

USING DDI TO DOCUMENT A COMPLEX LONGITUDINAL STUDY

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Overview

- **Background:**
 - **MIDUS study design, content, features, use**
- **Research data documentation**
 - **Importance of standardized structured metadata**
- **Using DDI to document (and distribute) longitudinal data**
 - **MIDUS-Colectica Portal**
- **Future Directions**



MIDUS Background



MIDUS Background: Unique Features



*Advancing Knowledge
of Factors That
Promote Positive
Health and Resilience*

MID-LIFE IN THE UNITED STATES A National Study of Health and Well-Being

Baseline: 1995-96

- **Harvard University**
- **Funded by MacArthur Foundation**
- **N=7,108**
- **Ages 25-74**

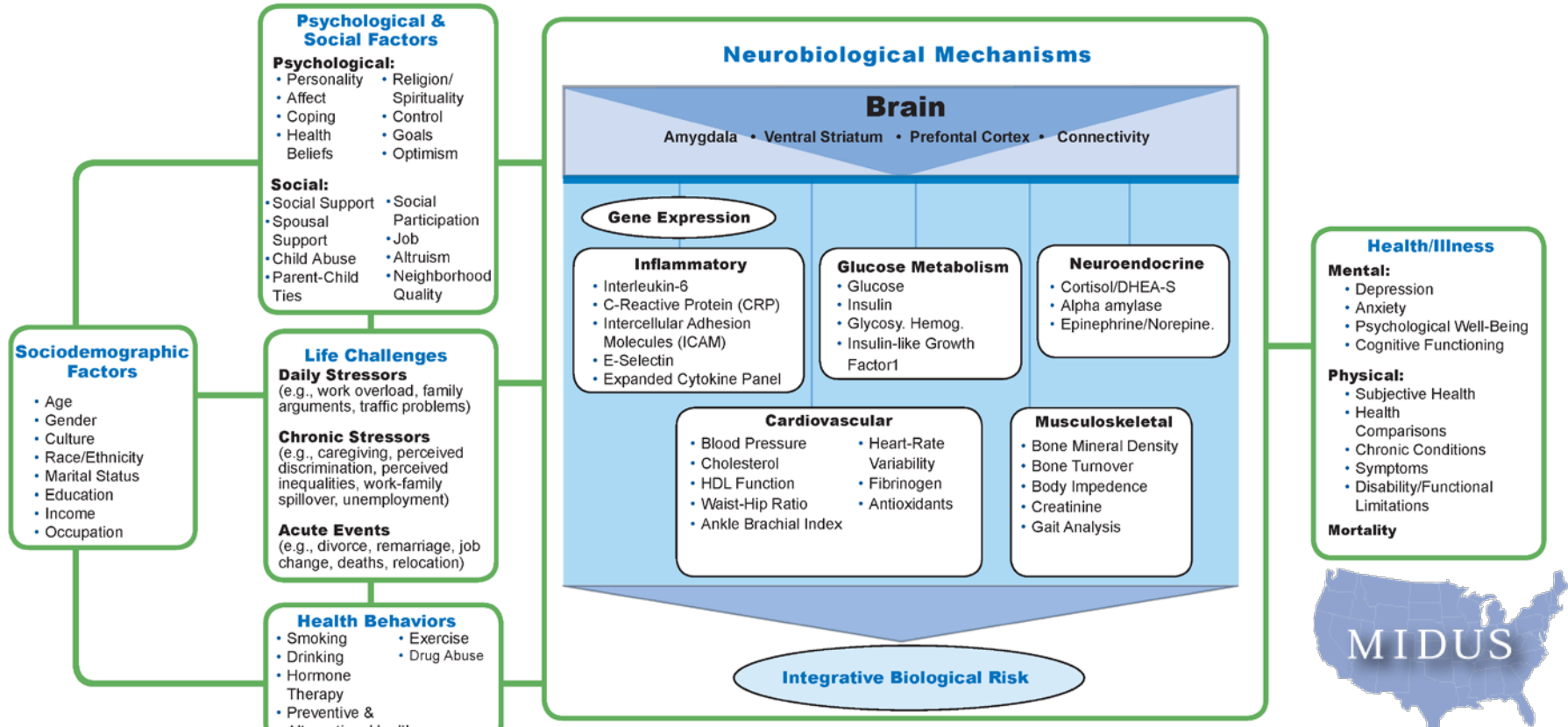


MIDUS Background: Unique Features

- **Multidisciplinary (“bio-psycho-social”) design**



MIDUS Background: Unique Features



PROJECT 1

(SURVEY OF A NATIONAL SAMPLE)

