societal perspective, CK costs $8,400/QALY compared to surgery, CK remained dominant versus IMRT and PT. Results were most sensitive to cost of CK and surgery, and utility weights for GU and SD. CONCLUSIONS: CyberKnife was found to be cost-effective versus surgery, and resulted in cost savings and improved quality-adjusted survival compared to radiation options for the treatment of localized PC.

PMD22 COST-EFFECTIVENESS ANALYSIS OF THREE WOUND DRESSINGS FOR THE TREATMENT OF PRESSURE ULCERS FROM THE PUBLIC HOSPITAL PERSPECTIVE
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OBJECTIVES: Each year in Brazil, 42.3% of all inpatients present skin ulcers during the hospitalization period. Current clinical practice guidelines have not established a gold standard protocol of care for pressure ulcers. Thus, this study aimed to develop a cost-effectiveness analysis comparing three different dressings: hydrocolloid, silver sulfadiazine 1% cream (SSD) and saline gauze (SG), under the perspective of Brazilian public hospitals.
METHODS: The mean time to healing (MTH) for each protocol was obtained from systematic reviews. Data from the Brazilian Hospital Information System from January 1st to December 31st 2009 was used to define the number of hospital admissions due to pressure ulcers (only non-surgical records with L89 ICD-10 code were included). The model assumed that SG is the current practice in Brazilian public hospitals and patients and are discharged at the time their wound heals. The difference in MTH was applied to the average length of stay (LOS) reported in the database. Resource use was estimated through expert panel and unit costs were obtained from Brazilian official price lists.
RESULTS: 934 hospitalizations were identified with mean LOS of 13.72 days. Hydrocolloid and SSD reduce the MTH in 4.72 and 2.72 days, respectively. Hydrocolloid as wound management protocol would save $342.89BRL per patient and $882.259 for the 2009 cohort. SSD projected savings was $54.9RL per patient and $115.79BRL for the entire cohort. CONCLUSIONS: Hydrocolloid dressing has shown higher efficacy when compared to SG or SSD dressings, with fewer costs. The clinical and economic incremental results between different dressings reinforce the need of evidence-based decision making and rational resource allocation.

PMD23 COST-EFFECTIVENESS OF SPECIFIC USE OF THE LANCET BD QUIKHEEL® IN SCREENING PROGRAM OF NEONATAL CONGENTIAL HYPOTHYROIDISM IN MEXICO
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OBJECTIVES: Congenital hypothyroidism (CH) is a serious conditions and expensive illness. The purpose of this study was to develop an economic model in order to evaluate the cost-effectiveness ratios between two heel lancet devices in terms of the procedure in neonates undergoing the newborn screening test at the Social Security Institute (IMSS) from the health care payers’ perspective.
METHODS: A cost-effectiveness analysis was developed using a decision-tree model. The model simulates costs and effectiveness outcomes in a 15 years period. The comparators were: Heel lance BD Safety-Flow lancet® and the BD QuikHeel lancet. A combined decision tree and Markov model was developed to compare the costs, life-years (LYs) and quality-adjusted life-years (QALYs) of TAVI (transfemoral (TF) and transapical (TA) approaches) to SM and SAVR over a 5-year time horizon. This analysis was conducted from a third party payer’s perspective.
RESULTS: In the primary analysis, comparing TF and SM resulted in an incremental cost-effectiveness ratio (ICER) of $126,874/LY and $222,378/QALY. Comparing TA and SM resulted in an ICER of $262,677/LY and $454,241/QALY. In the secondary analysis, TA and SAVR were compared, resulting in an ICER of $39,676/LY and $81,758/QALY. Comparing TA and SAVR resulted in an ICER of $183,454/LY. TA was dominated by SAVR when comparing QALYs. The total expected value of perfect information (EVPPI) was at a maximum with a value of $6,928 at a WTP threshold of $80,000/QALY. The expected value of partial perfect information (EVPI) was highest for the 30-day clinical event rates when compared to the EVPPI values for the 1-year, 2-year and >3-year clinical event rates.
CONCLUSIONS: This economic evaluation suggested that TAVI might not be a cost-effective option for inoperable patients in comparison to SM. The secondary analysis suggested that TAVI might be a better one compared to SAVR. To reduce the uncertainty in our estimate it might be worth-while to obtain empirical evidence related to clinical event rates occurring 30-days post-operation.

