MIDUS
Midlife in the United States
A National Study of Health & Well-Being

Conventions for Creating MIDUS Datasets

The MIDUS Administrative Core has developed conventions for creating MIDUS datasets. These conventions have evolved over time to accommodate technological advances and data management best practices. Such conventions ensure data quality, provide a similar look-and-feel to all MIDUS datasets, and facilitate efficient and accurate data merges across different MIDUS projects, samples, or waves. Further, the introduction of technological metadata standards such as the Data Documentation Initiative (DDI), which MIDUS adheres to, make the conventions an integral part of accurate documentation of the MIDUS study.

The attached pages provide specific guidelines for naming, labeling and formatting variables in MIDUS. Also included are coding conventions for variables, missing value designations, and guidelines for date and time variable formats.

Note: All project leaders will be responsible for delivering cleaned, coded *SPSS* data files to the Administrative Core. Accompanying text documentation must be in *Word* format[1] (ICPSR will create final PDFs for public release). We recommend sending an early draft of the dataset and documentation to the Administrative Core for review before you make final data deliveries.

I. File Naming Conventions

File naming conventions help manage and organize MIDUS. These conventions become increasingly more useful as MIDUS becomes more complex. For all file types MIDUS will use the prefixes MR and M3 to designate the Refresher and MIDUS 3, respectively, followed by an underscore and the project number. Avoid using special characters (" / \ : * ? " < > [ ] & $) in filenames and all research metadata. These characters have specific meanings in computer operating systems and different applications that could can cause problems. Similarly, use underscores (_) or type in CamelCase to separate terms, not spaces. MIDUS recommends including a data using the format recommended by International Standards Organization (ISO) 8601: YYY-MM-DD. Finally, end the file name with a datestamp, two examples of which follow:

Examples: Documentation/Instruments

Refresher: MR_P1_PHONE INSTRUMENT_5-8-12
MIDUS 3: M3_P1_DocumentationOfScales _20120508

[1] When at all possible, include the date in the document footer or on the title page. This ensures that important versioning information is not removed by ICPSR upon submission. ICPSR renames submitted files and removes the MIDUS datestamp from the filename.

Data files should include additional information on the number of cases:

Examples: Datasets

Refresher: MR_P1_DATA_N2100_5-8-12
MIDUS 3: M3_P1_DATA_N5000_20120508

II. Variable Naming Conventions

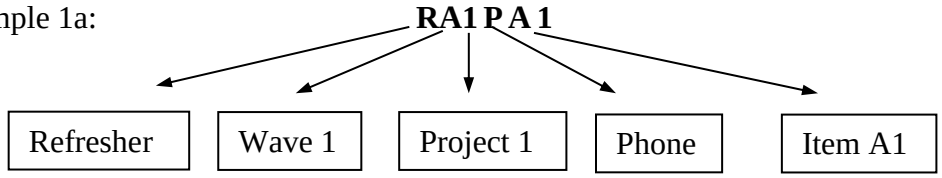
Rationale:

- Metadata best practices support a consistent and simple variable naming scheme. Not only does this reinforce the continuity of longitudinal data, but it makes cleaning and programming new waves of variables more efficient and ensures compatibility across different software platforms.
- The original naming conventions were adopted in 2004 when there were strict character limits on variable names in statistical software. While current software programs are much more lenient in this regard, there are still substantial differences across statistical programs, and some older versions of statistical software still adhere to smaller variable name character limits.
- For these reasons, we continue to limit variable name size, but because the Refresher cohort requires an "R" as the first character to identify the new sample (see examples 1a and 1b below), a 9-character variable name limit is used for MR variables**.**
- For the Refresher, the first 4 characters of each variable name identifies the cohort, longitudinal wave, the MIDUS project, and the instrument used to collect the data. The remaining characters identify the specific item or scale score variable that is represented by the measure's name. MIDUS 3 follows the same conventions but uses the first 3 characters to identify wave, project, and instrument. The exception to these conventions is the project 1 Milwaukee data. The Milwaukee sample is new at M2 and a used a different instrument (a personal interview instead of a phone interview) to collect Project 1 survey data from these individuals. Thus, Project 1 variables for the Milwaukee data include an additional character "A" to designate the project.[2]

