a larger sample size and severity sub-group comparisons is ongoing.

**PST7**

**DOES ADMINISTRATION MODE AFFECT ITEM HIERARCHY IN STROKE SPECIFIC QUALITY OF LIFE MEASURE, STROKE IMPACT SCALE?—TELEPHONE AND MAIL ADMINISTRATION METHODS**

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**OBJECTIVES:** The purpose of this study is to further examine potential mode effect on item difficulty hierarchy by taking item response theory (IRT) approach. Specific objective is to examine if the Stroke Impact Scale-16 (SIS-16) items function in the same way between the two administration modes in item difficulty hierarchy. **METHODS:** Patients with stroke were identified using ICD-9CM in 13 participating Veterans Affairs (VA) hospitals in a larger sample size and severity sub-group comparisons is ongoing.

**RESULTS:** with the Rasch model using Winsteps. The differences and errors associated with the difficulties were estimated demographies and severity of stroke were compared. Item difficulties and errors associated with the difficulties were estimated with the Rasch model using Winsteps. Baseline demographics and severity of stroke were compared. Item difficulties and errors associated with the difficulties were estimated with the Rasch model using Winsteps.

**CONCLUSION:** Complications resulted in significantly higher costs, which may reflect earlier mortality due to complications. Lack of health care information from non-VA organizations is a potential limitation.

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**Surgery—Methods & Concepts**

**PSU2**

**COST-EFFECTIVENESS ANALYSIS OF RHBM-P2 IN THE TREATMENT OF OPEN TIBIA FRACTURES IN SWEDEN AND DENMARK**

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**OBJECTIVES:** Recombinant human bone morphogenetic protein (rhBMP2) is a novel biologic therapy that promotes bone growth at the fracture site. We analyzed the cost-effectiveness of rhBMP-2 in open tibia fractures in Sweden and Denmark. **METHODS:** We developed an economic model to compare rhBMP-2 + standard of care (soft tissue management and intramedullary nailing) with standard of care alone. We obtained clinical data from the BMP-2 Evaluation for Surgery in Tibial Trauma (BESTT) trial and estimated treatment costs from national sources such as NORD-DRG for Sweden and DkDRG for Denmark. Total cost were measured as direct cost plus indirect costs and reported separately. Direct costs were measured as drug costs plus cost for complications and indirect costs were valued as lost productivity using average annual salaries. We assigned utility weights to different grades (Gustillo I-IIIB) of open tibia fractures to estimate the difference in quality-adjusted-life-expectancy. We performed the analysis from the health care payer’s and societal perspectives for a one-year time-horizon. We focus our analysis on Gustillo grade III (A and B) fractures where rhBMP-2 is most commonly used. **RESULTS:** In Sweden, use of rhBMP-2 (€2800) for grade III open tibia fractures resulted in an incremental cost of €1684 per patient and in incremental cost-effectiveness ratio (ICER) of €22,811/QALY. When indirect costs were included, rhBMP-2 was cost-saving. In Denmark, rhBMP-2 (€3100) treatment for grade III open tibia fractures resulted in an incremental cost of €1635 per patient and an ICER of €17,964/QALY and was cost-saving when productivity loss was also included. **CONCLUSION:** From a payer’s perspective, rhBMP-2 is a cost-effective treatment option in grade III open tibia fractures for both the Swedish and Danish health care systems. rhBMP-2 was a cost-saving option from the societal perspective, and therefore, a good value for money.