training was incorporated. In Round 2, participants reported improved usability as a result of the updates; three participants suggested increasing the font size on both devices, but only 1 participant reported difficulty selecting a response on the handheld. **CONCLUSIONS:** This study confirmed content equivalence between paper and electronic PSSD versions and demonstrated that both handheld and tablet are suitable for use in patients with plaque psoriasis with adequate front size on the devices.

PRM178

DEVELOPING AND VALIDATING A NEW TOOL: PHYSICIANS' BARRIERS, ATTITUDES AND PRACTICES TOWARDS APPLYING SMOKING CESSATION INTERVENTIONS IN THEIR CLINICS

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OBJECTIVES: Endocrinologists and other clinicians who provide care to diabetic patients have ideal teaching opportunities to connect and deliver tobacco cessation interventions in diabetes care. This study aimed to develop, validate and measure the reliability of a new tool that would be used to evaluate physicians' attitudes and practices regarding tobacco cessation counselling in patients with diabetes, as well as barriers to deliver tobacco cessation counselling in their clinics. **METHODS:** This study was conducted from March till December 2012 in the endocrine clinic at Hospital Pulau Pinang, Malaysia. A standardised, 22-item, self-administered questionnaire was developed to determine (i) physicians' attitudes and practices regarding tobacco cessation counselling in patients with diabetes, and (ii) barriers in delivering tobacco cessation counselling in their clinics. Face and content validity were assessed. Six pharmacists, whom were faculty members with experience and expertise in research and in the development of surveys, reviewed the questionnaire to assess its content validity.Reliability test was run along to check whether the new tool questions are correlated with one another adequately or no. **RESULTS:** Reliability test for the tool was pretested on a sample of 25 physicians physicians who ran the endocrine clinic at Hospital Pulau Pinang, Malaysia. Reliability analyses for the attitude domain and practice domain were 0.710 and 0.720, respectively. **CONCLUSIONS:** The questionnaire was valid and reliable to be use for the evaluation of physician's barriers, attitude and practice regarding tobacco cessation counselling in the diabetics clinics.

PRM179

COMPARISON OF A PROFILE AND MULTI-PROFILE BEST WORST SCALING TASK: A PREFERENCE STUDY IN PARKINSON'S PATIENTS

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OBJECTIVES: To elicit preferences for motor-symptoms, side-effects and process characteristics of competing treatments in Parkinson's Disease and comparing within respondents a best-worst scaling profile (case 2) and multi-profile (case 3) task. **METHODS:** Seven attributes were derived from patients' and neurologists' interviews: treatment modality, tremors, slowness of movement, posture and balance problems, fatigue, dizziness, and dyskinesia. A profile (BWS2) and multi-profile (BWS3) best-worst scaling experiment were designed to observe if different types of BWS result in differences in valuation. In the BWS2, respondents were asked to select the aspects that they perceived as most and least preferable within one single treatment profile. For BWS3, respondents were asked to select the most and least desirable treatment from three profiles. Nine BWS2 and ten BWS3 tasks based on a D-efficient design were offered to 596 respondents from an internet panel. The data was analyzed with mixed conditional logit. For six predefined states, including best and worst, estimated utility values were calculated. **RESULTS:** The attributes' rankings based on the relative importances differ slightly between tasks. Dizziness is most important attribute in BWS3 and tremors in BWS2. There was high agreement between estimated coefficients (r=0.97). The slope between the coefficients is less than unity, suggesting that overall the BWS3 coefficients are scaled up to a larger extent than the BWS2 coefficients. This implies smaller residual variance and lower decision uncertainty with the BWS3 task. The estimated utilities' rank order for the six states is the same for 64.4% of the respondents. One rank reversal occurs for 29% of the respondents. **CONCLUSIONS:** There is agreement on attribute importance and utility estimates both within and between respondents. There is yet no conclusive evidence for one of the two tasks, they both have their merits and depend on the context. The choice between them should be based on pretesting results, study goal and target population.

PRM180

TRANSLATION AND CULTURAL ADAPTATION DIFFICULTIES ENCOUNTERED DURING LINGUISTIC VALIDATION OF THE HABITUAL ACTIVITY ESTIMATION SCALE (HAES)

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OBJECTIVES: - To investigate difficulties encountered during linguistic validation of the HAES into nineteen languages; - to discover whether certain source items consistently posed problems across multiple target languages; - to evaluate solutions. **METHODS:** - Collation of back translation reviews and developer reviews across nineteen languages; -identification of problematic words and phrases based on written discussion between lead translators, project managers and developer; - investigation of patterns across languages; - review of methods used to overcome difficulties. **RESULTS:** Three principle issues were discovered and solutions found: (1) 52% of languages removed 'A.M.' and 'P.M.' due to use of the 24 hour clock. The 12 hour clock markers were replaced with a word, like 'Uhr' in German; a letter, like 'h' in French; or simply numbers. (2) Ten languages had issues with the concepts 'weekday' or 'weekend' as there is often no direct translation available. Various solutions

