Atherosclerosis Risk in Communities Study

Cohort Exam Visit 8 Telephone NCST

NCSTDERV8T1_NP Derived Variable Dictionary (v.1)

February 2024

Prepared by the Collaborative Studies Coordinating Center

ARIC NCSTDERV8T1_NP Derived Variable Dictionary

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NEW OR CHANGED FROM PREVIOUS DISTRIBUTION

This table describes the changes to the last published NCSTDERV8T1_NP dictionary. As the dataset undergoes modifications, this table will describe the updates made to the previously distributed dataset.

Modification Date	Variable Name	Reason(s) for Change

1. OVERVIEW

The NCSTDERV8T1_NP dataset contains the NCST form data collected during Visit 8 Telephone, as well as derived variables for neurocognitive test scores that required calculation. The NCSTDERV8T1_NP dataset contains records for 3,264 participants that had an NCST form entered at Visit 8 Telephone.

The purpose of this dataset is to provide ARIC collaborators with verified derived variables for tests in the neurocognitive battery that required calculation in their scoring. In Visits 5 and 6, CDART had programmed calculated script fields in the NCS form to compute these scores, but they were occasionally incorrect if the script was not reloaded and saved to the database. The Coordinating Center has replaced these script fields with derived variables to accurately report these scores. Derived variables created by the Coordinating Center are described below.

The dataset naming conventions are as follows: The dataset name retains the retrieval date until the dataset is considered final and frozen. After a dataset is frozen, the retrieval date is dropped from the dataset name (ex: NCSTDERV8T1_NP). Datasets with “NP” in the name have dates removed; instead, dates are replaced with number of follow up days after Visit 1 date.

Details about using NCSTDERV8T1_NP are provided in **Manual 30**.

2. ADMINISTRATIVE

2.1 SUBJECTID (ARIC Subject ID (CIR))

Type: Character; length: $7.

2.2 ID (ARIC ID - same as SUBJECTID)

Description: The historical participant identifier from visits 1-4 is ID. The value of ID is the same value as SUBJECTID. Use ID when merging visit NCS stage 1 data with datasets from previous visits necessary for longitudinal analyses.

Type: Character; length: $7.

Algorithm: ID=SUBJECTID.

Source variable(s): SUBJECTID

3. DERIVED NCST SCORE VARIABLES

3.1 NCST5fderv (Oral Trails A total time in seconds (derived))

Description: A variable created to indicate the time in seconds to complete the Oral Trail Making Test (Part A, TMT A). If the number of errors made in the test exceeds five, the total time spent is set to 240 seconds, which is the maximum allowable time for this test. Otherwise, the total completion time is calculated as the sum of the minutes (multiplied by 60) and seconds taken to complete the test.

Type: Numeric

Algorithm: if NCST5e > 5 then NCST5fderv = 240;
else NCST5fderv = sum(NCST5c, NCST5b * 60);

Source variable(s): NCST5b, NCST5c, NCST5e

3.2 NCST5gderv (Oral Trails A score (derived))

Description: A score for the Oral Trail Making Test (Part A, TMT A) computed based on the total time to complete in seconds. Higher scores indicate stronger performance as the participant took a shorter amount of time to complete the test. A score of 0 indicates that the participant used the maximum amount of time (240 seconds).

Type: Numeric

Algorithm: NCST5gderv = (-1 * NCST5fderv) + 240;

Source variable(s): NCST5fderv

3.3 NCST6fderv (Oral Trails B total time in seconds (derived))

Description: A variable created to indicate the time in seconds to complete the Oral Trail Making Test (Part B, TMT B). If the number of errors made in the test exceeds five, the total time spent is set to 240 seconds, which is the maximum allowable time for this test. Otherwise, the total completion time is calculated as the sum of the minutes (multiplied by 60) and seconds taken to complete the test.

Type: Numeric

Algorithm: if NCST6e > 5 then NCST6fderv = 240;
else NCST6fderv = sum(NCST6c, NCST6b * 60);

Source variable(s): NCST6b, NCST6c, NCST6e

3.4 NCST6gderv (Oral Trails B score (derived))

Description: A score for the Oral Trail Making Test (Part B, TMT B) computed based on the total time to complete in seconds. Higher scores indicate stronger performance as the participant took a shorter amount of time to complete the test. A score of 0 indicates that the participant used the maximum amount of time (240 seconds).

Type: Numeric

Algorithm: NCST6gderv = (-1 * NCST6fderv) + 240;

Source variable(s): NCST6fderv

3.5 NCST7dderv (Word Fluency test total score (derived))

Description: The sum of the F and A totals from the Word Fluency test.

Type: Numeric

Algorithm: NCST7dderv = sum (NCST7b, NCST7c);

Source variable(s): NCST7b, NCST7c

3.6 NCST0a_year (Year of Completion Date)

Description: Year of the participant's telephone neurocognitive assessment date.

Type: Numeric

Algorithm: NCST0a_year = year of NCST0a;

Source variable(s): NCST0a

3.7 NCST0a_FollowUpDays (Days of follow up from visit 1 to Completion Date)

Description: The number of days of follow up from visit 1 to the date the Visit 8 telephone neurocognitive assessment was administered.

Type: Numeric

Algorithm: NCST0a_FollowUpDays = the number of days between visit 1 and the telephone neurocognitive assessment date (NCST0a).

Source variable(s): V1DATE01, NCST0a