

UROLOGY RESIDENTS

In the United States and Across the Globe
2016-2018



American
Urological
Association

Advancing Urology™

American Urological Association (AUA)
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Preface

The American Urological Association (AUA) has conducted an Annual Census of its members since 2014. The results of the Census have been a vital source of definitive information about the landscape of urological practice, employment patterns, licensing and board certification of urologists. As a comprehensive effort surveying both the breadth and depth of the urological community, the Census has helped to bridge gaps in knowledge as well as probe emerging trends, such as projected workforce shortages and physician burnout.

The training and education of future urologists is a topic of particular interest to the AUA and the public. To this end, urology residents in the United States and around the world have participated in the Census since its inception. As practice patterns shift alongside broader changes in health care, the responses of urology residents to Census questions, in conjunction with those of practicing urologists, form a data-driven foundation to understand how residents may be influenced by their training.

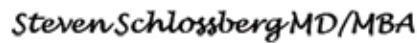
For the first time since the introduction of the Census, reports have been generated to aggregate and analyze the Census responses of urology residents from 2016 to 2018. The report *Urology Residents in the United States and Across the Globe* presents a unique snapshot of the demographics, professional interests, concerns and educational experiences of residents. As a companion publication to the annual Census review, *The State of the Urology Workforce and Practice in the United States*, this report offers a valuable perspective on the needs of contemporary trainees, the dynamic profile of the specialty, and the future of the urological workforce, both domestically and abroad.

As the AUA Annual Census enters its sixth year of data collection, continued participation by the AUA community—in particular by urology residents—will help to ensure that future editions of this report remain timely, representative and relevant. We encourage you to contribute to this important effort each year, and we invite you to review past Census reports available at AUAnet.org/Census.



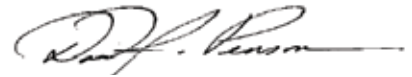
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The AUA would like to thank all members of the global urologic community for their continued support for and participation in the AUA Annual Census.

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Executive Summary



PURPOSE:

To prepare for the future urology workforce, the American Urological Association (AUA) conducted a study on current urology residents to understand, characterize, and compare professional preference and clinical training of the urology residents in the United States and across the globe.

METHODS:

Data were collected through the AUA Annual Census from 2016 to 2018. Urology residents answered questions pertaining to their demographic characteristics, motivating factors to pursue urology, career goals, professional preferences and plans for fellowship training. Statistics regarding residents' views on medical practice related areas, such as anticipated and desired environments, care volume, clinical responsibilities and preparation for the business side were also included. Countries with 15 or more respondents to the AUA Annual Census in the above years were included in this report.

RESULTS:

A total of 705 U.S. residents, who were validated against the AUA master resident files, along with 465 residents from 65 other countries completed the AUA Annual Census between 2016 and 2018. In the United States, the number of urology-trained graduating residents is expected to grow from 369 in 2016 to 388 in 2020 with the most gain from female residents. Remarkable gender differences were observed in anticipated practice setting and associated factors that influence the choice of practice settings. Geographic location, personal time, and lifestyle are most important in considering practice opportunities, while salary with production bonus is the most popular compensation model to residents. More than 50 percent of residents were unprepared to handle the “business side” of their medical careers, including

employment contracts, compensation arrangements and other facets of employment. About two-thirds of residents had little or no knowledge at all about the requirements and resources of continuing medical education (CME) and Life Long Learning (Formerly Maintenance of Certification [MOC]). Approximately one-quarter of residents do not plan to pursue fellowship training. Residents who grew up in rural or suburban areas are more likely to choose smaller communities to practice. Globally, variations were found in the anticipated practice settings, level of preparation for handling the business side of their medical careers, intention to pursue fellowship training, number of clinical hours and number of patients seen during residency. The main considerations in choosing a practice setting include work and life balance, geographic location, compensation, academic setting and local urologist supply. Similarly, the level of rurality of the neighborhood area where the residents grew up is a determinant factor in choosing practicing locations. More time was spent by residents performing procedures in Australia, the United States and India; on ambulatory clinic in Peru, Argentina, and Colombia; and on inpatient care in the United Kingdom, Colombia, India, Australia and Mexico.

CONCLUSIONS:

The findings from this study provide descriptive accounts of various global experiences from residents on a variety of topics, such as characteristics, professional preparation, practice preferences, clinical volume and responsibilities to bridge knowledge gaps; inform urology workforce planning and training; and ultimately, improve global urologic care and patient health.

About the American Urological Association

THE ORGANIZATION

Founded in 1902 and headquartered near Baltimore, Maryland, the AUA serves more than 22,000 members throughout the world as a leading advocate for the specialty of urology. The AUA is a premier urologic association, providing invaluable support to the urologic community by fostering the highest standards of urologic care through education, research and the formulation of health policy.

AUA MISSION

To promote the highest standards of urological clinical care through education, research and the formulation of health care policy.

AUA VISION

To be the premier professional association for the advancement of professional urologic patient care.

AUA ANNUAL CENSUS

The AUA's 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 surrounding the urologic community. Categories surveyed include 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.

About AUA Data and Statistical Services

REAL WORLD CLINICAL DATA SUPPORT

- Datasets
 - Real world clinical data collected from participating clinicians' electronic health records
 - AUA Quality (AQUA) Registry – 4.3 million unique patients identified by urologic disease diagnoses and treatments; providers with 19 million patient encounters
 - CMS Medicare claim data and 100% summary data
 - Agency for Healthcare Quality and Research (AHRQ) Healthcare Cost and Utilization Project (HCUP) data
- Typical Services
 - Discovering patients of interest (e.g., patients with low-risk prostate cancer, non-metastatic castrate-resistance prostate cancer, overactive bladder)
 - Recognizing patients' treatment journeys and decision trees
 - Providing summary statistics and longitudinal analysis based on CPT or ICD codes
 - Identifying providers who perform specific clinical procedures
 - Detecting associations between patient characteristics, treatment patterns and outcomes
 - Assessing performance measures using real-world data to report effectiveness
 - Testing educational needs based on urologists' patterns of practice
 - Evaluating needs and effectiveness of clinical guidelines

WORKFORCE RESEARCH SUPPORT

- Datasets
 - AUA Annual Census completed by urologists and other providers across the specialty from 2014 to 2018
 - American Board of Urology (ABU) certification and recertification records
 - National Provider Identification (NPI) files
 - Urology resident master files
 - National survey data from federal agencies such as the Centers for Disease Control and Prevention (CDC) and AHRQ
- Typical Services
 - Offering statistics on urologists and other providers in the United States and across the globe
 - Linking urologists across various data sources to report on urologists from multiple angles
 - Pinpointing links between workforce parameters and practice patterns

DATA COLLECTION AND REPORT

- Industry collaborators can submit questions to be placed in the AUA Annual Census
- AUA Annual Census collects nationally representative data
- AUA provides national patient statistics and volume of clinical procedures
- AUA can generate customized summaries of provider utilization and payment data

OTHER SERVICE AREAS

- Delivering general statistical consulting services to members and stakeholders
- Offering numerical support to researchers for abstract and manuscript development
- Supplying statistical support for members' grant applications
- Analyzing data from major national health care databases or client-provided data
- Assisting with data reporting and presentation

Should you need any data or statistical support, please contact AUA at dataservices@AUAnet.org



Glossary

AHRQ	Agency for Healthcare Quality and Research
AUA	American Urological Association
CDC	Centers for Disease Control and Prevention
CME	Continuing Medical Education
CMS	Centers for Medicare and Medicaid Services
CPT	Current Procedural Terminology
HCUP	Healthcare Cost and Utilization Project
ICD	International Classification of Disease
MOC	Maintenance of Certification
NPI	National Provider Identifier
PGY	Post-Graduate Year
SD	Standard Deviation

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Introduction

Millions of individuals who are affected by urologic diseases and conditions, including urologic cancers, sexual function/infertility and urinary incontinence, seek clinical care of urologists.^{1,2,3} As the global 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 where new urologists dedicate themselves to mastering the skills and knowledge, both professionally and personally, 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. In order to prepare the future urology workforce, the American Urological Association (AUA) included current urology residents in the AUA Annual Census to understand, characterize and compare urology residents in the United States and across the globe.

Data and Methods

DATA SOURCES

Data used in this report were collected through the AUA Annual Census, a systematically designed annual survey of urologists, residents and other professionals of urology. Among the AUA's 22,000 members throughout the world, two-thirds are U.S.-based, with the remainder of the membership from outside of the United States. Study samples were merged from the 2016, 2017 and 2018 AUA Annual Census, which were launched at the AUA Annual Meeting in May and remained online to both AUA members and non-members until September 30 of each year. Each respondent was assigned an identification number prior to the submission of responses to the Census questions. This step ensured that no respondent could take the survey more than once. In this report, 1,170 urology residents from 66 countries completed the Census, including 705 validated residents against the AUA master resident files from the United States and 465 self-reported residents from outside of the United States.

DATA ELEMENTS AND COUNTRY SELECTION FOR REPORT

Data was collected from urology residents who completed the AUA Annual Census between 2016 and 2018. Samples were combined in order to increase sample size and statistical power to identify differences. For those residents who completed the AUA Annual Census for more than one year, their most recent answers were used in the analysis.

Data elements consist of demographics (age, gender and race); education and training; geographical location; anticipated practice setting and sub-specialty areas;

career goals; professional expectations; practice preferences; motivating factors to pursue urology; plans for fellowship training; preparation for the business side of employment, including employment contracts, compensation arrangements and other facets of employment; clinical training preferences; numbers of hours of clinical and non-clinical work and patient volume per week; current time spent across clinical responsibilities; and clinical roles in performing typical urologic procedures.

Due to the inaccessibility of national master files of residents in countries other than the United States and Canada, sample analyses of urology residents in all countries were performed and compared.

DATA ANALYSIS

Descriptive analyses of data were performed using both IBM-SPSS 22.0 and MS Excel and reported at the country level. Countries with 15 or more respondents to the AUA Annual Census in the three-year reporting period were included in this report.

LIMITATIONS

Samples from urology residents were directly analyzed without the adjustment for non-response bias due to the inaccessibility of such resident master files outside the United States and Canada. Thus, findings in this report may not be generalizable. In addition, most data elements collected in the AUA Annual Census were self-reported; therefore, are subject to recall bias.

Results

As shown in the table below, a total of 1,170 residents from 66 countries completed at least one of the AUA Annual Census surveys between 2016 and 2018, including 705 samples from 2,630 residents (a response rate of 26.8 percent) in the United States and 465 urology residents from outside of the United States.

