Instructions for the Stata ado-file to map the QoL-AD to the EQ-5D-5L

This document describes how the **map_qolad_to_eq5d5l** Stata ado file is used to obtain EQ-5D-5L utilities mapped from the Quality of Life Alzheimer's Disease Scale (QoL-AD), using either a response mapping approach based on an mlogit model, or a direct mapping approach, based on a Tobit model.

The downloadable material contains files containing the regression coefficients for the different mapping scenarios, as well as the Stata ado file.
These files need to be saved before the mapping program can be run, and Stata needs to be informed about the location of the ado file using the *sysdir set* command (i.e. *sysdir set personal "C:\StataAdoFiles"*).

Command syntax
The syntax for the *map_qolad_to_eq5d5l* command is as follows:
map_qolad_to_eq5d5l, qolad() sex() age() scenario() item7() model() coeffs()

Within the brackets, the following information needs to be specified:

qolad	All 13 QoL-AD items need to be listed. If item 7 is not available the dataset, this variable needs to be created as a constant. The items need to be listed in the correct order (i.e. starting with item 1, and proceeding in increasing order to item 13). The QoL-AD data need to be coded as follows: 1=Poor, 2=Fair, 3=Good, 4=Excellent
sex	The variable specifying the gender of the person with dementia needs to be listed. This variable needs to be coded 1 for male and 0 for female.
age	The variable specifying the age of the person with dementia needs to be listed. For longitudinal data, this should be the age at the time the relevant data were collected.
scenario	Specify which mapping scenario should be performed. Choose from: 'SelfEQ_SelfQOL' for mapping self-reported QoL-AD to self-reported EQ-5D 'ProxyEQ_ProxyQOL' for mapping proxy-reported QoL-AD to proxy-reported EQ-5D 'ProxyEQ_SelfQOL' for mapping self-reported QoL-AD to proxy-reported EQ-5D 'SelfEQ_ProxyQOL' for mapping proxy-reported QoL-AD to self-reported EQ-5D
item7	Specify if the mapping should be performed excluding QoL-AD item 7 (use 'ExcludingItem7') or including QoL-AD item 7 (use 'IncludingItem7')
model	Specify mlogit or tobit
coeff	The location of the Stata data files containing the regression coefficients for the different mapping scenarios needs to be listed here. The file path needs to be entered without quotation marks.
dataset	The location and name of the dataset in which the QoL-AD should be mapped to the EQ-5D needs to be specified. Please note that this program opens a new dataset and will close any datasets currently in use. Please ensure that all data are saved before the mapping map_qolad_to_eq5d5l program is run.

mlogit mapping:
The program generates 26 new variables. 25 of those estimate the probability that a participant will fall into each of the 5 levels for each of the 5 EQ-5D-5L items. Specifically, mob_p1 indicates the probability that the participant falls into the first level of the mobility item ("I have no problems in walking about"), and pa_p5 indicates the probability that a participant falls into the 5th level of the pain item (i.e. "I have extreme pain or discomfort"). 'mob', 'sc', 'ac', 'pa' and 'ad' are used to record information on the mobility, self-care, usual activities, pain/ discomfort and anxiety/ depression items respectively. 'p1' to 'p5' are used to indicate levels 1 ("no problems") to 5 ("unable to" or "extreme problems"). 'eq5d5l_m' contains the EQ-5D-5D utility based on the UK value set (crosswalk to 3L value set, van Hout, 2012). Other country-specific value sets can be derived from the probabilities.
When the Tobit mapping algorithm is used, a single new variable (eq5d5l_t), is created EQ-5D-5D utility based on the UK value set (crosswalk to 3L value set, van Hout, 2012).

Note: The mapping algorithm is currently available in Stata only. We would be very happy to cooperate with other researchers who wish to write code for implementation in SAS, R or other programs.