Assessed a wide array of psychological constructs (e.g., personality, psychological well-being, positive and negative affect, sense of control, goal orientations) and demographic characteristics (e.g., gender, marital status, socioeconomic standing, employment status), along with extensive health measures (mental and physical).

MODE: 30-minute Phone Interview and Two 50-page Self-Administered Questionnaires

THE MIDUS II PROJECTS

PROJECT 2

(Daily Diary Study)

8 days of daily experience obtained via phone interviews.

(e.g., time use, physical health symptoms and substance use, work productivity, psychological distress)

4 days of salivary cortisol

PROJECT 3

(Cognitive Functioning)

Phone-based cognitive battery

(e.g., episodic verbal memory, working memory, verbal ability and speed, fluid intelligence/reasoning, speed of processing, episodic verbal memory/forgetting)

Face-to-face assessment of cognitive capacities

PROJECT 4

(Biomarkers)

2-Day Clinic Visit:

Biomarkers—neuroendocrine, cardiovascular, immune, bone

Physical exam

Medical history

Medications

Sleep assessments

Laboratory challenge study—heart-rate

variability, blood pressure, cortisol

PROJECT 5

(Neuroscience)

Affective reactivity & recovery:

- baseline electroencephalography (EEG)
- task-related EEG
- task-related electromyography (EMG; eyeblink startle response, post auricular startle reflex, corrugator supercilli activity)
- structural MRI of neuroanatomy
- task event-related fMRI



MIDUS Background: Unique Features

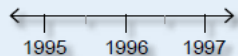
- Multidisciplinary (“bio-psycho-social”) approach
- **Multiple longitudinal samples**
 - Multiple assessments (9-10 years)
 - 2 National (Core and Refresher)
 - 2 African American (Milwaukee)
 - 1 Japanese (“Midlife in Japan”)



M1

Survey n=7108

Daily Diary n=1499



M2

Survey n = 4963

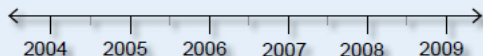
Cognitive n = 4512

Daily Diary n = 2022

Biomarker n = 1255

Neuroscience n = 331

Milwaukee n = 592



M3

Survey n = 3294

Cognitive n = 2693

Daily Diary

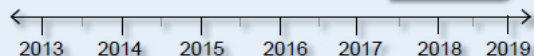
Biomarker

Neuroscience

Milwaukee n = 389

Gene Expression (new)

Retention- Early Warning (new)



MR

Survey n = 3577

Cognitive n = 2763

Daily Diary n = 782

Biomarker n = 863

Neuroscience n = 136

Milwaukee n=508

MIDJA

Survey n=1027

Biomarker n=382

Survey n=657

Biomarker n=328

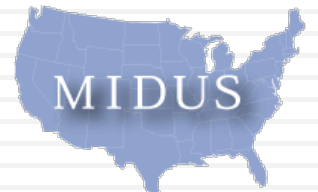


MIDUS Background: Unique Features

- Multidisciplinary (“bio-psycho-social”) approach
- Multiple longitudinal samples
- **Data products**
 - 24+ datasets and growing
 - 30k variables
 - N <13k
- **Widespread secondary usage**
 - ICPSR: 110k data downloads, 16k unique users
 - 1,100 publications



Documentation of Research Data



Using DDI to Document Research Data



- **Data Documentation Initiative:** is an international standard for describing social science *metadata* in distributed network environments.
- **Makes research data:**
 - *Machine-actionable*
 - *Independently understandable*



Using DDI to Document Research Data

- **University of Michigan: ICPSR**
 - Using DDI 2 (Codebook)
- **MIDUS Portal (<http://midus.colectica.org>)**
 - Based on same datasets available at ICPSR
 - Using DDI 3 (Lifecycle)



