2.0	3	4.1	12	4.9
Total Reported	**71**	**100.0**	**100**	**100.0**	**73**	**100.0**	**244**	**100.0**
Unsure	23		34		15		72	
Total	**94**		**134**		**88**		**316**	

(Data source: The 2020 and 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

TABLE 5-6

Current Educational Debt and Choice of Future Practice Settings in Fellows

Choice of Future Practice Settings	Educational Debt							
	None		≤ $250,000		> $250,000		Total Reported	
	Number	Percent (%)	Number	Percent (%)	Percent (%)	Percent (%)	Percent (%)	Percent (%)
Academic Medical Centers	35	87.5	40	76.9	28	75.7	103	79.8
Private Practices	1	2.5	5	9.6	1	2.7	7	5.4
Hospitals	4	10.0	3	5.8	6	16.2	13	10.1
Military	0	0.0	1	1.9	0	0.0	1	0.8
Other	0	0.0	3	5.8	2	5.4	5	3.9
Total Reported	**40**	**100.0**	**52**	**100.0**	**37**	**100.0**	**129**	**100.0**
Unsure	4		4		4		12	
Total	**44**		**56**		**41**		**141**	

(Data source: The 2020 and 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

TABLE 5-7

Current Educational Debt and Expected Annual Compensation

Expected Annual Compensation	Educational Debt							
	None		≤ $150,000		$150,001-$250,000		> $250,000	
	Number	Percent (%)	Number	Percent (%)	Percent (%)	Percent (%)	Percent (%)	Percent (%)
≤ $250,000	23	18.3	11	13.9	3	3.0	4	3.2
$250,001-$300,000	24	19.0	14	17.7	13	13.0	9	7.2
$300,001-$350,000	36	28.6	32	40.5	25	25.0	52	41.6
$350,001-$400,000	28	22.2	11	13.9	39	39.0	36	28.8
> $400,000	15	11.9	11	13.9	20	20.0	24	19.2
Total Reported	**126**	**100.0**	**79**	**100.0**	**100**	**100.0**	**125**	**100.0**
Not Reported	12		7		4		4	
Total	**138**		**86**		**104**		**129**	

(Data source: The 2020 and 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

Section 6: Important Benefits, Resources and Needs for Urologists in Training

Primary Observations

- The top benefits or resources that are believed to help improve well-being and work/life balance are meal plans, ability to attend health appointments during work hours and paid family leave (TABLE 6-1).
- It was reported that 49.5 percent of residents and 55.6 percent of fellows faced difficulty attending personal medical, mental or dental appointments (TABLE 6-2).
- Approximately 48 percent of urologists in training have access to urology-specific call rooms at all hospital sites (TABLE 6-5), with minor gender differences in access reported (TABLE 6-6 and TABLE 6-7).

TABLE 6-1

The Relative Importance of Benefits or Resources That May Be Provided to Residents to Improve Well-Being and Work/Life Balance

Important Benefits or Resources	Top Benefits or Resources Selected by Residents					
	1st Choice		2nd Choice		3rd Choice	
	Number	Percent (%)	Number	Percent (%)	Percent (%)	Percent (%)
Meal Plan	149	31.8	89	19.0	67	14.3
Ability to Attend Health Appointments during Work Hours	78	16.6	95	20.3	90	19.2
Paid Family Leave	76	16.2	55	11.7	83	17.7
Dedicated Call Rooms	60	12.8	86	18.3	99	21.1
Paid Uber/Taxi Service When Too Fatigued to Drive Home after Call	16	3.4	30	6.4	30	6.4
Resident Retreat	14	3.0	38	8.1	24	5.1

(Data source: The 2020 and 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

Respondents could select more than one answer, so the total number of counts may differ from the total number of residents and fellows.

