squares (OLS regression) and Tobit regression, with utility score as independent variable, and ordered logistic regression for each item of EQ-5D. For performance assessment by comparing predicted and observed mean EQ-SD score in the validation set, the unadjusted R-squared and the root mean squared error (RMSE). RESULTS: The OLS regression had the best predictive performance with R-squared equal to 0.60 and RMSE equal to 0.25. The linear regression model accurately explained variance (R-square = 0.87). Construct validity was demonstrated by moderate correlation with the SF-36 (R = 0.80) and PGIC (0.85). SAT scores strongly discriminated patient change groups and correlated with change in the NPRS (-0.55 pain now and -0.64 average pain) and −0.15 (−0.16) and −0.16 (−0.15) to make precise movements (p < 0.016). CONCLUSIONS: EQ-5D utility scores can be reasonably predicted from the H-Qol-I, although item wordings are not directly related. The model based on OLS regression provides the best fitting. Motor functions items contributed the model to utility predictions.

PND43
IMPACT OF RELAPSES LEADING TO HOSPITALISATION ON HEALTH-RELATED QUALITY OF LIFE, FATIGUE AND HEALTH CARE RESOURCE UTILISATION IN A POPULATION WITH A RELAPSING FORM OF MULTIPLE SCLEROSIS (RMS) USING DATA FROM TEMSO A TERIFLUNOMIDE PIVOTAL PHASE III TRIAL
O’Connor P1, Goldberg L2, Bego-Le-Bagousse G3, Dive-Pouletty C3
1University of Toronto, Toronto, ON, Canada, 2Goldberg, MD & Associates, Battle Ground, WA, USA, 3Sanofi-aventis, Massy Cedex, France

OBJECTIVE: In patients with RMS, assess the impact of relapse(s) leading to hospitalization on Health-Related Quality of Life (HR-Qol), fatigue and Health Care resource utilisation. METHODS: TEMSO (N=1088) was designed to assess efficacy and safety of teriflunomide, a novel oral disease modifier, in RMS patients. Patients with no relapse, patients with relapse(s) not leading to hospitalisation and patients with relapse(s) leading to hospitalisation were analyzed. A self-administered questionnaire assessing patient reported outcomes (PROs) were assessed: utility (EQ5D), PCS and MCS Physical and Mental Health Component Summaries) scores of the SF-36, fatigue (FIS-total score). Also, Emergency Medical Facility Visits (EMFV; a visit to a medical facility/hospital for emergency care not resulting in an admission) was tracked. Changes from Baseline for PROs and annual EMFV rate were analysed for a two-year period. RESULTS: Change from baseline (CB) in utility in patients with no relapse was −0.034, CB in utility in patients with relapse(s) not leading to hospitalisation was −0.050 (p < 0.001). CB in utility in patients with relapse(s) leading to hospitalisation was −0.057 (p < 0.001). Similar results were seen for PCS of +1.0, −1.0 (p1<0.01) and −3.1(p1<0.001), respectively. CONCLUSIONS: The HR-Qol-I is a first self-report scale and deployed it to an online community. As part of our validation process, we reviewed online forum discussions between patients, conducted in-person patient cognitive debriefing, and made minor improvements to form a revised scale (MSRS-R). We compared the revised measure, the Guy’s Neurological Disability Scale, to a self-report scale and remitting MS (RRMS) on the PatientsLikeMe platform. The survey included the MSRS-R as well as a range of comparator MS measures: PRIMUS, MSIS-29, PDSS, NARCOMS Performance Scales, and MSWS-12. RESULTS: In total, 816 RMS patients were included. The MSRS-R walks item was highly correlated with alternative walking measures (PDDS, r = 0.83; MSWS-12, r = 0.83; NARCOMS mobility question, r = 0.86). The MSRS-R correlated well with comparison instruments, and reliably differentiated between participants by PDDS disease stage, relapse severity, and time since diagnosis. Retrospective scoring of most recent relapse suggested a 3-point increase in MSRS-R might usefully identify relapses. CONCLUSIONS: The MSRS-R is a concise, multi-faceted measure of MS-related functional disability. It may be useful for describing the impact of MS and further inquiry into the factors that relate to variation in outcomes among MS patients.

PND46
THE HUNTINGTON QUALITY OF LIFE INSTRUMENT (H-QOL-I): CROSS-CULTURAL VALIDATION IN GERMANY, POLAND AND USA
Cuypers M1, Mielke M2, Mierlo G3, Jeunet P4, Stiell I1, Grote Y5, Martini M6, D’Aunoy D1, Tuomu M7, Aidri M8, Zielonka D9, Cohen J10, Tuomi M11, Ayukprasittikul P12
1United BioSource Corporation, London, UK, 2United BioSource Corporation, Bethesda, MD, USA, 3Astellas Pharma Global Development, Lederle International, Biometrics Corporation, London, UK, 4Creative Research, Paris, France, 5Creativit-Clipartical, Les Berges du Lac - Tunisi, Tunisie, Tunisia, 6University Hospital Hamburg, Hamburg, Germany, 7Tufts University Center for the Study of Drug Development, Boston, MA, USA, 8University Claude Bernard Lyon1, Lyon, France, 9Timone University Hospital, Marseille, France, 10Astellas Pharma Global Development, Lederle International, Biometrics Corporation, London, UK, 11Addenbrooke’s Hospital, Cambridge, UK, 12University Medical Center, University Hospital, Medical University, ‘Germans Tissue’ Pforzheim, Badalona, Spain, San Gerardo Hospital, Università Milano Bicocca, Monza, Italy, 13University Children’s Hospital, Zurich, Switzerland, 14Children’s Hospital, Università degli Studi di Monza, Monza, Italy

OBJECTIVES: The Huntington Quality of Life Instrument is a 36-item self-reported specific Health-Related Quality of Life (HR-Qol) instrument developed to assess the Qol of patients suffering from Huntington’s disease. It was originally developed and validated in French and Italian. The current study included 201 patients in 11 languages. This study aims to validate the German, Polish and US versions of H-Qol-I cross-culturally. METHODS: The original questionnaire was based on 11 items and 3 dimensions. The instrument was translated forwards and backwards by native speakers. It was then reviewed and adjusted by local clinicians and patients for face validity. A survey was conducted with 134 US, 60 Polish and 41 German patients. Face validity was tested through item completion and overall under-