PMD25 THE COST-UTILITY AND VALUE OF INFORMATION OF TRANSCATHETER AORTIC VALVE IMPLANTATION COMPARED TO STANDARD MANAGEMENT AND SURGICAL AORTIC VALVE REPLACEMENT IN PATIENTS WITH SEVERE SYMPTOMATIC AORTIC VALVE STENOSIS
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OBJECTIVES: The primary analysis of this study was to estimate the cost-effectiveness of TAVI compared to standard management (SM) in inoperable patients with severe, symptomatic aortic valve stenosis (SSAVS). The secondary analysis was to preliminarily explore both the cost-effectiveness and value of information of TAVI compared to surgical aortic valve replacement (SAVR) in operable patients at high surgical risk with SSAVS. METHODS: A combined decision tree and Markov model was developed to compare the costs, life-years (LYs) and quality-adjusted life-years (QALYs) of TAVI (transfemoral (TF) and transapical (TA) approaches) to SM and SAVR over a 5-year time horizon. This analysis was conducted from a third party payer’s perspective.
RESULTS: In the primary analysis, comparing TF and SM resulted in an incremental cost-effectiveness ratio (ICER) of $126,874/LY and $222,378/QALY. Comparing TA and SM resulted in an ICER of $262,677/LY and $454,241/QALY. In the secondary analysis, TA and SAVR were compared, resulting in an ICER of $39,676/LY and $81,758/QALY. Comparing TA and SAVR resulted in an ICER of $183,454/LY. TA was dominated by SAVR when comparing QALYs. The total expected value of perfect information (EVPPI) was at a maximum with a value of $6,928 at a WTP threshold of $80,000/QALY. The expected value of partial perfect information (EVPI) was highest for the 30-day clinical event rates when compared to the EVPPI values for the 1-year, 2-year and >3-year clinical event rates.
CONCLUSIONS: This economic evaluation suggested that TAVI might not be a cost-effective option for inoperable patients in comparison to SM. The secondary analysis suggested that TAVI might be a better one compared to SAVR. To reduce the uncertainty in our estimate it might be worth-while to obtain empirical evidence related to clinical event rates occurring 30-days post-operation.

PMD26 ECONOMIC EVALUATIONS FOR SCREENING AND TREATMENTS OF DIABETIC RETINOPATHY AND DIABETIC MACULAR EDema: A SYSTEMATIC REVIEW
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OBJECTIVES: New technologies in screening and treatment of diabetic retinopathy (DR) and diabetic macular edema (DME) have emerged recently. The goal of this systematic literature review is to identify and compare critical gaps in the published economic evaluation literatures for screenings and treatments strategies of DR/DME. METHODS: A systematic literature search was conducted to identify literature from 1980-2010, using PubMed, Embase, NHS NICE EED, and Tuft CEA Review. Key terms include “diabetic retinopathy,” “diabetic macular edema”, and relevant terms for economic evaluations. All studies related to economic analysis and decision modeling were included. Studies that focused only on cost or utility were excluded. RESULTS: 52 articles were identified and 33 were excluded based on the pre-specified exclusion criteria. Of the remaining 19 studies, nine (47%) focused on screening methods, six (32%) on diabetic care, and four (21%) on DR/DME treatment. Among the included studies, 12 studies (63%) were cost-effective analyses, and eight-years saved was the most frequently used endpoint. Seventeen (89%) were cost-effectiveness analyses, 12 (63%) used Markov modeling, 11 (58%) used incremental cost-effectiveness frameworks, and 10 (53%) used decision analytic frameworks, health state definitions, and utility sources employed in economic evaluations of screenings and treatments of DR/DME. Future studies assessing cost-effectiveness of new technologies should transparently address these areas.