TABLE 6-2

Difficulty Attending Medical/Mental/Dental Appointments Faced by Urologists in Training

Difficulty Attending Medical/Mental/ Dental Appointments	Urologists in Training			
	Residents		Fellows	
	Number	Percent (%)	Number	Percent (%)
Yes	147	49.5	80	55.6
No	150	50.5	64	44.4
Total Reported	**297**	**100.0**	**144**	**100.0**
Not Reported	27		1	
Total	**324**		**145**	

(Data source: The 2020 and 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

TABLE 6-3

Residents with Difficulty Attending Medical/Mental/Dental Appointments (by Gender)

Difficulty Attending Medical/Mental/ Dental Appointments	Residents			
	Male		Female	
	Number	Percent (%)	Number	Percent (%)
Yes	103	52.3	44	44.0
No	94	47.7	56	56.0
Total Reported	**197**	**100.0**	**100**	**100.0**
Not Reported	19		8	
Total	**216**		**108**	

(Data source: The 2020 and 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

TABLE 6-4

Fellows with Difficulty Attending Medical/Mental/Dental Appointments (by Gender)

Difficulty Attending Medical/Mental/ Dental Appointments	Fellows			
	Male		Female	
	Number	Percent (%)	Number	Percent (%)
Yes	45	51.7	35	61.4
No	42	48.3	22	38.6
Total Reported	**87**	**100.0**	**57**	**100.0**
Not Reported	1		0	
Total	**88**		**57**	

(Data source: The 2020 and 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

TABLE 6-5

Access to Urology-Specific Call Rooms at All Hospital Sites Available to Urologists in Training

Access to Urology-Specific Call Rooms	Urologists in Training			
	Residents		Fellows	
	Number	Percent (%)	Number	Percent (%)
Yes	155	48.7	49	48.0
No	163	51.3	53	52.0
Total Reported	**318**	**100.0**	**102**	**100.0**
Not Applicable	6		43	
Total	**324**		**145**	

(Data source: The 2020 and 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

TABLE 6-6

Access to Urology-Specific Call Rooms at All Hospital Sites Available to Residents (by Gender)

Access to Urology-Specific Call Rooms	Residents			
	Male		Female	
	Number	Percent (%)	Number	Percent (%)
Yes	110	52.1	45	42.1
No	101	47.9	62	57.9
Total Reported	**211**	**100.0**	**107**	**100.0**
Not Applicable	5		1	
Total	**216**		**108**	

(Data source: The 2020 and 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

TABLE 6-7

Access to Urology-Specific Call Rooms at All Hospital Sites Available to Fellows (by Gender)

Access to Urology-Specific Call Rooms	Fellows			
	Male		Female	
	Number	Percent (%)	Number	Percent (%)
Yes	31	50.0	18	45.0
No	31	50.0	22	55.0
Total Reported	**62**	**100.0**	**40**	**100.0**
Not Applicable	26		17	
Total	**88**		**57**	

(Data source: The 2020 and 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

Section 7: Revisiting Career Choices

Primary Observations

- Approximately 88 percent of urologists in training would choose medicine as their career again if given the opportunity (TABLE 7-1).
- Among those who would choose medicine as their career again, a vast majority (98.4 percent of residents and 94.4 percent of fellows) would choose urology again as their medical specialty (TABLE 7-4).
- Of the urologists in training, 53 percent considered revisiting their career or specialty choice at some point during residency, most commonly during the second postgraduate year (PGY2) of residency (TABLE 7-7).

TABLE 7-1

Choosing Medicine Again as a Career

	Urologists in Training			
	Residents		Fellows	
Choosing Medicine Again as a Career	Number	Percent (%)	Number	Percent (%)
Yes	251	87.5	112	88.2
No	36	12.5	15	11.8
Total Reported	**287**	**100.0**	**127**	**100.0**
Not Applicable	37		18	
Total	**324**		**145**	

(Data source: The 2020 and 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

TABLE 7-2

Residents Who Would Choose Medicine Again as Their Career (by Gender)

	Residents			
	Male		Female	
Choosing Medicine Again as a Career	Number	Percent (%)	Number	Percent (%)
Yes	70	87.5	42	89.4
No	10	12.5	5	10.6
Total Reported	**80**	**100.0**	**47**	**100.0**
Not Applicable	8		10	
Total	**88**		**57**	

(Data source: The 2020 and 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

TABLE 7-3

Fellows Who Would Choose Medicine Again as Their Career (by Gender)

Choosing Medicine Again as a Career	Fellows			
	Male		Female	
	Number	Percent (%)	Number	Percent (%)
Yes	70	87.5	42	89.4
No	10	12.5	5	10.6
Total Reported	**80**	**100.0**	**47**	**100.0**
Not Applicable	8		10	
Total	**88**		**57**	

(Data source: The 2020 and 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

TABLE 7-4

Would Choose Urology Again as Their Medical Specialty^

Choosing Urology Again as Medical Specialty	Urologists in Training			
	Residents		Fellows	
	Number	Percent (%)	Number	Percent (%)
Yes	239	98.4	101	94.4
No	4	1.6	6	5.6
Total Reported	**243**	**100.0**	**107**	**100.0**
Not Applicable	44		20	
Total	**287**		**127**	

(Data source: The 2020 and 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

^Reported respondents are those who reported they would choose medicine as their career again if given the opportunity.