Examples: MIDUS Refresher

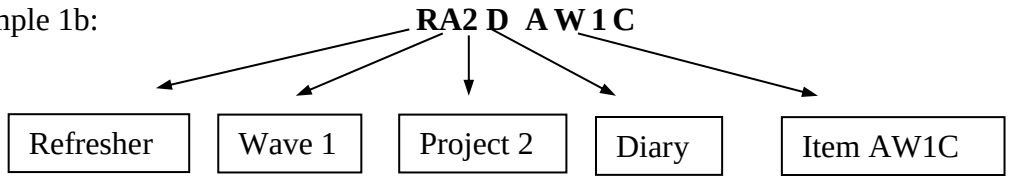
For the MIDUS Refresher the first character of each variables name will be **R**. Otherwise, the extant naming conventions apply, i.e. those developed for M2.

Example 1a:

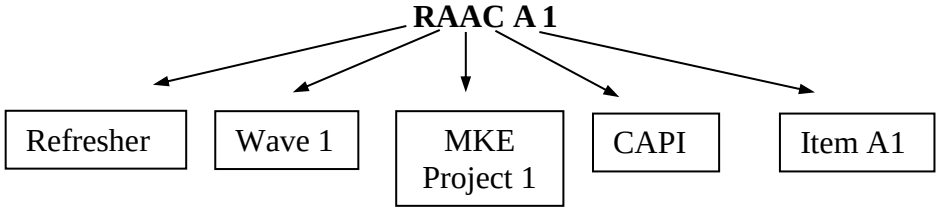


[2] Moving forward, the MKE2 variable names will continue the convention adopted at wave 2; MKE1 baseline was begun in 2005 during M2 data collection and so adopted the "B" character to indicate Wave2. Likewise, other projects like biomarkers and neuroscience who began baseline data collection at Wave2 also adopted variable names that began with "B". For MKE2, variable names will mimic those of M3 with "C" as the first character

Example 1b:

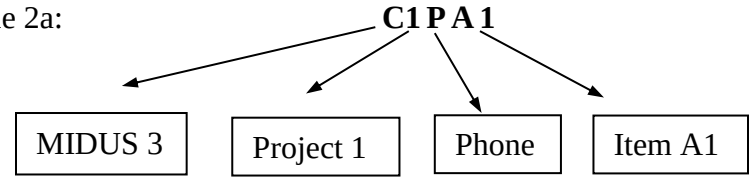


Example for Milwaukee Project 1:

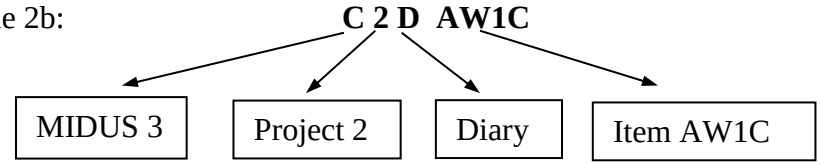


Examples: MIDUS 3

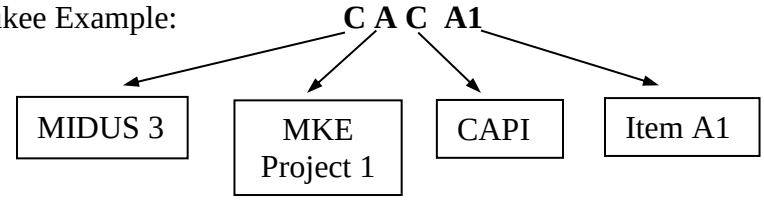
Example 2a:



Example 2b:



Milwaukee Example:



III. Variable Labeling Conventions

Additional information about variables can (and should!) be included in the variable label. The label is the appropriate metadata field to more fully and clearly describe a variable. New technological metadata standards can use the rich information contained in a label to harvest, search, and identify specific variables. We are setting an 80 character/space limit for variable labels and encourage the use of mixed case text for more sentence-like descriptions of variables. See examples below.

