

Renal Mass Management Questionnaire

There are presently many options with which urologists may manage renal masses. We kindly request that you participate in a brief survey pertaining to your practice patterns in treating patients with renal masses. The survey will take 3-5 minutes to complete.

We appreciate your time and consideration.

Training

When did you complete residency?

- 0-5 years ago
- 6-10 years ago
- 11-15 years ago
- Over 15 years ago

If you are fellowship-trained, put a check next to each fellowship you completed:

- Endourology
- Reconstructive
- Oncology
- Transplant
- Female Urology
- Infertility
- Pediatrics
- Research
- Other:

Please describe other Fellowship: _____

If applicable, when did you complete your most recent fellowship?

- 0-5 years ago
- 6-10 years ago
- 11-15 years ago
- Over 15 years ago

Practice Setting & Patient Population

In which region do you practice?

- West
- Midwest
- Northeast/New England
- South
- Other

How would you describe your practice type?

- Institution-based (academic)
- Institution-based (non-academic)
- Private practice

How would you describe the surroundings of your practice?

- Metropolitan
- Non-metropolitan (e.g. small town, rural)

On average, how many patients do you see per week?

- Fewer than 50
- 50-75
- 76-100
- 101-125
- 126-150
- Greater than 150

What percentage of your patients are obese (BMI > 30)?

- < 10%
- 10-25%
- 25-50%
- 50-75%
- 75-100%

In the past year...

How many renal masses did you manage? Please consider all cases, including: active surveillance, surgery, and image-guided therapy (cryoablation, microwave ablation, radiofrequency ablation).

- Fewer than 5
- 5-10
- 11-20
- 21-30
- 31-40
- More than 40

Please indicate which management options for renal masses were NOT available as part of your practice. If you were able to refer a patient for one of the image-guided therapies, please consider that as an available treatment.

- Robotic surgery
- Laparoscopic surgery
- Percutaneous ablation (cryo, microwave, or radiofrequency)
- Laparoscopic ablation (cryo, microwave, or radiofrequency)

For what percentage of renal masses did you choose active surveillance?

- 0%
- 10%
- 25%
- 50%
- 75%
- 90%
- 100%

For the remaining renal masses, how often did you perform or refer patients for...

	0%	10%	25%	50%	75%	90%	100%
Open partial nephrectomy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Open radical nephrectomy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Laparoscopic partial nephrectomy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Laparoscopic radical nephrectomy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Robotic partial nephrectomy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Robotic radical nephrectomy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Percutaneous ablation (cryo, microwave, or radiofrequency)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Laparoscopic ablation (cryo, microwave, or radiofrequency)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

For those patients who underwent an image guided-therapy, what percentage of the time was each of the following modalities used?

	0%	10%	25%	50%	75%	90%	100%
Cryoablation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Radiofrequency ablation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Microwave ablation

5 years ago...

How many renal masses did you manage? Please consider all cases, including: active surveillance, surgery, and image-guided therapy (cryoablation, microwave ablation, radiofrequency ablation).

Fewer than 5
 5-10
 11-20
 21-30
 31-40
 More than 40

Please indicate which management options for renal masses were NOT available as part of you practice. If you were able to refer a patient for one of the image-guided therapies, please consider that as an available treatment.

Robotic surgery
 Laparoscopic surgery
 Percutaneous ablation (cryo, microwave, or radiofrequency)
 Laparoscopic ablation (cryo, microwave, or radiofrequency)

For what percentage of renal masses did you choose active surveillance?

0%
 10%
 25%
 50%
 75%
 90%
 100

For the remaining renal masses, how often did you perform or refer patients for...

	0%	10%	25%	50%	75%	90%	100%
Open partial nephrectomy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Open radical nephrectomy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Laparoscopic partial nephrectomy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Laparoscopic radical nephrectomy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Robotic partial nephrectomy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Robotic radical nephrectomy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Percutaneous ablation (cryo, microwave, or radiofrequency)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Laparoscopic ablation (cryo, microwave, or radiofrequency)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

For those patients who underwent an image guided-therapy, what percentage of the time was each of the following modalities used?

	0%	10%	25%	50%	75%	90%	100%
Cryoablation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Radiofrequency ablation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Microwave ablation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Supplementary Table 1. Change in usage of treatment modalities for SRMs from five years ago to last year based on practice type.

