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A477

mon use across and between conditions. METHODS: Subjects were recruited by web posting and telephone screening. Those self-reporting active treatment for one of four conditions (Migraine, Low Back Pain (LBP), Osteo-Arthritis (OA), Rheumatoid Arthritis (RA)) were scheduled for in-person interviews using card sort exercises with 54 different pain descriptors to identify those each subject commonly used to describe the pain associated with their condition. RESULTS: Subjects ranged between 29 and 63 years (mean age of 45). The majority (71%) was female, 60% were working full or part time, and 51% were Caucasian. Pain descriptors were divided into three groups based on percent of subject endorsement; 70-100% for high use 45-69% for moderate use, and 18-44% for low use. Across all four conditions, the most used pain descriptors were SHARP, ACHING, THROB-BING, and HURTING. Moderate use was shown across all conditions for terms like RADIATING, SPREADING, STINGING, and JOLTING. Lower percentages of study subjects used descriptors with more specific pain characteristics, including temperature (HOT, SEARING, BURNING), neuropathic characteristics (NUMB, PRICKLING) and qualities associated with acute pain (CUTTING, TEARING). Migraine subjects tended to use descriptors like POUNDING (83%), SPLITTING (88%) and PULSATING (77%). LBP subjects used STABBING (77%), PINCHING (84%), and SHOOTING (74%). OA and RA patients tended to be more similar with CONSTANT (46%/73%), TENDER (55%/64%) and SORE (72/73%). Additional descriptors unique to RA included TIGHT (73%) and CRAMPING (64%). CONCLUSIONS: Because descriptors of pain used by patients across these four different conditions showed use of similar language as well as expressions that were unique to their condition, the assessment of condition specific pain should be considered when planning to use pain as a study endpoint.

### PRM92

# EXPLORATORY MAPPING OF THE LUPUSQOL TO THE SF-6D

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OBJECTIVES: To derive a mapping algorithm to estimate scores (utility values) for the preference-based SF-6D measures from the non-preference-based diseasespecific LupusQoL. METHODS: A total of 282 systemic lupus erythematosus (SLE) patients completed the LupusQoL and SF-6D at the same assessment. Models of the relationship between them were estimated using OLS regression. The SF-6D utility score was modelled using total scores on the 8 LupusQoL domains, employing a backward inclusion procedure. Model performance was judged using the root mean squared error (RMSE) and range of predicted values. RESULTS: The mean (SD) age of the sample was 45 (13.4) years and the mean (SD) SF-6D score was 0.61 (0.13). The mean scores for the LupusQoL domains ranged from 52.5 (Fatigue) to 73.5 (Body Image). Four of the eight LupusQoL domains were selected for inclusion in the final model (Physical Health, Pain, Emotional Health, Fatigue) because these domains were measured in both instruments. The root mean square error (RMSE) for the mapping function was 0.0701, lower than that reported for many published mapping functions. The overall model fit was good ( $R^2=0.7155$ ), although some under prediction at the upper end of the SF-6D was observed. CONCLUSIONS: There appears to be a strong relationship between the LupusQoL and SF-6D. Prediction errors are lower than for many published mapping functions, signifying that the mapping algorithm developed here provides a methodology for predicting SF-6D utility values from LupusQoL data. Potentially this could reduce patient burden if all of the necessary information can be obtain from administering the LupusOoL alone. However, the omission of disease-specific LupusQoL domains (intimate relationships, body image, burden to others, planning) from the final model, raises concerns that the specificity for SLE may be lost in this algorithm. Further out of sample testing will be useful to confirm the performance of this algorithm.

### PRM93

# INFANTILE HEMANGIOMA ON FAMILIES, CREATION OF A SPECIFIC BURDEN QUESTIONNAIRE

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OBJECTIVES: Infantile hemangioma (IH) is the most common form of benign vascular tumor in children, with an estimated incidence of between 3 and 10% of Caucasian children. The aim of our study is to develop a specific questionnaire for assessing the burden on families of children with HI. METHODS: A "Hemangioma Family Burden" questionnaire (HFB) consisting of 22 items. It was distributed accompanied by SF12 and PGWBI, to obtain internal and external validation. RESULTS: Fifty-eight evaluable questionnaires were returned, completed by either the mother (63.27%) or the father (36.7%). At the time of the survey, the average age of the child with IH was 9.34±4.75months. Internal validity was measured by Cronbach's-alpha (0.95), reflecting a good homogeneity of the 22 items. While the score of the physical component does not vary with the expressed extent of the hemangioma (p=0.2931), the burden scores of the SF12 mental component and the PGWBI "wellness" component increase with "severity", as perceived by the parents and expressed in terms of extent. Hence, the HFB score is correlated with these 2 components, thus confirming external validity. The mean score calculated from the HFB is 23.42 $\pm$ 19.93. The score increases with the "severity score" of the parents. In fact, a statistically significant difference is observed between the 3 severity groups:

 $5.28\pm6.8$  for those reporting the smallest extent to  $41.0\pm18.71$  for those reporting the greatest extent, and  $27.7\pm16.96$  for a moderate extent. This confirms the sensitivity of the HFB. **CONCLUSIONS:** Internal and external validity were confirmed. The HFB is correlated with the extent felt by parents, a feeling deemed relevant because it is often the cause of consultation and demand for treatment. We now have an easy-to-use, validated IH tool for assessing the disability caused. Following cultural and linguistic validation, the HFB is now available in US English, Spanish, German and Italian.