were discussed, including day of the week and day between Monday and Friday. It was agreed that 'weekdays' could be translated as 'working days', and 'weekends' as 'Saturdays and Sundays' while several languages preferred to use the English word. (3) 94% of languages struggled to find an equivalent for 'skipping'. Many English back translations showed 'hopping' or 'jumping'. The motion of skipping was discussed with translators as moving along lightly, stepping from one foot to the other with a hop or bounce. Many decided, on the absence of a similar word in their language, to replace this concept with 'skipping with a rope' which would work equally well as a 'very active' pastime. **CONCLUSIONS:** Similar issues often affect a number of languages. For such items, it may not be appropriate to produce literal translations and alternative solutions must be sought, taking into account linguistic features and cultural considerations, in order to achieve conceptual equivalence.

PRM181

DEVELOPMENT OF AN EQ-5D RESPIRATORY BOLT-ON

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OBJECTIVES: The responsiveness of the EQ-5D to patient-level changes over time in respiratory diseases appears limited. This study aimed to explore the potential room for adding a respiratory dimension to the current EQ-5D descriptive system, i.e. a bolt-on dimension. **METHODS:** First, the contents of the EQ-5D and six disease-specific health-related quality-of-life measures for asthma and COPD were reviewed. Second, a post-hoc analysis of data from three RCTs (N1=5452, N2=5992, N3=1086) in which both EQ-5D and disease-specific quality-of-life were measured, was conducted. Multivariate regression analyses were performed to investigate the change in the proportion of explained variance in EQ-5D VAS scores (R-square) when we added respiratory items of the disease-specific questionnaires to the EQ-5D dimension scores. Third, a principal component analysis (PCA) was performed to investigate the overlap between constructs of the disease-specific questionnaires and the EQ-5D. **RESULTS:** The review showed that all disease-specific questionnaires include questions about the impact of asthma/breathlessness on physical activities, while the EQ-5D addresses physical activities in terms of impact on mobility, self-care and usual activity. Symptoms are addressed by five of the disease-specific questionnaires, while the EQ-5D covers them only broadly (pain/discomfort). Impact on functioning was included in four disease-specific questionnaires as well as the EQ-5D. Domains that were not included in the EQ-5D were impact on sleep and medication use. The regression analyses showed that the addition of questions about the impact of asthma/shortness of breath on physical activities led to the highest increase in R-square. In the PCA several disease-specific items were found that had no overlap with the EQ-5D. These constructs either related to symptoms or impact of breathlessness on activities. **CONCLUSIONS:** We conclude that symptoms and the impact of shortness of breath on physical activities are the most appropriate respiratory bolt-on candidates. A valuation study including both candidates is currently ongoing.

PRM182

THE EFFECT OF STRESS AND COPING RESOURCES ON PREDICTING QUALITY OF LIFE OF GRADUATE STUDENTS

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OBJECTIVES: To study the effect of stress and coping resources on predicting graduate students' quality of life measured by the WHOQOL-BREF. **METHODS:** A battery of "Stress and Coping Resources" for graduate students was developed through a standard psychometric process. Four subscales are for Stress: relationship with advisor, future development, academic difficulty, and livelihood. Two scales are for Coping Resources: academic potential (knowledge, moral/ethic, resilience/endurance, self-management, and teamwork) and interpersonal relationship (with family, friends, peer, and intimacy partner). In addition, the WHOQOL-BREF questionnaire was also used. A total of 1,760 participants including 920 males and 840 females MS students completed these scales. Regression analysis was conducted to study the effect of stress and coping resources on predicting each domain of the WHOQOL-BREF. **RESULTS:** The result showed that the stress of livelihood, academic difficulty and interpersonal relationship with family can jointly predict physical QOL. Most of the academic potential variables including knowledge, self-management, resilience/endurance, and teamwork are good predictor variables to psychological QOL. Social QOL is predicted by the overall interpersonal relationship. Finally, Environmental QOL can be predicted by overall interpersonal relationship, and the stress from academic difficulty, future development, and relationship with advisor. **CONCLUSIONS:** The battery of "Stress and Coping Resources" was used to predict graduate students' quality of life measured by the WHOQOL-BREF. The result showed that the subscales of stress and coping resources did predicted graduate students' quality of life in various ways. Further study can be conducted to examine the mediate/moderate effect of coping resources on predicting QOL.

PRM183

METHOTREXATE ADHERENCE QUESTIONNAIRE: A NEW TOOL TO ASSESS ADHERENCE IN PATIENTS TREATED WITH METHOTREXATE

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OBJECTIVES: Despite evidence of suboptimal adherence to Methotrexate (MTX), it remains the preferred initial antirheumatic drug. Several different tools assess medication adherence in rheumatoid arthritis (RA) but none is specific to MTX and adapted for routine clinical practice. The objective was to develop a tool to identify MTX-treated patients likely to be poor adherent to the medication, for use in routine clinical practice and in research studies. **METHODS:** Exploratory interviews were conducted with 32 RA patients (US patients) currently or previously treated