Change in Usage Per Modality	Percentage of Respondents			p-value
	Academic (N=42)	Non-academic, hospital-based (N=16)	Private practice (N=19)	
Open partial nephrectomy				0.979
Less now	40.5	43.8	47.4	
Same amount	54.8	56.3	47.4	
More now	4.8	0.0	5.3	
Open radical nephrectomy				0.609
Less now	16.7	31.3	21.1	
Same amount	76.2	62.5	78.9	
More now	7.1	6.3	0.0	
Laparoscopic partial nephrectomy				0.673
Less now	21.4	25.0	36.8	
Same amount	71.4	75.0	57.9	
More now	7.1	0.0	5.3	
Laparoscopic radical nephrectomy				0.905
Less now	38.1	31.3	26.3	
Same amount	52.4	62.5	63.2	
More now	9.5	6.3	10.5	
Robotic partial nephrectomy				0.974
Less now	2.4	0.0	0.0	
Same amount	42.9	50.0	47.4	
More now	54.8	50.0	52.6	
Robotic radical nephrectomy				0.377
Less now	4.8	0.0	10.5	
Same amount	78.6	81.3	57.9	
More now	16.7	18.8	31.6	
Percutaneous ablation				0.923
Less now	19.0	12.5	21.1	
Same amount	59.5	68.8	52.6	
More now	21.4	18.8	26.3	
Laparoscopic ablation				0.840
Less now	19.0	12.5	21.1	
Same amount	59.5	68.8	52.6	
More now	21.4	18.8	26.3	
Cryoablation				0.308
Less now	21.4	10.0	23.1	
Same amount	60.7	40.0	38.5	
More now	17.9	50.0	38.5	
Radiofrequency ablation				0.747
Less now	3.6	0.0	7.7	
Same amount	71.4	90.0	76.9	
More now	25.0	10.0	15.4	
Microwave ablation				0.745
Less now	3.6	0.0	7.7	
Same amount	71.4	90.0	76.9	
More now	25.0	10.0	15.4	

Supplementary Table 2. Change in usage of treatment modalities for SRMs from five years ago to last year based on practice setting.

Change in Usage Per Modality	Percentage of Respondents		p-value
	Metropolitan (N=62)	Non-metropolitan (N=17)	
Open partial nephrectomy			0.555
Less now	40.0	52.9	
Same amount	55.0	47.1	
More now	5.0	0.0	
Open radical nephrectomy			0.067
Less now	16.7	35.3	
Same amount	80.0	52.9	
More now	3.3	11.8	
Laparoscopic partial nephrectomy			0.895
Less now	25.0	29.4	
Same amount	70.0	64.7	
More now	5.0	5.9	
Laparoscopic radical nephrectomy			0.270
Less now	30.0	47.1	
Same amount	61.7	41.2	
More now	8.3	11.8	
Robotic partial nephrectomy			1.000
Less now	1.7	0.0	
Same amount	45.0	47.1	
More now	53.3	52.9	
Robotic radical nephrectomy			0.529
Less now	5.0	5.9	
Same amount	76.7	64.7	
More now	18.3	29.4	
Percutaneous ablation			0.233
Less now	21.7	5.9	
Same amount	55.0	76.5	
More now	23.3	17.6	
Laparoscopic ablation			0.804
Less now	23.3	17.6	
Same amount	75.0	82.4	
More now	1.7	0.0	
Cryoablation			0.050
Less now	12.5	45.5	
Same amount	57.5	27.3	
More now	30.0	27.3	
Radiofrequency ablation			0.040
Less now	40.0	36.4	
Same amount	57.5	36.4	
More now	2.5	27.3	
Microwave ablation			0.070
Less now	5.0	0.0	
Same amount	82.5	54.5	
More now	12.5	45.5	

Supplementary Table 3. Change in usage of treatment modalities for SRMs from five years ago to last year based on fellowship training.

Change in Usage Per Modality	Percentage of Respondents		
	No fellowship (N=18)	Fellowship (N=59)	p-value
Open partial nephrectomy			0.728
Less now	50.0	40.7	
Same amount	50.0	54.2	
More now	0.0	5.1	
Open radical nephrectomy			0.786
Less now	22.2	20.3	
Same amount	77.8	72.9	
More now	0.0	6.8	
Laparoscopic partial nephrectomy			0.917
Less now	22.2	27.1	
Same amount	72.2	67.8	
More now	5.6	5.1	
Laparoscopic radical nephrectomy			1.000
Less now	33.3	33.9	
Same amount	61.1	55.9	
More now	5.6	10.2	
Robotic partial nephrectomy			1.000
Less now	0.0	1.7	
Same amount	44.4	45.8	
More now	55.6	52.5	
Robotic radical nephrectomy			0.007
Less now	16.7	1.7	
Same amount	50.0	81.4	
More now	33.3	16.9	
Percutaneous ablation			0.362
Less now	11.1	20.3	
Same amount	55.6	61.0	
More now	33.3	18.6	
Laparoscopic ablation			0.806
Less now	16.7	23.7	
Same amount	83.3	74.6	
More now	0.0	1.7	
Cryoablation			0.915
Less now	23.1	18.4	
Same amount	46.2	52.6	
More now	30.8	28.9	
Radiofrequency ablation			0.495
Less now	30.8	42.1	
Same amount	53.8	52.6	
More now	15.4	5.3	
Microwave ablation			0.085
Less now	7.7	2.6	
Same amount	92.3	71.1	
More now	0.0	26.3	

Supplementary Table 4a. Change in usage of treatment modalities for SRMs from five years ago to last year based on fellowship type.