Geographic Distribution of Responses

Country	Number of Responses	Mean Age (SD)
United States	705	31.3 (2.8)
65 Non-U.S. Countries	465	31.8 (3.9)
Canada	52	30.3 (2.8)
Mexico	50	30.8 (2.2)
India	47	32.9 (3.1)
Italy	37	30.6 (1.5)
Colombia	21	30.4 (2.7)
Argentina	20	32.3 (4.4)
Australia	17	31.9 (4.5)
Peru	17	30.8 (5.0)
Brazil	16	30.7 (2.8)
United Kingdom	15	32.6 (4.1)
Other 55 Countries	171	32.7 (4.7)
Total	1,170	31.5 (3.3)

Results were organized in two parts. Part 1 focuses on residents from the United States with additional questions on expected salary and estimates of educational debt. Given the adequate number of samples in the U.S. responses, most analyses were broken down by gender. Part 2 provides comparisons of characteristics of urology residents across non-U.S. countries studied.

PART 1:

Urology Residents in the United States



FIGURE 1-1

Number of Urology Residents (by Anticipated Graduation Year and Gender)

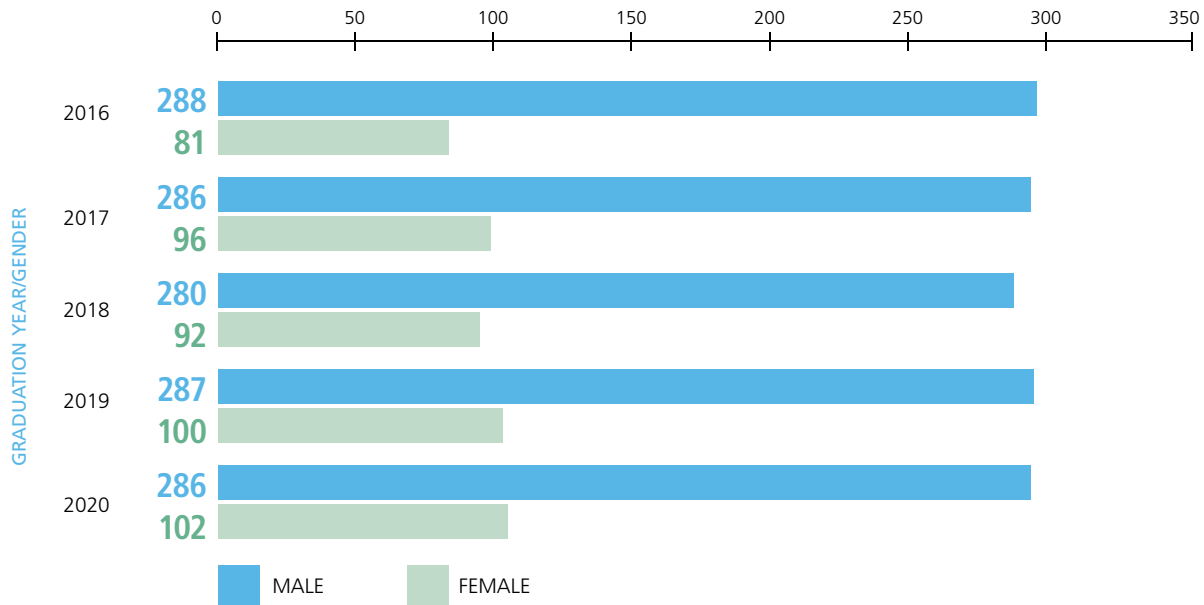


TABLE 1-1

Demographic Factors

Demographic Factors	Female		Male		Total	
	Number	Percent	Number	Percent	Number	Percent
Age						
≤28	23	11.7	60	11.8	83	11.8
29	26	13.3	69	13.6	95	13.5
30	34	17.3	66	13.0	100	14.2
31	36	18.4	91	17.9	127	18.0
32	38	19.4	73	14.3	111	15.7
33	20	10.2	66	13.0	86	12.2
≥34	19	9.7	84	16.5	103	14.6
Race						
White	135	68.9	364	71.5	499	70.8
Asian	51	26.0	116	22.8	167	23.7
Black/African American	8	4.1	9	1.8	17	2.4

TABLE 1-1
Demographic Factors (continued)

Demographic Factors	Female		Male		Total	
	Number	Percent	Number	Percent	Number	Percent
Hispanic Status						
Hispanic	7	3.6	31	6.1	38	5.4
Hispanic White	6	3.1	25	4.9	31	4.4
Non-Hispanic	188	95.9	471	92.5	659	93.5
Unknown	1	0.5	7	1.4	8	1.1
Country of Origin						
United States	168	85.7	434	85.3	602	85.4
Total	196	100.0	509	100.0	705	100.0

(Respondents could select multiple answers on risk; the total number of choices may not add up to the total number of residents and the total percentages may not equal 100%)

TABLE 1-2
Current Level of Training

Level of Training	Female		Male		Total	
	Number	Percent	Number	Percent	Number	Percent
Surgery Intern	23	11.7	55	10.8	78	11.1
PGY2	21	10.7	59	11.6	80	11.3
PGY3	54	27.6	92	18.1	146	20.7
PGY4	57	29.1	159	31.2	216	30.6
Chief Resident	41	20.9	144	28.3	185	26.2
Total	196	100.0	509	100.0	705	100.0

TABLE 1-3**What Practice Setting Do You Plan to Pursue?**

Planned Practice Setting	Female		Male		Total	
	Number	Percent	Number	Percent	Number	Percent
Academic/Medical School	79	40.3	168	33.0	247	35.0
Community-based Practice	3	1.5	12	2.4	15	2.1
Hospital	8	4.1	37	7.3	45	6.4
Military	4	2.0	15	2.9	19	2.7
Private Practice	52	26.5	175	34.4	227	32.2
Unsure	50	25.5	102	20.0	152	21.6
Total	196	100.0	509	100.0	705	100.0

TABLE 1-4**Planned Practice Setting (by Level of Training)**

Planned Practice Setting	Surgery Intern		PGY2		PGY3		PGY4		Chief Resident	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Academic/Medical School	28	35.9	25	31.3	54	37.0	72	33.3	68	36.8
Community-based Practice	1	1.3	3	3.8	2	1.4	4	1.9	5	2.7
Hospital	3	3.8	2	2.5	2	1.4	20	9.3	18	9.7
Military	1	1.3	3	3.8	3	2.1	5	2.3	7	3.8
Private Practice	20	25.6	26	32.5	46	31.5	68	31.5	67	36.2
Unsure	25	32.1	21	26.3	39	26.7	47	21.8	20	10.8
Total	78	100.0	80	100.0	146	100.0	216	100.0	185	100.0

TABLE 1-5**Factors That Influence Your Choice of Practice Setting**

Factors That Influence Practice Setting Choice	Female		Male		Total	
	Number	Percent	Number	Percent	Number	Percent
Family/Lifestyle/Call Schedule	167	85.2	447	87.8	614	87.1
Geographic Location	162	82.7	443	87.0	605	85.8
Compensation	138	70.4	409	80.4	547	77.6
Academic Setting	102	52.0	220	43.2	322	45.7
Local Urologist Supply	57	29.1	222	43.6	279	39.6
Contractual Obligation	53	27.0	145	28.5	198	28.1
Quality of Research	48	24.5	120	23.6	168	23.8
Malpractice Climate	34	17.3	96	18.9	130	18.4

(Respondents could select multiple answers; the total number of choices may not add up to the total number of residents and the total percentages may not equal 100%.)

TABLE 1-6**Factors That Influence Your Choice of Practice Setting by Level of Training**

Factors that Influence Practice Setting Choice	Level of Training									
	Surgery Intern		PGY2		PGY3		PGY4		Chief Resident	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Family/Lifestyle/Call Schedule	66	84.6	72	90.0	126	86.3	192	88.9	158	85.4
Geographic Location	66	84.6	69	86.3	126	86.3	191	88.4	153	82.7
Compensation	56	71.8	67	83.8	116	79.5	175	81.0	133	71.9
Academic Setting	43	55.1	43	53.8	67	45.9	98	45.4	71	38.4
Local Urologist Supply	32	41.0	36	45.0	65	44.5	81	37.5	65	35.1
Contractual Obligations	26	33.3	31	38.8	43	29.5	55	25.5	43	23.2
Quality of Research	23	29.5	20	25.0	35	24.0	50	23.1	40	21.6
Malpractice Climate	12	15.4	19	23.8	29	19.9	44	20.4	26	14.1

(Respondents could select multiple answers; the total number of choices may not add up to the total number of residents and the total percentages may not equal 100%.)

TABLE 1-7

Total Current Educational Debt

Educational Debt	Female		Male		Total	
	Number	Percent	Number	Percent	Number	Percent
None	43	21.9	113	22.2	156	22.1
≤\$150,000	45	23.0	116	22.8	161	22.8
\$150,001 to \$250,000	62	31.6	128	25.1	190	27.0
>\$250,000	43	21.9	146	28.7	189	26.8
I Prefer not to Answer	3	1.5	6	1.2	9	1.3
Total	196	100.0	509	100.0	705	100.0

TABLE 1-8

Planned Practice Setting (by Total Current Educational Debt)

Planned Practice Setting	Level of Educational Debt							
	None		≤\$150,000		\$150,001-\$250,000		>\$250,000	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Academic/Medical School	57	36.5	61	37.9	62	32.6	67	35.4
Community-based Practice	2	1.3	3	1.9	3	1.6	6	3.2
Hospital	8	5.1	9	5.6	9	4.7	19	10.1
Military	11	7.1	6	3.7	0	0.0	2	1.1
Private Practice	43	27.6	50	31.1	66	34.7	68	36.0
Unsure	35	22.4	32	19.9	50	26.3	27	14.3
Total	156	100.0	161	100.0	190	100.0	189	100.0

TABLE 1-9

How Would Payment of Your Educational Loans Influence Your Decision to Accept a Practice Opportunity Offer?