Example 1a:

Variable name: **RA1PA4**
Variable label: **Days unable to work because of health (30 days)**

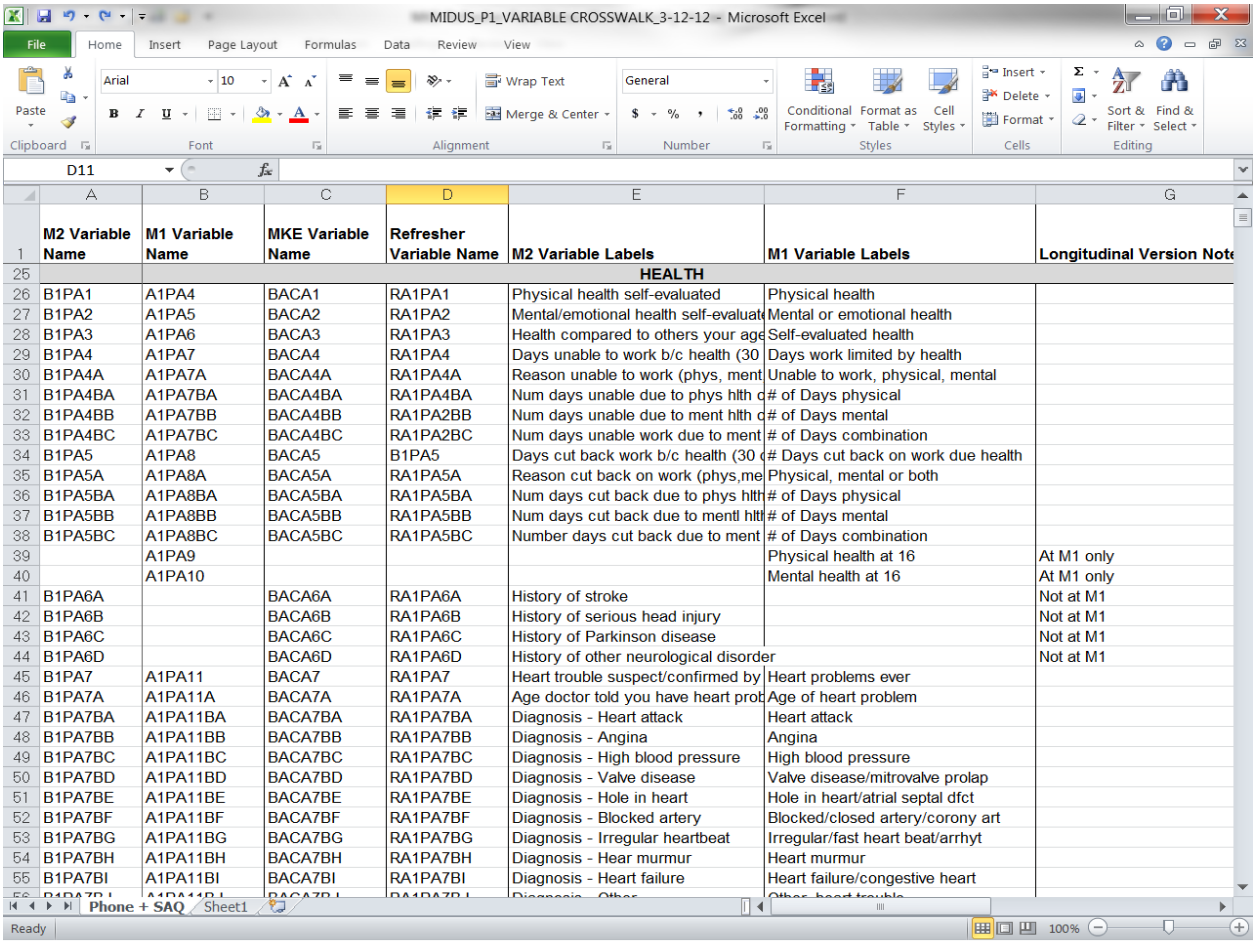
Example 1b:

Variable name: **RA4QCESD**
Variable label: **CESD: Center for Epidemiologic Studies Depression Scale**

IV. Variable concordance tables

The increasing number of waves and samples in MIDUS can make navigating among the datasets a challenge. We strongly suggest that each MIDUS project create variable concordance or cross-walk tables similar to the Excel spreadsheet created by Project 1 (see Figure 1 below). These tables help researchers find related variables across datasets and can be used by Data Documentation Initiative (DDI) tools to facilitate online variable concordance and searches. See the "Explore" and "Concordance Variables" views in the online MIDUS Portal (http://midus.colectica.org/Explore) to see how DDI tools make use of such concordance tables. Contact Barry Radler (bradler@wisc.edu) for more details if needed.

