# The State of the Urology Workforce and Practice in the United States

## 2016

American Urological Association

Advancing Urology™

American Urological Association (AUA)


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## *Preface*

The American Urological Association (AUA) continues to transform urologic care through meaningful collection, integration and utilization of data in order to generate knowledge and inform urologic practice, the nation's health care system and public policy. The AUA Annual Census has completed its third year of data collection and reporting and continues to serve as a cornerstone for these endeavors.

The AUA Annual Census provides an exciting opportunity to collect and disseminate workforce and practice data on the entire urologic community. The primary goal of the Census is to serve as a definitive source of data describing the urologic community, including geographic distribution of providers, demographic characteristics, education and training, licensing and board certification and patterns of practice. The Census explores the urologic profession in one systematically designed survey that longitudinally reports both cross-sectional variations and trends over time. The collected data assist in filling knowledge gaps and meeting research needs while ultimately improving patient care.

*The State of the Urology Workforce and Practice in the United States*, the annual publication summarizing Census findings, has emerged as a primary source of information about urology. Additionally, a de-identified public use Census dataset is available and researchers have used these data to conduct studies and generate publications on the urologic practice and workforce.

The AUA Annual Census is one of the AUA's primary data initiatives. Please visit the AUA Census webpage at **www.AUAnet.org/Census** for more information and results. To participate in the AUA Annual Census, you may access the survey online at **www.AUAnet.org/TakeCensus** from May to September each year or complete it in person at the AUA Annual Meeting. Annual participation is vital; all urology community members are encouraged to take part in this important data effort each year.

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

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# Executive Summary

Urologists increasingly face tremendous challenges and opportunities, especially as the U.S. population ages,[1] and the demand for urologic care grows. The AUA, with more than 21,000 members worldwide, is committed to providing the urologic community with the education, research, advocacy and statistics required to address these challenges. Data relating to the urology workforce and practice patterns play an important role in generating knowledge to inform urologic care and workforce policy.

As a premier urologic association, the AUA is committed to providing a definitive source of data regarding the urologic community. In 2014, the AUA launched its first Annual Census, defined and estimated the practicing urologist population, and, for the first time in the history of urology, reported the workforce and practice characteristics of the entire population of practicing urologists.

Data collection for the 2016 AUA Annual Census began in May 2016 at the AUA Annual Meeting in San Diego, CA, and continued online until the end of September 2016. A total of 5,281 urologists and other urologic care professionals, representing 107 countries and regions throughout the world, completed the 2016 AUA Annual Census. The results on U.S. practicing urologists were adjusted for non-responses and are reported in this annual publication.

In analyzing and reporting Census results, two data files were established: a population denominator file containing basic demographic, geographic and some certification information for all practicing urologists in the United States in 2016 as listed in the National Provider Identifier (NPI) master file[2] and cross-checked against the American Board of Urology (ABU) certification information maintained by the American Board of Medical Specialties (ABMS)[3] for allopathic physicians and the American Osteopathic Board of Surgery (AOBS) certification information listed by the American Osteopathic Association (AOA) for osteopathic physicians;[4] and a sample file containing information collected via the AUA Annual Census.

The Census is a novel data source that can be used to explore the profession of urology from multiple angles through the collection of information from practicing urologists and other professionals worldwide. The data collected assist in filling knowledge gaps and meeting research needs while, ultimately, improving patient care.

## RESPONSE AND METHODOLOGY USED IN REPORTING ON U.S. PRACTICING UROLOGISTS

### *Data Collection*

The AUA Annual Census targeted the entire landscape of the U.S. urologic practitioner population, ensuring all sample groups could then be weighted and compared with the "practicing urologist" population in order to address non-responses. The population file and the Census survey sample file were linked using post-stratification factors (i.e., gender, location, certification status and years since initial certification) to adjust for the contribution of each respondent in a Census survey by the assigned proper sample weight. A total of 5,281 respondents completed the 2016 AUA Annual Census–3,332 of whom were from the United States. Of these, 2,301 respondents were confirmed to be practicing urologists.

### *Population Definition*

Practicing urologists are defined as those with valid medical licenses reported in the NPI file as either urologists or pediatric urologists. Those who were reported as either surgeons or specialists in the NPI file were checked against the ABU certification records maintained by the ABMS and AOBS certification records listed on the AOA website. Urologists in residency training were excluded.

### *Justification for Non-Response*

Census samples were weighted based on post-stratification techniques to adjust for the contribution of each respondent in the Census.

### *Statistical Confidence of Census Reporting*

When reported findings were based on weighted Census samples, error estimates were also listed as margin of error (MOE) or confidence interval (CI), measuring precision of the reported values at a 90 percent confidence level. The difference was statistically significant when no overlap was identified between the two corresponding confidence limits.

## KEY FINDINGS

**In 2016, there were 12,186 practicing urologists identified in the United States.**


**Among these, 10,954 were actively practicing (work at least 25 clinical hours per week)** (Table 1-1).

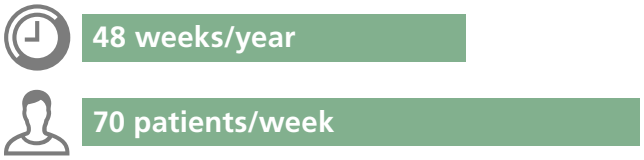
- Among the 50 U.S. states, New Hampshire has the highest urologist-to-population ratio, while Montana has the lowest (Table 1-2).
- Among the 3,144 U.S. counties, practicing urologists maintain their primary practice locations in 1,149 counties (Table 1-4).
- The median age of practicing urologists in the United States is 55 years (Table 2-1). Practicing urologists are predominantly male (Table 2-2), non-Hispanic (Table 2-3) and white (Table 2-4).
- Three top areas for fellowship of practicing urologists in the United States are oncology, pediatrics and endourology/stone disease (Table 3-3).
- More than 87 percent of practicing urologists in the United States are certified by the ABU, the AOBS or both (Table 3-8).
- Practicing urologists in the United States have practiced urology for a median of 21 years, while nearly 30 percent of practicing urologists have practiced for more than 30 years (Table 3-9).

**Nearly 59 percent of practicing urologists in the United States are in private practice (including solo, single urology or multispecialty groups) (Table 4-2).**

**59%**

- Significant gender difference exists with respect to primary work settings. Female practicing urologists are more likely to work in academic medical centers than their male counterparts (Table 4-3).
- Over 40 percent of practicing urologists in the United States have a primary subspecialty area (Table 4-6), with oncology being the most common subspecialty area (Table 4-7).
- Approximately 82 percent of practicing urologists in the United States perform inpatient surgical procedures. After age 75, fewer than half of practicing urologists perform inpatient procedures (Table 4-8).
- Practicing urologists in the United States work a median number of 56 hours in a "typical" week. More than 34 percent of urologists work over 60 hours a week (Table 5-1).

**Practicing urologists in the United States have a median number of 70 patient visits/encounters in a "typical" week** (Table 5-6) **and work a median 48 weeks per year** (Table 5-9)**, suggesting a total number of patient visits/encounters of 3,360 per year.**




- Approximately 36 percent of practicing urologists in the United States indicated high levels of professional burnout (Table 6-4).
- Approximately 33 percent of practicing urologists' practices experience difficulty filling urologist vacancies (Table 7-1) due to lack of enough candidates (53.2 percent) and lack of funding (35.8 percent) (Table 7-2).
- Nearly 9 percent of practicing urologists participate in a telemedicine program (Table 7-3).
- Nearly 60 percent of practicing urologists participated in quality reporting programs over the previous 12 months (Table 7-5).

## CONCLUSION

The AUA Census is conducted annually. Each new version is launched at the AUA Annual Meeting and remains available online until the end of September of that same year. The AUA strongly encourages all members to complete the Census each year at AUA's Annual Meeting or online at **www.AUAnet.org/TakeCensus**. Future Census publications will expand on initial findings. As more Census data are collected, the AUA will report trends over time and identify significant cross-sectional and longitudinal variations across the specialty.

# About the American Urological Association (AUA)

## THE ORGANIZATION

Founded in 1902 and headquartered near Baltimore, Maryland, the AUA serves more than 21,000 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.

## 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.

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

# The AUA Annual Census

As a premier urologic association, the AUA is committed to serving the urologic community. The AUA supports the generation and dissemination of urologic knowledge through a systematic approach. The AUA's Annual Census is a systematically designed, specialty-representative survey of urology (similar to the U.S. Census). The results of the AUA's Annual Census are weighted in order to reduce non-response bias, to represent accurately the entire specialty and to address the broad landscape of urology.

This publication serves as a primary source of information for the urology workforce in its effort to effectively convey the needs and demands of the urologic community. The findings also depict current clinical practice, including the use of electronic health records (EHRs), mechanisms to report quality measures and medications and procedures to treat urologic conditions of interest to the urologic community. Results from this publication provide an array of information that can bridge knowledge gaps, provide data to meet increasing research needs and, ultimately, improve patient care. Future Census publications will expand on initial findings, report trends over time, and identify cross-sectional and longitudinal variations across the specialty nationwide and globally.

# Definition of Terms

## PRACTICE STATUS

In order to understand the manner in which this report classifies urologists, a Definition of Terms is provided:

- **UROLOGISTS:** Physicians and surgeons who are specially trained for the diagnosis and treatment of genitourinary and adrenal gland diseases in patients of any age and of either sex
- **PRACTICING UROLOGISTS:** Urologists who maintain current medical licensures and treat patients with urologic conditions
- **PRACTICING UROLOGISTS IN THE UNITED STATES:** Practicing urologists with primary practice locations in at least one of the 50 U.S. states or the District of Columbia
- **ACTIVE PRACTICING UROLOGISTS:** Practicing urologists who treat patients with urologic conditions and who work at least 25 clinical hours per week
- **CERTIFIED UROLOGISTS:** Urologists who are certified either by the American Board of Urology (ABU) or by the American Osteopathic Board of Surgery (AOBS)

## LEVEL OF RURALITY

The zip code of each practicing urologist's primary practice location was converted to a rural-urban commuting area (RUCA) code based on RUCA 3.10[5] (developed collaboratively by the Health Resources and Service Administration's Office of Rural Health Policy [ORHP], the United States Department of Agriculture's Economic Research Service [ERS], the WWAMI Rural Health Research Center [RHRC] based on 2010 United States Census work-commuting data, 2012 United States Census Bureau revised urban area definition based on 2010 Census data and 2013 zip codes).

RUCA 3.10 codes were grouped into four levels of rurality. An area with population size ≥ 50,000 was defined as a Metropolitan Area. An area with population size < 50,000 was defined as a Non-Metropolitan Area. The Non-Metropolitan Area was further classified: Micropolitan Area (population = 10,000-49,999), Small Town (population = 2,500-9,999), Rural Area (population < 2,500).

# Glossary

| | |
|---|---|
| **90% CI** | 90 Percent Confidence Interval |
| **AUA** | American Urological Association |
| **ABU** | American Board of Urology |
| **ABMS** | American Board of Medical Specialties |
| **AOA** | American Osteopathic Association |
| **AOBS** | American Osteopathic Board of Surgeons |
| **DO** | Doctor of Osteopathic Medicine |
| **EHR** | Electronic Health Record |
| **HMO** | Health Maintenance Organization |
| **MD** | Medical Doctor |
| **MOE** | Margin of Error |
| **NP** | Nurse Practitioner |
| **NPI** | National Provider Identifier |
| **PA** | Physician Assistant |
| **RUCA** | Rural-Urban Commuting Area |

# Methodology

Data in the AUA Annual Census were collected and analyzed using survey methodology developed by Groves et al.[6] Two data files were established. One file was a population file containing basic demographic, geographic and certification information for all practicing urologists in the United States in 2016. Another file was a sample data file containing a broad range of information collected from the Census. The population file and the Census survey sample file were linked through post-stratification factors to adjust for non-responses and the contribution of each respondent in a Census survey by assigned sample weight.

## PRACTICING UROLOGIST POPULATION

Practicing urologists were identified jointly from the NPI file, which includes all physicians in the United States who hold valid medical licenses, ABU certification records maintained by the ABMS and AOBS certification records from the AOA website if the following criteria were met:

1. Either urology or pediatric urology was listed as the medical specialty.
2. A provider was listed as either a surgeon or a specialist and matched to either the 2016 ABU certification records as a urologist or the AOBS certification records as a urological surgeon. Manual checks of all individual urologists' and urologic surgeons' websites were performed to confirm that these physicians provided urologic care in 2016.
3. Urologists in residency training were excluded.
4. Urologists who were identified as certified by the ABU and/or AOBS but not listed in the NPI file were excluded in order to ensure inclusion of only currently practicing urologists.

## ORGANIZATION OF QUESTIONS

The Census consists of "base" and "supplemental" questions. Base questions that target the entire urology specialty will be asked annually in order to identify cross-sectional and longitudinal patterns. Examples of base question topics include practice status, clinical practice setting, primary and secondary subspecialties, patient encounters and employment status. Supplemental questions will vary each year and focus on emerging issues; these questions may be distributed either to all participants or to a random subset of participants.

## CENSUS TIMELINE

The AUA Annual Census officially launches at the AUA Annual Meeting, and the Census is available to respondents online through September of that same year. Census data are analyzed and reported in the annual publication *The State of the Urology Workforce and Practice in the United States*, which is available in the spring of the following year.

## CENSUS DATA COLLECTION

Data collection for the 2016 AUA Annual Census began on May 6, 2016 at the 2016 AUA Annual Meeting and ended on September 30, 2016. Each respondent was assigned an identification number prior to the submission of responses to the Census questions. This step ensured the results could be linked to the population file and no respondent could take the survey more than once.

A total of 5,281 respondents completed the 2016 AUA Annual Census–2,301 of whom were practicing urologists in the United States. Those who self-reported as practicing urologists were checked against the practicing urologist population file and removed if there were no matches found (n=51). Those who were practicing outside the United States (n=1,705) were also removed from this study, but their responses will be analyzed and reported separately with final analysis available on the AUA website.

## SAMPLE WEIGHTING

The purpose of a survey is to sample the entire population of interest, generalizing the collected data to the rest of the population. In order to achieve this aim, the sample needs to be representative (i.e., reflect the characteristics of the population from which it is drawn); however, surveys often over-sample some subgroups of the population and under-sample others. In other words, unless a certain response rate is achieved, survey samples usually do not represent the population. The way in which a certain characteristic (e.g., age, education, race, sex) of a sample is distributed in the survey data may differ from the way it is distributed in the population. Thus, sample weighting is performed to address this difference. Post-stratification factors are used with lesser weight given to over-sampled data and greater weight given to under-sampled data. This

utilization provides a mathematical correction for these biases, and a key result is reasonable statistical confidence. The post-stratification factors are those significant characteristics that distinguish urologists from the sample and from the population.

In order to adjust for non-responses and resulting biases in the 2016 AUA Census sample, a standard post-stratification weighting technique[7] was used to identify post-stratification factors. Identified factors include gender, geographic location, certification status and years since initial certification. These factors were used to develop stratification cells for calculating sample weights.

## CENSUS REPORTING WITH STATISTICAL CONFIDENCE

Results were based on either weighted Census samples or the practicing urologist population data described earlier in this report. Reported statistics based on the population data were preferred because of the lack of sampling bias. In contrast, when reported findings were based on weighted Census samples, error estimates were reported in the form of either MOE or CI, with estimation of measurement precision at a 90 percent level of confidence.

## DATA ANALYSIS

After post-stratification weighting adjustment, the Census data were analyzed with IBM-SPSS Complex Samples 22.0.

## MARGIN OF ERROR (MOE)

Estimates of characteristics of the practicing urologists from the AUA Census sample data can differ from those that would be obtained if all practicing urologists were surveyed. MOE values at the 90 percent confidence level were used to measure and report the precision of each estimate. The MOE is the difference between an estimate and its upper or lower confidence bounds.[8] The AUA reports both estimates and their associated MOE values in alignment with the U.S. Census Bureau in reporting the U.S. Census/ American Community Survey.

## CONFIDENCE INTERVALS (CI)

Estimates based on the AUA Census samples can differ from those that would be obtained if all practicing urologists were surveyed. A 90 percent confidence interval (90% CI) was used to mark the upper or lower confidence bounds of estimated parameter by Census samples with 90 percent statistical confidence.

## LIMITATIONS

The results of the AUA Annual Census are subject to the following limitations:

1. As a population-based and weighted survey, the analysis of the AUA Annual Census data relied on the absolute number of responses to report statistics for small geographic, demographic and clinical categories. Women and racial/ethnic minority groups were not well represented in the urologist population and, therefore, were difficult to analyze.

2. AOBS certification of osteopathic doctors was obtained via the AOA's online urologic surgeon list without direct verification by the AOBS. Information contained in the AOA's "DO Directory" (public list) is not the primary source for verification of physician credentials.

3. The AUA Annual Census is subject to sampling and estimate errors. Thus, the MOE is the appropriate tool when comparing two groups.

4. The practicing urologist population in the United States was based on the assumption that urologists who maintain their medical licenses in the Census year are considered practicing urologists.