Effects of Educational Loan Payment	Female		Male		Total	
	Number	Percent	Number	Percent	Number	Percent
Little to No Effect	63	32.1	152	29.9	215	30.5
Some Effect	79	40.3	219	43.0	298	42.3
Great Effect	54	27.6	138	27.1	192	27.2
Total	196	100.0	509	100.0	705	100.0

TABLE 1-10

How Would Payment of Your Educational Loans Influence Your Decision to Accept a Practice Opportunity Offer? (by Level of Educational Debt)

Effects of Educational Loan Payment	Level of Educational Debt							
	None		≤\$150,000		\$150,001-\$250,000		>\$250,000	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Little to No Effect	137	87.8	51	31.7	18	9.5	6	3.2
Some Effect	13	8.3	94	58.4	110	57.9	76	40.2
Great Effect	6	3.8	16	9.9	62	32.6	107	56.6
Total	156	100.0	161	100.0	190	100.0	189	100.0

TABLE 1-11**What Is Important to You as You Consider Practice Opportunities?**

Practice Opportunity Considerations	Female		Male		Total	
	Number	Percent	Number	Percent	Number	Percent
Geographic Location	187	95.4	481	94.5	668	94.8
Lifestyle	180	91.8	446	87.6	626	88.8
Adequate Call Coverage/Personal Time	181	92.3	417	81.9	598	84.8
Good Financial Package	151	77.0	420	82.5	571	81.0
Good Medical Facilities/Equipment	145	74.0	367	72.1	512	72.6
Proximity to Family	126	64.3	380	74.7	506	71.8
Specialty Support	112	57.1	257	50.5	369	52.3
Education Loan Forgiveness	74	37.8	163	32.0	237	33.6
Research Opportunity	79	40.3	144	28.3	223	31.6
Low Malpractice Climate	47	24.0	111	21.8	158	22.4

(Respondents could select multiple answers; the total number of choices may not add up to the total number of residents and the total percentages may not equal 100%.)

TABLE 1-12

What Is Important to You as You Consider Practice Opportunities? (by Level of Educational Debt)

Practice Opportunity Considerations	Level of Educational Debt							
	None		≤\$150,000		\$150,001-\$250,000		>\$250,000	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Geographic Location	148	94.9	159	98.8	174	91.6	178	94.2
Lifestyle	138	88.5	148	91.9	165	86.8	167	88.4
Adequate Call Coverage/ Personal Time	132	84.6	140	87.0	159	83.7	158	83.6
Good Financial Package	116	74.4	119	73.9	157	82.6	171	90.5
Good Medical Facilities/ Equipment	114	73.1	115	71.4	136	71.6	139	73.5
Proximity to Family	106	67.9	124	77.0	137	72.1	131	69.3
Specialty Support	81	51.9	83	51.6	98	51.6	101	53.4
Education Loan Forgiveness	5	3.2	31	19.3	86	45.3	113	59.8
Research Opportunity	61	39.1	50	31.1	58	30.5	50	26.5
Low Malpractice Climate	31	19.9	38	23.6	40	21.1	46	24.3

(Respondents could select multiple answers; the total number of choices may not add up to the total number of residents and the total percentages may not equal 100%.)

TABLE 1-13

Which of the Following Types of Compensation Would You Prefer at the Start of Your First Professional Practice?

Preferred Compensation Type	Female		Male		Total	
	Number	Percent	Number	Percent	Number	Percent
Salary with Production Bonus	104	53.1	370	72.7	474	67.2
Income Guarantee	59	30.1	187	36.7	246	34.9
Salary	56	28.6	122	24.0	178	25.2
Unsure	67	34.2	82	16.1	149	21.1
Bank Loan	1	0.5	4	0.8	5	0.7

(Respondents could select multiple answers; the total number of choices may not add up to the total number of residents and the total percentages may not equal 100%.)

TABLE 1-14**Preferred Types of Compensation at the Start of Your First Professional Practice (by Level of Educational Debt)**

Preferred Compensation Type	Level of Educational Debt							
	None		≤\$150,000		\$150,001-\$250,000		>\$250,000	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Salary with Production Bonus	96	61.5	114	70.8	129	67.9	131	69.3
Income Guarantee	46	29.5	49	30.4	68	35.8	81	42.9
Salary	42	26.9	46	28.6	43	22.6	45	23.8
Unsure	37	23.7	32	19.9	44	23.2	32	16.9
Bank Loan	0	0.0	2	1.2	1	0.5	2	1.1

(Respondents could select multiple answers; the total number of choices may not add up to the total number of residents and the total percentages may not equal 100%.)

TABLE 1-15**What Causes You Concern as You Enter Your First Professional Practice?**

What Causes Concerns	Female		Male		Total	
	Number	Percent	Number	Percent	Number	Percent
Availability of Free Time	115	58.7	296	58.2	411	58.3
Earning a Good Income	100	51.0	289	56.8	389	55.2
Dealing with Payers	102	52.0	258	50.7	360	51.1
Educational Debt	99	50.5	237	46.6	336	47.7
Health Reform	83	42.3	194	38.1	277	39.3
Ability to Find a Practice	73	37.2	191	37.5	264	37.4
Malpractice	77	39.3	185	36.3	262	37.2
Management Knowledge	85	43.4	155	30.5	240	34.0
Insufficient Practice	44	22.4	105	20.6	149	21.1
Insufficient Medical Knowledge	35	17.9	71	13.9	106	15.0

(Respondents could select multiple answers; the total number of choices may not add up to the total number of residents and the total percentages may not equal 100%.)

TABLE 1-16

What Level of Annual Compensation Do You Anticipate Achieving in Your First Professional Practice?

Anticipated Annual Compensation	Female		Male		Total	
	Number	Percent	Number	Percent	Number	Percent
≤ \$250,000	36	18.4	42	8.3	78	11.1
\$250,001 to \$300,000	68	34.7	121	23.8	189	26.8
\$300,001 to \$350,000	64	32.7	178	35.0	242	34.3
>\$350,000	28	14.3	168	33.0	196	27.8
Total	196	100.0	509	100.0	705	100.0

TABLE 1-17

What Level of Annual Compensation Do You Anticipate Achieving in Your First Professional Practice? (by Level of Educational Debt)

Anticipated Annual Compensation	Level of Educational Debt							
	None		≤\$150,000		\$150,001-\$250,000		>\$250,000	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
≤ \$250,000	32	20.5	21	13.0	15	7.9	9	4.8
\$250,001 to \$300,000	41	26.3	43	26.7	55	28.9	46	24.3
\$300,001 to \$350,000	46	29.5	62	38.5	73	38.4	60	31.7
>\$350,000	37	23.7	35	21.7	47	24.7	74	39.2
Total	156	100.0	161	100.0	190	100.0	189	100.0

TABLE 1-18

How Prepared Are You to Handle the “Business Side” of Your Medical Career, Including Employment Contracts, Compensation Arrangements and Other Facets of Employment?

Level of Preparation	Female		Male		Total	
	Number	Percent	Number	Percent	Number	Percent
Unprepared	144	73.5	267	52.5	411	58.3
Somewhat Prepared	48	24.5	226	44.4	274	38.9
Very Prepared	4	2.0	16	3.1	20	2.8
Total	196	100.0	509	100.0	705	100.0

TABLE 1-19

What Are Your Plans Regarding a Fellowship?

Fellowship Plan	Female		Male		Total	
	Number	Percent	Number	Percent	Number	Percent
I Plan to Pursue a Fellowship	84	42.9	178	35.0	262	37.2
I Do Not Plan to Pursue a Fellowship	32	16.3	156	30.6	188	26.7
I Am Currently in or Have Been Matched for Fellowship Training	29	14.8	71	14.0	100	14.1
I Do Not Know	51	26.0	104	20.4	155	22.0
Total	196	100.0	509	100.0	705	100.0

TABLE 1-20

Fellowship Plan (by Level of Educational Debt)

Fellowship Plan	Level of Educational Debt							
	None		≤\$150,000		\$150,001-\$250,000		>\$250,000	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
I Plan to Pursue a Fellowship	65	41.7	65	40.4	62	32.6	66	34.9
I Do Not Plan or Know If I Plan to Pursue a Fellowship	67	42.9	80	49.7	100	52.6	91	48.1
I Am Currently in or Have Been Matched for Fellowship Training	24	15.4	16	9.9	28	14.7	32	16.9
Total	156	100.0	161	100.0	190	100.0	189	100.0

TABLE 1-21

What Is the Most Important Factor Influencing Which Fellowship to Pursue?

Fellowship Training Factors	Female		Male		Total	
	Number	Percent	Number	Percent	Number	Percent
Type of Surgical Cases	58	51.3	140	56.2	198	54.7
Nature of Clinical and Medical Problems	44	38.9	79	31.7	123	34.0
Others	11	9.7	30	12.0	41	11.3
Total	113	100.0	249	100.0	362	100.0

TABLE 1-22

Subspecialty Choice for Fellowship Training

Subspecialty Choice	Female		Male		Total	
	Number	Percent	Number	Percent	Number	Percent
Oncology	17	15.0	74	29.7	91	25.1
Male Genitourinary Reconstruction	15	13.3	41	16.5	56	15.5
Endourology/Stone Disease	6	5.3	32	12.9	38	10.5
Robotic Surgery	4	3.5	34	13.7	38	10.5
Pediatric	24	21.2	12	4.8	36	9.9
Female Pelvic Medicine and Reconstructive Surgery	29	25.7	6	2.4	35	9.7
Infertility	6	5.3	25	10.0	31	8.6
Others	12	10.6	25	10	37	10.2
Total	113	100.0	249	100.0	362	100.0

TABLE 1-23

Subspecialty Choice for Fellowship Training (by Level of Educational Debt)

Subspecialty Choice	Level of Educational Debt							
	None		≤\$150,000		\$150,001-\$250,000		>\$250,000	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Oncology	26	29.2	18	22.2	23	25.6	24	24.5
Male Genitourinary Reconstruction	14	15.7	14	17.3	16	17.8	11	11.2
Endourology/Stone Disease	11	12.4	5	6.2	6	6.7	14	14.3
Robotic Surgery	8	9.0	12	14.8	6	6.7	12	12.2
Pediatrics	6	6.7	11	13.6	13	14.4	6	6.1
Female Pelvic Medicine and Reconstructive Surgery	7	7.9	8	9.9	11	12.2	9	9.2
Infertility	12	13.5	6	7.4	4	4.4	9	9.2
Others	5	5.6	7	8.6	11	12.2	13	13.3

TABLE 1-24**Patient Mix and Clinical Workload (Average/Median)**

Patient Mix and Clinical Workload	Female		Male		Total	
	Average	Median	Average	Median	Average	Median
Percent of Visits/Encounters with Female Patients	28.3	30.0	27.7	30.0	27.9	30.0
Number of Work Hours Spent on Clinical Activities (e.g., Rounding, Seeing Patients, Ordering and Reviewing Lab Tests, Taking Calls) in a Typical Week (Hours)	59.6	60.0	59.7	60.0	59.7	60.0
Number of Work Hours Spent on Non-Clinical Activities (e.g., Administration, Teaching, Research) in a Typical Week (Hours)	12.8	10.0	13.0	10.0	12.9	10.0
Number of Patient Visits/Encounters in a Typical Week	48.4	45.0	52.5	50.0	51.4	50.0

TABLE 1-25**Knowledge of the Requirements and Resources of Continuing Medical Education (CME) and Life Long Learning (Formerly Maintenance of Certification [MOC])**

Knowledge of Educational Requirements and Resources	Female		Male		Total	
	Number	Percent	Number	Percent	Number	Percent
Not Knowledgeable at All	107	54.6	228	44.8	335	47.5
A Little Knowledgeable	38	19.4	107	21.0	145	20.6
Somewhat Knowledgeable	49	25.0	166	32.6	215	30.5
Very Knowledgeable	2	1.0	8	1.6	10	1.4
Total	196	100.0	509	100.0	705	100.0

TABLE 1-26

Based on Population, in What Community Size Would You Most Like to Practice?