Using DDI 3.2 (Lifecycle)

- **Particular benefits for longitudinal studies**
 - **Harmonization (internal, post-hoc)**
 - Clarifies the related nature of versions of longitudinal and cross-cohort variables
 - **Intelligent search function**
 - Searches multiple metadata fields and arrays results
 - **Custom Data Extracts**
 - Researchers can focus on variables of interest
 - Facilitate accurate merges across numerous datasets



Using DDI to Document Longitudinal Data




MIDUS Portal - <http://midus.colectica.org>

MIDUS Search Explore Basket Admin Help Feedback bradler@wisc.edu


Home

Welcome

Welcome to the MIDUS Colectica Portal. This website provides users access to publicly available data and richly-structured documentation for the MIDUS study.



The Portal is based on the DDI metadata standard and is powered by Colectica software.



Midlife in the United States

Midlife in the United States (MIDUS) is a national longitudinal study of health and well-being that was conceived by a multidisciplinary team of scholars interested in understanding aging as an integrated bio-psycho-social process. Since its inception in 1995 MIDUS has continued to grow, and now includes data from over 12,000 individuals, comprising thousands of variables in different scientific topics among multiple cohorts.

This website is a one-stop portal that provides MIDUS data and metadata (information about research data) for exploration and analysis. As of 2016 the portal is organized around four functions:

- **Home:** The home page still allows users to browse variables, read abstracts, download instruments and documentation, and search for variables within individual MIDUS projects. Also included for each project is a link to the full project dataset available from the [official MIDUS archive at ICPSR](#).
- **Search tab:** improved and expanded capabilities allow searches across ALL publicly-available MIDUS datasets, by variable name, label, question text, or topic/concept.
 - Search results provide all variable-level metadata and descriptive statistics.
 - Search results can be shared by copying and pasting the URL from the search results window.
- **Explore tab:** harmonization and concordance information is available for Survey, Cognitive, Daily Diary, and Neuroscience variables (Biomarkers concordance information is forthcoming). This information can be found under the Explore tab by browsing the variables listed to the left, OR it can found in the Search results via the "Concordance Variables" link associated with each variable.
 - Under Explore, click on the "graph" icon to produce visualizations across concordance variables.
 - Click on the "grid" icon to examine code list comparability across concordance variables.
 - Any threats to comparability or equivalence among concordance variables are detailed in two fields called "Comparability notes" and "Comparability class."
- **Basket tab (custom data extracts):** any variable can be added to a download "basket" by clicking on the shopping cart icon next to it. These variables are then listed under the "Basket" tab where users can download the following:
 - A custom CSV or SPSS data file (custom data downloads from multiple datasets are presented in a "wide" format, i.e. the same measures from different datasets or waves are represented as separate variables).
 - A custom PDF codebook. It is strongly recommended that users download a codebook to accompany any custom datasets – the codebooks include important information about versioning, provenance, and harmonization that are not included in the datasets.
 - The DDI-compliant XML code that describes the variables in your basket.

The MIDUS study and this portal are supported by multiple grants from the National Institute on Aging (SR37AG027343, SP01AG020166, 1R03AG046312, 1U19AG051426) and by the University of Wisconsin Institute on Aging. Please feel free to send MIDUS any [feedback or questions about this portal](#).

Home

Welcome

Welcome to the MIDUS Colectica Portal.



Based on the DDI metadata standard and powered by Colectica software.



Bing Translator

English



MIDUS 2

Project 1 (Survey)	Project 1 provided follow-up on the psychosocial, sociodemographic, and health variables assessed in MIDUS 1.	Study Documentation	Browse Variables	Download Full Dataset	Download Codebook
Project 2 (Daily Stress)	Project 2 provided follow-up on the daily diary study included in MIDUS 1.	Study Documentation	Browse Variables	Download Full Dataset	Download Codebook
Project 3 (Cognitive)	Project 3 included new cognitive assessments for the full MIDUS sample.	Study Documentation	Browse Variables	Download Full Dataset	Download Codebook
Project 4 (Biomarkers)	Project 4 included comprehensive biomarker assessments on a subsample of MIDUS respondents, collected at one of 3 General Clinical Research Centers around the country.	Study Documentation	Browse Variables	Download Full Dataset	Download Codebook
Project 5 (Neuroscience)	Project 5 included neuroscience assessments on a subsample of respondents in the biomarker study.	Study Documentation	Browse Variables	Download Full Dataset	Download Codebook