5. Geographic classifications, such as levels of rurality and state, were determined based on the primary office location in the NPI file. The actual geographic coverage of practice for each practicing urologist may be beyond the area reported.

6. Census data are self-reported, non-validated, and subject to bias or misrepresentation.

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# Practicing Urologists
## *in the United States*

# Section 1: Geographic Distribution

## *Primary Observations*

- In 2016, 12,186 urologists were identified as "practicing urologists" in the United States. Of those practicing urologists, 90 percent are "actively" practicing (Table 1-1), which is similar to what was reported in 2015 but statistically higher than the 85.3 percent reported in 2014.
- The overall urologist-to-population ratio increased slightly to 3.77 per 100,000 population in 2016 up from 3.70 in 2014 and 3.72 in 2015. Among the 50 U.S. states, New Hampshire has the highest urologist-to-population ratio, while Montana has the lowest (Table 1-2).
- The AUA's Southeastern Section has the greatest number of practicing urologists in the United States (21.1 percent of the total practicing urologist population) (Table 1-3).
- Practicing urologists maintain their primary practice locations in nearly 37 percent of all U.S. counties (Table 1-4).
- Less than 10 percent of practicing urologists in the United States maintain their primary practice locations in non-metropolitan areas (including micropolitan, small towns and rural areas) (Table 1-5). Practicing urologists over the age of 55 are more likely to maintain their primary practice locations in non-metropolitan areas (Figure 1-5).

### TABLE 1-1

### Practice Status

| Type of Urologist | Number of Practicing Urologists | Percent (%) |
|---|---|---|
| Practicing Urologists | 12,186 | 100.0 |
| Active Practicing Urologists | 10,954* | 90.0 |

(Data source: National Provider Identifier 09/2016 file, ABU certification records from the ABMS Directory of Board Certified Medical Specialists, AOA DO Directory. *2016 AUA Annual Census; active practicing urologists are defined as those who work 25 or more clinical hours per week.)

## TABLE 1-2

### Urologist-to-Population Ratio by State of Primary Practice Location (Ranked from High to Low)

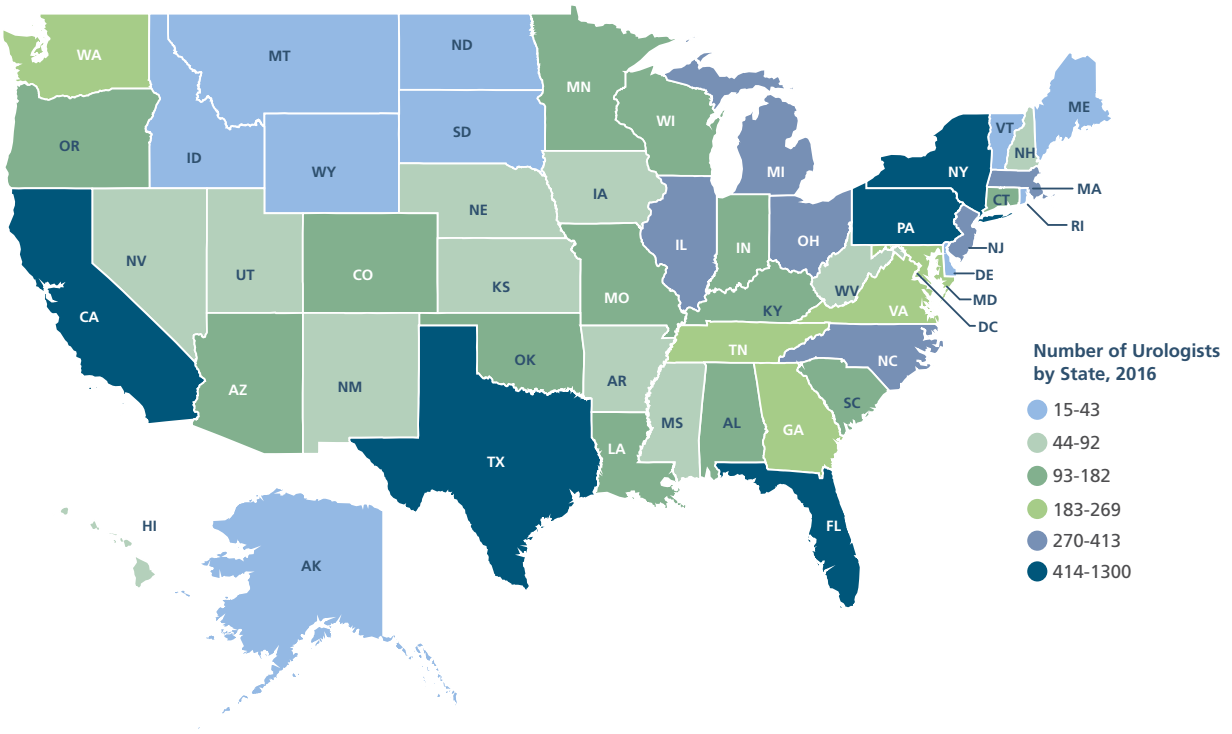
| State | Number of Practicing Urologists* | Population[9] | Urologist-to-Population Ratio^ | Relative Position |
|---|---|---|---|---|
| **U.S. (50 States & DC)** | **12,186** | **323,172,513** | **3.77** | **National Average** |
| District of Columbia | 67 | 681,170 | 9.84 | |
| New Hampshire | 70 | 1,334,795 | 5.24 | |
| New York | 976 | 19,745,289 | 4.94 | |
| Massachusetts | 326 | 6,811,779 | 4.79 | |
| New Jersey | 409 | 8,944,469 | 4.57 | |
| Pennsylvania | 581 | 12,784,227 | 4.54 | High |
| Louisiana | 212 | 4,681,666 | 4.53 | |
| Maryland | 267 | 6,016,447 | 4.44 | |
| Tennessee | 290 | 6,651,194 | 4.36 | |
| Hawaii | 62 | 1,428,557 | 4.34 | |
| Connecticut | 154 | 3,576,452 | 4.31 | |
| West Virginia | 77 | 1,831,102 | 4.21 | |
| Florida | 841 | 20,612,439 | 4.08 | |
| Ohio | 472 | 11,614,373 | 4.06 | |
| North Carolina | 409 | 10,146,788 | 4.03 | Medium High |
| Michigan | 400 | 9,928,300 | 4.03 | |
| Oregon | 164 | 4,093,465 | 4.01 | |
| Vermont | 25 | 624,594 | 4.00 | |
| Washington | 282 | 7,288,000 | 3.87 | |
| Illinois | 490 | 12,801,539 | 3.83 | |
| Wisconsin | 216 | 5,778,708 | 3.74 | |
| South Carolina | 184 | 4,961,119 | 3.71 | |
| Alabama | 180 | 4,863,300 | 3.70 | |
| Virginia | 307 | 8,411,808 | 3.65 | |
| Alaska | 27 | 741,894 | 3.64 | Medium |
| Minnesota | 199 | 5,519,952 | 3.61 | |
| Indiana | 239 | 6,633,053 | 3.60 | |
| Rhode Island | 38 | 1,056,426 | 3.60 | |
| Missouri | 219 | 6,093,000 | 3.59 | |
| Kansas | 103 | 2,907,289 | 3.54 | |
| Arizona | 243 | 6,931,071 | 3.51 | |

| State | Number of Practicing Urologists* | Population[9] | Urologist-to-Population Ratio^ | Relative Position |
|---|---|---|---|---|
| Nebraska | 66 | 1,907,116 | 3.46 | |
| Colorado | 191 | 5,540,545 | 3.45 | |
| Kentucky | 150 | 4,436,974 | 3.38 | |
| California | 1298 | 39,250,017 | 3.31 | |
| Maine | 43 | 1,331,479 | 3.23 | |
| Oklahoma | 126 | 3,923,561 | 3.21 | Medium Low |
| Iowa | 100 | 3,134,693 | 3.19 | |
| Arkansas | 92 | 2,988,248 | 3.08 | |
| Mississippi | 92 | 2,988,726 | 3.08 | |
| New Mexico | 64 | 2,081,015 | 3.08 | |
| Georgia | 313 | 10,310,371 | 3.04 | |
| Texas | 823 | 27,862,596 | 2.95 | |
| South Dakota | 25 | 865,454 | 2.89 | |
| North Dakota | 21 | 757,952 | 2.77 | |
| Utah | 82 | 3,051,217 | 2.69 | |
| Wyoming | 15 | 585,501 | 2.56 | Low |
| Nevada | 74 | 2,940,058 | 2.52 | |
| Idaho | 40 | 1,683,140 | 2.38 | |
| Delaware | 21 | 952,065 | 2.21 | |
| Montana | 21 | 1,042,520 | 2.01 | |

(Data source: National Provider Identifier 09/2016 file, ABU certification records from the ABMS Directory of Board Certified Medical Specialists, AOA DO Directory.
*In reporting results from the 2016 AUA Census, states with fewer than 50 reported urologists were manually checked against these urologists' web sites.
^Urologist-to-population ratio is per 100,000 population.)

## FIGURE 1-1

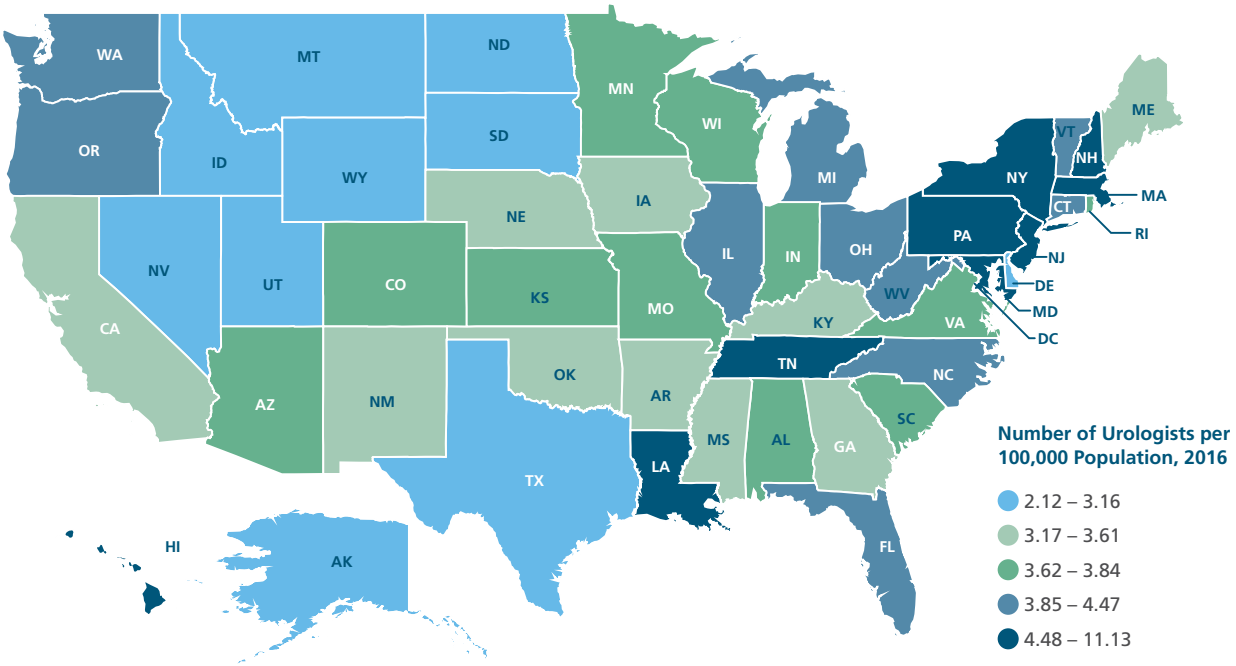
### Number of Practicing Urologists by State of Primary Practice Location




(Data source: National Provider Identifier 09/2016 file, ABU certification records from the ABMS Directory of Board Certified Medical Specialists, AOA DO Directory.)

## FIGURE 1-2

### Practicing Urologist-to-Population Ratio by State of Primary Practice Location




(Data source: National Provider Identifier 09/2016 file, ABU certification records from the ABMS Directory of Board Certified Medical Specialists, AOA DO Directory.)

## TABLE 1-3

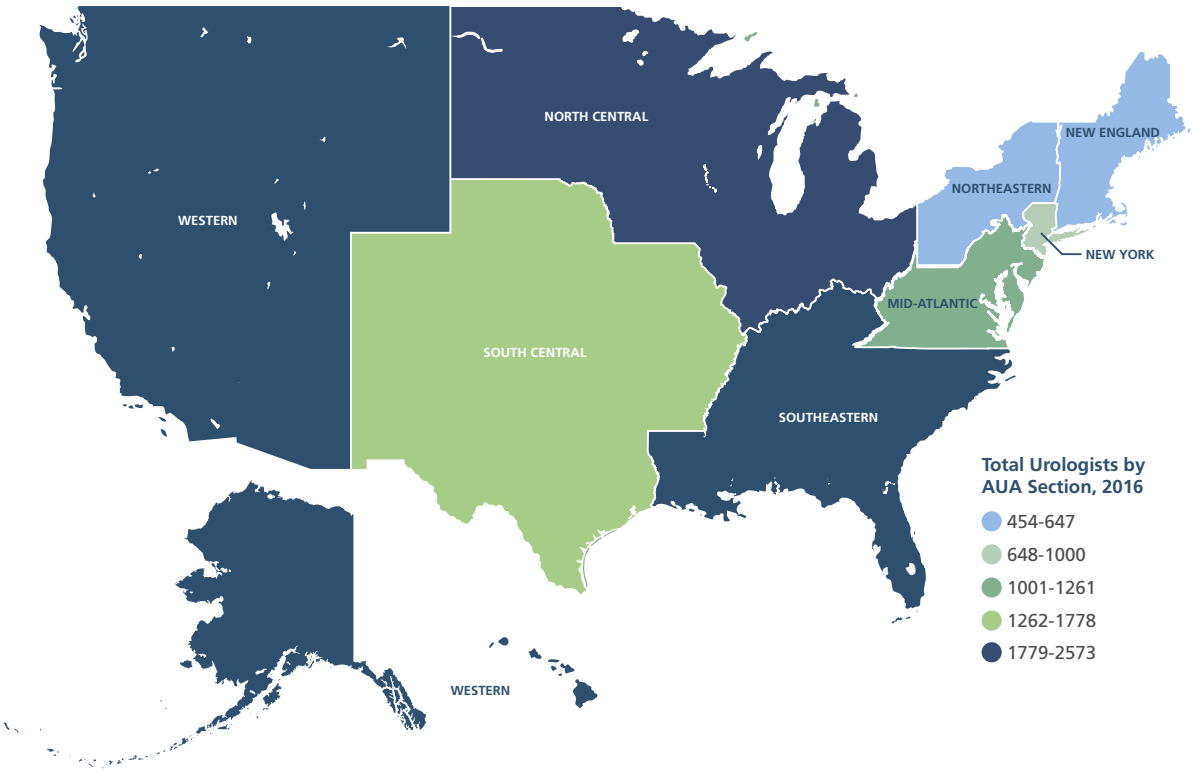
### AUA Section (United States Only*)

| AUA Section | Number of Practicing Urologists | Percent (%) |
|---|---|---|
| Southeastern | 2,571 | 21.1 |
| Western | 2,292 | 18.8 |
| North Central | 2,177 | 17.9 |
| South Central | 1,778 | 14.6 |
| Mid-Atlantic | 1,266 | 10.4 |
| New York | 999 | 8.2 |
| New England | 649 | 5.3 |
| Northeastern | 454 | 3.7 |
| **Total** | **12,186** | **100.0** |

(Data source: National Provider Identifier 09/2016 file, ABU certification records from the ABMS Directory of Board Certified Medical Specialists, AOA DO Directory.
*Some AUA sections have non-U .S. members who were not included in this report.)

## FIGURE 1-3

### Practicing Urologists by AUA Section (United States Only)




(Data source: National Provider Identifier 09/2016 file, ABU certification records from the ABMS Directory of Board Certified Medical Specialists, AOA DO Directory.)

