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 FSSD versions and demonstrated that both handheld and tablet versions are suitable for use in patients with plaque psoriasis with adequate front size on the devices.

PMR178
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 physicians who 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 toward delivering tobacco cessation advice to diabetic patients, 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 if the new tool questions are correlated with one another adequately or not. RESULTS: Reliability test for the tool was pretested on a sample of 25 physicians who ran the endocrine clinic at Hospital Pulau Pinang, Malaysia. Reliability analysis based on test-retest reliability, since domain were 0.710 and 0.720, respectively. CONCLUSIONS: The questionnaire was valid and reliable to be used for the evaluation of physician’s barrier, attitude and practice regarding tobacco cessation counselling in the diabetics clinics.

PMR179
COMPARISON OF A PROFILE AND MULTI-PROFILE BEST WORST SCALING TASK: A PREFERENCE STUDY IN PARKINSON’S PATIENTS
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OBJECTIVES: This study aimed to compare 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 was designed to observe if differences in BWS results in differences in valuations. Patients were asked to select the aspects that they perceived as most and least prevalent within one single treatment profile. For BWS3, respondents were asked to select the most and least desirable treatment from the three profiles. Nine BWS2 and ten BWS3 tasks based on a D-efficient design were offered to 596 respondents from the internet panel. The data was analyzed with mixed conditional logit. For six predefined states, 16 profiles, best and worst, estimated utility values were calculated. RESULTS: The attributes’ rankings based on the relative importance 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.

PMR180
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 to these problems; - to conduct back-translation of back-translation reviewers and develop scores 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; – Detailed survey of principle issues, strategies and steps taken to deal with the problems.

RESULTS: (1) 52% of languages removed ‘A.M.’ and ‘P.M.’ due to use of the 24 hour clock. The 24 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 concept ‘week-day’ 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 very 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 ‘skip-rope’ and ‘Hopscotch’ among other suggestions.

CONCLUSIONS: Similar issues across 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.

PMR181
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 RTCs (NI=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 EQ-VAS in EQ-5D and the VASs in the disease-specific questionnaires and the EQ-5D. RESULTS: The result showed that all disease-specific questionnaires include questions about the impact of asthma/breathlessness on physical activities, while the EQ-5D added to these dimensions. The EQ-5D impact on physical activities, 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. Variables that were not included in the EQ-5D were development of chronic cough 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 correlations in R-squares. 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 of the disease-specific bolt-on candidates. A valuation study including both candidates is currently ongoing.

PMR182
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 33 coping resources and 13 stress measures were obtained from graduate students currently ongoing. RESULTS: 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 RTCs (NI=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 EQ-VAS in EQ-5D and the VASs in the disease-specific questionnaires and the EQ-5D. RESULTS: The result showed that all disease-specific questionnaires include questions about the impact of asthma/breathlessness on physical activities, while the EQ-5D added to these dimensions. The EQ-5D impact on physical activities, 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. Variables that were not included in the EQ-5D were development of chronic cough 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 correlations in R-squares. 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 of the disease-specific bolt-on candidates. A valuation study including both candidates is currently ongoing.

PMR183
METHOTREXATE ADHEREENCE QUESTIONNAIRE: A NEW TOOL TO ASSSSE ADHERENCE IN PATIENTS TREATED WITH METHOTREXATE (MTX)
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OBJECTIVES: Despite evidence of suboptimal adherence to Methotrexate (MTX), it remains the preferred initial antineumatic drug. Several different tools assess overall, measures of medication adherence and its impact on treatment satisfaction with 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...