TABLE 7-5

Residents Who Would Choose Urology Again as Their Medical Specialty (by Gender)^

Choosing Medicine Again as a Medical Specialty	Residents			
	Male		Female	
	Number	Percent (%)	Number	Percent (%)
Yes	162	98.8	77	97.5
No	2	1.2	2	2.5
Total Reported	**164**	**100.0**	**79**	**100.0**
Not Applicable	5		3	
Total	**169**		**82**	

(Data source: The 2020 and 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

^Reported respondents are those who reported they would choose medicine as their career again if given the opportunity.

TABLE 7-6

Fellows Who Would Choose Urology Again as Their Medical Specialty (by Gender)^

Choosing Medicine Again as a Medical Specialty	Fellows			
	Male		Female	
	Number	Percent (%)	Number	Percent (%)
Yes	63	94.0	38	95.0
No	4	6.0	2	5.0
Total Reported	**67**	**100.0**	**40**	**100.0**
Not Applicable	3		2	
Total	**70**		**42**	

(Data source: The 2020 and 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

^Reported respondents are those who reported they would choose medicine as their career again if given the opportunity.

TABLE 7-7

Year of Education Urologists in Training Most Frequently or Strongly Consider Revisiting Their Career or Specialty Choice

Year of Residency	Urologists in Training	
	Number	Percent (%)
Never Considered during Residency or Unknown	**209**	**47.0**
Ever Considered at Some Point of Residency	**236**	**53.0**
PGY1 (Surgery Intern)	41	9.2
PGY2	135	30.3
PGY3	48	10.8
PGY4	9	2.0
Chief Resident	3	0.7
Total	**445**	**100.0**

(Data source: The 2020 and 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)8

TABLE 7-8

The Year of Education Residents Most Frequently or Strongly Consider Revisiting Their Career or Specialty Choice during Residency (by Gender)

Year of Residency	Residents			
	Male		Female	
	Number	Percent (%)	Number	Percent (%)
Never Considered during Residency or Unknown	109	51.4	45	43.7
Ever Considered at Some Point of Residency	**103**	**48.6**	**58**	**56.3**
PGY1 (Surgery Intern)	18	8.5	11	10.7
PGY2	56	26.4	35	34.0
PGY3	22	10.4	12	11.7
PGY4	7	3.3	0	0.0
Chief Resident	0	0.0	0	0.0
Total	**212**	**100.0**	**103**	**100.0**

(Data source: The 2020 and 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

^Reported respondents are those who reported they would choose medicine as their career again if given the opportunity.

TABLE 7-9

The Year of Education Fellows Most Frequently or Strongly Consider Revisiting Their Career or Specialty Choice during Residency (by Gender)

Year of Residency	Fellows			
	Male		Female	
	Number	Percent (%)	Number	Percent (%)
Never Considered during Residency or Unknown	35	44.3	20	39.2
Ever Considered at Some Point of Residency	**44**	**55.7**	**31**	**60.8**
PGY1 (Surgery Intern)	5	6.3	7	13.7
PGY2	26	32.9	18	35.3
PGY3	10	12.7	4	7.8
PGY4	2	2.5	0	0.0
Chief Resident	1	1.3	2	3.9
Total	**79**	**100.0**	**51**	**100.0**

(Data source: The 2020 and 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

Section 8: Professional Burnout

Primary Observations

- Professional burnout rates in both residents and fellows in 2021 increased by 1.2 percent and 4.7 percent, respectively, from rates reported in 2019 (TABLE 8-3).
- The percentage of professional burnout is relatively higher in residents (48.2 percent) and lower in fellows (32.5 percent) (TABLE 8-4), compared to practicing urologists (36.7 percent), as reported in 2021.
- The highest professional burnout rate in residents was seen during PGY2 of residency (68.8 percent) (TABLE 8-5), which may be the reason that urologists in training were most likely to revisit their career or specialty choice during the second postgraduate year (PGY2) of residency (TABLE 7-7).