## TABLE 1-4

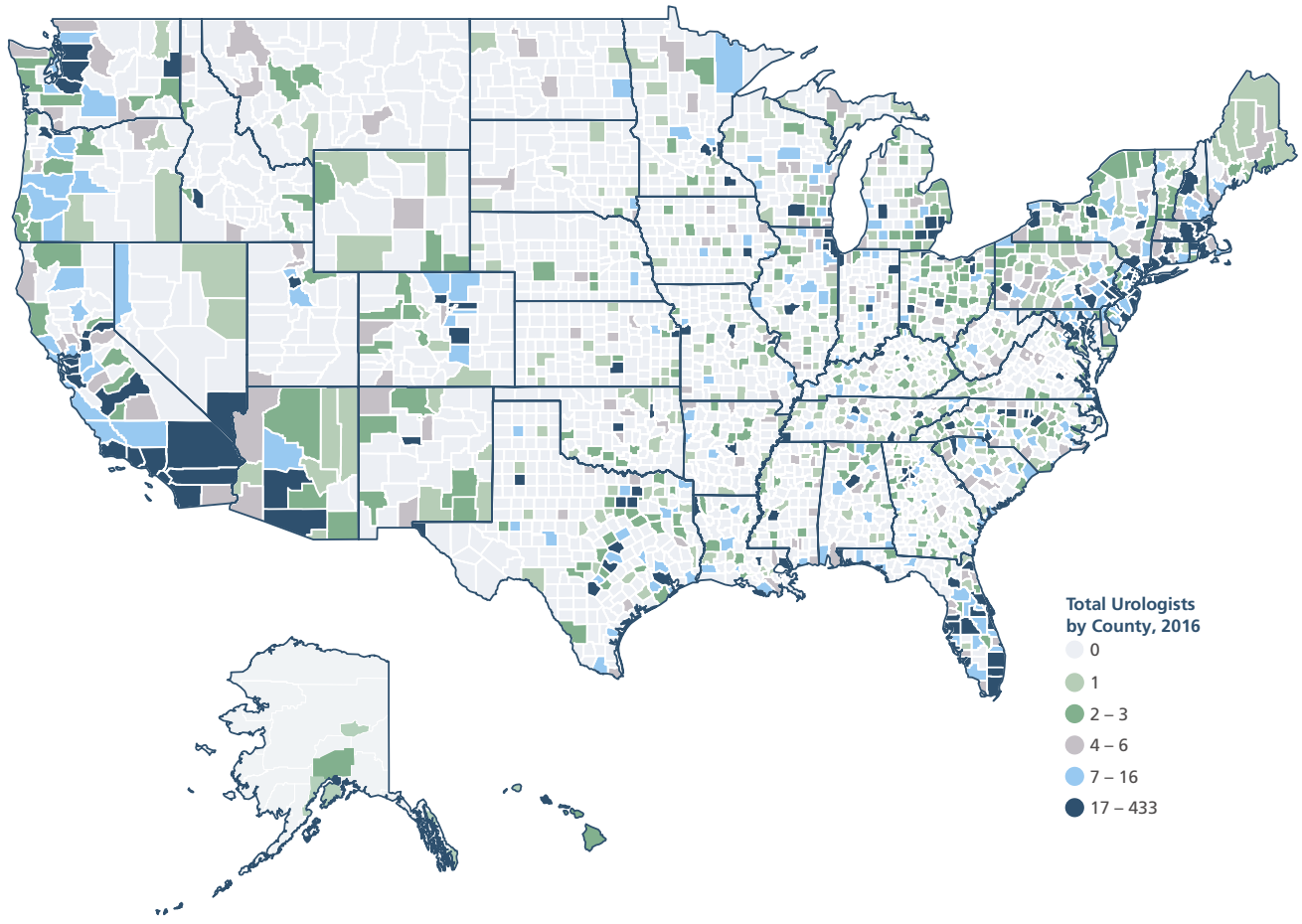
### County of Primary Practice Location

| Urologist Supply | Number of Counties | Percent (%) |
|---|---|---|
| Counties without Any Urologists | 1,995 | 63.5 |
| Counties with at Least 1 Urologist | 1,149 | 36.5 |
| Counties with 1 Urologist | 310 | |
| Counties with 2-3 Urologists | 287 | |
| Counties with 4-8 Urologists | 259 | |
| Counties with 9 or More Urologists | 293 | |
| **Total** | **3,144** | **100.0** |

(Data source: National Provider Identifier 09/2016 file. *Based on the U.S. Census 2013 population estimates, these 2,001 counties represent a population of 47,300,238 Americans.)

## FIGURE 1-4

### Number of Practicing Urologists at County Level Based on Primary Practice Location




(Data source: National Provider Identifier 09/2016 file.) *Population based figures will be continually updated.

## TABLE 1-5

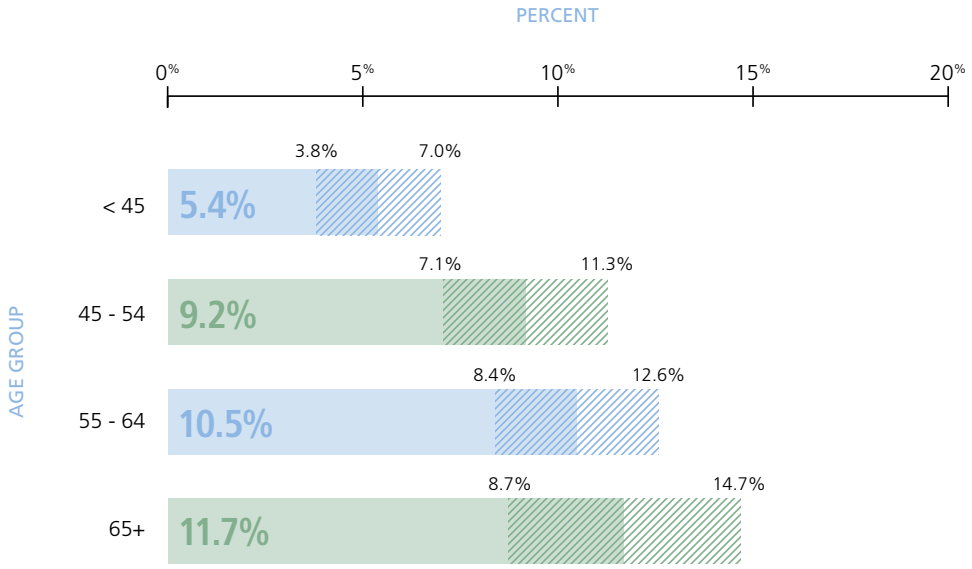
### Level of Rurality of Primary Practice Location

| Rurality Level | Number of Practicing Urologists | Percent (%) |
|---|---|---|
| Metropolitan | 10,960 | 89.9 |
| Non-Metropolitan Areas | 1,226 | 10.1 |
| Micropolitan Areas | 956 | 7.8 |
| Small Towns | 214 | 1.8 |
| Rural Areas | 56 | 0.5 |
| **Total** | **12,186** | **100.0** |

(Data source: National Provider Identifier 09/2016 file, Rural Urban Commuting Area Codes Data from RUCA 3.10)

## FIGURE 1-5

### Percent of Practicing Urologists Whose Primary Practice Locations are Outside Metropolitan Areas (by Age)*




(Data source: National Provider Identifier 09/2016 file, weighted samples from the 2016 AUA Annual Census and Rural Urban Commuting Area Codes Data from RUCA 3.10.)
*Bold numbers are point estimates. The dashed bars represent upper and lower 90% confidence limits.

# Section 2: Demographic Characteristics

## *Primary Observations*

- The median age of practicing urologists in the United States is 55 years (Table 2-1).
- The urologic workforce in the United States is predominantly male. Male and female practicing urologists represent 91.5 percent and 8.5 percent of the U.S. urologic workforce, respectively (Table 2-2).
- Higher percentages of females are observed in the younger age groups of practicing urologists (Figure 2-1).These data suggest an increasing number of females are entering the urologic workforce in the United States.
- The urologic workforce in the United States is predominantly non-Hispanic white (Table 2-3 and Table 2-4).

### TABLE 2-1

### Age

| | Population Represented | | |
|---|---|---|---|
| Age Group (Year) | Number | Percent (%) | ± MOE (%) |
| ≤ 34 | 491 | 4.0 | 0.8 |
| 35 - 44 | 2,918 | 24.0 | 1.2 |
| 45 - 54 | 2,601 | 21.3 | 1.0 |
| 55 - 64 | 2,795 | 22.9 | 1.0 |
| ≥ 65 | 3,380 | 27.7 | 0.8 |
| **Total** | **12,186** | **100.0** | |

(Data source: Weighted samples from the 2016 AUA Annual Census. The median age is 55.)

### TABLE 2-2

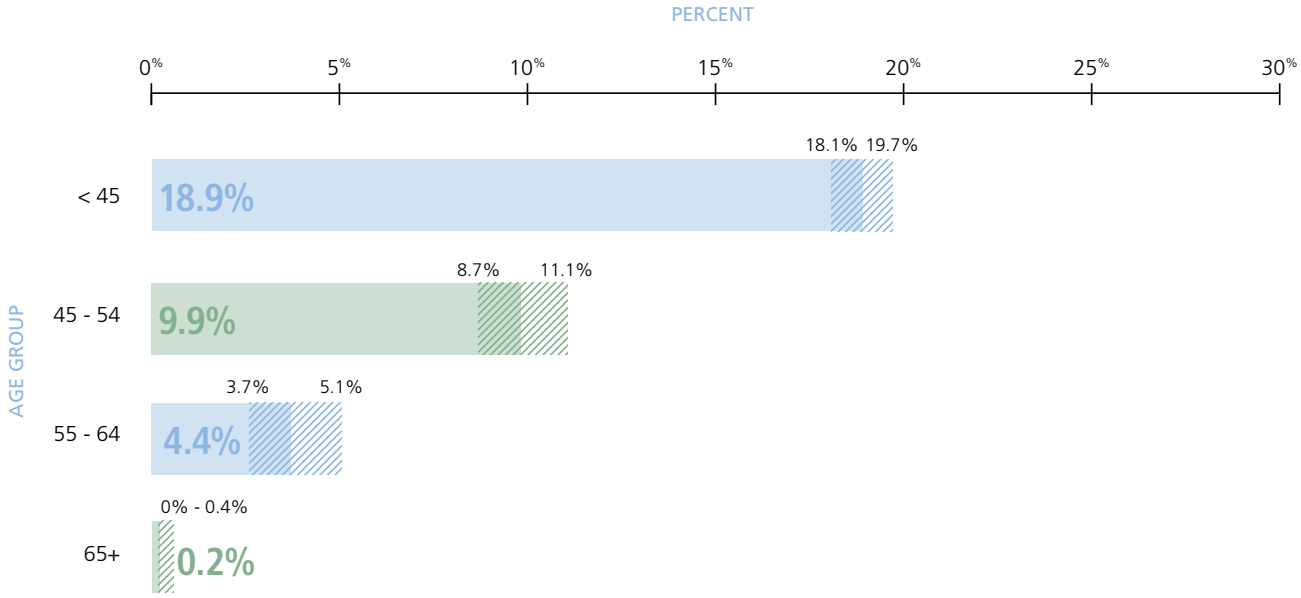
### Gender

| Gender | Number of Practicing Urologists | Percent (%) |
|---|---|---|
| Male | 11,154 | 91.5 |
| Female | 1,032 | 8.5 |
| **Total** | **12,186** | **100.0** |

(Data source: National Provider Identifier 09/2016 file.)

## FIGURE 2-1

### Percent of Female Practicing Urologists (by Age)*




(Data source: National Provider Identifier 09/2016 file and weighted samples from the 2016 AUA Annual Census.)
*Bold numbers are point estimates. The dashed bars represent upper and lower 90% confidence limits.

## TABLE 2-3

### Ethnicity

| | Population Represented | | |
|---|---|---|---|
| Hispanic Origin | Number | Percent (%) | ± MOE (%) |
| Hispanic | 451 | 3.8 | 0.8 |
| Non-Hispanic | 11,395 | 96.2 | 0.8 |
| **Total Reported** | **11,846** | **100.0** | |
| Not Reported | 340 | | |
| Total | 12,186 | | |

(Data source: Weighted samples from the 2016 AUA Annual Census.)

## TABLE 2-4

### Race

| Race | Population Represented | | |
|---|---|---|---|
| | Number | Percent (%) | ± MOE (%) |
| White | 9,713 | 84.9 | 1.5 |
| Asian | 1,355 | 11.8 | 1.3 |
| African American/ Black | 242 | 2.10 | 0.5 |
| Other Races (Including Multiple Races) | 132 | 1.20 | 0.3 |
| **Total Reported** | **11,442** | **100.0** | |
| Not Reported | 744 | | |
| Total | 12,186 | | |

(Data source: Weighted samples from the 2016 AUA Annual Census.)

## TABLE 2-5

### Country of Origin

| Country of Origin | Population Represented | | |
|---|---|---|---|
| | Number | Percent (%) | ± MOE (%) |
| North and South America | 10,462 | 85.9 | 1.5 |
| United States | 9,970 | 81.8 | 1.5 |
| Canada | 192 | 1.6 | 0.5 |
| Rest of Countries | 300 | 2.5 | 0.7 |
| Asia | 1,204 | 9.9 | 1.2 |
| India | 481 | 3.9 | 0.8 |
| Rest of Countries | 723 | 5.9 | 1.0 |
| Europe | 335 | 2.7 | 0.7 |
| Africa | 185 | 1.5 | 0.5 |
| **Total** | **12,186** | **100.0** | |

(Data source: Weighted samples from the 2016 AUA Annual Census.)

# Section 3: Education, Training, State Licensing, Certification and Years of Practice

## *Primary Observations*

- More than half of practicing urologists completed their residency training at age 32 or younger (Table 3-1).
- Approximately 40 percent of practicing urologists reported to have completed fellowship training in 2016 (Table 3-2), which is significantly higher than 35.9 percent as reported in 2015. More than half of practicing urologists completed fellowship training at age 34 or younger (Table 3-4).
- Practicing urologists in younger age groups are more likely to have completed fellowship training than practicing urologists in older age groups (Figure 3-1).
- The three top areas for fellowship of practicing urologists in the United States are: oncology, pediatrics and endourology/stone disease (Table 3-3).
- Approximately 18 percent of practicing urologists in the United States maintain more than one state medical license (Table 3-7).
- Nearly 88 percent of practicing urologists in the United States are certified by the ABU, the AOBS or both (Table 3-8).
- Practicing urologists in the United States have practiced urology for a median of 21 years, while nearly 30 percent of practicing urologists have practiced for more than 30 years (Table 3-9).

### TABLE 3-1

### Age at Completion of Residency

| Age at Completion of Residency | Population Represented | | |
|---|---|---|---|
| | Number | Percent (%) | ± MOE (%) |
| ≤ 30 | 1,017 | 8.3 | 1.2 |
| 31 | 2,105 | 17.3 | 1.5 |
| 32 | 3,285 | 27.0 | 1.6 |
| 33 | 2,431 | 19.9 | 1.6 |
| 34 | 1,222 | 10.0 | 1.2 |
| 35 | 759 | 6.2 | 1.0 |
| ≥ 36 | 1,367 | 11.2 | 1.2 |
| **Total** | **12,186** | **100.0** | |

(Data source: Weighted samples from the 2016 AUA Annual Census. The median age at completion of residency is 32.)

## TABLE 3-2

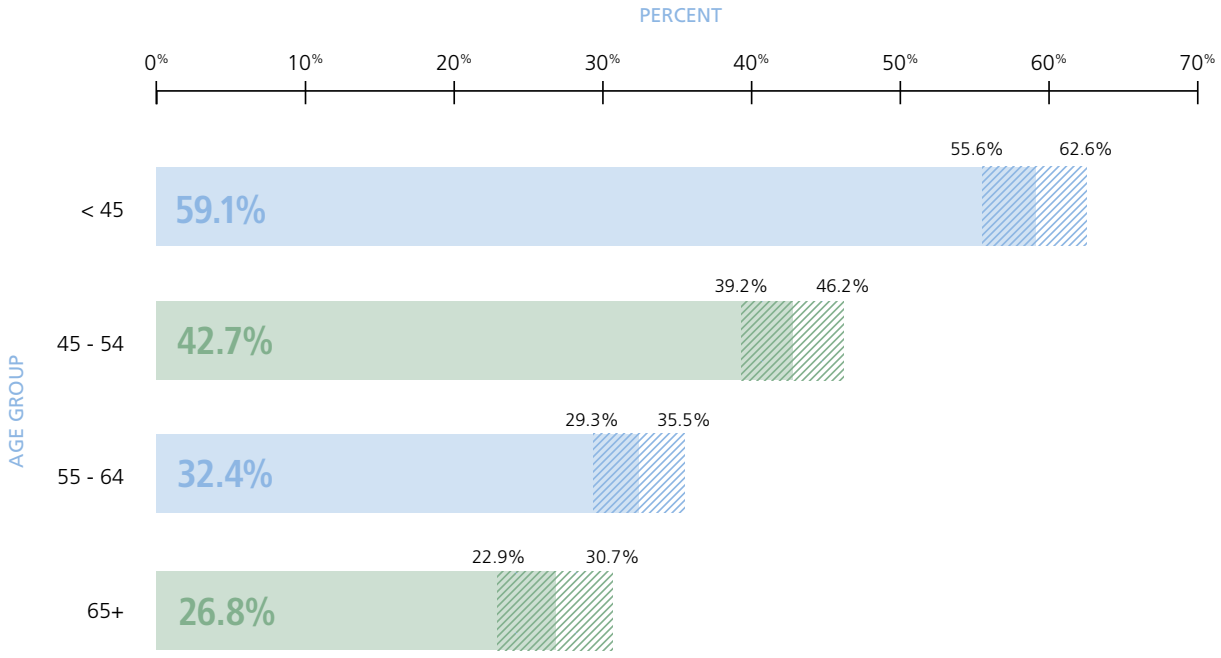
### Completion of Fellowship Experience

| Fellowship Experience | Population Represented | | |
|---|---|---|---|
| | Number | Percent (%) | ± MOE (%) |
| No Fellowship | 7,249 | 59.5 | 1.8 |
| Fellowship Trained | 4,937 | 40.5 | 1.8 |
| Trained by One Fellowship Program | 3,770 | 30.9 | 1.8 |
| Trained by Two or More Fellowship Programs | 1,167 | 9.6 | 1.2 |
| **Total** | **12,186** | **100.0** | |

(Data source: Weighted samples from the 2016 AUA Annual Census. Fellowship experience was reported on programs with duration of one year or longer.)

