

Impact of Rurality on Access to Complex Urological Surgery

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Methods

Data sources



20% Medicare Provider Analysis and Reviewer (MedPAR) inpatient claims from 2016

US Census data to determine rurality

Definitions

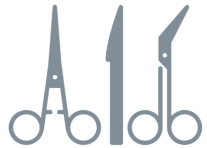
Core-based statistical area (CBSA) used to categorize counties

- Metropolitan (>50k people)
- Micropolitan (between 10 and 50k people)
- Non-CBSA or rural (<10k people)

Complex urologic surgery CPT codes

- Cystectomy
- Partial nephrectomy
- Percutaneous nephrolithotomy (PCNL)

One-way distance (miles) between providers and patients calculated based on zip codes



Results

Geographic distribution of patients and providers

	Metropolitan	Micropolitan	Non-CBSA
Patients	79%	13%	8%
Providers	87%	8%	5%

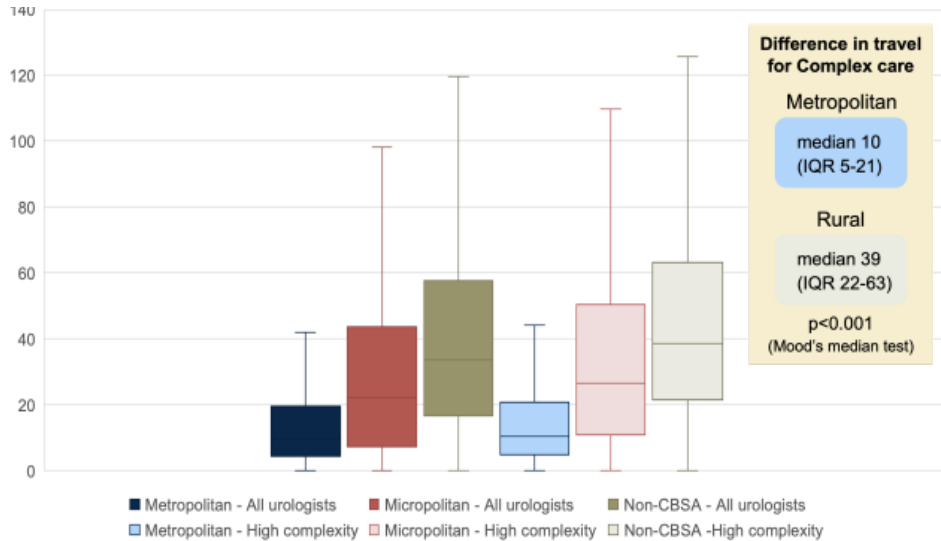
Where do patients travel for high complexity urologic care

		Providers		
		Metropolitan	Micropolitan	Non-CBSA
Patients	Metropolitan	94.6%	2%	3.4%
	Micropolitan	55%	40.2%	4.8%
	Non-CBSA	70.9%	18.4%	10.7%

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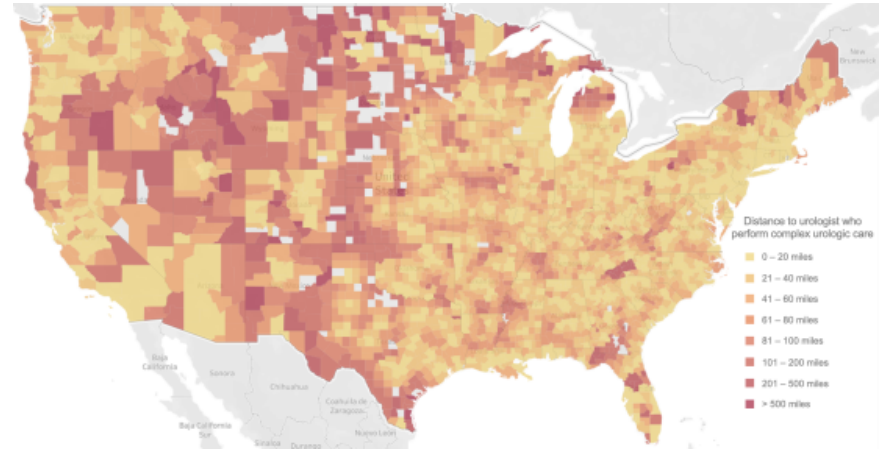
Results

Distance patients traveled for care by geographic location



Results

County-level distance to urologist who performs complex urologic surgery



Conclusion

~70% of rural patients traveled to metropolitan areas for complex urologic care and rural patients had to **travel 4x** as far as their metropolitan counterparts