OPTIMUM Toolbox Cognitive Data

In addition to supplying the Toolbox Cognitive Data, we will also provide several files that describe missing data. It will be important to review these files as well as the final column in the datasets, which describe any exclusions used in previous analyses. The data consists of many flags. Important points:

1. The NEURO24 Toolbox data is provided when appropriate, should researchers want to use it in place of missing month 12 continuation data.
2. For participants joining Step 2 from Step 1, the Step 1 Week 10 data was often used as the baseline for Step 2.
3. There are many cases where incorrect demographical data was entered into the Toolbox app when the participant was registered. It would take a significant effort to correct all of these. Therefore, only uncorrected standard scores are provided.
4. The fluid cognition composite score (FCC) is automatically computed by Toolbox using the scores of the individual tasks (Dimensional Change Card Sort, Flanker, List Sorting, Pattern Comparison, and Picture Sequence Memory) that make up the FCC. If one of the tasks was missing, Meryl Butters, the study’s neuropsychologist, approved the approach of using the mean of the other four tasks as the value for the missing FCC score. If more than one individual task was missing, then the missing FCC was treated as missing data.

As mentioned earlier, there will be several files provided that attempt to describe missing data. These include:

1. STOP CODES: this data, provided for Step 1 and Step 2 separately, consists of STOP Codes that were generated by the Toolbox App.
2. DataMissingNotes: this file contains notes taken from several fields in the Participant Tracking Form in REDCap. These fields describe data collection issues and/or summaries at the BL, week 10, month 12, and NEURO24 timepoints. Note: these fields may also contain information pertaining to data outside of Toolbox. PtTrackingForm\_CodeBook is also provided here: <https://wustl.box.com/s/ag82wgt6pmz6sz2khoxom7a20cdewub3>
3. ToolboxDataMissingNotes: this file contains information about Toolbox data collection. This file merges the NIH Toolbox Baseline and NIH Toolbox Followup REDCap instruments. NIHTBForm\_CodeBook is also provided here: <https://wustl.box.com/s/n9b8fi5i8e4bth4vytijda22qtgm9q61>