TABLE 8-1

Aggregated Burnout Score–Section A: Emotional Exhaustion

	Urologists in Training					
	Residents		Fellows		Practicing Urologists^	
Level of Emotional Exhaustion	Number	Percent (%)	Number	Percent (%)	Number	Percent (%)
Low	116	69.9	58	75.3	8,658	62.8
Medium	34	20.5	14	18.2	3,399	24.6
High	16	9.6	5	6.5	1,732	12.6
Total	**166**	**100.0**	**77**	**100.0**	**13,790**	**100.0**

(Data source: The 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

^The burnout rate for practicing urologists was reported in the 2021 AUA Census report based on weighted samples.[iv]

TABLE 8-2

Aggregated Burnout Score–Section B: Depersonalization

	Urologists in Training					
	Residents		Fellows		Practicing Urologists^	
Level of Depersonalization	Number	Percent (%)	Number	Percent (%)	Number	Percent (%)
Low	43	25.9	31	40.3	6,016	43.6
Medium	43	25.9	22	28.6	2,858	20.7
High	80	48.2	24	31.2	4,916	35.6
Total	**166**	**100.0**	**77**	**100.0**	**13,790**	**100.0**

(Data source: The 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

^The burnout rate for practicing urologists was reported in the 2021 AUA Census report based on weighted samples.[iv]

TABLE 8-3

Overall Professional Burnout (2019 versus 2021)

Professional Burnout	Residents				Fellows			
	2019^		2021		2019^		2021	
	Number	Percent (%)	Number	Percent (%)	Number	Percent (%)	Number	Percent (%)
Yes	195	47.0	80	48.2	27	27.8	25	32.5
No	220	53.0	86	51.8	70	72.2	52	67.5
Total	**415**	**100.0**	**166**	**100.0**	**97**	**100.0**	**77**	**100.0**

(Data source: The 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

^The 2019 burnout rate for urologists in training was reported in the 2019 AUA Census report based on unweighted samples.v

TABLE 8-4

Overall Professional Burnout (Urologists in Training versus Practicing Urologists)

Level of Depersonalization	Urologists in Training				Practicing Urologists^	
	Residents		Fellows			
	Number	Percent (%)	Number	Percent (%)	Number	Percent (%)
Yes	80	48.2	25	32.5	5,067	36.7
No	86	51.8	52	67.5	8,723	63.3
Total	**166**	**100.0**	**77**	**100.0**	**13,790**	**100.0**

(Data source: The 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

TABLE 8-5

Burnout at Different Levels of Training

Level of Training	Urologists in Training			
	Yes		No	
	Number	Percent (%)	Number	Percent (%)
Residents	**80**	**48.2**	**86**	**51.8**
Surgery Intern	12	46.2	14	53.8
PGY2	11	68.8	5	31.3
PGY3	16	57.1	12	42.9
PGY4	16	32.7	33	67.3
Chief Resident	25	53.2	22	46.8
Fellows	**25**	**32.5**	**52**	**67.5**

(Data source: The 2021 AUA Annual Census–unweighted samples from the resident and fellow module.)

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The AUA Data Programs are under the direction of the AUA Data Committee. This report is a project of the AUA Department of Data Management and Statistical Services in collaboration with the AUA Residents and Fellows Committee and AUA Data Committee.

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References

[i] Maslach C, Jackson SE (1981). The measurement of experienced burnout. Journal of Occupational Behavior, Vol. 2, 99-113.

[ii] Maslach C, Leiter MP (1997). The truth about burnout: How organizations cause personal stress and what to do about it. San Francisco, CA: Jossey-Bass.

[iii] Maslach C, Leiter MO (2016). Understanding the burnout experience: Recent research and its implications for psychiatry. World Psychiatry 15, 103-111.

[iv] American Urological Association (2021), The state of the urology workforce and practice in the United States. 2021. https://www.auanet.org/documents/research/census/2021%20Census%20Report.pdf. Accessed on August 5, 2022.

[v] American Urological Association (2019), Urologists in training: residents and fellows in the United States. 2019. https://www.auanet.org/documents/research/census/2019_Resident_and_Fellow_Census_Book.pdf. Accessed on August 5, 2022.

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