Figure 1: MIDUS Concordance Table



	A	B	C	D	E	F	G
1	**M2 Variable Name**	**M1 Variable Name**	**MKE Variable Name**	**Refresher Variable Name**	**M2 Variable Labels**	**M1 Variable Labels**	**Longitudinal Version Note**
25					**HEALTH**		
26	B1PA1	A1PA4	BACA1	RA1PA1	Physical health self-evaluated	Physical health	
27	B1PA2	A1PA5	BACA2	RA1PA2	Mental/emotional health self-evaluate	Mental or emotional health	
28	B1PA3	A1PA6	BACA3	RA1PA3	Health compared to others your age	Self-evaluated health	
29	B1PA4	A1PA7	BACA4	RA1PA4	Days unable to work b/c health (30	Days work limited by health	
30	B1PA4A	A1PA7A	BACA4A	RA1PA4A	Reason unable to work (phys, ment	Unable to work, physical, mental	
31	B1PA4BA	A1PA7BA	BACA4BA	RA1PA4BA	Num days unable due to phys hlth c	# of Days physical	
32	B1PA4BB	A1PA7BB	BACA4BB	RA1PA2BB	Num days unable due to ment hlth c	# of Days mental	
33	B1PA4BC	A1PA7BC	BACA4BC	RA1PA2BC	Num days unable work due to ment	# of Days combination	
34	B1PA5	A1PA8	BACA5	B1PA5	Days cut back work b/c health (30	# Days cut back on work due health	
35	B1PA5A	A1PA8A	BACA5A	RA1PA5A	Reason cut back on work (phys,me	Physical, mental or both	
36	B1PA5BA	A1PA8BA	BACA5BA	RA1PA5BA	Num days cut back due to phys hlth	# of Days physical	
37	B1PA5BB	A1PA8BB	BACA5BB	RA1PA5BB	Num days cut back due to mentl hlth	# of Days mental	
38	B1PA5BC	A1PA8BC	BACA5BC	RA1PA5BC	Number days cut back due to ment	# of Days combination	
39		A1PA9				Physical health at 16	At M1 only
40		A1PA10				Mental health at 16	At M1 only
41	B1PA6A		BACA6A	RA1PA6A	History of stroke		Not at M1
42	B1PA6B		BACA6B	RA1PA6B	History of serious head injury		Not at M1
43	B1PA6C		BACA6C	RA1PA6C	History of Parkinson disease		Not at M1
44	B1PA6D		BACA6D	RA1PA6D	History of other neurological disorder		Not at M1
45	B1PA7	A1PA11	BACA7	RA1PA7	Heart trouble suspect/confirmed by	Heart problems ever	
46	B1PA7A	A1PA11A	BACA7A	RA1PA7A	Age doctor told you have heart prob	Age of heart problem	
47	B1PA7BA	A1PA11BA	BACA7BA	RA1PA7BA	Diagnosis - Heart attack	Heart attack	
48	B1PA7BB	A1PA11BB	BACA7BB	RA1PA7BB	Diagnosis - Angina	Angina	
49	B1PA7BC	A1PA11BC	BACA7BC	RA1PA7BC	Diagnosis - High blood pressure	High blood pressure	
50	B1PA7BD	A1PA11BD	BACA7BD	RA1PA7BD	Diagnosis - Valve disease	Valve disease/mitrovalve prolap	
51	B1PA7BE	A1PA11BE	BACA7BE	RA1PA7BE	Diagnosis - Hole in heart	Hole in heart/atrial septal dfct	
52	B1PA7BF	A1PA11BF	BACA7BF	RA1PA7BF	Diagnosis - Blocked artery	Blocked/closed artery/corony art	
53	B1PA7BG	A1PA11BG	BACA7BG	RA1PA7BG	Diagnosis - Irregular heartbeat	Irregular/fast heart beat/arrhyt	
54	B1PA7BH	A1PA11BH	BACA7BH	RA1PA7BH	Diagnosis - Hear murmur	Heart murmur	
55	B1PA7BI	A1PA11BI	BACA7BI	RA1PA7BI	Diagnosis - Heart failure	Heart failure/congestive heart	

V. Variable Formats

1. Utilize "Numeric" formats whenever possible; avoid using raw string variables that contain verbatim text. Open-ended responses, text, and verbatim data should be numerically coded where possible.