## FIGURE 3-1

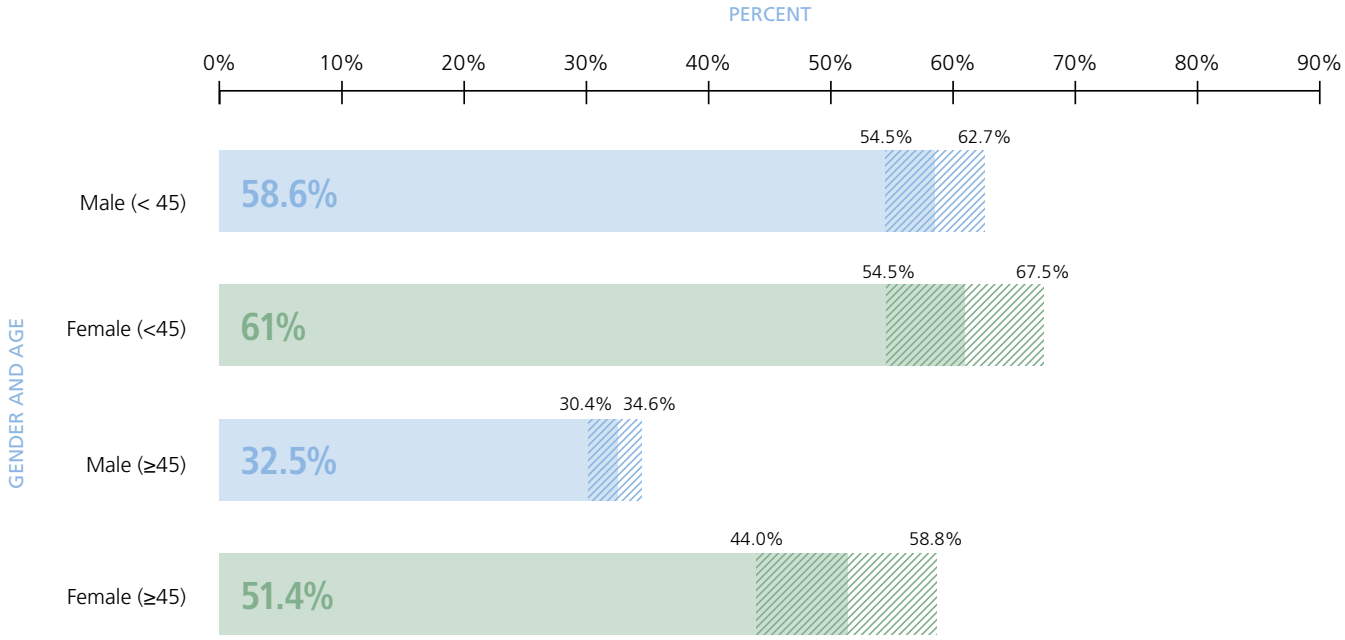
### Percent of Practicing Urologists with Completed Fellowship Experience (by Age)*




(Data source: Weighted samples from the 2016 AUA Annual Census. Fellowship experience was reported on programs with duration of one year or longer.)
*Bold numbers are point estimates. The dashed bars represent upper and lower 90% confidence limits.

## FIGURE 3-2

### Percent of Practicing Urologists with Completed Fellowship Experience (by Gender and Age)*




(Data source: Weighted samples from the 2016 AUA Annual Census. Fellowship experience was reported on programs with duration of one year or longer.)
*Bold numbers are point estimates. The dashed bars represent upper and lower 90% confidence limits.

## TABLE 3-3

### Fellowship Area

| Area of Fellowship | Population Represented | | |
|---|---|---|---|
| | Number | Percent (%) | ± MOE (%) |
| Oncology | 1,348 | 11.1 | 1.2 |
| Pediatrics | 1,031 | 8.5 | 1.0 |
| Endourology/Stone Disease | 753 | 6.2 | 0.8 |
| Robotic Surgery | 656 | 5.4 | 0.8 |
| Female Pelvic Medicine and Reconstructive Surgery | 595 | 4.9 | 0.8 |
| Research | 459 | 3.8 | 0.7 |
| Male Infertility | 399 | 3.3 | 0.7 |
| Male Genitourinary Reconstruction | 362 | 3 | 0.7 |
| Erectile Dysfunction | 302 | 2.5 | 0.7 |
| Renal Transplantation | 195 | 1.6 | 0.5 |

(Data source: Weighted samples from the 2016 AUA Annual Census. Fellowship experience was reported on programs with duration of one year or longer. ^ This is a multiple selection question so the total number of counts may be more than the total number of practicing urologists.)

## TABLE 3-4

### Age at Completion of Most Recent Fellowship

| Age at Completion of Most Recent Fellowship | Population Represented | | |
|---|---|---|---|
| | Number | Percent (%) | ± MOE (%) |
| ≤ 32 | 948 | 19.2 | 2.5 |
| 33 | 929 | 18.8 | 2.3 |
| 34 | 936 | 19.0 | 2.3 |
| 35 | 684 | 13.8 | 2.1 |
| ≥ 36 | 1,440 | 29.2 | 2.8 |
| **Fellowship Trained** | **4,937** | **100.0** | |
| Not Fellowship Trained | 7,249 | | |
| **Total** | **12,186** | | |

(Data source: Weighted samples from the 2016 AUA Annual Census. Fellowship experience was reported on programs with duration of one year or longer. The median age is 34.)

## TABLE 3-5

### Could You Find a Job That Allows You to Practice Your Fellowship Specialty as the Majority of Your Practice?

| Practice Your Fellowship Specialty | Population Represented | | |
|---|---|---|---|
| | Number | Percent (%) | ± MOE (%) |
| Yes | 3,990 | 80.8 | 2.5 |
| No | 708 | 14.3 | 2.1 |
| I prefer not to answer | 239 | 4.8 | 1.5 |
| **Total** | **4,937** | **100.0** | |

(Data source: Weighted samples from the 2016 AUA Annual Census.)

## TABLE 3-6

### Why Did You Pursue Fellowship Training?

| Reason for Fellowship Training | Population Represented | | |
|---|---|---|---|
| | Number | Percent (%) | ± MOE (%) |
| I wanted advanced training so I could specialize in it in practice | 2,173 | 50.5 | 3.1 |
| I felt I needed additional clinical and surgical experience before entering practice | 526 | 12.2 | 2.3 |
| I wanted to enter into an academic practice | 1,324 | 30.7 | 3.0 |
| Other | 284 | 6.6 | 1.8 |
| **Total** | **4,306** | **100.0** | |

(Data source: Weighted samples from the 2016 AUA Annual Census.)

## TABLE 3-7

### Number of State Medical Licenses

| Number of Licenses | Population Represented | |
|---|---|---|
| | Number | Percent (%) |
| **Total Reported** | **12,175** | **100** |
| 1 | 10,047 | 82.4 |
| 2 | 1,774 | 14.6 |
| 3 | 303 | 2.5 |
| 4 | 51 | 0.4 |
| Not Reported | 11 | |
| **Total** | **12,186** | |

(Data source: Weighted samples from the 2016 AUA Annual Census.)

## TABLE 3-8

### Certification Status

| Certification Status | Population Represented | |
|---|---|---|
| | Number | Percent (%) |
| Not Certified | 1,530 | 12.6 |
| Certified | 10,656 | 87.4 |
| By ABU | 10,467 | |
| By AOBS | 206 | |
| By ABU or AOBS | 10,639 | |
| By Both ABU and AOBS | 17 | |
| **Total** | **12,186** | **100.0** |

(Data source: National Provider Identifier 09/2016 file, ABU certification records from the ABMS Directory of Board Certified Medical Specialists, AOA DO Directory.)

## TABLE 3-9

### Total Number of Years of Practicing Urology Since Completion of Residency

| Total Number of Years of Practicing Urology Since Completion of Residency | Population Represented | | |
|---|---|---|---|
| | Number | Percent (%) | ± MOE (%) |
| 1-5 | 2,072 | 17.0 | 1.0 |
| 6-10 | 1,299 | 10.7 | 0.8 |
| 11-15 | 1,223 | 10.0 | 0.7 |
| 16 - 20 | 1,388 | 11.4 | 0.7 |
| 21 - 25 | 1,263 | 10.4 | 0.8 |
| 26 - 30 | 1,282 | 10.5 | 0.8 |
| 31 - 35 | 1,176 | 9.7 | 0.8 |
| 36 - 40 | 1,456 | 11.9 | 1.3 |
| ≥ 41 | 1,027 | 8.4 | 1.2 |
| **Total Reported** | **12,186** | **100.0** | |

(Data source: Weighted samples from the 2016 AUA Annual Census. The median number of years practicing urology since completion of residency is 21.)

# Section 4: Characteristics of the Urology Practice

## *Primary Observations*

- Nearly 60 percent of practicing urologists in the United States are in private practice (including solo, single urology or multispecialty groups) (Table 4-2). Practicing urologists between the ages of 55 and 64 are most likely to be in private practice, whereas practicing urologists who are 45 and younger are least likely to be in private practice (Figure 4-1). A significant gender difference in this regard was found only among practicing urologists above 55 (Figure 4-2).
- Female practicing urologists are more likely to work in academic medical centers than their male counterparts (35.9% versus 24.6%) (Table 4-3).
- Nearly 60 percent of practicing urologists in the United States do not have a primary subspecialty (Table 4-6); however, for these who do, oncology is the most common primary subspecialty area selected.
- Approximately 82 percent of practicing urologists in the United States perform inpatient surgical procedures. However, the percentage of practicing urologists who perform inpatient surgical procedures is lower in older age groups. After age 75, less than half of practicing urologists perform inpatient procedures (Table 4-8).
- Practicing urologists in the United States between the ages of 45 and 64 are less likely to be employed by others compared to practicing urologists in other age groups (Figure 4-4).
- Nearly 11 percent of practicing urologists in the United States are the sole owners of their practices, and more than 32 percent of practicing urologists serve as partners in their practices (Table 4-11).
- Female practicing urologists who are 45 or younger are more likely to be employed by others compared to their male counterparts (Figure 4-5).

### TABLE 4-1

### Number of Urologists per Practice

| | Population Represented | | |
|---|---|---|---|
| Number of Urologists | Number | Percent (%) | ± MOE (%) |
| 1 | 1,902 | 15.9 | 1.5 |
| 2 | 1,167 | 9.7 | 1.2 |
| 3 | 1,137 | 9.5 | 1.2 |
| 4 | 849 | 7.1 | 1.0 |
| 5 - 9 | 2,840 | 23.7 | 1.6 |
| 10 - 15 | 1,959 | 16.4 | 1.5 |
| ≥ 16 | 2,127 | 17.8 | 1.5 |
| **Total Reported** | **11,981** | **100.0** | |
| Not reported | 204 | | |
| **Total** | **12,186** | | |

(Data source: Weighted samples from the 2016 AUA Annual Census. The median number of urologists per practice is the United States is 6.)

## TABLE 4-2

### Work Setting

| Work Setting | Population Represented | | |
|---|---|---|---|
| | Number | Percent (%) | ± MOE (%) |
| **Private Practices** | **7,196** | **59.1** | **2.0** |
| Solo Practice | 1,198 | 9.8 | 1.2 |
| Single Urology Group | 4,114 | 33.8 | 1.8 |
| Multispecialty Group | 1,884 | 15.5 | 1.3 |
| **Institutional Settings** | **4,828** | **39.6** | **1.8** |
| Academic Medical Center* | 3,111 | 25.5 | 1.6 |
| Public or Private Hospital | 1,365 | 11.2 | 1.3 |
| Private Hospital | 608 | 5.0 | 0.8 |
| Veterans Affairs (VA) | 501 | 4.1 | 0.8 |
| Non-VA Military Hospital | 68 | 0.6 | 0.3 |
| Other Public Hospital | 189 | 1.5 | 0.5 |
| Community Health Center/HMO/Managed Care Organization | 352 | 2.9 | 0.7 |
| Other Settings | 161 | 1.3 | 0.5 |
| **Total** | **12,186** | **100.0** | |

(Data source: Weighted samples from the 2016 AUA Annual Census. Sums from numbers and percentages may contrast with calculated totals due to intrinsic rounding errors.)

## TABLE 4-3

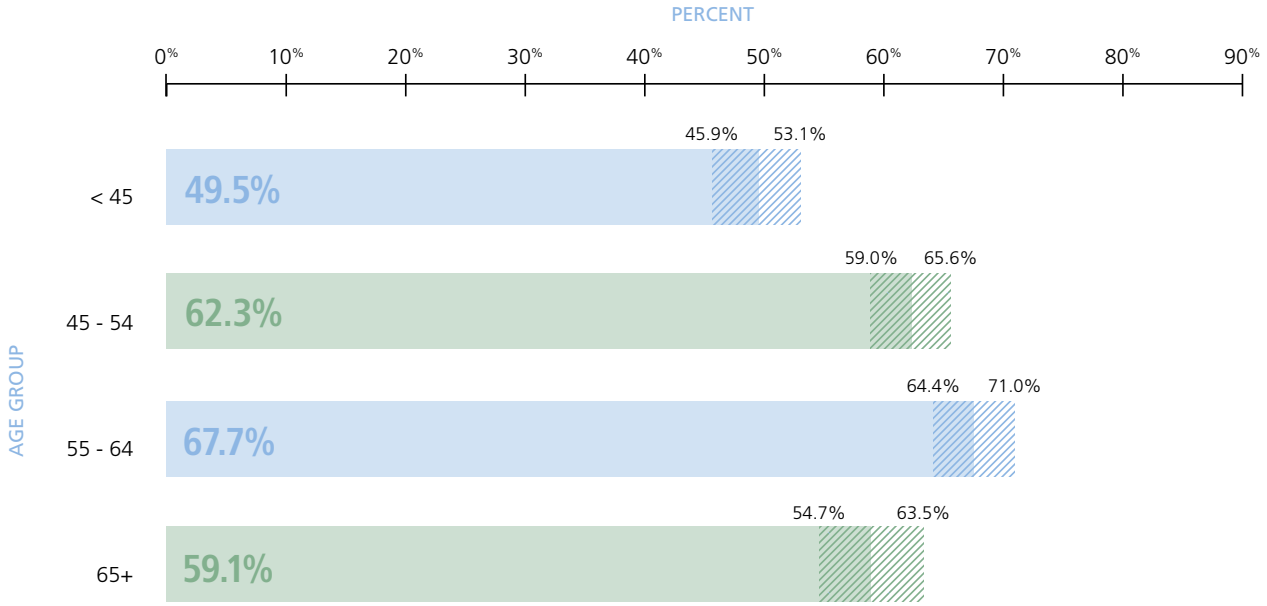
### Work Setting by Gender

| Work Setting | Male Urologists | | Female Urologists | |
|---|---|---|---|---|
| | Percent (%) | ± MOE (%) | Percent (%) | ± MOE (%) |
| Academic Medical Center | 24.6 | 1.7 | 35.9 | 5.2 |
| Multispecialty Group | 15.2 | 1.4 | 18.5 | 4.0 |
| Single Urology Group | 34.9 | 1.9 | 21.6 | 4.2 |
| Others | 25.3 | 1.8 | 24.1 | 4.7 |
| **Total** | **100.0** | | **100.0** | |

(Data source: Weighted samples from the 2016 AUA Annual Census.)

## FIGURE 4-1

### Percent of Practicing Urologists in Private Practice (by Age)*




(Data source: Weighted samples from the 2016 AUA Annual Census.)
*Bold numbers are point estimates. The dashed bars represent upper and lower 90% confidence limits.

