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TO: HCHS/SOL Investigators

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DATE: July 14, 2020

RE: Distribution of HCHS/SOL Updated Visit 2 Participant Derived Dataset – Version 3.1

The HCHS/SOL Coordinating Center is distributing an update to the Visit 2 Participant Derived Dataset (PART_DERV_V2_INV3 created on 7-10-2020, 2:10pm) with its corresponding documentation (codebook and dictionary). This dataset which is considered a significant update for longitudinal analysis replaces previous dataset released on March 2019. The current version 3.1 update includes 11 updated variables, 27 new derived variables, and 4 renamed variables. Details are included at the end of the memo.

The most relevant change and impact is in the recoding of some variables, including hypertension awareness and diabetes definitions 3 and 5, to incorporate self-reported information from AFU interviews. For example, in this release we corrected DIABETES_SELF_V2 (yes/no). This variable was previously released in March 2019 and only included incident cases from the last telephone call to V2 (question MHE14). DIABETES_SELF_V2 is used as a key component in two definitions of diabetes (DIABETES3_V2 and DIABETES5_V2) and has an impact on the number of incident cases.

The contents for this release include SAS dataset PART_DERV_V2_INV3 and following documentation:

1. HCHS/SOL Visit 2 Examination Database Codebook Version 3.1
2. HCHS/SOL Visit 2 Derived Variable Dictionary Version 3.1

As a reminder, investigator use data contain potentially identifying information and should be handled in a manner that ensures data security and confidentiality. These datasets must be stored on a secure server, so that authorized study team members access the data directly from either a local area network or remotely via a virtual private network in a secure fashion. At no time should investigator use datasets or subsets of the data be stored on laptop computers or portable data storage devices (e.g., memory sticks), nor should copies be distributed via email attachments. Making multiple copies for storage on stand-alone workstations is also prohibited, as the likelihood of data being hacked into is increased as a result. Each study PI is responsible for recording and tracking where the data are stored and who has access to the data at all times. Access to investigator use data should be granted to co-investigators or other study personnel at a PI’s institution only for approved HCHS/SOL activities. Please contact us at the Coordinating Center if you have any questions about the contents of this Visit 2 data distribution for exclusive use by the HCHS/SOL investigators and NIH.
New Derived Variables
The participant derived variable dataset for Visit 2, PART_DERV_V2_INV3, contains these additional variables that are documented in the Data Dictionary that accompanies this release and they are profiled in the codebook.

**YRSUS_C3_V2** (3-category years in US (born in US/less than 10 years/10+ years) at visit 2)
**AFUCOPD_SELF_BYV2** (Self-reported COPD/emph or CB only in AFU by Visit 2)
**AFUHYPERT_SELF_BYV2** (Self-reported hypertension only in AFU by Visit 2)
**AFUDM_SELF_BYV2** (Self-reported diabetes only in AFU by Visit 2)
**COPD_EVER_V2** (Self-reported COPD/emph or CB only by Visit 2)
**SELFMED_ANTIDIAB_V2** (Self-reported anti-diabetic medication use at Visit 2)
**GESTATIONAL_DM_V2** (Self-reported gestational diabetes only case at V2)
**DIABETES5_V2** (3-level Diabetes using diabetes definition 5 (lab criteria ADA guideline plus self-reported diabetes or self-reported medication use) by Visit 2)
**DIABETES4_C4_V2** (4-level grouped diabetes using diabetes definition 4 (none/pre/treated/untreated) at V2)
**DIABETES5_C4_V2** (4-level grouped diabetes using diabetes definition 5 (none/pre/treated/untreated) by V2)
**DIABETES3_INDICATOR_V2** (Indicator of diabetes status using diabetes definition 3 by V2)
**DIABETES4_INDICATOR_V2** (Indicator of diabetes status using diabetes definition 4 at V2)
**DIABETES5_INDICATOR_V2** (Indicator of diabetes status using diabetes definition 5 by V2)
**DIABETES3_TIME_V2** (Observed time of diabetes censored event using diabetes definition 3 by V2)
**DIABETES5_TIME_V2** (Observed time of diabetes censored event using diabetes definition 5 by V2)
**DIABETES3_LL_DATE** (Diabetes definition 3 censored interval lower limit date)
**DIABETES3_UL_DATE** (Diabetes definition 3 censored interval upper limit date)
**DIABETES3_LL** (Diabetes definition 3 censored interval lower limit time)
**DIABETES3_UL** (Diabetes definition 3 censored interval upper limit time)
**DIABETES5_LL_DATE** (Diabetes definition 5 censored interval lower limit date)
**DIABETES5_UL_DATE** (Diabetes definition 5 censored interval upper limit date)
**DIABETES5_LL** (Diabetes definition 5 censored interval lower limit time)
**DIABETES5_UL** (Diabetes definition 5 censored interval upper limit time)
**DM4_AWARE_V2** (Diabetes awareness in diabetes definition 4 classification by V2)
**DM4_CONTROL_V2** (Diabetes awareness in diabetes definition 4 classification at V2)
**DM5_AWARE_V2** (Diabetes awareness in diabetes definition 5 classification by V2)
**DM5_CONTROL_V2** (Diabetes awareness in diabetes definition 5 classification at V2)

Updated/Corrected Derived Variables

<table>
<thead>
<tr>
<th>Updated variables</th>
<th>Number of Changes, out of N=11623 at Visit 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>DURATION_V2</td>
<td>32, cases set to missing when less than 30 minutes or greater than 8 hours</td>
</tr>
<tr>
<td>YRSUS_V2</td>
<td>1800 values slightly changed because they are no longer reported as integer values when US_BORN_V2=0</td>
</tr>
<tr>
<td>YRSUS_C2_V2</td>
<td>7 Corresponding change with YRSUS_V2</td>
</tr>
<tr>
<td>DIABETES_SELF_V2</td>
<td>900, Algorithm update by implement AFU self-reported DM and Gestational DM.</td>
</tr>
<tr>
<td>DIABETES3_V2</td>
<td>567, Corresponding change with Diabetes_self_V2</td>
</tr>
<tr>
<td>CHARLSON_V2</td>
<td>1165, COPD_EVER_V2 replaced MHE12 to include AFU &amp; V1 self-reported cases</td>
</tr>
<tr>
<td>IDF_IDF_SELFMEDS_V2</td>
<td>300, Diabetes_Self_V2 replaced MHE14 to include AFU and V1 self-reported cases</td>
</tr>
<tr>
<td>METS_IDF3_V2</td>
<td>115, Corresponding to IDF_IDF_SELFMEDS_V2 update</td>
</tr>
<tr>
<td>HYPERT_AWARENESS_V2</td>
<td>1987, Include the AFU and baseline self-reported cases</td>
</tr>
<tr>
<td>HYPERT_TREATMENT_V2</td>
<td>1663, Due to Hypert_Awareness_V2 updates</td>
</tr>
<tr>
<td>HYPERT_CONTROL_V2</td>
<td>1081, Due to Hypert_Treatment_V2 updates</td>
</tr>
</tbody>
</table>

Variable Name Changed
- GFR_PLUS1 \(\rightarrow\) GFR_PLUS1_V1V2
- DM_AWARE_V2 \(\rightarrow\) DM3_AWARE_V2
- DM_CONTROL_V2 \(\rightarrow\) DM3_CONTROL_V2
- DIABETES_C4_V2 \(\rightarrow\) DIABETES3_C4_V2