#### PRM94

A NEW STEP IN THE USE OF COMPUTER ADAPTIVE TESTS FOR MEASURING QUALITY OF LIFE. CULTURAL ADAPTATION AND CALIBRATION IN SPAIN OF TWO PROMIS ITEM BANKS: PAIN-BEHAVIOUR AND PAIN-INTERFERENCE <u>Castejón N</u><sup>1</sup>, Rodríguez A<sup>1</sup>, Correia H<sup>2</sup>, Choi S<sup>2</sup>, Gálvez R<sup>3</sup>, Mayoral V<sup>4</sup>, Rebollo P<sup>5</sup> <sup>1</sup>LA-SER (BAP LA-SER Outcomes), Oviedo, Spain, <sup>2</sup>The PROMIS Statistical Center Northwestern University, Chicago, II, USA, <sup>3</sup>Hospital Virgen de las Nieves, Granada, Spain, <sup>4</sup>Hospital de Bellvitge, Barcelona, Spain, <sup>5</sup>LA-SER (BAP LA-SER Outcomes), Oviedo, Asturias, Spain OBJECTIVES: To carry out the cultural adaptation and calibration in Spain of the universal Spanish version of two item banks previously developed and translated by the PROMIS Group: "Pain-Behavior-PB" (39 items) and "Pain-Interference-PI" (41 items). This will allow construction of two Computerized Adaptive Tests (CATs) for evaluating Health-Related Quality of Life (HRQoL) in patients with pain. METHODS: Forward and backward translations of PB and PI items were carried out. The alternative translation was then compared to the existing PROMIS translation and reviewed by 25 patients and 6 experts to evaluate the relevance and comprehensibility of items. Recommendations to revise the universal Spanish were evaluated by the PROMIS Statistical Center and by a linguist from Spain. The revised items were cognitively debriefed with 5 patients following the PROMIS Interview Script and discrepancies were resolved. The revised universal Spanish version of both item banks was administered to a sample of 236 subjects with chronic pain of any etiology. Unidimensionality and local independence were evaluated. The calibration of the items was done using the Samejima's graded response model. RESULTS: The process of cultural adaptation of both item banks for use in Spain resulted in the amendment of 8 items (5 PB -3 PI). Unidimensionality and local independence of items of both banks were confirmed. Discrimination parameters ranged from moderate to very high in almost all items of both banks. Differences according to gender were not statistically significant in PB bank ( $F_{(1,225)}=3.24$ ;p=0.073) nor in PI bank (F<sub>(1,224)</sub>=2.072;p=0.151). Despite the relatively small sample size, the standard errors for the item parameters are within an acceptable range (<1), with the exception of three extreme threshold parameters. CONCLUSIONS: The universal Spanish PROMIS Pain Behavior and Pain Interference have been calibrated in Spain and two CATs have been built to evaluate HRQoL of patients with pain in daily clinical practice

## PRM95

# DOES THE CAT QUESTIONNAIRE PRODUCE SIMILAR RESULTS WHEN SELF- OR INTERVIEWER-ADMINISTERED?

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OBJECTIVES: The COPD Assessment Test (CAT) assesses the impact of chronic obstructive pulmonary disease (COPD) on health status in clinical practice. We examined whether the mode of administration (self vs. interviewer) influences the CAT score and/or its psychometric properties in a heterogeneous COPD population (during clinical stability and during exacerbations). METHODS: Observational study in 49 Spanish centers. Patients hospitalized because of exacerbations of COPD (ECOPD; n=224) and clinically stable patients (n=153) completed the CAT and other measures, including the Saint George's Respiratory Disease Questionnaire (SGRQ) and the London Chest Activities of Daily Living (LCADL) instrument. In order to replicate real-life, the CAT was self-administered (CAT-SA) or administered by health care personnel (CAT-IA) as decided by clinicians. Multiple linear regression analysis was used to determine whether mode of administration affected scores after adjusting for differences between groups. The instrument's psychometric properties were compared between groups. RESULTS: Of 377 patients included, 118 (31.2%) completed the questionnaire by self-administration and 259 (68.8%) by interview. Multiple regression analysis showed that the mode of administration did not affect CAT scores. Psychometric properties were good whichever mode of administration was used. Internal consistency coefficients (Cronbach's alpha: 0.86 for CAT-SA and 0.85 for CAT-IA) and test-retest reliability (intraclass correlation coefficients of 0.83 for CAT-SA and CAT-IA) were high. Correlations with SGRQ and LCADL were moderate to strong for both groups, though only the CAT-IA correlated significantly with clinical measures of COPD. Similar results were observed when testing longitudinal validity. CONCLUSIONS: The mode of administration does not influence CAT scores and only minimally influences its psychometric properties, suggesting that data obtained using different modes of administration can be pooled or compared. Further research is required to determine whether sensitivity to change is affected by mode of administration.

# PRM96

#### RELIABILITY OF A PATIENT-REPORTED ADVERSE DRUG EVENT QUESTIONNAIRE

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University of Groningen, University Medical Center Groningen, Groningen, The Netherlands OBJECTIVES: Previously, a questionnaire was developed to collect information re-