## TABLE 4-4

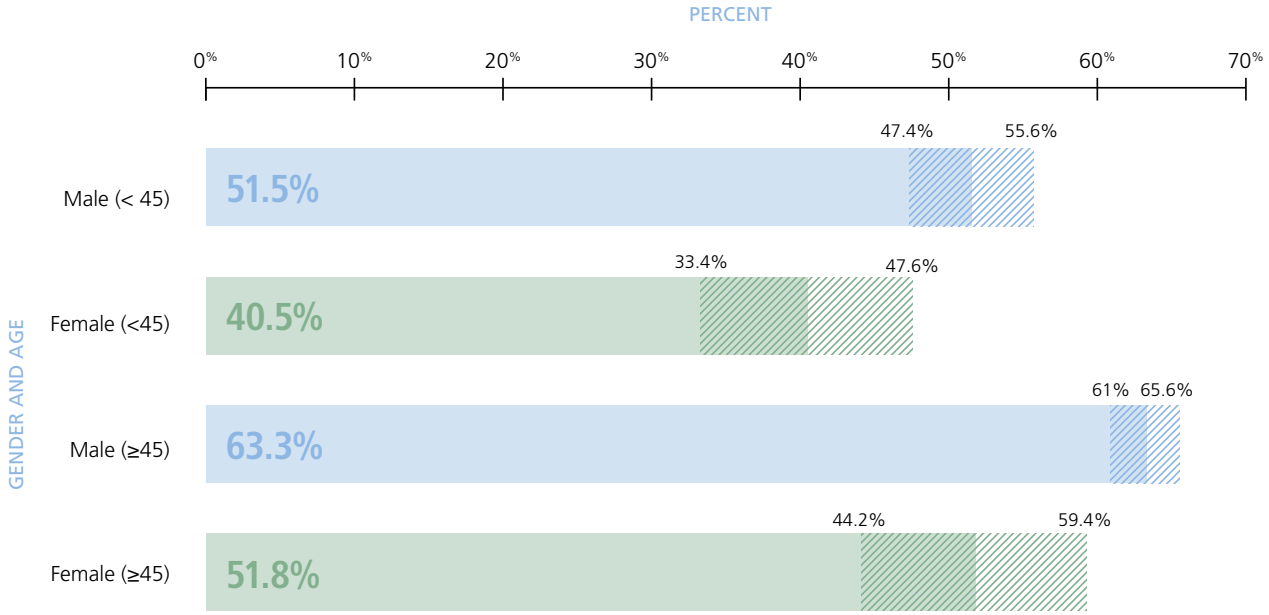
### Number of Practicing Urologists by Work Setting

| Number of Practicing Urologists | Population Represented | | |
|---|---|---|---|
| | Number | Percent (%) | ± MOE (%) |
| **Institutional Settings (Academic, Hospitals and Health Care Systems)** | | | |
| 1 | 356 | 7.4 | 1.8 |
| 2 - 5 | 1,355 | 28.3 | 2.8 |
| 6 - 10 | 1,273 | 26.6 | 2.8 |
| ≥ 10 | 1,802 | 37.6 | 3.0 |
| **Total** | **4,786** | **100.0** | |
| **Private Practices (Solo, Single-Specialty and Multispecialty)** | | | |
| 1 | 1,471 | 20.9 | 2.1 |
| 2 - 5 | 2,528 | 35.9 | 2.5 |
| 6 - 10 | 1,238 | 17.6 | 1.8 |
| ≥ 10 | 1,797 | 25.5 | 2.1 |
| **Total** | **7,034** | **100.0** | |
| **Other Settings (Community Health Center/ HMO/Managed Care Organization, Federal, State and Local Government)** | | | |
| 1 | 75 | 46.4 | 20.4 |
| 2 - 5 | 62 | 38.5 | 19.6 |
| 6 - 10 | 9 | 5.3 | 6.3 |
| ≥ 10 | 16 | 9.8 | 12.2 |
| **Total** | **161** | **100.0** | |

(Data source: Weighted samples from the 2016 AUA Annual Census.)

## FIGURE 4-2

### Percent of Practicing Urologists in Private Practice (by Gender and Age)*




(Data source: Weighted samples from the 2016 AUA Annual Census.)
*Bold numbers are point estimates. The dashed bars represent upper and lower 90% confidence limits.

## TABLE 4-5

### Number of Office Locations per Practice

| Number of Office Locations | Population Represented | | |
|---|---|---|---|
| | Number | Percent (%) | ± MOE (%) |
| 1 | 4,135 | 33.9 | 1.8 |
| 2 | 2,316 | 19.0 | 1.5 |
| 3 | 1,662 | 13.6 | 1.3 |
| 4 | 1,085 | 8.9 | 1.2 |
| ≥ 5 | 2,989 | 24.5 | 1.6 |
| **Total** | **12,186** | **100.0** | |

(Data source: Weighted samples from the 2016 AUA Annual Census. The median number of office locations per practice is 2.)

## TABLE 4-6

### Primary Subspecialty

| Primary Subspecialty | Population Represented | | |
|---|---|---|---|
| | Number | Percent (%) | ± MOE (%) |
| General Without Subspecialty | 7,260 | 59.6 | 1.8 |
| Oncology | 1,348 | 11.1 | 1.2 |
| Pediatrics | 965 | 7.9 | 1.0 |
| Endourology/Stone Disease | 593 | 4.9 | 0.8 |
| Female Pelvic Medicine and Reconstructive Surgery | 588 | 4.8 | 0.7 |
| Robotic Surgery | 477 | 3.9 | 0.7 |
| Male Infertility | 310 | 2.5 | 0.7 |
| Male Genitourinary Reconstruction | 262 | 2.1 | 0.7 |
| Erectile Dysfunction | 259 | 2.1 | 0.7 |
| Renal Transplantation/ Laparoscopic Surgery | 125 | 1.0 | 0.3 |
| **Total** | **12,186** | **100.0** | |

(Data source: Weighted samples from the 2016 AUA Annual Census.)

## TABLE 4-7

### Any Subspecialty

| Area of Practice | Population Represented | | |
|---|---|---|---|
| | Number | Percent (%) | ± MOE (%) |
| Oncology | 7,114 | 58.4 | 2.0 |
| Endourology/Stone Disease | 6,794 | 55.8 | 2.0 |
| Erectile Dysfunction | 5,891 | 48.3 | 2.0 |
| Robotic Surgery | 3,742 | 30.7 | 1.5 |
| Laparoscopic Surgery/Renal Transplantation | 3,983 | 32.7 | 1.6 |
| Female Pelvic Medicine and Reconstructive Surgery | 3,565 | 29.3 | 1.6 |
| Male Infertility | 3,134 | 25.7 | 1.6 |
| Pediatrics | 2,538 | 20.8 | 1.5 |
| Male Genitourinary Reconstruction | 2,351 | 19.3 | 1.5 |

(Data source: Weighted samples from the 2016 AUA Annual Census. This is a multiple selection question so the total number of counts may be more than the total number of practicing urologists.)

## TABLE 4-8

### Performing Inpatient Procedures (by Age)

| Age | Population Represented | | |
|---|---|---|---|
| | Number | Percent (%) | ± MOE (%) |
| All Ages | 9,970 | 81.8 | 2.3 |
| ≤ 54 | 5,437 | 91.0 | 2.1 |
| 55 - 64 | 2,453 | 84.0 | 3.6 |
| 65 - 74 | 1,626 | 68.8 | 7.6 |
| ≥ 75 | 455 | 49.1 | 13.3 |
| **Total** | **12,186** | | |

(Data source: Weighted samples from the 2016 AUA Annual Census.)

## TABLE 4-9

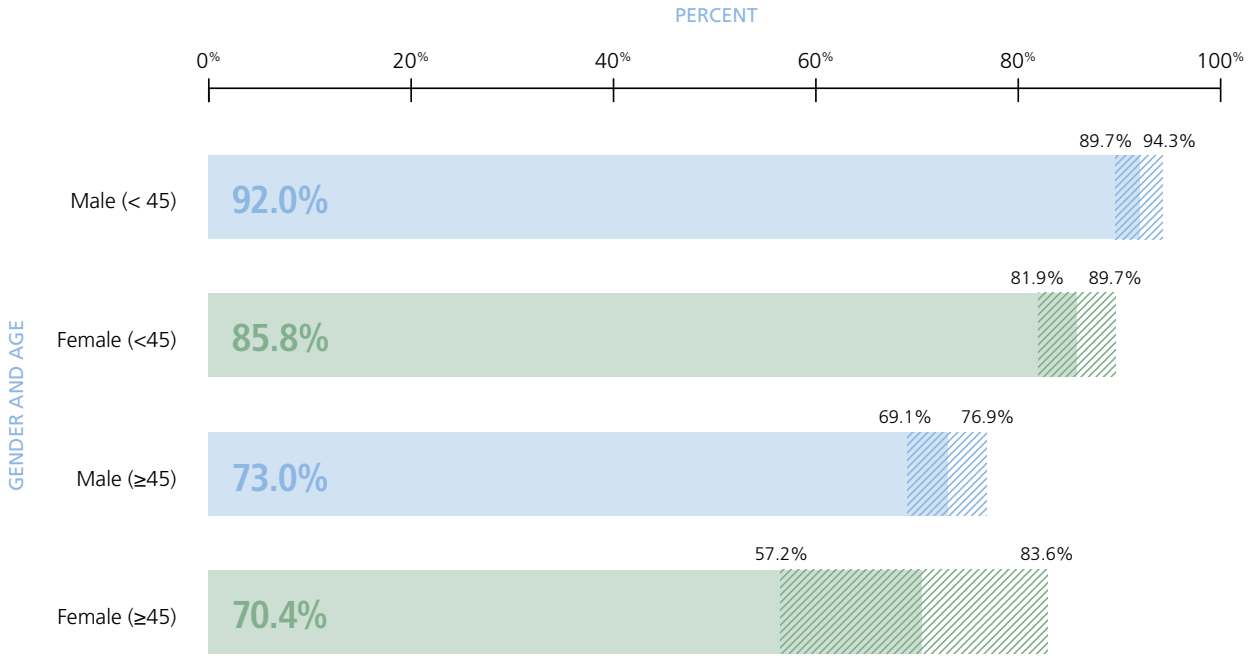
### Number of Major Inpatient Operative Procedures Performed in a Typical Month

| Number of Procedures per Month | Population Represented | | |
|---|---|---|---|
| | Number | Percent (%) | ± MOE (%) |
| None | 2,215 | 18.2 | 2.3 |
| At least One | 9,970 | 81.8 | 2.3 |
| 1 - 4 | 3,243 | 26.6 | 2.3 |
| 5 - 9 | 2,928 | 24.0 | 2.3 |
| ≥ 10 | 3,799 | 31.2 | 2.5 |
| **Total** | **12,186** | **100.0** | |

(Data source: Weighted samples from the 2016 AUA Annual Census.)

## FIGURE 4-3

### Percent of Practicing Urologists Who Reported Performing Inpatient Procedures (by Gender and Age)*




(Data source: Weighted samples from the 2016 AUA Annual Census.)
*Bold numbers are point estimates. The dashed bars represent upper and lower 90% confidence limits.

## TABLE 4-10

### Other Professional Roles

| Other Roles | Population Represented | | |
|---|---|---|---|
| | Number | Percent (%) | ± MOE (%) |
| Educator | 1,080 | 8.9 | 1.2 |
| Researcher | 858 | 7.0 | 1.0 |
| Administrator/Medical Officer/ Practice Manager | 437 | 3.6 | 0.7 |

(Data source: Weighted samples from the 2016 AUA Annual Census. This is a multiple selection question so the total number of counts may be more than the total number of practicing urologists.)

## TABLE 4-11

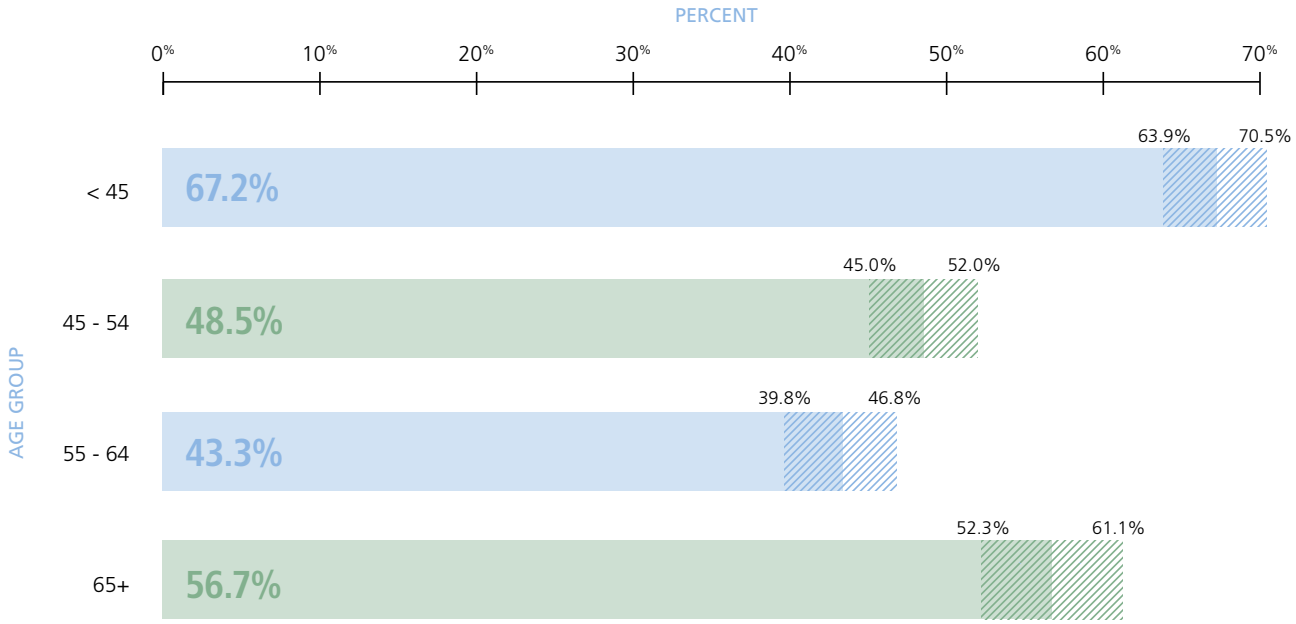
### Employment Status

| Employment Status | Population Represented | | |
|---|---|---|---|
| | Number | Percent (%) | ± MOE (%) |
| I am employed by others | 6,678 | 54.8 | 1.8 |
| I am a partner in my practice | 3,923 | 32.2 | 1.6 |
| I am the sole owner of my practice | 1,302 | 10.7 | 1.2 |
| I am a combination of the above | 283 | 2.3 | 0.7 |
| **Total** | **12,186** | **100.0** | |

(Data source: Weighted samples from the 2016 AUA Annual Census.)

## FIGURE 4-4

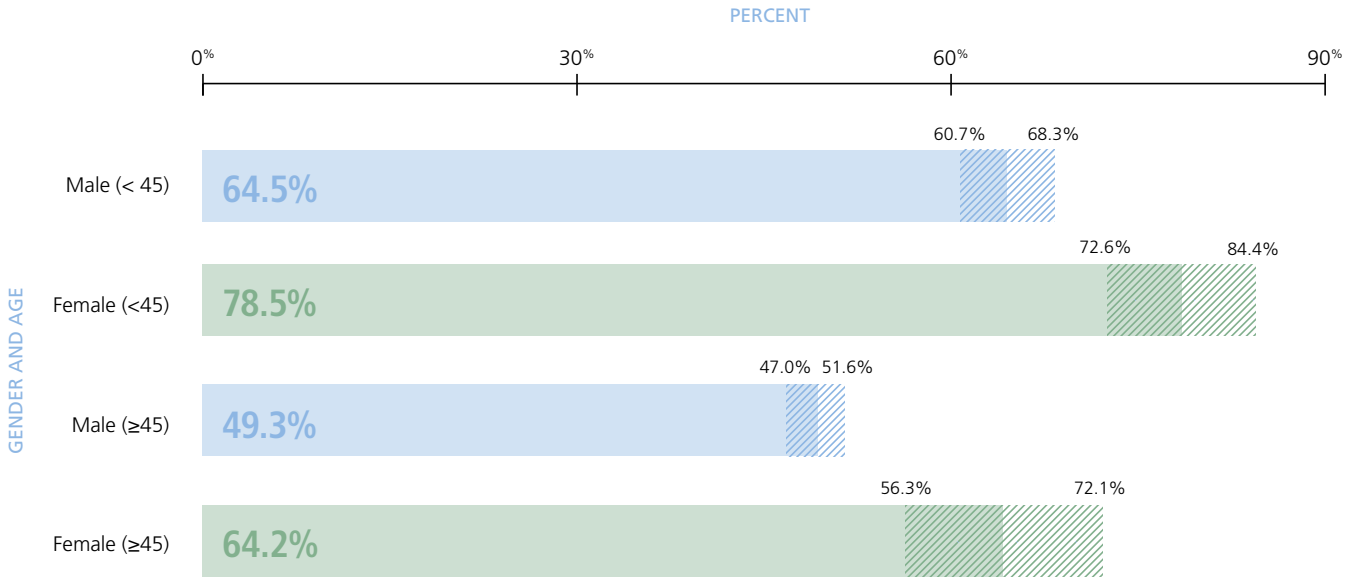
### Percent of Employed Practicing Urologists (by Age)*




(Data source: Weighted samples from the 2016 AUA Annual Census.)
*Bold numbers are point estimates. The dashed bars represent upper and lower 90% confidence limits.

## FIGURE 4-5

### Percent of Employed Practicing Urologists (by Gender and Age)*




(Data source: Weighted samples from the 2016 AUA Annual Census.)
*Bold numbers are point estimates. The dashed bars represent upper and lower 90% confidence limits.

# Section 5: Work Hours, Patient Encounters and Other Practice Characteristics

## *Primary Observations*

- Practicing urologists in the United States work a median number of 56 hours on clinical and other activities in a "typical" week. Approximately 34 percent of urologists work more than 60 hours a week (Table 5-1).
- Female practicing urologists in the United States work four more hours per week than male practicing urologists. However, male practicing urologists spend more hours on clinical activities than their female counterparts (Table 5-5).
- Practicing urologists in the United States have a median number of 70 patient visits/encounters in a "typical" week (Table 5-6) and work a median 48 weeks per year (Table 5-9), suggesting a total number of patient visits/encounters of 3,360 per year.
- Twenty-eight percent of practicing urologists in the United States plans to retire fully after age 70 (Table 5-10). However, the age of planned retirement is higher in older age groups than in younger age groups (Table 5-11).

