level and self-perceived health status. METHODS: An international protocol was pioneered in the US and Canada. Respondents completed 10 DCE tasks, selecting the preferred health state in each paired comparison. Conditional logit regression was used to model the discrete choice data. The coefficients were compared between the two countries and between the subgroups. RESULTS: Models comparing US (n=417) and Canadian-based respondents (n=547) estimated parameters that were highly consistent across the 5 levels of each dimension of health, except for extreme problems with mobility (US vs Canada, -2.00 vs -1.57, p<0.01), and severe problems with self-care (US vs Canada, -0.80 vs -1.04, p<0.05). In the US, those >45 years old had worse rating on all measures except for heart problems or usual activities. The validity or usual activities for problems with mobility were lower for males than females. Severe or extreme problems with anxiety/depression were assigned lower values among Whites compared to Blacks and higher education was associated with lower values. US health states were difficult to comprehend; 3) Development of alternative questions in the interviews. Item 5 ("...how much time did you wheeze?"") was more easily understood by children. Item 6 ("...asthma?") was well understood and did not require the development of alternative wording. Item 5 ("...how much time did you wheeze?"") was problematic in Peru, but not in Guatemala. Children had difficulties with "wheezze" ("te ha sibado el pecho"). The wording used by mothers, "te ha sonado el pecho", was more easily understood.

CONCLUSIONS: The content validity of the FACIT-Fatigue scale was found to be consistent between the two countries and two subgroups with the exception of mobility and self-care. There were differences in how US and Canadian patients rated health states. This is important when using the FACIT-Fatigue scale in diverse populations. It highlights the importance of adapting the FACIT-Fatigue scale to local contexts to ensure its validity and reliability.

PRM115
IS BETWEEN-MODE EQUIVALENCE COMPARABLE TO TEST-RETET RELIABILITY FOR PATIENT-REPORTED OUTCOME (PRO) MEASURES: A TEST CASE OF WEB VERSUS IVRS VERSUS PAPER FOR THE MSKCC BOWEL FUNCTION INSTRUMENT AND LASA QOL

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OBJECTIVES: Little is known about the equivalence of Web and IVRS survey responses. Given the potential to affect power in clinical trials, the purpose of this study was to assess the equivalence of PRO survey responses across modes (Web, IVRS, and Paper). METHODS: Post-operative colorectal cancer patients at Memorial Sloan-Kettering Cancer Center (MSKCC) with home web/email and phone were recruited from clinic and randomized to one of eight study groups: Groups 1-6 completed the survey via Web, IVRS, and Paper, in one of six possible orders; Groups 7-8 completed the survey twice, either by Web or by IVRS. The study used the 18-item MSKCC BOWEL Function Instrument (BFI) and single-item 11-point NRS LASA QOL. Surveys were completed from home, on consecutive days. Mode equivalence was assessed by comparison of mean (SD) scores and intra-class correlation coefficients (ICC). CONCLUSIONS: The DCE-based approach produced different preference-based algorithms in the US and Canada. Among US respondents, age, gender, race, and educational level are factors that impacted health preferences. Study limitations include lack of adjustment for multiple factors in models and the need to better understand whether differences in coefficients represent meaningful differences.

PRM116
A REVIEW OF CARDIOVASCULAR DISEASE HEALTH STATE UTILITIES

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OBJECTIVES: To review and analyze health utility estimates across different cardiovascular events and procedures in published cost-utility analyses (CUAs). METHODS: We identified CUA s pertaining to cardiovascular diseases published between 2000-2010 using the Tufts Medical Center Cost-Effectiveness Analysis (CEA) Registry, which contains detailed information on over 3,100 English-language CUAs with more than 11,500 utility weights. We reviewed the utility weights across cardiovascular disease and classified them into nine categories: myocardial infarction (MI), heart failure, coronary artery bypass graft (CABG) surgery, percutaneous coronary intervention (PCI), stroke, cardiac arrest, revascularized cardiac arrest, peripheral vascular disease (PVD), and transient ischemic attack (TIA). RESULTS: We identified 349 cost-utility studies containing...
1200 utility weights associated with cardiovascular events and procedures. Stroke accounted for one-third of total identified cardiovascular utilities, followed by myocardial infarction (25%) and heart failure (17%), and peripheral vascular disease (8%). Most (86%) of the utility estimates were derived from secondary references (e.g., published literature). Over one-third (36%) of utilities identified were elicited using EQ-5D and 14% were estimated with direct time trade-off questions. Among the utilities from published studies disclosing sample population information, nearly two-thirds (64%) were elicited from patients and 25% from community members. Few studies (n=27) used 168 utility weights reported utilities for asymptomatic or symptomatic states prior to the cardiovascular event or procedure. CONCLUSIONS: Heterogeneity exists in the reporting of cardiovascular utility weights. Analysts conducting CUA using secondary references can improve study transparency by reporting relevant utility weights as close to sample population estimates as possible. In order to better understand the cost-effectiveness of interventions for cardiovascular conditions, further research is needed to inform baseline utility measurement prior to cardiovascular events or procedures.