Size of Community to Practice	Female		Male		Total	
	Number	Percent	Number	Percent	Number	Percent
≤50,000	8	4.1	23	4.5	31	4.0
50,001 to 500,000	55	28.1	173	34.0	228	32.3
500,001 to 1,000,000	46	23.5	128	25.1	174	24.7
>1,000,000	41	20.9	128	25.1	169	24.0
I Don't Know	46	23.5	57	11.2	103	14.6
Total	196	100.0	509	100.0	705	100.0

TABLE 1-27

In What Type of Neighborhood Did You Grow Up?

Type of Neighborhood	Female		Male		Total	
	Number	Percent	Number	Percent	Number	Percent
Rural	19	9.7	90	17.7	109	15.5
Suburban	137	69.9	315	61.9	452	64.1
Urban	36	18.4	99	19.4	135	19.1
Unknown	4	2.0	5	1.0	9	1.3
Total	196	100.0	509	100.0	705	100.0

TABLE 1-28

Size of Community in Which You Would Most Like to Practice (by Type of Childhood Neighborhood)

Size of Community to Practice	Type of Childhood Neighborhood					
	Female			Male		
	Rural Percent	Suburban Percent	Urban Percent	Rural Percent	Suburban Percent	Urban Percent
≤50,000	23.5	3.0	3.3	16.9	2.9	0.0
50,001 to 500,000	52.9	37.6	20.0	55.4	40.5	15.1
500,001 to 1,000,000	17.6	35.6	23.3	13.3	31.2	33.7
>1,000,000	5.9	23.8	53.3	14.5	25.4	51.2
Total	100.0	100.0	100.0	100.0	100.0	100.0

FIGURE 1-2

Size of Community in Which You Would Most Like to Practice (by Type of Childhood Neighborhood)

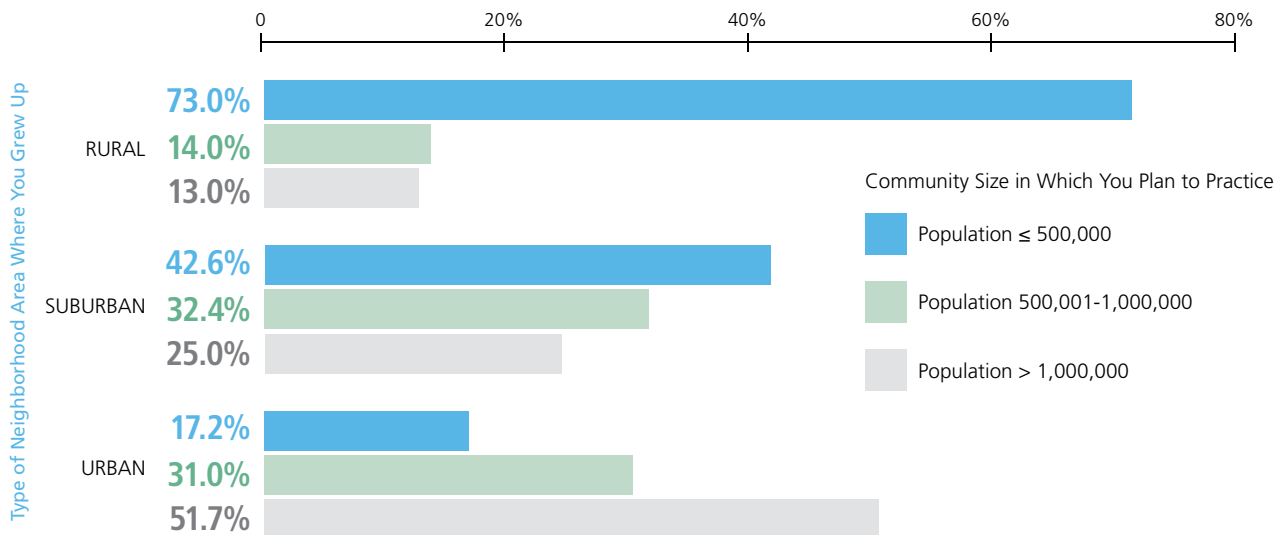


TABLE 1-29

Percentage of Time Spent on Each of the Following Areas

Percentage of Time Allocation	Ambulatory clinic			
	Number	Percent	Mean Percent	SD
Ambulatory Clinic				
<10	78	11.1	22.7	14.8
10-25	383	54.3		
>25	244	34.6		
Inpatient				
≤12	210	29.8	21.8	13.4
13-25	256	36.3		
>25	239	33.9		
Procedures (Including Operating Room Duties)				
<40	223	31.6	44.5	17.0
40-50	284	40.3		
>50	198	28.1		
Non-Clinical Duties				
≤5	256	36.3	10.0	8.9
6-10	287	40.7		
>10	162	23.0		

TABLE 1-30
Roles in Performing Clinical Procedures

Procedures	Surgery Intern	PGY2	PGY3	PGY4	Chief Resident
	Number (Percent)	Number (Percent)	Number (Percent)	Number (Percent)	Number (Percent)
Aspirate Hydrocele					
Perform Independently	14 (17.9)	43 (53.8)	88 (60.3)	158 (73.1)	145 (78.4)
Assist Physician	26 (33.3)	12 (15.0)	31 (21.2)	37 (17.1)	33 (17.8)
Not Involved	38 (48.7)	25 (31.1)	27 (18.5)	21 (9.7)	7 (3.8)
Bladder Instillations					
Perform Independently	21 (26.9)	50 (62.5)	101 (69.2)	164 (75.9)	143 (77.3)
Assist Physician	23 (29.5)	16 (20.0)	30 (20.5)	40 (18.5)	37 (20.0)
Not Involved	34 (43.6)	14 (17.5)	15 (10.3)	12 (5.6)	5 (2.7)
Chemotherapy Injections					
Perform Independently	4 (5.1)	32 (40.0)	46 (31.5)	76 (35.2)	67 (36.2)
Assist Physician	48 (61.5)	39 (48.8)	88 (60.3)	130 (60.2)	113 (61.1)
Not Involved	26 (33.3)	9 (11.3)	12 (8.2)	10 (4.6)	5 (2.7)
Circumcision					
Perform Independently	12 (15.4)	40 (50)	92 (63)	175 (81.0)	170 (91.9)
Assist Physician	13 (16.7)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Not Involved	53 (67.9)	40 (50.0)	54 (37.0)	41 (19.0)	15 (8.1)
Cystoscopy for Diagnostic or Cancer Surveillance					
Perform Independently	32 (41.0)	69 (86.3)	134 (91.8)	199 (92.1)	179 (96.8)
Assist Physician	10 (12.8)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Not Involved	36 (46.2)	11 (13.8)	12 (8.2)	17 (7.9.0)	6 (3.2)
Cystoscopy for Difficult Catheter Placement					
Perform Independently	33 (42.3)	74 (92.5)	139 (95.2)	212 (98.1)	182 (98.4)
Assist Physician	12 (15.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

TABLE 1-30

Roles in Performing Clinical Procedures (continued)

Procedures	Surgery Intern	PGY2	PGY3	PGY4	Chief Resident
	Number (Percent)	Number (Percent)	Number (Percent)	Number (Percent)	Number (Percent)
Not Involved	33 (42.3)	6 (7.5)	7 (4.8)	4 (1.9)	3 (1.6)
Cystoscopy for Stent Removal					
Perform Independently	38 (48.7)	76 (95.0)	136 (93.2)	207 (95.8)	181 (97.8)
Assist Physician	10 (12.8)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Not Involved	30 (38.5)	4 (5.0)	10 (6.8)	9 (4.2)	4 (2.2)
Cystoscopy for Bladder/Prostate Botox Injections					
Perform Independently	44 (56.4)	21 (26.3)	28 (19.2)	34 (15.7)	14 (7.6)
Assist Physician	19 (24.4)	58 (72.5)	115 (78.8)	180 (83.3)	169 (91.4)
Not Involved	15 (19.2)	1 (1.3)	3 (2.1)	2 (0.9)	2 (1.1)
Cystoscopy for Bladder Biopsy					
Perform Independently	48 (61.5)	16 (20.0)	23 (15.8)	20 (9.3)	7 (3.8)
Assist Physician	18 (23.1)	64 (80.0)	123 (84.2)	196 (90.7)	178 (96.2)
Not Involved	12 (15.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Intracavernosal Injections for Erectile Dysfunction					
Perform Independently	39 (50.0)	17 (21.3)	29 (19.9)	29 (13.4)	13 (7.0)
Assist Physician	11 (14.1)	38 (47.5)	78 (53.4)	138 (63.9)	127 (68.6)
Not Involved	28 (35.9)	25 (31.3)	39 (26.7)	49 (22.7)	45 (24.3)
LHRH Antagonist Insertion					
Perform Independently	30 (38.5)	11 (13.8)	24 (16.4)	18 (8.3)	13 (7.0)
Assist Physician	3 (3.8)	17 (21.3)	27 (18.5)	49 (22.7)	50 (27.0)
Not Involved	45 (57.7)	52 (65.0)	95 (65.1)	149 (69.0)	122 (65.9)
Neuromodulation with Interstim Programming					
Perform Independently	50 (64.1)	51 (63.8)	87 (59.6)	130 (60.2)	86 (46.5)
Assist Physician	3 (3.8)	3 (3.8)	21 (14.4)	52 (24.1)	64 (34.6)
Not Involved	25 (32.1)	26 (32.5)	38 (26.0)	34 (15.7)	35 (18.9)