### TABLE 5-1

### Total Number of Work Hours in a Typical Week

| | Population Represented | | |
|---|---|---|---|
| Hours per Week | Number | Percent (%) | ± MOE (%) |
| ≤ 35 | 1,392 | 11.4 | 1.3 |
| 36 - 40 | 851 | 7.0 | 1.2 |
| 41 - 45 | 764 | 6.3 | 1.0 |
| 46 - 50 | 1,553 | 12.7 | 1.3 |
| 51 - 55 | 1,485 | 12.2 | 1.2 |
| 56 - 60 | 1,962 | 16.1 | 1.3 |
| ≥ 61 | 4,178 | 34.3 | 1.6 |
| **Total** | **12,186** | **100.0** | |

(Data source: Weighted samples from the 2016 AUA Annual Census. This table is based on a derived question summing work hours from both clinical work and non-clinical work. The median number of work hours per week is 56.)

## TABLE 5-2

### Number of Clinical Hours Directly Related to Patient Care in a Typical Week

| Number of Clinical Hours per Week | Population Represented | | |
|---|---|---|---|
| | Number | Percent (%) | ± MOE (%) |
| < 25 | 1,213 | 10.0 | 1.3 |
| ≥ 25 | 10,973 | 90.0 | 0.0 |
| 25 - 30 | 982 | 8.1 | 1.2 |
| 31 - 35 | 535 | 4.4 | 0.8 |
| 36 - 40 | 1,906 | 15.6 | 1.5 |
| 41 - 45 | 986 | 8.1 | 1.2 |
| 46 - 50 | 2,477 | 20.3 | 1.5 |
| 51 - 55 | 786 | 6.4 | 1.0 |
| 56 - 60 | 2,011 | 16.5 | 1.3 |
| ≥ 61 | 1,289 | 10.6 | 1.2 |
| **Total** | **12,186** | **100.0** | |

(Data source: Weighted samples from the 2016 AUA Annual Census. The median number of clinical hours directly related to patient care per week is 50.)

## TABLE 5-3

### Number of Minutes Spent with a Patient in a Typical Office Visit

| | Population Represented | | |
|---|---|---|---|
| Number of Minutes | Number | Percent (%) | ± MOE (%) |
| ≤ 10 | 3,285 | 27.0 | 1.7 |
| 11-14 | 640 | 5.3 | 0.9 |
| 15 - 19 | 4,753 | 39.0 | 1.9 |
| ≥ 20 | 3,508 | 28.8 | 1.7 |
| **Total** | **12,186** | **100.0** | |

(Data source: Weighted samples from the 2016 AUA Annual Census. The median number of clinical hours directly related to patient care per week is 15.)

## TABLE 5-4

### Number of Non-Clinical (e.g., Administration, Teaching, Research) Hours in a Typical Week

| Number of Non-Clinical Hours per Week | Population Represented | | |
|---|---|---|---|
| | Number | Percent (%) | ± MOE (%) |
| < 1 | 2,054 | 16.9 | 1.5 |
| 2-5 | 4,059 | 33.3 | 1.8 |
| 6-10 | 3,145 | 25.8 | 1.6 |
| 11-15 | 1,056 | 8.7 | 1.2 |
| 16 - 20 | 1,126 | 9.2 | 1.2 |
| ≥ 21 | 746 | 6.1 | 0.8 |
| **Total** | **12,186** | **100.0** | |

(Data source: Weighted samples from the 2016 AUA Annual Census. The median number of non-clinical hours per week is 5.)

## TABLE 5-5

### Median/Mean Work Hours per Week (by Gender)

| Hours per Week (Median^/Mean*) | Population Represented | | |
|---|---|---|---|
| | Men | Women | Combined |
| Clinical Hours | 50/46.6 | 45/46.3 | 50/46.5 |
| Non-Clinical Hours | 5/8.7 | 10/10.6 | 5/8.9 |
| Total Work Hours | 56/55.4 | 60/56.9 | 56/55.5 |

(Data source: Weighted samples from the 2016 AUA Annual Census. ^ The sum of the median clinical hours and the median non-clinical hours does not necessarily equal the median of the total work hours. * The difference in the sum of the mean hours is subject to intrinsic rounding errors.)

## TABLE 5-6

### Number of Patient Visits/Encounters in a Typical Week

| Patient Visits/ Encounters | Population Represented | | |
|---|---|---|---|
| | Number | Percent (%) | ± MOE (%) |
| ≤ 50 | 3,936 | 32.3 | 1.8 |
| 51 - 75 | 3,034 | 24.9 | 1.6 |
| 76 - 100 | 3,388 | 27.8 | 1.6 |
| 101 - 125 | 1,122 | 9.2 | 1.0 |
| ≥ 126 | 705 | 5.8 | 0.8 |
| **Total** | **12,165** | **100.0** | |

(Data source: Weighted samples from the 2016 AUA Annual Census. The median number of patient visits/encounters per week is 70.)

## TABLE 5-7

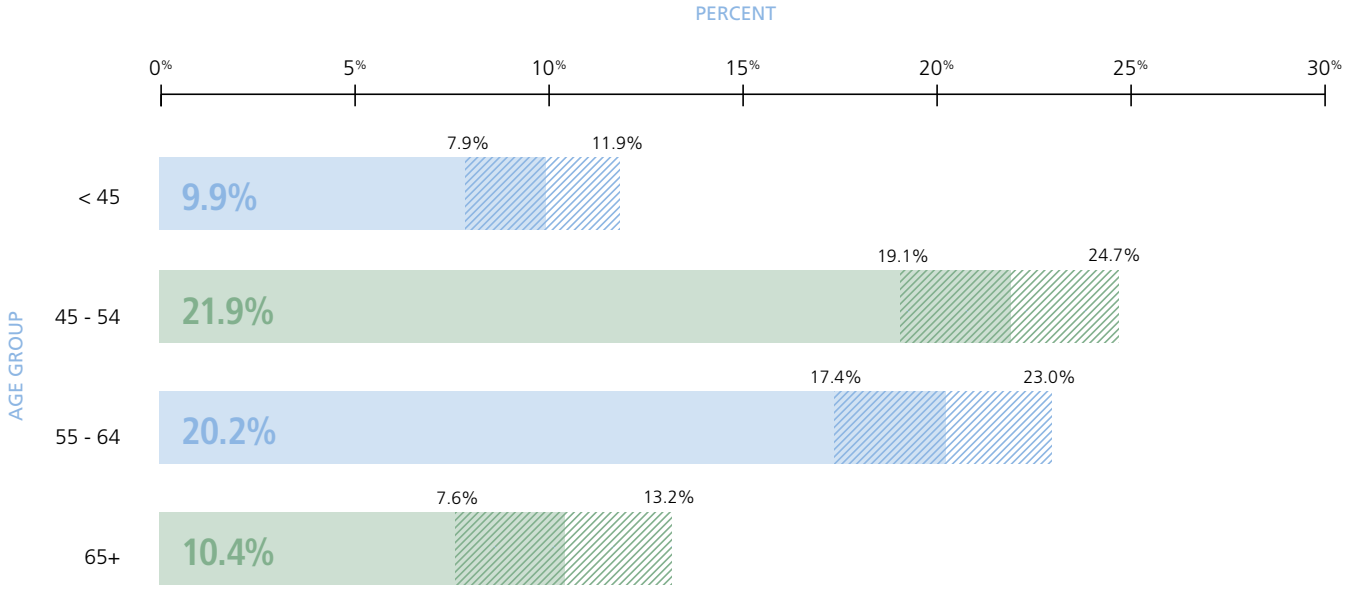
### Number of Patient Visits/Encounters in a Typical Week (by Gender)

| Patient Visits/ Encounters | Male Urologists | | Female Urologists | |
|---|---|---|---|---|
| | Percent (%) | ± MOE (%) | Percent (%) | ± MOE (%) |
| ≤ 50 | 31.4 | 2.0 | 42.2 | 5.1 |
| 51 – 75 | 24.3 | 1.8 | 30.9 | 5.1 |
| 76 – 100 | 28.5 | 1.8 | 20.6 | 3.9 |
| ≥ 101 | 15.8 | 1.3 | 6.3 | 2.3 |
| **Total** | **100.0** | | **100.0** | |

(Data source: Weighted samples from the 2016 AUA Annual Census.)

## FIGURE 5-1

### Percent of Practicing Urologists with More Than 100 Patient Visits/Encounters in a Typical Week (by Age)*




(Data source: Weighted samples from the 2016 AUA Annual Census.
*Bold numbers are point estimates. The dashed bars represent upper and lower 90% confidence limits.)

## TABLE 5-8

### Percent of Patient Visits/Encounters Made by Female Patients

| Female Patient Encounters | Population Represented | | |
|---|---|---|---|
| | Number | Percent (%) | ± MOE (%) |
| ≤ 25 | 4,726 | 38.8 | 1.8 |
| 26-50 | 6,631 | 54.4 | 2.0 |
| 51-75 | 441 | 3.6 | 0.7 |
| 75 or more | 387 | 3.2 | 0.5 |
| **Total** | **12,186** | **100.0** | |

(Data source: Weighted samples from the 2016 AUA Annual Census. The median percentage of patient visits/encounters by female patients is 30.)

## TABLE 5-9

### Number of Weeks of Vacation Leave in the Previous Year

| Number of Weeks of Vacation Leave | Population Represented | | |
|---|---|---|---|
| | Number | Percent (%) | ± MOE (%) |
| ≤ 2 | 2,485 | 20.4 | 1.5 |
| 3 | 2,435 | 20.0 | 1.5 |
| 4 | 3,207 | 26.3 | 1.6 |
| 5-6 | 2,650 | 21.8 | 1.6 |
| ≥ 7 | 1,408 | 11.6 | 1.3 |
| **Total** | **12,186** | **100.0** | |

(Data source: Weighted samples from the 2016 AUA Annual Census. The median number of vacation weeks is 4.)

## TABLE 5-10

### Age at Planned Full Retirement from Practice

| Planned Retirement Age | Population Represented | | |
|---|---|---|---|
| | Number | Percent (%) | ± MOE (%) |
| < 60 | 553 | 4.5 | 0.7 |
| 60 - 65 | 4,417 | 36.2 | 1.5 |
| 66 - 70 | 3,810 | 31.3 | 1.6 |
| 71 - 75 | 2,007 | 16.5 | 1.5 |
| >75 | 1,398 | 11.5 | 1.2 |
| **Total** | **12,186** | **100.0** | |

(Data source: Weighted samples from the 2016 AUA Annual Census. The median age at planned full retirement from practice is 68.)

## TABLE 5-11

### Age at Planned Full Retirement from Practice (by Current Age)

| | Population Represented | | |
|---|---|---|---|
| Retirement Age | Number | Percent (%) | ± MOE (%) |
| **Current Age: ≤ 44 — *Median planned full retirement age: 65*** | | | |
| < 60 | 340 | 10.0 | 2.1 |
| 60 - 65 | 1,899 | 55.7 | 3.6 |
| 66 - 70 | 929 | 27.3 | 3.3 |
| ≥ 71 | 240 | 7.0 | 2.0 |
| **Total** | **3,409** | **100.0** | |
| **Current Age: 45-54 — *Median planned full retirement age: 65*** | | | |
| <60 | 195 | 7.5 | 1.8 |
| 60-65 | 1,395 | 53.7 | 3.5 |
| 66-70 | 786 | 30.2 | 3.1 |
| ≥ 71 | 224 | 8.6 | 2.0 |
| **Total** | **2,601** | **100.0** | |
| **Current Age: 55-64 — *Median planned full retirement age: 67*** | | | |
| <60 | 19 | 0.7 | 0.5 |
| 60-65 | 1,091 | 39.0 | 3.3 |
| 66-70 | 1,269 | 45.4 | 3.5 |
| ≥ 71 | 416 | 14.9 | 2.5 |
| **Total** | **2,795** | **100.0** | |
| **Current Age: ≥ 65 — *Median planned full retirement age: 75*** | | | |
| ≤ 70 | 856 | 25.3 | 3.1 |
| ≥ 71 | 2,524 | 74.7 | 3.1 |
| **Total** | **3,380** | **100.0** | |

(Data source: Weighted samples from the 2016 AUA Annual Census.)

# Section 6: Professional Burnout among Urologists

Physician burnout has been linked to decreased job performance as well as increased medical errors, interpersonal conflicts and depression.[10] The purpose of including burnout questions in the 2016 AUA Annual Census was to establish the prevalence of professional burnout among urologists and to determine the sub-groups associated with higher burnout rates. Maslach Burnout Inventory (MBI)[11,12] questions were randomly assigned to half of the respondents. Using matrix sampling, the 1,126 practicing urologists who received and answered the MBI questions represent the entire 2,301 practicing urologists who completed the Census. The results were weighted to represent the entire 12,186 practicing urologists in the United States. Burnout was defined as scoring high in either the emotional exhaustion (score ≥27) or depersonalization (score ≥10) categories.

## *Primary Observations*

- The overall burnout rate in practicing urologists in the United States is 36.2 percent, lower in the age group of 65 or older, yet higher in practicing urologists aged 45 to 54 (Table 6-5).
- There is no significant difference in burnout rates among male urologists vs. female urologists (Table 6-6).
- Based on univariate frequency analyses, burnout rate is lower among practicing urologists in the following situations:
  - In non-metropolitan areas
  - In pediatric and oncology sub-specialties
  - In academic medical centers
  - As a sole owner or an employee
  - Those who work less than 40 hours or less than 30 hours on clinical activities per week
  - Those who see less than 40 patients per week and spend fewer minutes with patients

### TABLE 6-1

### Aggregated Burnout Score - Section A: Emotional Exhaustion

| | Population Represented | | |
|---|---|---|---|
| Emotional Exhaustion | Number | Percent (%) | ± MOE (%) |
| Low | 8,318 | 68.3 | 2.5 |
| Moderate | 1,863 | 15.3 | 1.8 |
| High | 2,005 | 16.5 | 2.0 |
| **Total** | **12,186** | **100.0** | |

(Data source: Weighted samples from the 2016 AUA Annual Census.)

## TABLE 6-2

### Aggregated Burnout Score - Section B: Depersonalization

| Depersonalization | Population Represented | | |
|---|---|---|---|
| | Number | Percent (%) | ± MOE (%) |
| Low | 5,280 | 43.3 | 2.8 |
| Moderate | 2,688 | 22.1 | 2.3 |
| High | 4,218 | 34.6 | 2.6 |
| **Total** | **12,186** | **100.0** | |

(Data source: Weighted samples from the 2016 AUA Annual Census.)

## TABLE 6-3

### Aggregated Inverse Burnout Score - Section C: Personal Achievement

| Personal Achievement | Population Represented | | |
|---|---|---|---|
| | Number | Percent (%) | ± MOE (%) |
| High | 9,272 | 76.1 | 2.3 |
| Moderate | 1,866 | 15.3 | 2.0 |
| Low | 1,048 | 8.6 | 1.5 |
| **Total** | **12,186** | **100.0** | |

(Data source: Weighted samples from the 2016 AUA Annual Census.)

*Overall burnout is defined as either high emotional exhaustion or high depersonalization*

## TABLE 6-4

### Overall Burnout Rate^

| Age (years) | Population Represented | Burnout Population Represented | | |
|---|---|---|---|---|
| | | Number | Percent (%) | ± MOE (%) |
| **Total** | **12,186** | **4,414** | **36.2** | **2.7** |

(Data source: Weighted samples from the 2016 AUA Annual Census.
^ Overall professional burnout is defined as high if reported high in either emotional exhaustion or depersonalization)

## TABLE 6-5

### Burnout Rate by Age

| Age (years) | Population Represented | Burnout Population Represented | | |
|---|---|---|---|---|
| | | Number | Percent (%) | ± MOE (%) |
| ≤ 65 | 9,075 | 3,667 | 40.4 | 2.8 |
| ≤ 44 | 3,387 | 1,284 | 37.9 | 4.8 |
| 45 - 54 | 2,587 | 1,124 | 43.4 | 4.9 |
| 55 - 65 | 3,102 | 1,260 | 40.6 | 4.8 |
| ≥ 66 | 3,111 | 747 | 24.0 | 6.3 |
| **Total** | **12,186** | **4,414** | **36.2** | **2.7** |

(Data source: Weighted samples from the 2016 AUA Annual Census.)

## TABLE 6-6

### Burnout Rate by Gender

| Gender | Population Represented | Burnout Population Represented | | |
|---|---|---|---|---|
| | | Number | Percent (%) | ± MOE (%) |
| Female | 1,032 | 364 | 35.3 | 6.7 |
| Male | 11,154 | 4,050 | 36.3 | 2.8 |
| **Total** | **12,186** | **4,414** | **36.2** | **2.7** |

(Data source: Weighted samples from the 2016 AUA Annual Census.)