Variables



Sort by:

Relevance

[Syntax](#)

Item types: Variables

Query: smoking

Results 1 to 20 of 125 (0.205 seconds)

C1PA41

Ever tried to quit smoking

Since we last interviewed you in [M2PhoneMO] [M2PhoneVR] have you tried to quit smoking?

Study: [MIDUS 3 Project 1](#) / Data File: [MIDUS 3](#) / Variable Group: [Phone](#) / Variable Group: [Phone A: Health](#)

A2DNOSMO

Never smokes

R never smokes/ R may smoke

Study: [MIDUS 1 Project 2](#) / Data File: [M1_P2_DAILY DAIRY N=1499 11-01-12](#) / Variable Group: [MIDUS 1 Project 2](#) / Variable Group: [Personal Background](#)



- Appears Within
- MIDUS 3 Project 1
 - MIDUS 3
 - MIDUS 3 Project 1
 - MIDUS 3
 - M3_P1_AGGREGATE_N=3294_20150608
 - Phone
 - Phone A: Health

Ever tried to quit smoking

MIDUS 3 Project 1 MIDUS 3 Phone 2

Variable Details Lineage Concordance Variables

Name C1PA41

Label Ever tried to quit smoking

Question Text Since we last interviewed you in [M2PhoneMO], [M2PhoneYR] have you tried to quit smoking?

Backward Skip (C1PA37 = NEVER) OR (C1PA38A = NO, DK, OR REFUSED) OR (C1PA39 = NO, DK, OR REFUSED)

Forward Skip GO TO C1PA44.

Dataset M3_P1_AGGREGATE_N=3294_20150608

Comparability Class Wording in Question - Difference exists among waves because there were wording changes in question just at particular waves.

Comparability Notes Wording change in question text: 'Since we last interviewed you in [MONTH], [YEAR]' phrase was deleted from MR and MKER baseline instruments.

Value	Label	Frequency	
1	YES	203	
2	NO	103	
9	INAPP	2988	

Valid	Invalid	Min	Max
306	2988	1	2



- Appears Within
- MIDUS 3 Project 1
 - MIDUS 3
 - MIDUS 3 Project 1
 - MIDUS 3
 - M3_P1_AGGREGATE_N=3294_20150608
 - Phone
 - Phone A: Health

Ever tried to quit smoking

MIDUS 3 Project 1 MIDUS 3 Phone 2

Variable Details Lineage **Concordance Variables**

Name C1PA41

Label Ever tried to quit smoking

Question Text Since we last interviewed you in [M2PhoneMO], [M2PhoneYR] have you tried to quit smoking?

Backward Skip (C1PA37 = NEVER) OR (C1PA38A = NO, DK, OR REFUSED) OR (C1PA39 = NO, DK, OR REFUSED)

Forward Skip GO TO C1PA44.

Dataset M3_P1_AGGREGATE_N=3294_20150608

Comparability Class Wording in Question - Difference exists among waves because there were wording changes in question just at particular waves.

Comparability Notes Wording change in question text: 'Since we last interviewed you in [MONTH], [YEAR]' phrase was deleted from MR and MKER baseline instruments.

Value	Label	Frequency	
1	YES	203	
2	NO	103	
9	INAPP	2988	

Valid	Invalid	Min	Max
306	2988	1	2

Ever tried to quit smoking

MIDUS 3 Project 1 MIDUS 3

Variable Concordance Variables

B1PA41 - Tried quit smoking since last interview

Dataset MIDUS 2

Comparability Class Wording in Question - Difference exists among waves because there were wording changes in question just at particular waves.

Comparability Notes Wording change in MR question: 'Since we last interviewed you in [MONTH], [YEAR]' phrase was deleted.