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OBJECTIVES: Evaluate the psychometric properties of the revised version of the Medical Outcomes Study Cognitive Functioning Scale (MOS-Cog-R) using data from a representative sample of U.S. adults. METHODS: The 6-item MOS-Cog yields a single score representing impairment across a range of cognitive functions (e.g., memory, reasoning, attention, and confusion) measured at 1-week retest intervals. This study analyzed new data from a 2009 U.S. internet-based general population normative survey to improve interpretability. The psychometric properties of both one-week (acute) and four-week (standard) recall forms of the MOS-Cog-R were examined within the development sample. Scale reliability was evaluated using inter-item correlations and Cronbach's alpha. Construct validity was tested using correlations with relevant continuous criterion variables and analysis of covariance models comparing mean MOS-Cog-R scores across levels of categorical criterion variables. RESULTS: Acute and standard forms of the MOS-Cog-R were completed by 2012 and 2003 respondents, respectively. Both forms showed adequate internal consistency reliability (all inter-item correlations >0.38) and Cronbach's alpha >0.83. The acute and chronic MOS-Cog scores showed greater correspondence with mental domains of quality of life than physical domains (e.g., correlations for both forms with SF-12v2 mental and physical summary scores were 0.55 and 0.28, respectively). Direction and magnitude of correlations with criterion measures of psychological status (e.g., depression, anxiety) and health outcomes indicated good convergent validity for both forms. Differences in mean scores across respondents stratified by criterion outcomes supported adequate discriminant validity of each form. CONCLUSIONS: The MOS-Cog-R introduces a number of improvements, including simplified responses, the introduction of a one-week recall form, and norm-based scoring that enhances interpretability of scores. Both standard and recall-period forms of the MOS-Cog-R demonstrated good reliability and validity.

PRM118 ESTIMATING AN EQ-5D-3L VALUE SET IN SINGAPORE

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OBJECTIVES: The objective of this study was to estimate the EQ-5D-3L value set using time trade-off (TTO) values directly measured from the general Singaporean population. METHODS: The values of 80 EQ-5D-3L health states were directly elicited from a general Singaporean population sample using a TTO method modified from the MHN protocol. In face-to-face interviews, participants were asked to value a block of 10 health states. Various linear regression models and model specifications were included (1=not satisfied to 7=completely satisfied) and examined alongside MS-symptoms. RESULTS: The value set of EQ-5D-3L health states for Singapore. The value set provides health services researchers in Singapore a useful tool for assessing the cost-effectiveness of health technologies and services.

