ABCD Data Release 1.1

The <u>first annual curated ABCD Data Release 1.0</u> was made available to the scientific community in February 2018. Subsequently, the Data Analysis and Informatics Center (DAIC) of the ABCD Consortium addressed errors related to some of the imaging-derived tabulated data, added data not included in Data Release 1.0, improved the formatting of some measures, and made some enhancements (e.g., assessment summary scores; imaging QC metrics) to the data. These changes will be included in ABCD Data Release 1.1, scheduled for November 2018. Below is a brief summary of the modifications included in Data Release 1.1. Full details will be included in the Release Notes for Data Release 1.1.

Known issues with Release 1.0

- Imaging:
 - O sMRI: fuzzy clusters area metrics invalid.
 - O Resting-state fMRI: incorrect within and between network correlations.
 - O Task fMRI: mean motion (average framewise displacement) values were calculated incorrectly.
 - O Task fMRI: t-stats were averaged within ROIs, reducing their interpretability.
 - O General: the Desikan-Killiany Atlas insula ROIs ("aparc") are missing from all datasheets.
- Non-imaging assessments:
 - O Several "gender" and "sex-assigned-at-birth" values are incorrect.
 - O Missing responses to the questions "child's religion forbidding the use of alcohol" and "child's religion forbidding the use of drugs" in ABCD Parent Demographics Survey.
 - O Incorrect ADHD DSM-5 logic in ABCD Parent Diagnostic Interview for DSM-5 Full (KSADS-5).
 - O Incorrect pubertal development category scores in ABCD Sum Scores Mental Health Youth/ABCD Sum Scores Mental Health Parent.
 - O "Don't know" mistakenly assigned to a value of "0" for some variables in ABCD Parent Sports and Activities Involvement Questionnaire.
 - O Missing values in ABCD Parent Family Environment Scale Family Conflict Subscale.
 - O Variables without data displayed as blank fields in some of the neurocognitive summary scores.

Changes between Release 1.0 and 1.1

- General:
 - O Three of the 4524 participants included in Release 1.0 were excluded from the ABCD study subsequent to Release 1.0. Therefore, all data from these three participants have been removed from NDA and are not included in Release 1.1.
 - The family ID is auto-calculated and will change after the addition/removal of participants from the ABCD study. Family IDs will, therefore, differ between Release 1.0 and Release 1.1.
 - O Changed datasheet names to reflect differences with the Release 1.0.

- O Changed variable names for easier keyword searching.
- O Changed variable types from string to integer.
- Imaging:
 - O sMRI: corrected problem with invalid area values for fuzzy clusters, added insula cortical ROI and T2w measures.
 - O dMRI: reduced set of RSI measures to N0, ND, NT, N0_s2, ND_s2, and NT_s2; added insula cortical ROI.
 - Resting-state fMRI: corrected within and between network correlations, added Desikan aparc ROIs in variance calculations, added additional variables related to censoring: nvols, numTRs, ntpoints, etc.
 - O Task fMRI: corrected mean motion estimates, replaced t-stats with SEM for each contrast and ROI, removed ROI averages for Gordon parcels, added additional variables related to censoring: nvols, numTRs, dofs, etc., added insula cortical ROI, added lure/target/nonlure variables for n-back behavioral data.
 - O MRI QC: added additional QC metrics (i.e., automated and visual QC of sMRI, dMRI and fMRI data).
 - O Site ID added for baseline visit to disambiguate site ID associated with imaging.
- Non-imaging assessments:
 - O Corrected "gender" and "sex-assigned-at-birth" values.
 - Variables representing "child's religion forbidding the use of alcohol" and "child's religion forbidding the use of drugs" have been deleted from the ABCD Parent Demographics Survey.
 - Corrected ADHD DSM-5 logic in ABCD Parent Diagnostic Interview for DSM-5 Full (KSADS-5).
 - O Corrected pubertal development category scores in ABCD Sum Scores Mental Health Youth/ABCD Sum Scores Mental Health Parent.
 - O Corrected "Don't know" value in ABCD Parent Sports and Activities Involvement Questionnaire.
 - O Entered missing values in ABCD Parent Family Environment Scale Family Conflict Subscale.
 - O Removed blank fields from ABCD Youth NIH TB Summary Scores.
 - O Added instruments (e.g., Parent Diagnostic Interview for DSM-5 (KSADS) Traumatic Events); assessment summary scores added.
 - Removed answer option category values in the Description column of the Data Dictionary for the alcohol/substance use questions – Family History Questionnaire. For example, "paternal grandfather Abuelo paterno (0, No Problems Sin Problemas)" changed to "paternal grandfather Abuelo paterno (No Problems Sin Problemas)"