IDENTIFYING RESPONSE SHIFT STATISTICALLY AT THE INDIVIDUAL LEVEL

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Response shift, recognized as a particular challenge in quality of life research, refers to changes in the meaning of a self-evaluation resulting from recalibration, reprioritization or reconceptualization. We explored whether a longitudinal comparison between predicted and reported health-related quality of life (HRQL) could be used as a method of identifying subjects who experienced response shift. Data from a 1-year study of 678 persons with stroke were used to develop a predictive growth model of HRQL from physical, mental and cognitive measures. We hypothesized that large fluctuations between reported and predicted HRQL over time would identify individuals with a response shift. Latent trajectory analysis identified seven groups: 67% with little fluctuation, 10% with early and 4% with late decline, 11% with a moderate, early increase, 1% with a steep early increase, 3% with a late increase, and 4% who were generally unstable. Validity was considered by examining other HRQL outcomes for similar patterns, and by comparison with results from a smaller data set which included the more traditional 'then' test. Validation results were supportive. This type of residual analysis could be used to stratify data, where persons with small residual fluctuations over time would form one strata. An examination of mean change and variability of change within strata would provide information for the purposes of interpretation of change for the whole group.