Value	Label	Frequency
1	YES	532
2	NO	235

Valid	Invalid	Min	Max	Mean	StdDev
767	4196	1	2	1.31	0.46

BACA41 - Ever tried to quit smoking

Dataset MIDUS 2 Milwaukee

Comparability Class Wording in Question - Difference exists among waves because there were wording changes in question just at particular waves.

Comparability Notes Wording change in MR question: 'Since we last interviewed you in [MONTH], [YEAR]' phrase was deleted.

Value	Label	Frequency
1	YES	130
2	NO	34
9	INAPP	428

Valid	Invalid	Min	Max	Mean	StdDev
164	428	1	2	1.21	0.41

RA1PA41 - Ever tried to quit smoking

Dataset MIDUS Refresher

Comparability Class Wording in Question - Difference exists among waves because there were wording changes in question just at particular waves.

Comparability Notes Wording change in MR question: 'Since we last interviewed you in [MONTH], [YEAR]' phrase was deleted.

Value	Label	Frequency
1	YES	398
2	NO	73
9	INAPP	3106

Survey

Daily Diary

Cognitive

Neuroscience



Select an item on the left.

Currently, Explore provides harmonization information for the Survey, Daily Diary, Cognitive, and Neurosciences variables. Work on harmonizing the Biomarker variables is ongoing.

Survey

Administration

Recession Experience

Health

Self-Evaluated Health

Physical/Mental Health Limits Work

Health at Age 16

History of Neurological Disorder

History of Heart Trouble

Cardiovascular Health

Angina

Chest Pain

Blood Pressure

Cancer

Hysterectomy/Ovary Removal

History of Smoking

History of Drinking

Depression - Depressed Affect

Depression - Anhedonia

Depression - Depressed Affect and Anhedonia

Anxiety/Worry/Panic

Education, Occupation, and Marital Status

Household Roster and Children

Caregiving

Living Arrangements

Race and Ethnicity

Life Satisfaction

Your Health



Select an item on the left.

Currently, Explore provides harmonization information for the Survey, Daily Diary, Cognitive, and Neurosciences variables. Work on harmonizing the Biomarker variables is ongoing.

Survey

Administration

Recession Experience

Health

Self-Evaluated Health

Physical/Mental Health Limits Work

Health at Age 16

History of Neurological Disorder

History of Heart Trouble

Cardiovascular Health

Angina

Chest Pain

Blood Pressure

Cancer

Hysterectomy/Ovary Removal

History of Smoking

History of Drinking

Depression - Depressed Affect

Depression - Anhedonia

Depression - Depressed Affect and Anhedonia

Anxiety/Worry/Panic

Education, Occupation, and Marital Status

Household Roster and Children

Caregiving

Living Arrangements

Race and Ethnicity

Life Satisfaction



	M1P1	M2P1	M3P1	MKE1	MKE2	MRP1	MKER
Age smoked first cigarette	A1PA41	B1PA37	C1PA37	BACA36	CACA36	RA1PA37	RAACA36
Smoked cigarettes ever	A1PA40	B1PA38A	C1PA38A	BACA37	CACA37	RA1PA38A	RAACA37
Age begin smoke regularly	A1PA42	B1PA38B	C1PA38B	BACA38	CACA38	RA1PA38B	RAACA38
Smoke cigarettes regularly now	A1PA43	B1PA39	C1PA39	BACA39	CACA39	RA1PA39	RAACA39
Ave # cigs per day_cur smoker	A1PA44	B1PA40	C1PA40	BACA40	CACA40	RA1PA40	RAACA40
Ever tried to quit smoking	A1PA45	B1PA41	C1PA41	BACA41	CACA41	RA1PA41	RAACA41
Age when last smoked regularly	A1PA46	B1PA42	C1PA42	BACA42	CACA42	RA1PA42	RAACA42
Ave # cigs per day_ex-smoker	A1PA47	B1PA43	C1PA43	BACA43	CACA43	RA1PA43	RAACA43
Ever used pipe/cigars/snuff/chew		B1PA44	C1PA44	BACA44	CACA44	RA1PA44	RAACA44
Who smoked - Father		B1PA45A		BACA45A		RA1PA45A	RAACA45A
Who smoked - Mother		B1PA45B		BACA45B		RA1PA45B	RAACA45B
Who smoked - Other		B1PA45C		BACA45C		RA1PA45C	RAACA45C
In home anyone smoke/use tobacco current		B1PA46	C1PA46	BACA46	CACA46	RA1PA46	RAACA46
At job anyone smoke/use tobacco ever		B1PA47	C1PA48	BACA47	CACA47	RA1PA47	RAACA47
At job anyone smoke/use tobacco current		B1PA48	C1PA47	BACA48	CACA48	RA1PA48	RAACA48