TABLE 1-30
Roles in Performing Clinical Procedures (continued)

Procedures	Surgery Intern	PGY2	PGY3	PGY4	Chief Resident
	Number (Percent)	Number (Percent)	Number (Percent)	Number (Percent)	Number (Percent)
Pelvic Floor Muscle Rehabilitation +/- Biofeedback					
Perform Independently	29 (37.2)	14 (17.5)	24 (16.4)	23 (10.6)	13 (7.0)
Assist Physician	1 (1.3)	2 (2.5)	2 (1.4)	12 (5.6)	13 (7.0)
Not Involved	48 (61.5)	64 (80.0)	120 (82.2)	181 (83.8)	159 (85.9)
Implant Insertion (e.g., Testopel or Vantas)					
Perform Independently	43 (55.1)	22 (27.5)	38 (26.0)	63 (29.2)	34 (18.4)
Assist Physician	2 (2.6)	13 (16.3)	22 (15.1)	56 (25.9)	43 (23.2)
Not Involved	33 (42.3)	45 (56.3)	86 (58.9)	97 (44.9)	108 (58.4)
Percutaneous Tibial Nerve Stimulation					
Perform Independently	32 (41.0)	19 (23.8)	29 (19.9)	28 (13.0)	30 (16.2)
Assist Physician	1 (1.3)	5 (6.3)	12 (8.2)	26 (12.0)	29 (15.7)
Not Involved	45 (57.7)	56 (70)	105 (71.9)	162 (75.0)	126 (68.1)
Priapism Injection Treatment					
Perform Independently	36 (46.2)	9 (11.3)	17 (11.6)	7 (3.2)	3 (1.6)
Assist Physician	22 (28.2)	65 (81.3)	120 (82.2)	203 (94.0)	179 (96.8)
Not Involved	20 (25.6)	6 (7.5)	9 (6.2)	6 (2.8)	3 (1.6)
Transrectal Ultrasound without Biopsy					
Perform Independently	33 (42.3)	13 (16.3)	25 (17.1)	22 (10.2)	8 (4.3)
Assist Physician	28 (35.9)	58 (72.5)	111 (76.0)	176 (81.5)	159 (85.9)
Not Involved	17 (21.8)	9 (11.3)	10 (6.8)	18 (8.3)	18 (9.7)
Transrectal Ultrasound with Biopsy					
Perform Independently	26 (33.3)	59 (73.8)	121 (82.9)	189 (87.5)	177 (95.7)
Assist Physician	14 (17.9)	2 (2.5)	0 (0.0)	1 (0.5)	2 (1.1)
Not Involved	38 (48.7)	19 (23.8)	25 (17.1)	26 (12.0)	6 (3.2)

TABLE 1-30

Roles in Performing Clinical Procedures (continued)

Procedures	Surgery Intern	PGY2	PGY3	PGY4	Chief Resident
	Number (Percent)	Number (Percent)	Number (Percent)	Number (Percent)	Number (Percent)
Ultrasound: Renal					
Perform Independently	11 (14.1)	16 (20.0)	21 (14.4)	50 (23.1)	53 (28.6)
Assist Physician	46 (59.0)	55 (68.8)	102 (69.9)	140 (64.8)	119 (64.3)
Not Involved	21 (26.9)	9 (11.3)	23 (15.8)	26 (12.0)	13 (7.0)
Ultrasound: Scrotal					
Perform Independently	9 (11.5)	9 (11.3)	16 (11.0)	37 (17.1)	43 (23.2)
Assist Physician	49 (62.8)	59 (73.8)	106 (72.6)	156 (72.2)	130 (70.3)
Not Involved	20 (25.6)	12 (15.0)	24 (16.4)	23 (10.6)	12 (6.5)
Ultrasound: Penile Doppler					
Perform Independently	9 (11.5)	9 (11.3)	10 (6.8)	31 (14.4)	32 (17.3)
Assist Physician	42 (53.8)	59 (73.8)	106 (72.6)	144 (66.7)	138 (74.6)
Not Involved	27 (34.6)	12 (15.0)	30 (20.5)	41 (19.0)	15 (8.1)
Urodynamics (Place Catheters/Perform Test)					
Perform Independently	5 (6.4)	17 (21.3%)	32 (21.9)	59 (27.3)	64 (34.6)
Assist Physician	37 (47.4)	29 (36.3%)	38 (26.0)	80 (37.0)	67 (36.2)
Not Involved	36 (46.2)	34 (42.5%)	76 (52.1)	77 (35.6)	54 (29.2)

TABLE 1-30

Roles in Performing Clinical Procedures (continued)

Procedures	Surgery Intern	PGY2	PGY3	PGY4	Chief Resident
	Number (Percent)	Number (Percent)	Number (Percent)	Number (Percent)	Number (Percent)
Urodynamics Interpretation					
Perform Independently	13 (16.7)	33 (41.3)	78 (53.4)	149 (69.0)	158 (85.4)
Assist Physician	22 (28.2)	5 (6.3)	1 (0.7)	3 (1.4)	2 (1.1)
Not Involved	43 (55.1)	42 (52.5)	67 (45.9)	64 (29.6)	25 (13.5)
Xiaflex Injections					
Perform Independently	5 (6.4)	13 (16.3)	20 (13.7)	43 (19.9)	44 (23.8)
Assist Physician	42 (53.8)	51 (63.8)	80 (54.8)	105 (48.6)	103 (55.7)
Not Involved	31 (39.7)	16 (20.0)	46 (31.5)	68 (31.5)	38 (20.5)
Vasectomy					
Perform Independently	10 (12.8)	42 (52.5)	74 (50.7)	145 (67.1)	156 (84.3)
Assist Physician	17 (21.8)	1 (1.3)	1 (0.7)	2 (0.9)	1 (0.5)
Not Involved	51 (65.4)	37 (46.3)	71 (48.6)	69 (31.9)	28 (15.1)

PART 2:

*Urology Residents
across the Globe*

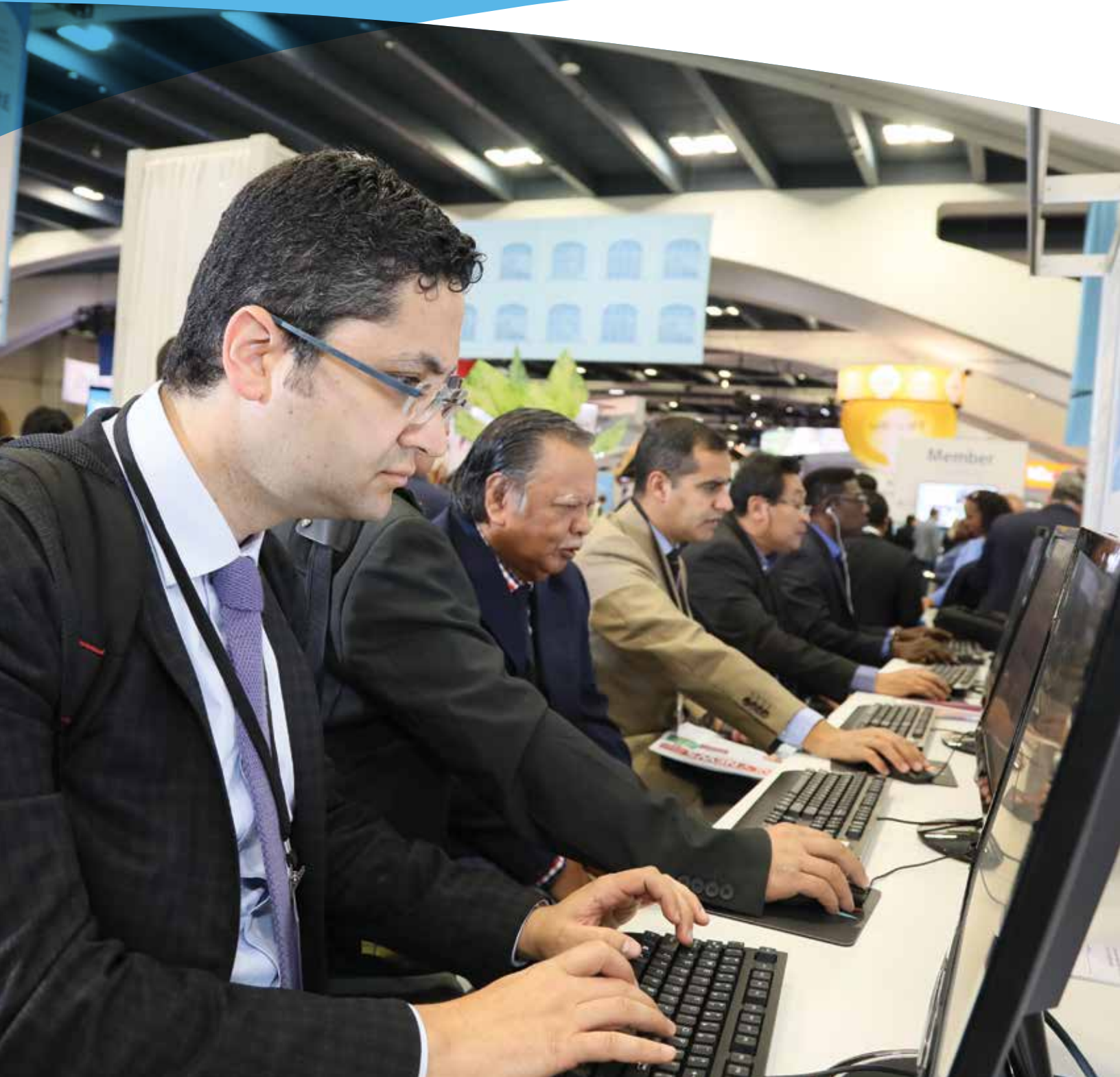


TABLE 2-1**Age**

Country	Age				
	Number	Mean	25th Percentile	50th Percentile	75th Percentile
United States	705	31.3	29	31	33
Non-U.S. Countries	465	31.8	29	31	33
Canada	52	30.3	28	30	32
Mexico	50	30.8	29	30	32
India	47	32.9	31	32	34
Italy	37	30.6	30	31	32
Colombia	21	30.4	29	31	33
Argentina	20	32.4	29	32	34
Australia	17	31.9	30	31	33
Peru	17	30.8	28	29	32
Brazil	16	30.7	30	32	32
United Kingdom	15	32.6	29	32	35

TABLE 2-2**Gender**

Country	Female	Male	Total
	Percent	Percent	Number
United States	27.8	72.2	705
Non-U.S. Countries	17.0	83.0	465
Canada	23.1	76.9	52
Mexico	10.0	90.0	50
India	0.0	100.0	47
Italy	21.6	78.4	37
Colombia	33.3	66.7	21
Argentina	20.0	80.0	20
Australia	23.5	76.5	17
Peru	29.4	70.6	17
Brazil	0.0	100.0	16
United Kingdom	33.3	66.7	15

TABLE 2-3

What Practice Setting Do You Plan to Pursue?