2. Variable formats should be precise – variable lengths should not exceed the maximum number of digits possible for a response. Thus, if a response code has a maximum of 2 digits (e.g., a scale ranging from 1-10) then the variable length should be formatted as 2 digits.

3. Decimals: Specify up to 3 decimal places (an ICPSR convention). If important details of the data require more decimal places, please contact Barry Radler (bradler@wisc.edu).

4. Date/time formats:

- Because of conflicting or proprietary formatting, date or time data provided **by *respondents*** must be separated into individual components. For example, date information must be recorded in separate month and year variables, and temporal information must be recorded in separate hour, minute and meridian (am/pm etc.) variables (one alternative for temporal variables is using a 24-hour clock or military time, in which hours and minutes can be represented as a numeric variable HHMM). Treating such variables this way allows them to be read by a wider array of software programs with fewer formatting problems or errors.
- Dates or times recorded **by *project staff for administrative purposes*** (e.g. date & time Medical History was completed) can be submitted to the Administrative Core in the date and time formats specified in the established conventions for MIDUS (e.g., mm/dd/yyyy, or hh:mm:ss, etc.).
- **Note: because of confidentiality/disclosure precautions, ICPSR suggests that month and year are sufficient for most sensitive date variables that are released publicly.**

5. Derived or constructed variables: if possible, any constructed or derived variables (e.g., scales scores or summary variables) are placed directly after their components in the dataset. That is, derived variables should follow their constituent variables in the sequence of variables in a dataset. Also, the details of the construction or derivation of such variables are to be explained in accompanying documentation (e.g., a Word document explaining the formula, procedure, source, criteria, etc., used in creating the constructed or derived variables).

VI. Value Labeling Conventions

A. Format

All value labels should be **UPPER CASE**.

Example:

1 = YES
2 = NO
7 = DON'T KNOW or DO NOT KNOW
8 = REFUSED or MISSING
9 = INAPP

B. Coding Conventions for Non-response (Don't Know, Missing Data, Inapplicable, Filters)

Ideally, all cells in MIDUS datasets should be populated with a value and empty cells should be avoided. The following values should be used to indicate different types of missing data or non-response to questions or data fields (a series of 9's can be appended to fit the maximum number of digits/integers for a particular variable):

DON'T KNOW (7's) - 7, 97, 997, 9997, etc.

Used to indicate explicit "Don't know" responses (where a specific response option of "Don't know" was offered).

REFUSED/MISSING (8's) - 8, 98, 998, 9998, etc.

Used to indicate R did not provide a response to a particular question.

INAPPLICABLE (9's) - 9, 99, 999, 9999, etc.

Used to indicate that R was not asked a particular question. This will occur most often because of skip patterns that the R is asked to follow, or questions that R determines do not apply to him or her.

INCOMPLETE SAQ (-1)

The Refresher and M3 uses a new convention for coding SAQ non-responders in the Project 1 protocol. SAQ variables for those cases that did not return a completed SAQ will be coded "-1". Project 1 SAQ variables from M1 and M2 will eventually be coded in the same way.

OTHER NEGATIVE CODES (-2, -9, etc.)

It is increasingly clear that in many situations it is more efficient from the data manager's and the analyst's standpoint to use negative integers as non-response codes. MIDUS has begun adopting these in limited situations (as for coding SAQ non-response). For the M1 Boston Longitudinal Cognitive data (M1P3), MIDUS began using "-2" to indicate a case lacked longitudinal data and "-9" to indicate a case lacked baseline data.

C. Additional Coding Situations.

In M2, some projects used additional codes to indicate invalid values or incomplete data. We suggest using the value of 96 (and working backwards to add additional codes). For example, Project 2 assigned additional codes to cortisol variables that did not contain valid data (e.g., 96 = empty vial, 95 = not done, 94 = unreliable).