Concept History of Smoking

Comparability Class General Item Availability; Baseline Item

Comparability Notes Not in M1, M3, and MKE2; was introduced at M2, MKE1, MR, MKER as a new baseline item.

Statistics **Code Comparison** Correspondence Tree

% of valid % of total

	M2P1 B1PA45B	MKE1 BACA45B	MRP1 RA1PA45B	MKER RAACA45B
YES	31.59 %	36.15 %	34.77 %	43.98 %
NO	40.54 %	33.11 %	31.33 %	29.19 %
NO ONE	27.86 %	30.74 %	33.90 %	26.82 %
DON'T KNOW				
REFUSED				
INAPP				

Dataset	Variable	Valid	Invalid	Min	First Quartile	Median	Third Quartile	Max	Mean	StdDev
<input type="checkbox"/> M2P1	B1PA45B	4960	3	1				4		
<input type="checkbox"/> MKE1	BACA45B	592	0	1				4		
<input type="checkbox"/> MRP1	RA1PA45B	3575	2	1				4		
<input type="checkbox"/> MKER	RAACA45B	507	1	1				4		

Close

MKER

RAACA36

RAACA37

RAACA38

RAACA39

RAACA40

RAACA41

RAACA42

RAACA43

RAACA44

RAACA45A

RAACA45B

RAACA45C

RAACA46

RAACA47

RAACA48

Survey

Administration

Recession Experience

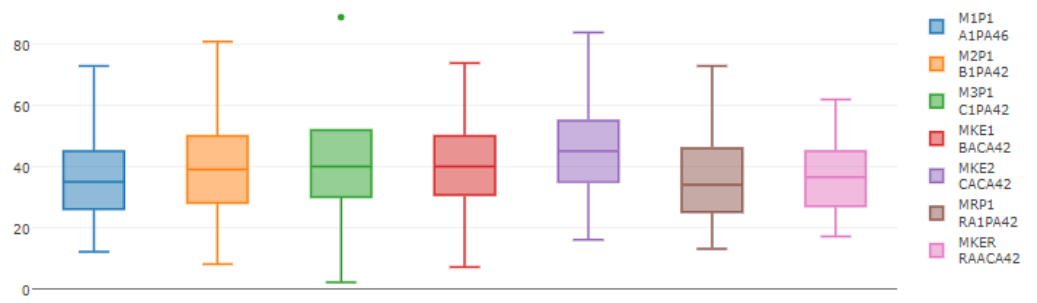
Health

- Self-Evaluated Health
 - Physical/Mental Health Limits Work
 - Health at Age 16
 - History of Neurological Disorder
 - History of Heart Trouble
 - Cardiovascular Health
 - Angina
 - Chest Pain
 - Blood Pressure
 - Cancer
 - Hysterectomy/Ovary Removal
 - History of Smoking**
 - History of Drinking
 - Depression - Depressed Affect
 - Depression - Anhedonia
 - Depression - Depressed Affect and Anhedonia
 - Anxiety/Worry/Panic
- Education, Occupation, and Marital Status
 - Household Roster and Children
 - Caregiving
 - Living Arrangements
 - Race and Ethnicity
 - Life Satisfaction