	U.S.	Non-U.S.	Canada	Mexico	India	Italy
Planned Practice Setting	Percent	Percent	Percent	Percent	Percent	Percent
Academic/Medical School	35.0	33.1	61.5	10.0	48.9	51.4
Community-based Practice	2.1	3.0	21.2	0.0	0.0	0.0
Hospital	6.4	41.1	5.8	36.0	21.3	43.2
Military	2.7	1.7	0.0	4.0	0.0	0.0
Private Practice	32.2	17.0	0.0	48.0	29.8	0.0
Others/Unsure	21.6	4.1	11.5	2.0	0.0	5.4
Total	100.0	100.0	100.0	100.0	100.0	100.0
	Colombia	Argentina	Australia	Peru	Brazil	U.K.
Planned Practice Setting	Percent	Percent	Percent	Percent	Percent	Percent
Academic/Medical School	19.0	15.0	23.5	17.6	25.0	13.3
Community-based Practice	0.0	0.0	0.0	0.0	0.0	0.0
Hospital	47.6	55.0	58.8	82.4	31.3	80.0
Military	14.3	5.0	0.0	0.0	0.0	0.0
Private Practice	4.8	25.0	11.8	0.0	43.8	6.7
Other/Unsure	14.3	0.0	5.9	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 2-4**Factors That Influence Your Choice of Practice Setting**

Factors That Influence Practice Setting Choice	U.S.	Non-U.S.	Canada	Mexico	India	Italy
	Percent	Percent	Percent	Percent	Percent	Percent
Compensation	77.6	37.0	55.8	62.0	29.8	21.6
Local Urologist Supply	39.6	43.9	42.3	44.0	27.7	37.8
Geographic Location	85.8	37.6	75.0	26.0	40.4	27.0
Family/Lifestyle/Call Schedule	87.1	60.2	82.7	62.0	78.7	35.1
Quality of Research	23.8	40.6	46.2	30.0	42.6	54.1
Academic Setting	45.7	52.0	63.5	46.0	46.8	48.6
Malpractice Climate	18.4	5.6	9.6	0.0	4.3	8.1
Contractual Obligation	28.1	6.9	11.5	2.0	8.5	2.7
Factors That Influence Practice Setting Choice	Colombia	Argentina	Australia	Peru	Brazil	U.K.
	Percent	Percent	Percent	Percent	Percent	Percent
Compensation	28.6	25.0	29.4	29.4	31.3	20.0
Local Urologist Supply	38.1	35.0	76.5	47.1	37.5	20.0
Geographic Location	19.0	35.0	58.8	29.4	18.8	53.3
Family/Lifestyle/Call Schedule	57.1	50.0	76.5	52.9	68.8	66.7
Quality of Research	23.8	35.0	47.1	17.6	37.5	40.0
Academic Setting	61.9	60.0	47.1	35.3	37.5	53.3
Malpractice Climate	0.0	5.0	0.0	0.0	0.0	6.7
Contractual Obligation	4.8	0.0	0.0	5.9	6.3	26.7

(Respondents could select multiple answers; the total number of choices may not add up to the total number of residents and the total percentages may not equal 100%.)

TABLE 2-5

How Would Payment of Your Educational Loans Influence Your Decision to Accept a Practice Opportunity Offer?

	Little to No Effect	Some Effect	Great Effect
Country	Percent	Percent	Percent
United States	29.9	38.3	31.8
Non-U.S. Countries	35.1	49.2	15.7
Canada	36.5	59.6	3.8
Mexico	34.0	46.0	20.0
India	38.3	34.0	27.7
Italy	48.6	37.8	13.5
Colombia	19.0	66.7	14.3
Argentina	25.0	60.0	15.0
Australia	35.3	58.8	5.9
Peru	5.9	70.6	23.5
Brazil	25.0	56.3	18.8
United Kingdom	40.0	53.3	6.7

TABLE 2-6

What Is Important to You as You Consider Practice Opportunities?

Practice Opportunity Consideration	U.S.	Non-U.S.	Canada	Mexico	India	Italy
	Percent	Percent	Percent	Percent	Percent	Percent
Geographic Location	94.8	58.1	90.4	60.0	44.7	51.4
Adequate Call Coverage/ Personal Time	84.8	43.2	71.2	30.0	57.4	21.6
Lifestyle	88.8	65.6	86.5	66.0	44.7	51.4
Good Financial Package	81.0	56.8	69.2	62.0	61.7	48.6
Proximity to Family	71.8	55.3	80.8	46.0	66.0	45.9
Good Medical Facilities/ Equipment	72.6	68.2	67.3	76.0	74.5	70.3
Specialty Support	52.3	41.5	51.9	38.0	51.1	24.3
Low Malpractice Climate	22.4	10.8	11.5	6.0	31.9	8.1
Education Loan Forgiveness	33.6	9.0	11.5	10.0	14.9	5.4
Research Opportunity	31.6	49.9	55.8	36.0	59.6	56.8
Practice Opportunity Consideration	Colombia	Argentina	Australia	Peru	Brazil	U.K.
	Percent	Percent	Percent	Percent	Percent	Percent
Geographic Location	52.4	35.0	88.2	29.4	56.3	86.7
Adequate Call Coverage/ Personal Time	14.3	20.0	82.4	23.5	12.5	66.7
Lifestyle	81.0	50.0	76.5	52.9	68.8	73.3
Good Financial Package	52.4	35.0	76.5	29.4	50.0	33.3
Proximity to Family	33.3	35.0	76.5	41.2	56.3	40.0
Good Medical Facilities/ Equipment	76.2	60.0	76.5	64.7	68.8	46.7
Specialty Support	33.3	40.0	70.6	11.8	43.8	40.0
Low Malpractice Climate	0.0	10.0	11.8	5.9	6.3	0.0
Education Loan Forgiveness	9.5	10.0	5.9	11.8	6.3	6.7
Research Opportunity	23.8	60.0	47.1	41.2	68.8	40.0

TABLE 2-7

How Prepared Are You to Handle the "Business Side" of Your Medical Career, Including Employment Contracts, Compensation Arrangements and Other Facets of Employment?

Country	Unprepared to Handle the "Business Side" of Medical Career
	Percent
United States	55.3
Non-U.S. Countries	33.3
Canada	69.2
Mexico	26.0
India	29.8
Italy	24.3
Colombia	42.9
Argentina	25.0
Australia	52.9
Peru	5.9
Brazil	18.8
United Kingdom	53.3

TABLE 2-8

What Is the Most Important Factor Influencing Which Fellowship to Pursue?

Country	Type of Surgical Cases	Nature of Clinical and Medical Problems	Others
	Percent	Percent	Percent
United States	54.7	34.0	11.3
Non-U.S. Countries	55.7	27.3	17.0
Canada	47.8	37.0	15.2
Mexico	46.7	17.8	35.6
India	51.3	33.3	15.4
Italy	74.1	22.2	3.7
Colombia	50.0	37.5	12.5
Argentina	68.4	21.1	10.5

TABLE 2-8**What Is the Most Important Factor Influencing Which Fellowship to Pursue? (continued)**

	Type of Surgical Cases	Nature of Clinical and Medical Problems	Others
Country	Percent	Percent	Percent
Australia	57.1	28.6	14.3
Peru	56.3	18.8	25.0
Brazil	60.0	26.7	13.3
United Kingdom	72.7	27.3	0.0

(Respondents could select multiple answers; the total number of choices may not add up to the total number of residents and the total percentages may not equal 100%.)

TABLE 2-9**What Are Your Plans Regarding a Fellowship?**

	I am Currently in or Have Been Matched for a Fellowship	I Plan to Pursue a Fellowship	I Do Not Plan to Pursue a Fellowship or I Do Not Know
Country	Percent	Percent	Percent
United States	14.2	37.2	48.7
Non-U.S. Countries	17.0	68.0	15.1
Canada	21.2	67.3	11.5
Mexico	10.0	80.0	10.0
India	2.1	80.9	17.0
Italy	29.7	43.2	27.0
Colombia	4.8	71.4	23.8
Argentina	20.0	75.0	5.0
Australia	11.8	70.6	17.6
Peru	17.6	76.5	5.9
Brazil	12.5	81.3	6.3
United Kingdom	26.7	46.7	26.7

TABLE 2-10

Subspecialty Choice for Fellowship Training

Country	Most Popular	2nd Most Popular	3rd Most Popular
United States	Oncology	Male Genitourinary Reconstruction	Endourology/Stone Disease or Robotic Surgery
Non-U.S. Countries	Oncology	Endourology/Stone Disease	Laparoscopic Surgery
Canada	Endourology/Stone Disease	Oncology	Male Genitourinary Reconstruction
Mexico	Laparoscopic Surgery	Oncology	Robotic Surgery
India	Robotic Surgery	Oncology	Laparoscopic Surgery
Italy	Oncology	Robotic Surgery	Laparoscopic Surgery
Colombia	Oncology	Laparoscopic Surgery or Pediatrics	
Argentina	Oncology	Laparoscopic Surgery	Endourology/Stone Disease
Australia	Oncology	Male Genitourinary Reconstruction	Infertility, Laparoscopic Surgery or Renal Transplantation
Peru	Endourology/Stone Disease	Laparoscopic Surgery	Oncology or Pediatrics
Brazil	Oncology or Robotic Surgery		Laparoscopic Surgery or Pediatrics
United Kingdom	Robotic Surgery	Oncology or Research	

(Merged cells represent ties in responses.)