PRM119 VALIDATION AND PSYCHOMETRIC EVALUATION OF A HEALTH CARE ORIENTATION ASSESSMENT

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OBJECTIVES: The Provider-Dependent Health Care Orientation (PDHCO; Kaplan 1996) assesses an individual's orientation towards health and health care measures an individual's dependence (i.e., passivity) related to health care and disease management. We sought to build on prior validation of the instrument by evaluating the reproducibility of the PDHCO and test-retest reliability between repetitions conducted at 1-week retest intervals. METHODS: The PDHCO and other questionnaires were administered to a sample of adults recruited through web-based advertisements in 8 U.S. cities. Participants completed the PDHCO on four occasions, 1-week apart. A one-week retest was completed at home. Reproducibility and mode equivalence were assessed using the intra-class correlation coefficient (ICC). Cronbach's alpha was used to assess internal consistency. RESULTS: The correlation of the PDHCO to the Communication With Physician (CWP) Scale of the Chronic Disease Self-Efficacy Scale was calculated. ANOVA was used to compare mean PDHCO scores among tertiles of the Health Assertiveness Scale (HAS). Following 2,305 eligible respondents that completed the PDHCO (99.1%) the one-week retest was completed. The mean age of participants was 44.3 years, 51.3% were female, and 58.3% were Caucasian. A small number (n=9; 3.9%) reported health as Poor or Fair. Alpha was calculated. Based on the results of the ICC between paper and computerized administration was 0.887. The ICC for the one-week retest of the paper format was 0.913, and the PDHCO was found to be internally consistent (Cronbach's alpha=0.735). Significant correlations were found with the CWP (r=0.246, p=0.001), and the instrument discriminated between levels of the HAS (p<0.05). CONCLUSIONS: The PDHCO was observed to have adequate reproducibility and internal consistency as well as appropriate convergent validity. The scale was found to significantly discriminate between levels of health assertiveness. Equivalence between paper and web-based administration was demonstrated.

PRM120 DEVELOPMENT OF A NEW PATIENT-REPORTED OUTCOME (PRO) INSTRUMENT FOR PULMONARY ARTERIAL HYPERTENSION (PAH): THE PULMONARY ARTERIAL HYPERTENSION-SYMPTOMS AND IMPACT (PAH-SYMPACT) QUESTIONNAIRE

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OBJECTIVES: In the absence of any pulmonary arterial hypertension (PAH)-specific PRO instruments developed in accordance with 2009 FDA guidance requirements, a new patient-reported outcome instrument was developed to develop a new instrument assessing PAH symptoms and their impacts following the PRO guidance. METHODS: Patient inclusion criteria were age 18–80 years and symptomatic PAH (WHO Group 1) diagnosed by right-heart catheterization. Concept elicitation was based on 5 focus groups, which after saturation of emergent concepts was reached. A PRO instrument for PAH symptoms and their impacts was drafted, considering input from the international Steering Committee as well as translatability and legibility considerations. Two rounds of cognitive interviews on the draft PRO were conducted, with instrument revisions following each. The study was approved by institutional review boards at 5 US sites and participants provided written informed consent. RESULTS: Focus groups comprised 25 patients, and 20 additional patients participated in cognitive interviews (10 per round). Participants had a mean±SD age of 54±16 years, were predominantly female (91%), and were diverse in race/ethnicity, WHO functional class (FC I/II: 51%, III/IV: 49%), and etiology (primary PAH 51%, diopathic PAH 47%, familial PAH 2%). The draft PRO instrument was found to be clear, comprehensive, and relevant to PAH patients in cognitive interviews. Item reduction (final instrument comprises 18 items: 7 symptoms (respiratory symptoms, tiredness, cardiovascular symptoms, other symptoms) and 5 impact domains (physical activities, daily activities, social impact, cognition, emotional impact). The recall period is the past 24 hours for symptom items, and 7 days for impact items. CONCLUSIONS: The draft instrument was shown to capture symptoms and their impacts relevant to PAH patients, demonstrating content saturation and concept validity. Additional testing is continuing to establish the content and psychometric validity of the PAH-SYMPACT before use in future clinical practice or studies.

PRM121 USING A LIFE SATISFACTION MEASURE IN THE VALUATION OF HEALTH: A CASE STUDY OF MULTIPLE SCLEROSIS

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OBJECTIVES: The valuation of health is becoming increasingly important for the purposes of health technology assessment. However, recent research has suggested that traditional preference-based measures for valuing health states poorly capture the impact of disease on patients and may not be adequate for patient perspective. The current study extended this research by examining the validity of a life satisfaction measure among patients with multiple sclerosis (MS). METHODS: Data from the MS-consideration’s Database (n=1024) values, which were collected from an internet-based survey of patients who self-reported a diagnosis of MS. Information on demographics, disease and treatment history, and health outcomes were collected. A life satisfaction measure was included, which was created to assess the patient's specific symptom and quality of life measures. RESULTS: Respondents were mostly female (82.8%) with an average age of 48.7 years. Most respondents had relapsing remsitting MS (89.0%). The mean life satisfaction scores were 4.87 (SD=1.26, IQR:4-6). Only small effects were observed between life satisfaction and...