



Comparative Cost-Effectiveness of Percutaneous Nephrolithotomy, Ureteroscopy, and Extracorporeal Shock Wave Lithotripsy for the Management of 1-2cm Renal Stones

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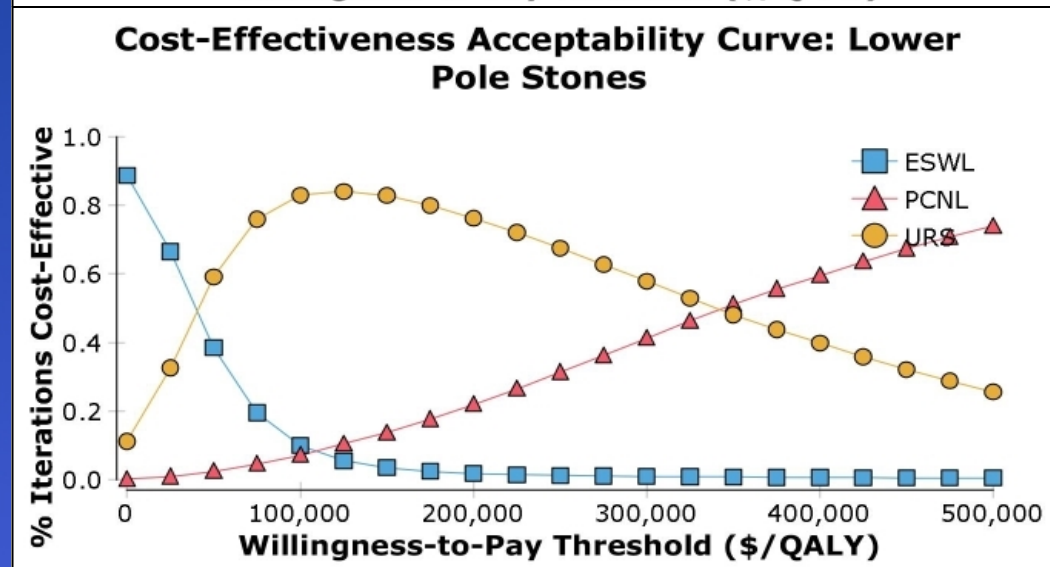
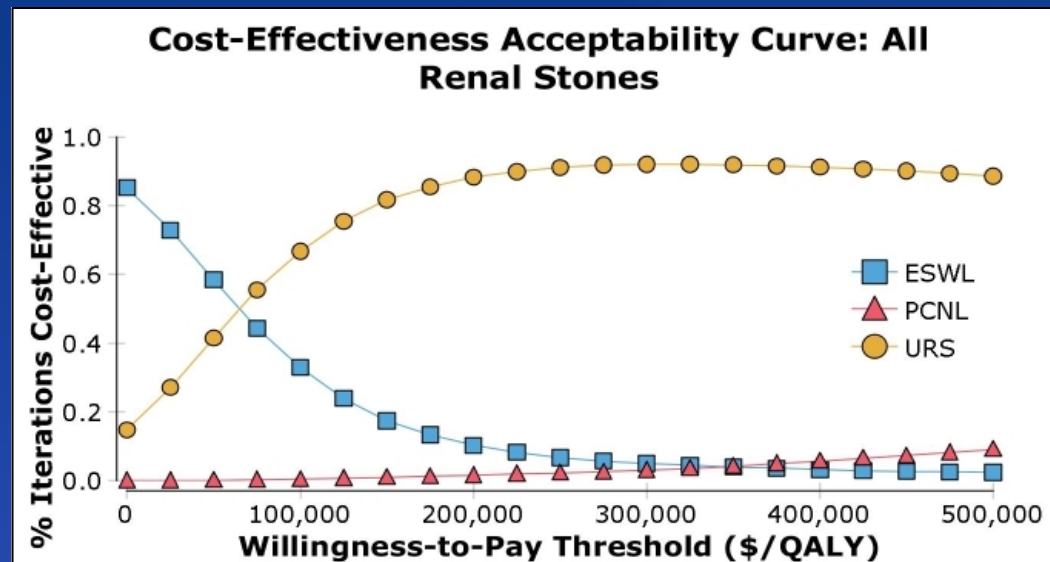
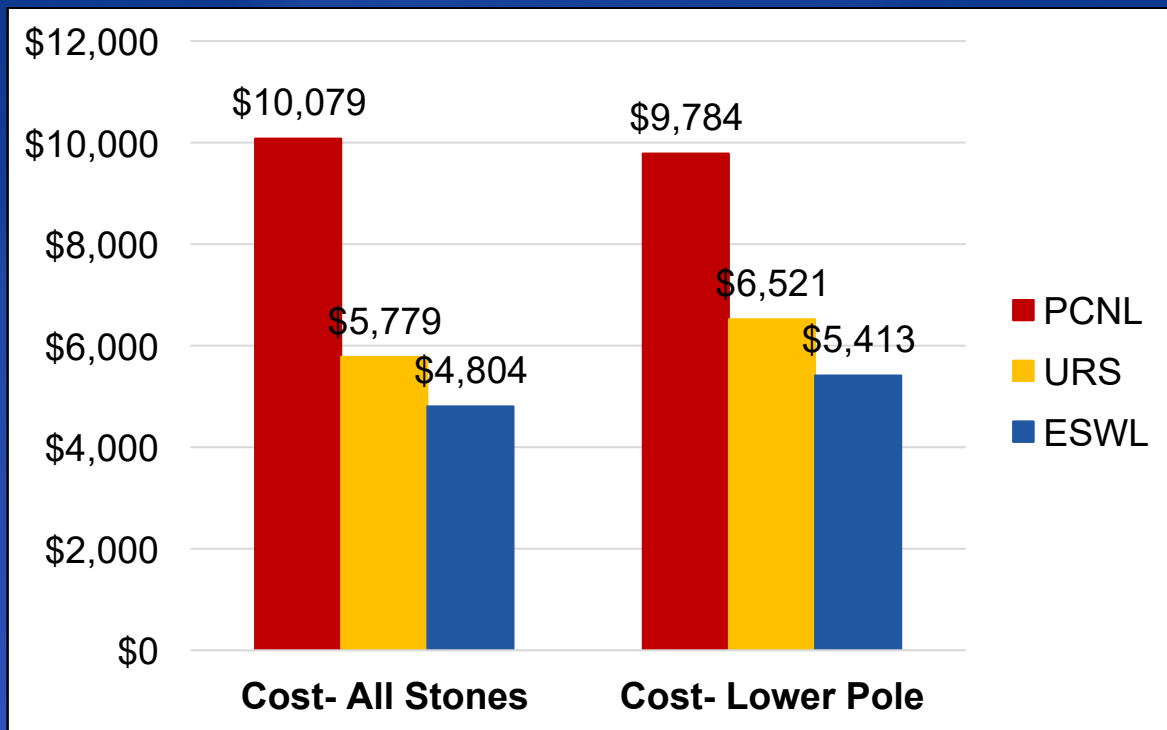
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INTRODUCTION AND METHODS

- Guidelines for treatment of renal stones 1-2cm in size include URS, PCNL, ESWL
- Recent meta-analysis found highest SFR with PCNL; also highest complication rate
- **OBJECTIVE:** To compare the cost-effectiveness of PCNL, URS, and ESWL for 1-2cm renal stones
- Markov Model
 - Stone free and complication rates from meta-analysis¹
 - Cost: Medicare
- Incremental Cost-Effectiveness Ratio (ICER)
 - Cost (\$) / additional QALY gained
 - Willingness to Pay Threshold: \$100,000/QALY

¹Chung et al., 2019

RESULTS



Management Option	QALYs All Stones	QALYs Lower Pole
ESWL	REFERENCE	REFERENCE
URS	+ 0.014	+ 0.028
PCNL	+ 0.017	+ 0.038

SENSITIVITY ANALYSIS: If URS stone free <0.82 or PCNL cost <\$5,205, URS no longer CE