TABLE 2-11

Patient Mix and Clinical Workload (Average)

Patient Mix and Clinical Workload	U.S.	Non-U.S.	Canada	Mexico
Percent of Visits/Encounters with Female Patients	27.9	28.7	29.8	32.0
Number of Work Hours Spent on Clinical Activities (e.g., Rounding, Seeing Patients, Ordering and Reviewing Lab Tests, Taking Calls) in a Typical Week	59.7	53.5	60.8	55.2
Number of Work Hours Spent on Non-Clinical Activities (e.g., Administration, Teaching, Research) in a Typical Week	12.9	13.4	12.8	12.8
Number of Patient Visits/Encounters in a Typical Week	51.4	65.7	75.8	67.9
Patient Mix and Clinical Workload	India	Italy	Australia	Peru
Percent of Visits/Encounters with Female Patients	26.6	23.7	26.8	23.8
Number of Work Hours Spent on Clinical Activities (e.g., Rounding, Seeing Patients, Ordering and Reviewing Lab Tests, Taking Calls) in a Typical Week	62.3	42.8	51.5	73.3
Number of Work Hours Spent on Non-Clinical Activities (e.g., Administration, Teaching, Research) in a Typical Week	15.2	13.9	12.9	16.6
Number of Patient Visits/Encounters in a Typical Week	114.8	44.7	59.9	42.5
Patient Mix and Clinical Workload	Colombia	Argentina	Brazil	UK
Percent of Visits/Encounters with Female Patients	29.9	36.4	33.9	28.9
Number of Work Hours Spent on Clinical Activities (e.g., Rounding, Seeing Patients, Ordering and Reviewing Lab Tests, Taking Calls) in a Typical Week	55.7	50.8	50.8	33.8
Number of Work Hours Spent on Non-Clinical Activities (e.g., Administration, Teaching, Research) in a Typical Week	8.1	14.6	7.4	13.6
Number of Patient Visits/Encounters in a Typical Week	67.3	42.9	41.1	38.3

TABLE 2-12

Type of Childhood Neighborhood and Size of Community in Which You Would Most Like to Practice

Size of Community	Type of Childhood Neighborhood					
	United States			Non-United States		
	Rural Percent	Suburban	Percent	Percent	Percent	Percent
≤50,000	16.5	2.4	0.7	28.6	24.5	15.0
50,001 to 500,000	50.5	33.4	14.1	28.6	32.4	23.2
500,001 to 1,000,000	12.8	27.2	26.7	28.6	24.5	23.6
>1,000,000	20.2	36.9	58.5	14.3	18.6	38.2

TABLE 2-13

Percentage of Time Spent on Each of the Following Areas

Country	Ambulatory Clinic	Inpatient	Procedures (Including Operating Room Duties)	Non-Clinical Duties	Others
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
United States	22.7 (14.8)	21.8 (13.4)	44.5 (17.0)	10.0 (8.9)	0.9 (3.2)
Non-U.S.	22.1 (14.7)	25.1 (15.1)	35.9 (16.1)	12.2 (10.0)	4.5 (9.6)
Canada	24.9 (16.6)	26.3 (17.5)	36.0 (18.7)	11.0 (8.0)	1.8 (4.2)
Mexico	21.3 (12.8)	24.7 (14.6)	35.2 (12.9)	10.3 (6.9)	6.5 (9.6)
India	20.0 (13.4)	25.1 (11.1)	42.1 (13.7)	9.9 (6.5)	2.8 (5.0)
Italy	26.9 (13.8)	19.2 (10.5)	32.3 (13.0)	16.5 (9.0)	5.1 (8.1)
Colombia	28.3 (16.1)	28.3 (13.4)	30.0 (15.1)	10.0 (6.9)	3.3 (4.6)
Argentina	32.3 (18.1)	18.8 (10.9)	30.9 (13.4)	11.7 (8.1)	6.5 (11.0)
Australia	16.1 (12.6)	25.5 (13.5)	45.2 (13.4)	13 (14.7)	0.3 (1.2)
Peru	30.3 (14.0)	21.5 (16.6)	29.7 (14.2)	12.1 (8.3)	6.5 (10.1)
Brazil	36.6 (11.9)	15.3 (11.0)	35.9 (15.5)	10.0 (8.0)	2.2 (4.8)
United Kingdom	15.4 (13.3)	29.7 (21.9)	34.3 (18.7)	19.3 (19.8)	1.3 (3.5)

TABLE 2-14

Roles in Performing Clinical Procedures

Procedure	U.S.	Non-U.S.	Canada	Mexico	India	Italy
	Percent	Percent	Percent	Percent	Percent	Percent
Aspirate Hydrocele						
Perform Independently	63.5	70.3	51.9	79.6	87.2	64.9
Assist Physician	19.7	15.1	23.1	4.1	12.8	10.8
Not Involved	16.7	14.7	25	16.3	0	24.3
Bladder Instillations						
Perform Independently	59	77.6	67.3	89.8	100	78.4
Assist Physician	9.6	11.4	21.2	0	0	10.8
Not Involved	31.5	11	11.5	10.2	0	10.8
Chemotherapy Injections						
Perform Independently	52.2	50.2	32.7	63.3	74.5	43.2
Assist Physician	38.4	39	57.7	20.4	21.3	48.6
Not Involved	9.4	10.8	9.6	16.3	4.3	8.1
Procedure	Colombia	Argentina	Australia	Peru	Brazil	U.K.
	Percent	Percent	Percent	Percent	Percent	Percent
Aspirate Hydrocele						
Perform Independently	71.4	90	47.1	76.5	62.5	40
Assist Physician	9.5	0	35.3	11.8	37.5	60
Not Involved	19	10	17.6	11.8	0	0
Bladder Instillations						
Perform Independently	52.4	85	64.7	52.9	62.5	53.3
Assist Physician	19	5	35.3	5.9	31.3	40
Not Involved	28.6	10	0	41.2	6.3	6.7
Chemotherapy Injections						
Perform Independently	42.9	75	29.4	35.3	18.8	20
Assist Physician	42.9	20	64.7	17.6	75	80
Not Involved	14.3	5	5.9	47.1	6.3	0

TABLE 2-14

Roles in Performing Clinical Procedures (continued)

	U.S.	Non-U.S.	Canada	Mexico	India	Italy
Procedure	Percent	Percent	Percent	Percent	Percent	Percent
Circumcision						
Perform Independently	48.1	79.7	53.8	83.7	100	86.5
Assist Physician	34.2	2.2	1.9	0	0	0
Not Involved	17.7	18.1	44.2	16.3	0	13.5
Cystoscopy for Diagnostic or Cancer Surveillance						
Perform Independently	77	88.1	88.5	91.8	97.9	97.3
Assist Physician	1.6	1.9	3.8	0	0	0
Not Involved	21.4	9.9	7.7	8.2	2.1	2.7
Cystoscopy for Difficult Catheter Placement						
Perform Independently	88.9	81.7	92.3	85.7	97.9	73
Assist Physician	1.4	3.4	5.8	0	2.1	2.7
Not Involved	9.6	14.9	1.9	14.3	0	24.3
	Colombia	Argentina	Australia	Peru	Brazil	U.K.
Procedure	Percent	Percent	Percent	Percent	Percent	Percent
Circumcision						
Perform Independently	90.5	80	76.5	76.5	68.8	73.3
Assist Physician	0	0	0	0	6.3	13.3
Not Involved	9.5	20	23.5	23.5	25	13.3
Cystoscopy for Diagnostic or Cancer Surveillance						
Perform Independently	95.2	85	94.1	88.2	68.8	86.7
Assist Physician	0	5	0	0	6.3	13.3
Not Involved	4.8	10	5.9	11.8	25	0
Cystoscopy for Difficult Catheter Placement						
Perform Independently	76.2	75	94.1	64.7	75	73.3
Assist Physician	0	5	0	0	6.3	20
Not Involved	23.8	20	5.9	35.3	18.8	6.7

TABLE 2-14
Roles in Performing Clinical Procedures (continued)

	U.S.	Non-U.S.	Canada	Mexico	India	Italy
Procedure	Percent	Percent	Percent	Percent	Percent	Percent
Cystoscopy for Stent Removal						
Perform Independently	90.8	90.5	92.3	91.8	100	94.6
Assist Physician	1.7	2.4	3.8	0	0	0
Not Involved	7.5	7.1	3.8	8.2	0	5.4
Cystoscopy for Bladder/Prostate Botox Injections						
Perform Independently	13.2	28.7	28.8	28.6	29.8	32.4
Assist Physician	84.7	55.4	67.3	61.2	53.2	54.1
Not Involved	2.1	15.9	3.8	10.2	17	13.5
Cystoscopy for Bladder Biopsy						
Perform Independently	18.6	17.9	19.2	12.2	2.1	10.8
Assist Physician	78.7	79.5	76.9	85.7	97.9	89.2
Not Involved	2.7	2.6	3.8	2	0	0
	Colombia	Argentina	Australia	Peru	Brazil	U.K.
Procedure	Percent	Percent	Percent	Percent	Percent	Percent
Cystoscopy for Stent Removal						
Perform Independently	95.2	95	94.1	88.2	75	86.7
Assist Physician	0	0	0	0	12.5	13.3
Not Involved	4.8	5	5.9	11.8	12.5	0
Cystoscopy for Bladder/Prostate Botox Injections						
Perform Independently	33.3	25	5.9	58.8	25	6.7
Assist Physician	66.7	50	82.4	29.4	37.5	80
Not Involved	0	25	11.8	11.8	37.5	13.3
Cystoscopy for Bladder Biopsy						
Perform Independently	19	30	17.6	41.2	31.3	20
Assist Physician	81	70	82.4	58.8	62.5	73.3
Not Involved	0	0	0	0	6.3	6.7

TABLE 2-14

Roles in Performing Clinical Procedures (continued)

	U.S.	Non-U.S.	Canada	Mexico	India	Italy
Procedure	Percent	Percent	Percent	Percent	Percent	Percent
Intracavernosal Injections for Erectile Dysfunction						
Perform Independently	17.6	20	21.2	20.4	8.5	10.8
Assist Physician	69.5	52.6	44.2	57.1	78.7	83.8
Not Involved	12.9	27.4	34.6	22.4	12.8	5.4
LHRH Antagonist Insertion						
Perform Independently	15.7	14.7	5.8	12.2	14.9	8.1
Assist Physician	40.7	52.8	59.6	73.5	76.6	54.1
Not Involved	43.5	32.5	34.6	14.3	8.5	37.8
Neuromodulation with Interstim Programming						
Perform Independently	33.5	24.9	30.8	28	14.9	29.7
Assist Physician	19.9	6.9	3.8	18	4.3	8.1
Not Involved	46.7	68.2	65.4	54	80.9	62.2
	Colombia	Argentina	Australia	Peru	Brazil	U.K.
Procedure	Percent	Percent	Percent	Percent	Percent	Percent
Intracavernosal Injections for Erectile Dysfunction						
Perform Independently	14.3	20	17.6	47.1	31.3	6.7
Assist Physician	71.4	55	29.4	23.5	37.5	33.3
Not Involved	14.3	25	52.9	29.4	31.3	60
LHRH Antagonist Insertion						
Perform Independently	19	10	5.9	23.5	37.5	13.3
Assist Physician	23.8	70	29.4	35.3	18.8	6.7
Not Involved	57.1	20	64.7	41.2	43.8	80
Neuromodulation with Interstim Programming						
Perform Independently	57.1	25	29.4	35.3	12.5	13.3
Assist Physician	0	5	5.9	5.9	12.5	6.7
Not Involved	42.9	70	64.7	58.8	75	80

