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Cost Utility of Treatment of Stress Urinary Incontinence [poster abstract]

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COST UTILITY OF TREATMENT OF STRESS URINARY INCONTINENCE

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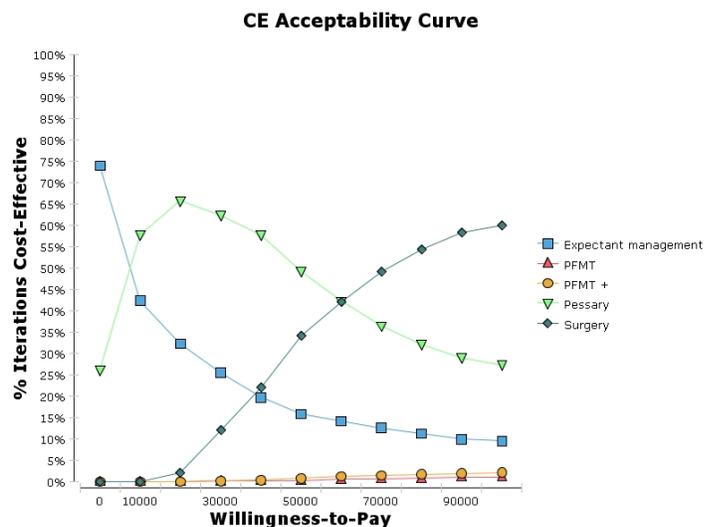
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Objective: There are many possible treatment options for stress urinary incontinence. We sought to investigate the cost-utility of non-surgical versus surgical treatments.

Study Design: A decision analysis model was created to compare non-surgical and surgical treatment options for healthy women with stress urinary incontinence. Decision paths included conservative management, pelvic floor physical therapy, pelvic floor physical therapy with electrical stimulation, incontinence pessary and surgical treatment with a midurethral sling. A Markov model cohort analysis was performed with a cycle length of one year starting at age 45 with a lifetime horizon. Probabilities, success rates and utilities for health outcomes were obtained from the literature or, when unavailable, by expert opinion. A cost utility analysis was performed using US recommendations from a societal perspective. This includes cost to the patient and the health plan. Cost data was obtained from Medicare reimbursement in 2012 US dollars. Cost and quality adjusted life years were discounted at 3% per year. Sensitivity analysis was performed to test the validity of our model.

Results: Analysis of the model showed that incontinence pessary was the most cost-effective treatment



option with a cost of \$11,411 for 18.9 quality adjusted life years. At a willingness to pay threshold of \$50,000, incontinence pessary remained the most cost-effective treatment option. At a willingness to pay threshold of \$60,000, surgery became the most cost-effective treatment option. Pelvic floor physical therapy and pelvic floor physical therapy with electrical stimulation were dominated at any willingness to pay threshold.

Conclusion: This model shows that surgical correction is likely the most cost-effective treatment option for young healthy women with stress urinary incontinence. These results are driven by the high success rate of minimally invasive slings compared to other treatment modalities. More studies are needed to define utility values for health states experienced by women with stress urinary incontinence. This will enhance our ability to develop more accurate cost-utility models and offer the best treatment for women affected by incontinence.