Change in Usage Per Modality	Percentage of Respondents				p-value
	Endourology (N=36)	Oncology (N=14)	Other fellowship (N=9)	No fellowship (N=18)	
Open partial nephrectomy					0.303
Less now	36.1	64.3	22.2	50.0	
Same amount	58.3	35.7	66.7	50.0	
More now	5.6	0.0	11.1	0.0	
Open radical nephrectomy					0.517
Less now	27.8	7.1	11.1	22.2	
Same amount	66.7	85.7	77.8	77.8	
More now	5.6	7.1	11.1	0.0	
Laparoscopic partial nephrectomy					0.289
Less now	36.1	7.1	22.2	22.2	
Same amount	55.6	92.9	77.8	72.2	
More now	8.3	0.0	0.0	5.6	
Laparoscopic radical nephrectomy					0.728
Less now	38.9	35.7	11.1	33.3	
Same amount	52.8	50.0	77.8	61.1	
More now	8.3	14.3	11.1	5.6	
Robotic partial nephrectomy					0.039
Less now	0.0	0.0	11.1	0.0	
Same amount	33.3	64.3	66.7	44.4	
More now	66.7	35.7	22.2	55.6	
Robotic radical nephrectomy					0.111
Less now	2.8	0.0	0.0	16.7	
Same amount	83.3	71.4	88.9	50.0	
More now	13.9	28.6	11.1	33.3	
Percutaneous ablation					0.322
Less now	22.2	21.4	11.1	11.1	
Same amount	66.7	57.1	44.4	55.6	
More now	11.1	21.4	44.4	33.3	
Laparoscopic ablation					0.865
Less now	27.8	14.3	22.2	16.7	
Same amount	69.4	85.7	77.8	83.3	
More now	2.8	0.0	0.0	0.0	
Cryoablation					1.000
Less now	21.4	14.3	0.0	23.1	
Same amount	50.0	57.1	66.7	46.2	
More now	28.6	28.6	33.3	30.8	
Radiofrequency ablation					0.941
Less now	42.9	42.9	33.3	30.8	
Same amount	50.0	57.1	66.7	53.8	
More now	7.1	0.0	0.0	15.4	
Microwave ablation					0.048
Less now	3.6	0.0	0.0	7.7	
Same amount	60.7	100.0	100.0	92.3	
More now	35.7	0.0	0.0	0.0	

Supplementary Table 4b. Usage rates of robotic partial nephrectomy for SRMs based on fellowship type.

Usage Rate	Percentage of Respondents		p-value
	Endourology (N=48)	Other or no fellowship (N=68)	
Robotic partial nephrectomy			0.064
<75%	60.4	76.5	
>75%	39.6	23.5	

Supplementary Table 5a. Usage rates of laparoscopic partial nephrectomy within the past year based on number of years since residency.

Usage Rate	Percentage of Respondents		
	0-15 Years Since Residency (N=95)	≥15 Years Since Residency (N=21)	p-value
Laparoscopic partial nephrectomy			0.002
0%	87.4	61.9	
10%	7.4	4.8	
≥25%	5.3	33.3	

Supplementary Table 5b. Change in usage of treatment modalities for SRMs from five years ago to last year based on number of years since residency.

Change in Usage Per Modality	Percentage of Respondents			p-value
	0-5 Years Since Residency (N=22)	6-10 Years Since Residency (N=21)	≥11 Years Since Residency (N=34)	
Open partial nephrectomy				0.735
Less now	36.4	47.6	44.1	
Same amount	54.5	52.4	52.9	
More now	9.1	0.0	2.9	
Open radical nephrectomy				0.658
Less now	13.6	28.6	20.6	
Same amount	77.3	66.7	76.5	
More now	9.1	4.8	2.9	
Laparoscopic partial nephrectomy				0.444
Less now	13.6	38.1	26.5	
Same amount	81.8	57.1	67.6	
More now	4.5	4.8	5.9	
Laparoscopic radical nephrectomy				0.951
Less now	31.8	33.3	35.3	
Same amount	59.1	61.9	52.9	
More now	9.1	4.8	11.8	
Robotic partial nephrectomy				0.033
Less now	4.5	0.0	0.0	
Same amount	68.2	42.9	32.4	
More now	27.3	57.1	67.6	
Robotic radical nephrectomy				0.699
Less now	0.0	9.5	5.9	
Same amount	81.8	66.7	73.5	
More now	18.2	23.8	20.6	
Percutaneous ablation				0.771
Less now	18.2	23.8	14.7	
Same amount	54.5	52.4	67.6	
More now	27.3	23.8	17.6	
Laparoscopic ablation				0.458
Less now	13.6	19.0	29.4	
Same amount	86.4	81.0	67.6	
More now	0.0	0.0	2.9	
Cryoablation				0.642
Less now	8.3	15.4	26.9	
Same amount	66.7	46.2	46.2	
More now	25.0	38.5	26.9	
Radiofrequency ablation				0.330
Less now	33.3	53.8	34.6	
Same amount	58.3	30.8	61.5	
More now	8.3	15.4	3.8	
Microwave ablation				0.574
Less now	0.0	7.7	3.8	
Same amount	91.7	76.9	69.2	
More now	8.3	15.4	26.9	