treated with docetaxel-based chemotherapy. EQ-5D and FACT-P data were collected for a subset of patients at baseline and throughout the study until treatment discontinuation. The data was compared using three statistical methods: (a) regression analyses of patients’ EQ-5D index scores determined using the UK-tariff; (b) linear regression estimated by generalized estimating equation (GEE) algorithms; (c) separate mapping algorithms. The model is reliable as the AIC was defined as 1.25. To select the best model specification, four different sets of explanatory variables were compared. The models were fitted to the full dataset and cross-validated using a 10-fold in-sample cross-validation. The variance explained by the model was assessed using the R2. Model performance was assessed using: (a) predicted and observed mean EQ-5D scores, the mean absolute error (MAE) and the root mean squared error (RMSE). RESULTS: Values for both FACT-P and EQ-5D were available for 234 patients. The TPM model including the FACT-P sub-domain scores and demographic data was the best model. The model (minimal) R2 = 0.689 providing the most accurate predictions (MAE = 0.125; RMSE = 0.176). The physical well-being and prostate cancer specific subscales in the logistic part and functional and emotional well-being subscales in the linear regression part had the highest explanatory value. CONCLUSIONS: The developed algorithms for mapping FACT-P to EQ-5D enable the calculation of appropriate preference-based HRQoL scores for use in cost-effectiveness analyses when EQ-5D data are missing or inadequate.

PHS65 OUTCOMES AND DETERMINANTS OF CAREGIVER BURDEN AFTER FIRST-EVER STROKE: THE ERLANGEN STROKE PROJECT (ESPRO) Schallert1, L.1, Weinzig1, C.1, Ciesla2, J., Griza3, C., Niederberger4, M., Wahlsler5, P., Kolominsky-Rabas6, P.1 University of Erlangen-Nuremberg, Erlangen, Germany

OBJECTIVES: Informal caregivers of stroke survivors provide extensive care which can be perceived as a burden. With regard to the high prevalence of stroke and increasing costs of care, limited attention is given to informal caregivers. The purpose of this analysis is to investigate specific caregiver burden outcomes 12 months after stroke and to identify determinants of caregiver burden. METHODS: Data were collected from the Erlangen Stroke Project among the 106,000 residents of the community of Erlangen, Germany. Analysis includes stroke survivors, followed-up 12 months after stroke as well as their informal, primary caregivers. The Caregiver Burden Scale (CBS) was used to assess caregiver burden. Explanatory factors of burden were examined in terms of socio-demographic data, functional status (Barthel Index, Frenchay Activity Index), hours per day provided for care, caregivers relationship to patient and health status. RESULTS: A total of 1,194 subjects were assessed prospectively. Mean age of caregivers is 62.9 years. Informal care is mainly provided by spouses (55.8%) and children (34.6%). 12 months after stroke, over one third of caregivers were experiencing considerable burden. Main burden of caregiving out of 15 dimensions (CBS) is reported for ‘emotional support’ (46.3%), ‘dealing with behavioural difficulties’ (38.8%) and for ‘transport of the patient’ (30.6%). Both, the degree of patients’ physical disability (p = 0.001) and the degree of patients’ inactivity in activities of daily living (p = 0.001) were significantly associated with a high level of experienced burden. The time of care per day provided by the caregiver is correlated positively with a higher caregiver burden (p = 0.001). CONCLUSIONS: Results confirm that caregiver burden of stroke survivors is still an unmet need in terms of public health. Effective preventive and situation-specific strategies should be implemented, based on understanding the reported determinants. We collected and made available data from 234 patients. The developed algorithms for mapping FACT-P to EQ-5D enable the calculation of appropriate preference-based HRQoL scores for use in cost-effectiveness analyses when EQ-5D data are missing or inadequate.

PHS67 RASCH MODEL VALIDATION OF A PEER RELATIONS SCALE FOR PEOPLE TREATED FOR PSYCHOACTIVE SUBSTANCE USE DISORDER Ciesla2, J., Mazurek K2

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OBJECTIVES: There is strong evidence in the literature indicating that positive supportive peer relationships are protective of relapse for people treated for psychotropic substance use disorder (PSUD). Unfortunately, no standard measure of peer relations exists. The objective of this research is to use Rasch item response theory (IRT) modeling to validate a 13-item peer relations scale for use in outcomes studies in this treatment population. METHODS: The participants are 408 adults (average age 36.4) discharged from primary substance abuse treatment (ASAM Level 1A) in 2004-2010. The data is from an outcome study conducted approximately six months post discharge via a 190-item questionnaire that included the 13-item peer relations scale. The scale is made up of behaviorally-ranging items that assess the degree to which peers display positive social behaviors and behaviors indicative of abstinence and recovery. The response rate was 58 percent. RESULTS: The person reliability is 0.98 and the Cronbach’s alpha raw score reliability is 0.92—both indicating the scale is internally consistent. The item reliability of 0.96 is high showing that the model is reliable. The item separation in 6.69 meaning items are placed appropriately on the Rasch ‘ruler’ with about six levels of importance identified. The mean-square (MSQ) statistic of the infit and outfit values were between 0.5 and 1.5 for all of the items indicating a low level of randomness and the unidimensionality of the scale. Additionally, the scale is made up of four ordered thresholds. Visual inspection of a Wright Item Map shows the scale is hierarchically structured with a consistent amount of inter-item spread. Similarly, the standardized t-tests (Z-STD), shown on a pathway bubble chart indicate minimal item overlap. CONCLUSIONS: The Rasch analysis shows the peer relations scale is a reliable and unidimensional measure of an important PSUD treatment outcome.