## TABLE 6-7

### Burnout Rate by Hispanic Origin

| Hispanic Origin | Population Represented | Burnout Population Represented | | |
|---|---|---|---|---|
| | | Number | Percent (%) | ± MOE (%) |
| No | 11,510 | 4,137 | 35.9 | 2.8 |
| Yes | 353 | 92 | 26.0 | 12.2 |
| **Total** | **12,186** | **4,414** | **36.2** | **2.7** |

(Data source: Weighted samples from the 2016 AUA Annual Census.)

## TABLE 6-8

### Burnout Rate by Race

| Race | Population Represented | Burnout Population Represented | | |
|---|---|---|---|---|
| | | Number | Percent (%) | ± MOE (%) |
| White | 9,890 | 3,530 | 35.7 | 3.0 |
| Asian | 1,394 | 505 | 36.2 | 8.4 |
| Black | 162 | 34 | 21.1 | 16.3 |
| Other races including multiple race | 76 | 41 | 54.2 | 31.6 |
| **Total** | **12,186** | **4,414** | **36.2** | **2.7** |

(Data source: Weighted samples from the 2016 AUA Annual Census.)

## TABLE 6-9

### Burnout Rate by Number of Years in Practice

| Years | Population Represented | Burnout Population Represented | | |
|---|---|---|---|---|
| | | Number | Percent (%) | ± MOE (%) |
| ≤ 10 | 3,381 | 1,224 | 36.2 | 4.8 |
| 11 - 25 | 3,862 | 1,678 | 43.5 | 4.3 |
| ≥ 26 | 4,943 | 1,512 | 30.6 | 4.6 |
| **Total** | **12,186** | **4,414** | **36.2** | **2.7** |

(Data source: Weighted samples from the 2016 AUA Annual Census.)

## TABLE 6-10

### Burnout Rate by Practice Location

| Area | Population Represented | Burnout Population Represented | | |
|---|---|---|---|---|
| | | Number | Percent (%) | ± MOE (%) |
| Metropolitan Area | 11,124 | 4,095 | 36.8 | 2.8 |
| Non-Metropolitan Areas | 1,062 | 319 | 30.0 | 8.1 |
| **Total** | **12,186** | **4,414** | **36.2** | **2.7** |

(Data source: Weighted samples from the 2016 AUA Annual Census.)

## TABLE 6-11

### Burnout Rate by Major Primary Subspecialty Areas

| Primary Subspecialty | Population Represented | Burnout Population Represented | | |
|---|---|---|---|---|
| | | Number | Percent (%) | ± MOE (%) |
| General without Subspecialty | 8,350 | 2,689 | 36.9 | 3.5 |
| Oncology | 1,237 | 380 | 30.7 | 7.4 |
| Pediatrics | 989 | 248 | 25.1 | 7.7 |
| Other Areas | 2,672 | 1,097 | 41.1 | 5.6 |
| **Total** | **12,186** | **4,414** | **36.2** | **2.7** |

(Data source: Weighted samples from the 2016 AUA Annual Census.)

## TABLE 6-12

### Burnout Rate by Practice Settings

| Practice Setting | Population Represented | Burnout Population Represented | | |
|---|---|---|---|---|
| | | Number | Percent (%) | ± MOE (%) |
| Academic Medical Center/Medical School | 3,277 | 966 | 29.5 | 4.9 |
| Multispecialty Group | 1,671 | 817 | 48.9 | 6.9 |
| Single Urology Group | 3,909 | 1,555 | 39.8 | 4.8 |
| Solo Practice | 1,252 | 458 | 36.6 | 8.4 |
| Other | 2,077 | 618 | 29.7 | 6.4 |
| **Total** | **12,186** | **4,414** | **36.2** | **2.7** |

(Data source: Weighted samples from the 2016 AUA Annual Census.)

## TABLE 6-13

### Burnout Rate by Employment Status

| Employment Status | Population Represented | Burnout Population Represented | | |
|---|---|---|---|---|
| | | Number | Percent (%) | ± MOE (%) |
| I am employed by others | 6,760 | 2,263 | 33.5 | 3.6 |
| I am the sole owner of my practice | 1,339 | 429 | 32.0 | 8.1 |
| I am a partner in my practice | 3,805 | 1,671 | 43.9 | 4.6 |
| A combination of the above | 282 | 51 | 18.1 | 13.5 |
| **Total** | **12,186** | **4,414** | **36.2** | **2.7** |

(Data source: Weighted samples from the 2016 AUA Annual Census.)

## TABLE 6-14

### Burnout Rate by Practice Size

| Number of Urologists | Population Represented | Burnout Population Represented | | |
|---|---|---|---|---|
| | | Number | Percent (%) | ± MOE (%) |
| 1 - 2 | 3,169 | 1,000 | 31.6 | 5.1 |
| 3 - 5 | 2,708 | 1,075 | 39.7 | 5.8 |
| 6 - 9 | 2,195 | 763 | 34.7 | 6.1 |
| ≥ 10 | 3,727 | 1,444 | 38.7 | 4.6 |
| Not reported | 387 | 132 | 34.2 | 13.7 |
| **Total** | **12,186** | **4,414** | **36.2** | **2.7** |

(Data source: Weighted samples from the 2016 AUA Annual Census.)

## TABLE 6-15

### Burnout Rate by Total Hours Worked in a Typical Week

| Hours | Population Represented | Burnout Population Represented | | |
|---|---|---|---|---|
| | | Number | Percent (%) | ± MOE (%) |
| ≤ 40 | 2,376 | 656 | 27.6 | 6.6 |
| 41 - 50 | 2,275 | 690 | 30.3 | 6.3 |
| 51 - 60 | 3,426 | 1,493 | 43.6 | 4.8 |
| 61 - 70 | 2,504 | 885 | 35.3 | 5.6 |
| > 70 | 1,605 | 690 | 43.0 | 7.1 |
| **Total** | **12,186** | **4,414** | **36.2** | **2.7** |

(Data source: Weighted samples from the 2016 AUA Annual Census.)

## TABLE 6-16

### Burnout Rate by Number of Clinical Hours in a Typical Week

| Hours | Population Represented | Burnout Population Represented | | |
|---|---|---|---|---|
| | | Number | Percent (%) | ± MOE (%) |
| ≤ 30 | 2,344 | 543 | 23.2 | 5.9 |
| 31 - 40 | 2,513 | 936 | 37.2 | 6.1 |
| 41 - 50 | 3,284 | 1,260 | 38.4 | 4.9 |
| 51 - 60 | 2,807 | 1,192 | 42.5 | 5.6 |
| > 60 | 1,238 | 483 | 39.0 | 7.9 |
| **Total** | **12,186** | **4,414** | **36.2** | **2.7** |

(Data source: Weighted samples from the 2016 AUA Annual Census.)

## TABLE 6-17

### Burnout Rate by Number of Patient Visits in a Typical Week

| Number of Visits | Population Represented | Burnout Population Represented | | |
|---|---|---|---|---|
| | | Number | Percent (%) | ± MOE (%) |
| ≤ 40 | 2,508 | 605 | 24.1 | 5.6 |
| 41 - 60 | 3,073 | 1,023 | 33.3 | 4.9 |
| 61 - 75 | 1,649 | 606 | 36.8 | 7.4 |
| 76 - 100 | 3,180 | 1,406 | 44.2 | 5.4 |
| > 100 | 1,777 | 775 | 43.6 | 6.6 |
| **Total** | **12,186** | **4,414** | **36.2** | **2.7** |

(Data source: Weighted samples from the 2016 AUA Annual Census.)

## TABLE 6-18

### Burnout Rate by Number of Minutes Spent with a Patient in a Typical Office Visit

| Number of Minutes | Population Represented | Burnout Population Represented | | |
|---|---|---|---|---|
| | | Number | Percent (%) | ± MOE (%) |
| ≤ 10 | 3,154 | 1,355 | 43.0 | 5.3 |
| 11 - 15 | 5,584 | 2,027 | 36.3 | 3.9 |
| 16 - 20 | 2,254 | 757 | 33.6 | 6.3 |
| ≥ 21 | 1,193 | 275 | 23.0 | 7.2 |
| **Total** | **12,186** | **4,414** | **36.2** | **2.7** |

(Data source: Weighted samples from the 2016 AUA Annual Census.)

## TABLE 6-19

### Burnout Rate by Geographic Locations

| AUA Section | Population Represented | Burnout Population Represented | | |
|---|---|---|---|---|
| | | Number | Percent (%) | ± MOE (%) |
| Mid-Atlantic | 1,295 | 557 | 43.0 | 8.6 |
| New England | 653 | 252 | 38.6 | 13.7 |
| New York | 832 | 258 | 31.0 | 9.9 |
| North Central | 2,192 | 890 | 40.6 | 6.6 |
| Northeastern | 562 | 162 | 28.9 | 10.0 |
| South Central | 1,644 | 543 | 33.0 | 6.7 |
| Southeastern | 2,668 | 1,006 | 37.7 | 5.9 |
| Western | 2,339 | 746 | 31.9 | 5.6 |
| **Total** | **12,186** | **4,414** | **36.2** | **2.7** |

(Data source: Weighted samples from the 2016 AUA Annual Census.)

# Section 7: Workforce, Telemedicine and Quality Reporting

## *Primary Observations*

- Approximately one-third of practicing urologists in the United States find it difficult to fill urologist vacancies in their practices. Of these, more than half could not find enough candidates for open positions (Table 7-1 and Table 7-2).
- Less than nine percent of practicing urologists in the United States participate in a telemedicine program (Table 7-3).
- Nearly 60 percent of practicing urologists in the United States participated in a quality reporting program over the past 12 months (Table 7-5).

### TABLE 7-1

### Does Your Practice Currently Have Difficulty Filling Urologist Vacancies?

| | Population Represented | | |
|---|---|---|---|
| Difficulty Filling Urologist Vacancies | Number | Percent (%) | ± MOE (%) |
| Yes | 4,104 | 33.7 | 2.5 |
| No | 6,351 | 52.1 | 2.6 |
| Do Not know | 1,731 | 14.2 | 2.0 |
| **Total** | **12,186** | **100.0** | |

(Data source: Weighted samples from the 2016 AUA Annual Census.)

### TABLE 7-2

### What Are Your Difficulties Filling Urologist Vacancies?

| | Population Represented | | |
|---|---|---|---|
| Reasons for Difficulties Filling Urologist Vacancies | Number | Percent (%) | ± MOE (%) |
| Not enough candidates available | 2,185 | 53.2 | 4.8 |
| Not enough qualified candidates available | 1,567 | 38.2 | 4.3 |
| Not enough funding to fill the position | 1,468 | 35.8 | 4.3 |

(Data source: Weighted samples from the 2016 AUA Annual Census.
^This is a multiple selection question so the total number of counts may be more than the total number of practicing urologists.)

## TABLE 7-3

### Do You Participate in a Telemedicine Program^?

| Telemedicine Participation | Population Represented | | |
|---|---|---|---|
| | Number | Percent (%) | ± MOE (%) |
| No | 11,150 | 91.5 | 1.5 |
| Yes | 1,036 | 8.5 | 1.5 |
| ≥ 10 of my patients | 214 | 1.8 | 0.7 |
| < 10 of my patients | 822 | 6.7 | 1.3 |
| **Total** | **12,186** | **100.0** | |

(Data source: Weighted samples from the 2016 AUA Annual Census.
^Telemedicine is defined as the remote diagnosis and treatment of patients by means of telecommunications technology.)

## TABLE 7-4

### Does Your Organization Have Telemedicine Practice Standards/Guidelines for Delivering Telemedicine Services?

| Telemedicine Standards/ Guidelines Implemented | Population Represented | | |
|---|---|---|---|
| | Number | Percent (%) | ± MOE (%) |
| Yes | 2,323 | 19.1 | 2.1 |
| No | 6,956 | 57.1 | 2.6 |
| Do Not Know | 2,907 | 23.9 | 2.3 |
| **Total** | **12,186** | **100.0** | |

(Data source: Weighted samples from the 2016 AUA Annual Census.)

## TABLE 7-5

### Have You Participated in Any Quality Reporting Programs over the Past 12 Months?

| Quality Reporting Programs Participations | Population Represented | | |
|---|---|---|---|
| | Number | Percent (%) | ± MOE (%) |
| Yes | 7,304 | 59.9 | 2.6 |
| No | 2,188 | 18.0 | 2.1 |
| Do Not Know | 2,694 | 22.1 | 2.3 |
| **Total** | **12,186** | **100.0** | |

(Data source: Weighted samples from the 2016 AUA Annual Census.)

## TABLE 7-6

### Does Your Practice Routinely Use Timeouts prior to Procedures in the Ambulatory Clinic?

| Timeout Use | Population Represented | | |
|---|---|---|---|
| | Number | Percent (%) | ± MOE (%) |
| Yes | 9,393 | 77.1 | 2.3 |
| No | 2,540 | 20.8 | 2.3 |
| Do Not Know | 253 | 2.1 | 0.8 |
| **Total** | **12,186** | **100.0** | |

(Data source: Weighted samples from the 2016 AUA Annual Census.)

## TABLE 7-7

### Are You Planning to Participate in the Merit-based Incentive Payment System (MIPS)?

| MIPS Reporting | Population Represented | | |
|---|---|---|---|
| | Number | Percent (%) | ± MOE (%) |
| Yes | 3,514 | 28.8 | 2.5 |
| No | 2,295 | 18.8 | 2.1 |
| Do Not Know | 6,378 | 52.3 | 2.6 |
| **Total** | **12,186** | **100.0** | |

(Data source: Weighted samples from the 2016 AUA Annual Census.)

# Section 8: Selected Urological Condition - Benign Prostatic Hyperplasia (BPH)

## *Primary Observations*

- A majority of practicing urologists (82 percent) in the United States treat benign prostatic hyperplasia (BPH) surgically (Table 8-1).
- The most common procedure is bipolar TURP.

### TABLE 8-1

### Do You Treat BPH Surgically?

| | Population Represented | | |
|---|---|---|---|
| Surgical Treatment of BPH | Number | Percent (%) | ± MOE (%) |
| Yes | 9,993 | 82.0 | 1.5 |
| No | 2,149 | 17.6 | 1.5 |
| Do Not Know | 44 | 0.4 | 0.2 |
| **Total** | **12,186** | **100.0** | |

(Data source: Weighted samples from the 2016 AUA Annual Census.)

### TABLE 8-2

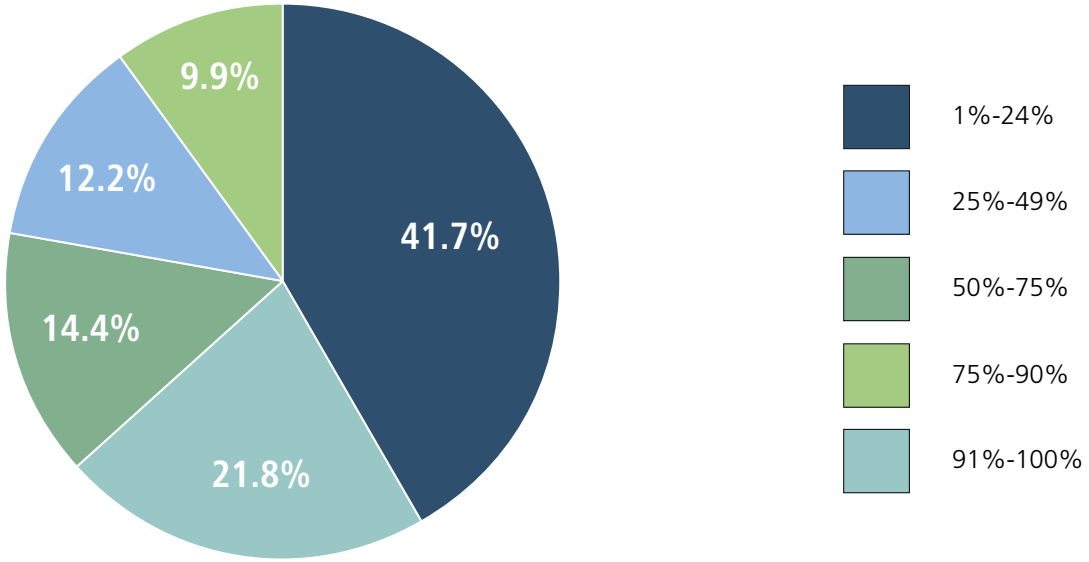
### Of Your BPH Patients Treated Surgically, What Percentages Are Treated Using Monopolar Transurethral Resection of the Prostate (TURP)?

| | Population Represented | | |
|---|---|---|---|
| Monopolar TURP | Number | Percent (%) | ± MOE (%) |
| None | 5,663 | 56.7 | 2.1 |
| ≥ 1% | 4,330 | 43.3 | 2.1 |
| **Total** | **9,993** | **100.0** | |

(Data source: Weighted samples from the 2016 AUA Annual Census.)

## FIGURE 8-1

### Distribution of Practicing Urologists by the Percentages of Their BPH Patients Treated Using TURP – Monopolar




(Data source: Weighted samples from the 2016 AUA Annual Census.)