TABLE 2-14

Roles in Performing Clinical Procedures (continued)

	U.S.	Non-U.S.	Canada	Mexico	India	Italy
Procedure	Percent	Percent	Percent	Percent	Percent	Percent
Pelvic Floor Muscle Rehabilitation +/- Biofeedback						
Perform Independently	37.6	19.8	9.6	24	25.5	21.6
Assist Physician	12.5	13.1	7.7	16	29.8	16.2
Not Involved	49.9	67.1	82.7	60	44.7	62.2
Implant Insertion (e.g., Testopel or Vantas)						
Perform Independently	19.1	21.7	28.8	16	31.9	21.6
Assist Physician	12.5	8	7.7	20	4.3	5.4
Not Involved	68.4	70.3	63.5	64	63.8	73
Percutaneous Tibial Nerve Stimulation						
Perform Independently	25.5	14.8	13.5	20	10.6	13.5
Assist Physician	14.3	6.5	5.8	8	2.1	10.8
Not Involved	60.1	78.7	80.8	72	87.2	75.7
	Colombia	Argentina	Australia	Peru	Brazil	U.K.
Procedure	Percent	Percent	Percent	Percent	Percent	Percent
Pelvic Floor Muscle Rehabilitation +/- Biofeedback						
Perform Independently	19	25	11.8	35.3	6.3	6.7
Assist Physician	0	20	5.9	11.8	6.3	6.7
Not Involved	81	55	82.4	52.9	87.5	86.7
Implant Insertion (e.g., Testopel or Vantas)						
Perform Independently	23.8	25	17.6	29.4	18.8	6.7
Assist Physician	0	5	5.9	0	12.5	13.3
Not Involved	76.2	70	76.5	70.6	68.8	80
Percutaneous Tibial Nerve Stimulation						
Perform Independently	19	20	5.9	23.5	6.3	0
Assist Physician	0	10	5.9	5.9	12.5	6.7
Not Involved	81	70	88.2	70.6	81.3	93.3

TABLE 2-14
Roles in Performing Clinical Procedures (continued)

	U.S.	Non-U.S.	Canada	Mexico	India	Italy
Procedure	Percent	Percent	Percent	Percent	Percent	Percent
Priapism Injection Treatment						
Perform Independently	16.3	22.2	9.6	28	19.1	43.2
Assist Physician	43.4	56.6	76.9	60	72.3	37.8
Not Involved	40.3	21.3	13.5	12	8.5	18.9
Transrectal Ultrasound without Biopsy						
Perform Independently	12.3	15.9	17.3	10	10.6	8.1
Assist Physician	79	59.1	21.2	66	76.6	89.2
Not Involved	8.7	24.9	61.5	24	12.8	2.7
Transrectal Ultrasound with Biopsy						
Perform Independently	78.6	62.8	19.2	72	80.9	83.8
Assist Physician	5.8	17.4	57.7	14	8.5	5.4
Not Involved	15.6	19.8	23.1	14	10.6	10.8
	Colombia	Argentina	Australia	Peru	Brazil	U.K.
Procedure	Percent	Percent	Percent	Percent	Percent	Percent
Priapism Injection Treatment						
Perform Independently	9.5	20	17.6	58.8	12.5	20
Assist Physician	71.4	65	41.2	17.6	56.3	40
Not Involved	19	15	41.2	23.5	31.3	40
Transrectal Ultrasound without Biopsy						
Perform Independently	28.6	20	11.8	52.9	37.5	13.3
Assist Physician	47.6	40	41.2	29.4	18.8	60
Not Involved	23.8	40	47.1	17.6	43.8	26.7
Transrectal Ultrasound with Biopsy						
Perform Independently	57.1	50	82.4	23.5	25	60
Assist Physician	14.3	25	5.9	23.5	31.3	26.7
Not Involved	28.6	25	11.8	52.9	43.8	13.3

TABLE 2-14
Roles in Performing Clinical Procedures (continued)

	U.S.	Non-U.S.	Canada	Mexico	India	Italy
Procedure	Percent	Percent	Percent	Percent	Percent	Percent
Ultrasound: Renal						
Perform Independently	54	49	9.6	62	74.5	83.8
Assist Physician	32.3	34.2	78.8	22	10.6	5.4
Not Involved	13.6	16.8	11.5	16	14.9	10.8
Ultrasound: Scrotal						
Perform Independently	19.9	41.3	7.7	52	48.9	83.8
Assist Physician	67.4	42.2	80.8	34	34	5.4
Not Involved	12.8	16.6	11.5	14	17	10.8
Ultrasound: Penile Doppler						
Perform Independently	14.5	20.2	7.7	30	8.5	32.4
Assist Physician	70.6	56.6	82.7	50	63.8	29.7
Not Involved	14.9	23.2	9.6	20	27.7	37.8
	Colombia	Argentina	Australia	Peru	Brazil	U.K.
Procedure	Percent	Percent	Percent	Percent	Percent	Percent
Ultrasound: Renal						
Perform Independently	0	30	5.9	29.4	18.8	6.7
Assist Physician	81	35	88.2	41.2	56.3	86.7
Not Involved	19	35	5.9	29.4	25	6.7
Ultrasound: Scrotal						
Perform Independently	0	30	5.9	29.4	12.5	20
Assist Physician	90.5	40	88.2	41.2	68.8	73.3
Not Involved	9.5	30	5.9	29.4	18.8	6.7
Ultrasound: Penile Doppler						
Perform Independently	0	10	5.9	17.6	12.5	0
Assist Physician	85.7	65	88.2	41.2	75	86.7
Not Involved	14.3	25	5.9	41.2	12.5	13.3

TABLE 2-14

Roles in Performing Clinical Procedures (continued)

	U.S.	Non-U.S.	Canada	Mexico	India	Italy
Procedure	Percent	Percent	Percent	Percent	Percent	Percent
Urodynamics (Place Catheters/Perform Test)						
Perform Independently	17.2	44.7	19.2	36	78.7	48.6
Assist Physician	54.2	23.7	55.8	22	6.4	16.2
Not Involved	28.7	31.6	25	42	14.9	35.1
Urodynamics Interpretation						
Perform Independently	42	49	40.4	34	89.4	51.4
Assist Physician	20.7	11.8	9.6	10	0	21.6
Not Involved	37.3	39.1	50	56	10.6	27
	Colombia	Argentina	Australia	Peru	Brazil	U.K.
Procedure	Percent	Percent	Percent	Percent	Percent	Percent
Urodynamics (Place Catheters/Perform Test)						
Perform Independently	71.4	60	41.2	17.6	62.5	20
Assist Physician	4.8	15	35.3	17.6	6.3	40
Not Involved	23.8	25	23.5	64.7	31.3	40
Urodynamics Interpretation						
Perform Independently	85.7	45	47.1	23.5	56.3	40
Assist Physician	9.5	10	23.5	5.9	6.3	20
Not Involved	4.8	45	29.4	70.6	37.5	40

TABLE 2-14

Roles in Performing Clinical Procedures (continued)

	U.S.	Non-U.S.	Canada	Mexico	India	Italy
Procedure	Percent	Percent	Percent	Percent	Percent	Percent
Xiaflex Injections						
Perform Independently	44	9.7	5.8	16	12.8	10.8
Assist Physician	25.2	74.4	82.7	66	74.5	83.8
Not Involved	30.8	15.9	11.5	18	12.8	5.4
Vasectomy						
Perform Independently	36.9	53.5	23.1	78	74.5	21.6
Assist Physician	32.9	20.6	17.3	0	19.1	59.5
Not Involved	30.2	25.8	59.6	22	6.4	18.9
	Colombia	Argentina	Australia	Peru	Brazil	U.K.
Procedure	Percent	Percent	Percent	Percent	Percent	Percent
Xiaflex Injections						
Perform Independently	9.5	10	5.9	5.9	12.5	0
Assist Physician	71.4	85	94.1	41.2	75	93.3
Not Involved	19	5	0	52.9	12.5	6.7
Vasectomy						
Perform Independently	85.7	70	47.1	52.9	81.3	46.7
Assist Physician	4.8	10	17.6	0	12.5	20
Not Involved	9.5	20	35.3	47.1	6.3	33.3

Conclusions

In order to prepare for the future urology workforce, importance must be placed on understanding, characterizing and comparing demographics, professional preferences and clinical training of the urology residents in the United States and across the globe.

The findings from this report provide descriptive accounts of the various global experiences from residents on a variety of topics, such as characteristics, professional preparation, practice preferences, and clinical volume and responsibilities to bridge knowledge gaps; inform urology workforce planning and training; and ultimately, improve global urologic care and patient health.

Currently there are several critical challenges facing the healthcare workforce. The top issues are population growth and aging, health care reform and improvement, new therapeutic possibilities and rising expectations of health care values. These challenges have made the provision of health care much more complex than in the past. To address various dilemmas and meet global needs for urological care, policymakers and the urology community must prepare for the future workforce through a greater understanding of urology residents on their demographics, training, planned sub-specialization, anticipated practice settings, compensation models, workload and productivity.

The results of the AUA Annual Census are subject to limitations. First, estimates were based on sample analysis and therefore may not represent the true landscape of urology residents. Second, sample sizes vary significantly from country to country, which may result in bias due to small sample size. This variation also makes it difficult to detect statistically significant differences among countries with low Census response counts, especially those with samples of 20 or fewer. Third, non-U.S. practicing urologists who connected with the AUA through membership, Annual Meeting or other education activities may differ from practicing urologists in their countries in many ways. Fourth, Census data were self-reported, non-validated and subject to the usual survey bias and misrepresentation. Finally, the AUA Annual Census questionnaire was in English only; thus, the results in this report may be subject to bias due to language barriers.

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