## TABLE 8-3

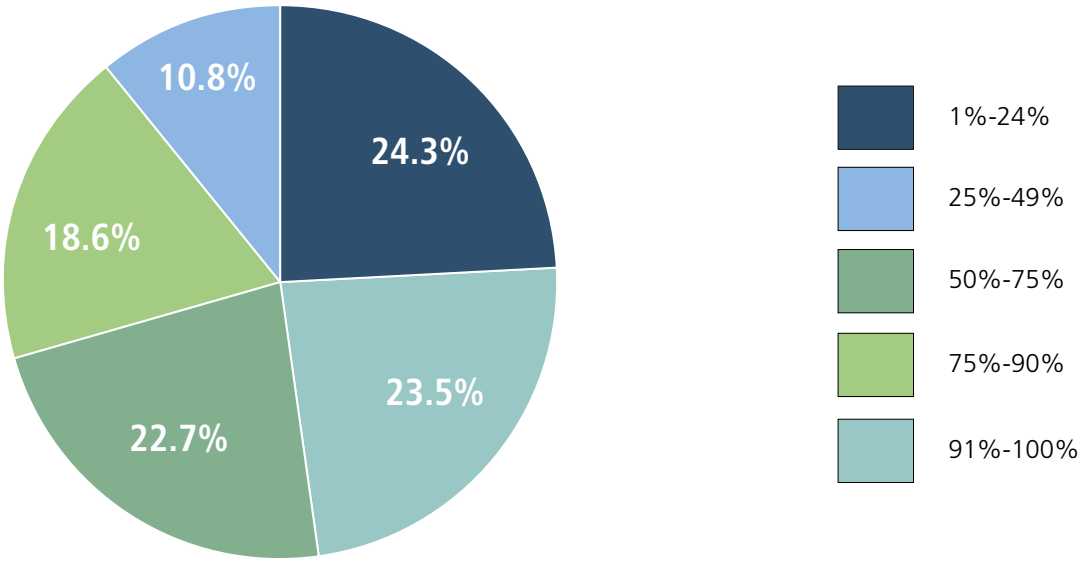
### Of Your BPH Patients Treated Surgically, What Percentages Are Treated Using Bipolar TURP?

| Bipolar TURP | Population Represented | | |
|---|---|---|---|
| | Number | Percent (%) | ± MOE (%) |
| None | 3,369 | 33.7 | 2.0 |
| ≥ 1% | 6,623 | 66.3 | 2.0 |
| **Total** | **9,993** | **100.0** | |

(Data source: Weighted samples from the 2016 AUA Annual Census.)

## FIGURE 8-2

### Distribution of Practicing Urologists by the Percentages of Their BPH Patients Treated Using TURP – Bipolar




(Data source: Weighted samples from the 2016 AUA Annual Census.)

## TABLE 8-4

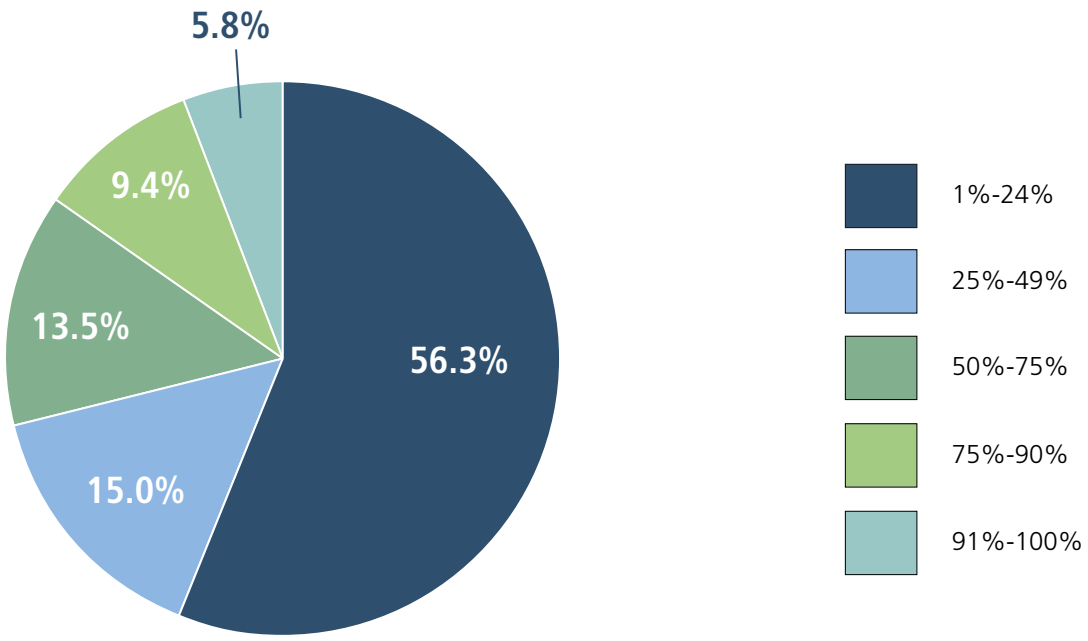
### Of Your BPH Patients Treated Surgically, What Percentages Are Treated Using Button-TURP (Button Procedure)?

| | Population Represented | | |
|---|---|---|---|
| Button-TURP (Button Procedure) | Number | Percent (%) | ± MOE (%) |
| None | 6,490 | 64.9 | 2.0 |
| ≥ 1% | 3,503 | 35.1 | 2.0 |
| **Total** | **9,993** | **100.0** | |

(Data source: Weighted samples from the 2016 AUA Annual Census.)

## FIGURE 8-3

### Distribution of Practicing Urologists by the Percentages of Their BPH Patients Treated Using Button-TURP




(Data source: Weighted samples from the 2016 AUA Annual Census.)

## TABLE 8-5

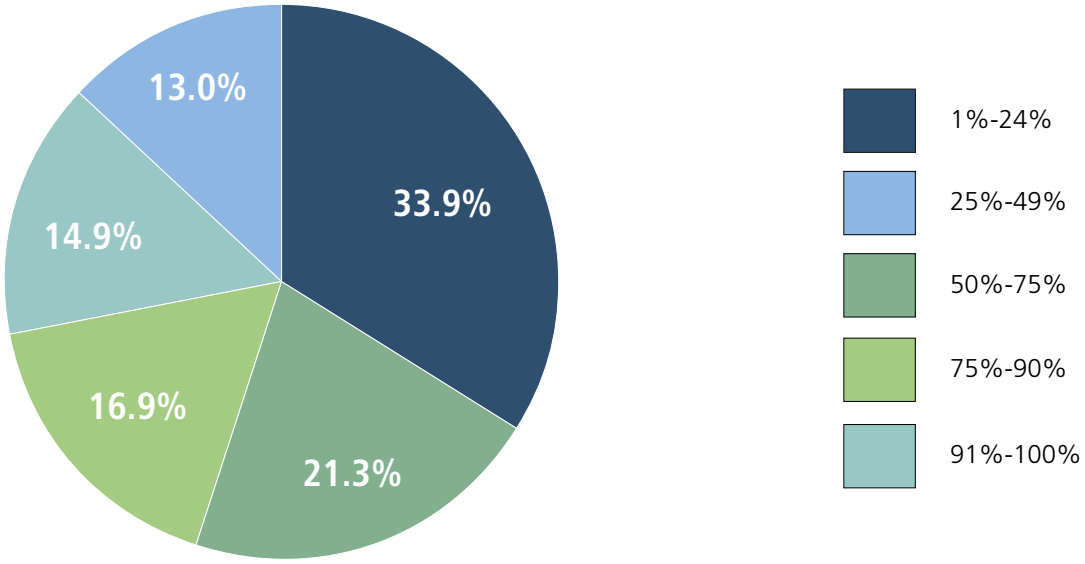
### Of Your BPH Patients Treated Surgically, What Percentages Are Treated Using Photo-Selective Vaporization (PVP)?

| PVP | Population Represented | | |
|---|---|---|---|
| | Number | Percent (%) | ± MOE (%) |
| None | 6,091 | 61.0 | 2.0 |
| ≥ 1% | 3,902 | 39.0 | 2.0 |
| **Total** | **9,993** | **100.0** | |

(Data source: Weighted samples from the 2016 AUA Annual Census.)

## FIGURE 8-4

### Distribution of Practicing Urologists by the Percentages of Their BPH Patients Treated Using PVP




(Data source: Weighted samples from the 2016 AUA Annual Census.)

## TABLE 8-6

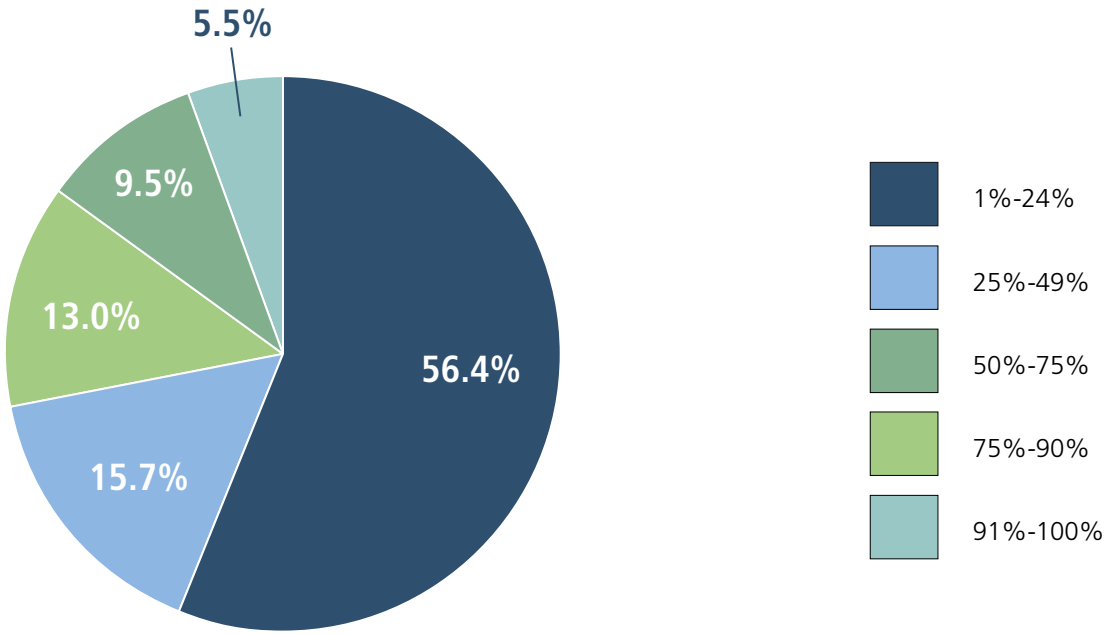
### Of Your BPH Patients Treated Surgically, What Percentages Are Treated Using Holmium Laser Ablation of the Prostate (HoLAP)?

| | Population Represented | | |
|---|---|---|---|
| HoLAP | Number | Percent (%) | ± MOE (%) |
| None | 9,304 | 93.1 | 1.1 |
| ≥ 1% | 688 | 6.9 | 1.1 |
| **Total** | **9,993** | **100.0** | |

(Data source: Weighted samples from the 2016 AUA Annual Census.)

## FIGURE 8-5

Distribution of Practicing Urologists by the Percentages of Their BPH Patients Treated Using HoLAP




(Data source: Weighted samples from the 2016 AUA Annual Census.)

## TABLE 8-7

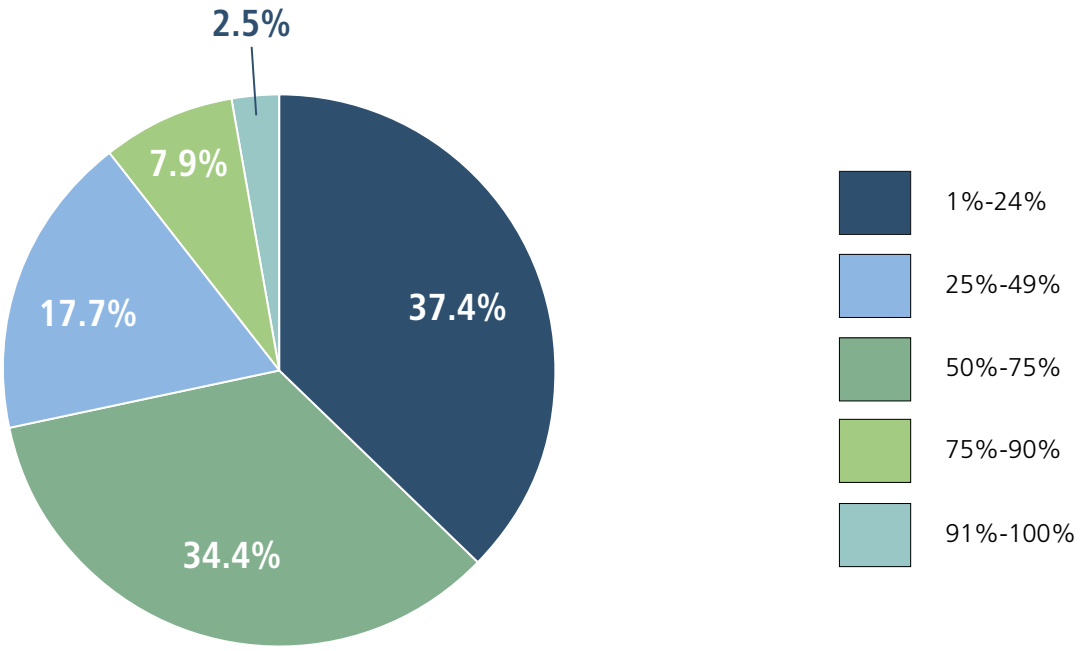
Of Your BPH Patients Treated Surgically, What Percentages Are Treated Using Holmium Laser Enucleation of the Prostate (HoLEP)?

| | Population Represented | | |
|---|---|---|---|
| HoLEP | Number | Percent (%) | ± MOE (%) |
| None | 9,633 | 96.4 | 0.8 |
| ≥ 1% | 360 | 3.6 | 0.8 |
| **Total** | **9,993** | **100.0** | |

(Data source: Weighted samples from the 2016 AUA Annual Census.)

## FIGURE 8-6

### Distribution of Practicing Urologists by the Percentages of Their BPH Patients Treated Using HoLEP




(Data source: Weighted samples from the 2016 AUA Annual Census.)

## TABLE 8-8

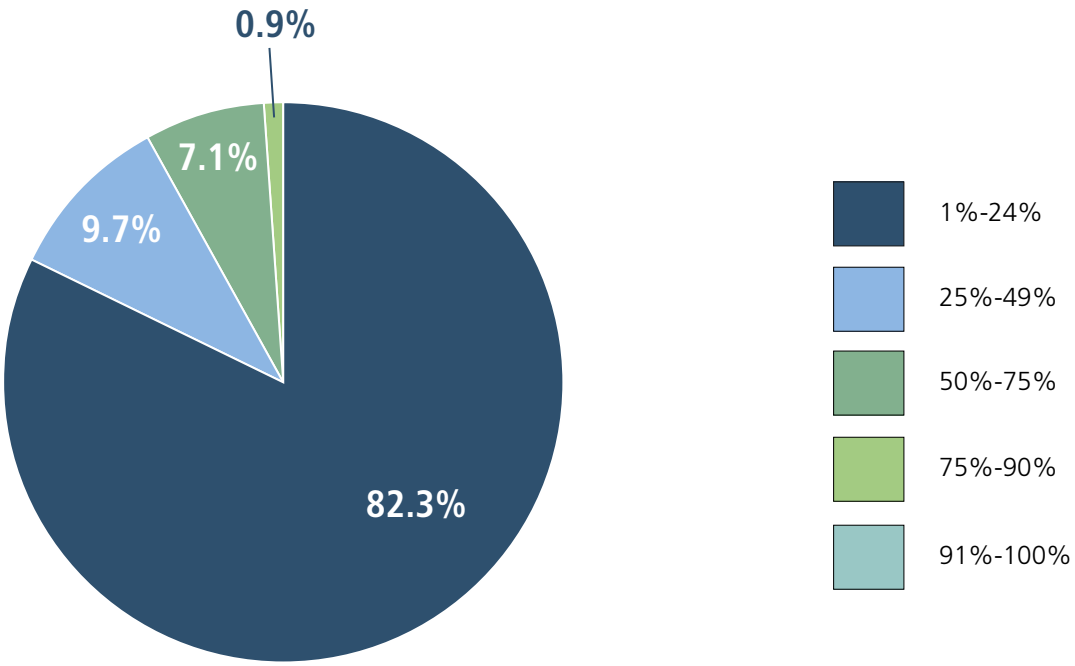
### Of Your BPH Patients Treated Surgically, What Percentages Are Treated Using UroLift?

| | Population Represented | | |
|---|---|---|---|
| UroLift | Number | Percent (%) | ± MOE (%) |
| None | 8,671 | 86.8 | 1.4 |
| ≥ 1% | 1,322 | 13.2 | 1.4 |
| **Total** | **9,993** | **100.0** | |

(Data source: Weighted samples from the 2016 AUA Annual Census.)

## FIGURE 8-7

Distribution of Practicing Urologists by the Percentages of Their BPH Patients Treated Using UroLift




(Data source: Weighted samples from the 2016 AUA Annual Census.)

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