	M1P1	M2P1	M3P1	MKE1	MKE2	MRP1	MKER
Age smoked first cigarette	A1PA41	B1PA37	C1PA37	BACA36	CACA36	RA1PA37	RAACA36
Smoked cigarettes ever	A1PA40	B1PA38A	C1PA38A	BACA37	CACA37	RA1PA38A	RAACA37
Age begin smoke regularly	A1PA42	B1PA38B	C1PA38B	BACA38	CACA38	RA1PA38B	RAACA38
Smoke cigarettes regularly now	A1PA43	B1PA39	C1PA39	BACA39	CACA39	RA1PA39	RAACA39
Ave # cigs per day_cur smoker	A1PA44	B1PA40	C1PA40	BACA40	CACA40	RA1PA40	RAACA40
Ever tried to quit smoking	A1PA45	B1PA41	C1PA41	BACA41	CACA41	RA1PA41	RAACA41
Age when last smoked regularly	A1PA46	B1PA42	C1PA42	BACA42	CACA42	RA1PA42	RAACA42
Ave # cigs per day_ex-smoker	A1PA47	B1PA43	C1PA43	BACA43	CACA43	RA1PA43	RAACA43
Ever used pipe/cigars/snuff/chew		B1PA44	C1PA44	BACA44	CACA44	RA1PA44	RAACA44
Who smoked - Father		B1PA45A		BACA45A		RA1PA45A	RAACA45A
Who smoked - Mother		B1PA45B		BACA45B		RA1PA45B	RAACA45B
Who smoked - Other		B1PA45C		BACA45C		RA1PA45C	RAACA45C
In home anyone smoke/use tobacco current		B1PA46	C1PA46	BACA46	CACA46	RA1PA46	RAACA46
At job anyone smoke/use tobacco ever		B1PA47	C1PA48	BACA47	CACA47	RA1PA47	RAACA47
At job anyone smoke/use tobacco current		B1PA48	C1PA47	BACA48	CACA48	RA1PA48	RAACA48

- Survey
- Administration
- Recession Expe
- Health
 - Self-Evalu
 - Physical/M
 - Health at A
 - History of I
 - History of I
 - Cardiovasc
 - Angina
 - Chest Pain
 - Blood Pres
 - Cancer
 - Hysterecto
 - History of S
 - History of I
 - Depression
 - Depression
 - Depression
 - Depression
 - Anxiety/W
- Education, Occ
- Household Ros
- Caregiving
- Living Arrang
- Race and Ethn
- Life Satisfac
- Your Health
- Health Quest
- Health Insuran
- Parent's Health
- Personal Belie
- Work
- Finances
- Community Inv
- Your Neighbor

Age when last smoked regularly



% of valid % of total

Dataset	Variable	Valid	Invalid	Min	First Quartile	Median	Third Quartile	Max	Mean	StdDev
M1P1	A1PA46	2033	5075	12	26	35	45	73	36.5	12.59
M2P1	B1PA42	1632	3331	8	28	39	50	81	39.31	13.52
M3P1	C1PA42	1152	2142	2	30	40	52	89	41.21	14.75
MKE1	BACA42	161	431	7	30.67	40	50	74	40.73	12.61
MKE2	CACA42	122	267	16	34.92	45	55.08	84	44.78	14.37
MRP1	RA1PA42	1047	2530	13	25	34	46	73	36.62	13.64
MKER	RAACA42	94	414	17	26.92	36.5	45	62	36.65	11.32

MKER

- RAACA36
- RAACA37
- RAACA38
- RAACA39
- RAACA40
- RAACA41
- RAACA42
- RAACA43
- RAACA44
- RAACA45A
- RAACA45B
- RAACA45C
- RAACA46
- RAACA47
- RAACA48

Close

Details...

Name dataElementConcept_A1PA4

Label Physical health

Concept  Self-Rated Physical Health

Comparability Class Coding Scheme - Difference exists among waves because responses were coded differently.

Comparability Notes The M1 version of this variable is reverse coded

Statistics




Code Comparison

Correspondence Tree

	M1P1 A1PA4	M2P1 B1PA1	M3P1 C1PA1	MKE1 BACA1	MKE2 CACA1	MRP1 RA1PA1	MKER RAACA1
POOR	1	5	5	5	5	5	5
FAIR	2	4	4	4	4	4	4
GOOD	3	3	3	3	3	3	3
VERY GOOD	4	2	2	2	2	2	2
EXCELLENT	5	1	1	1	1	1	1
DON'T KNOW	7	7	7	7	7	7	7
REFUSED	8	8	8	8	8	8	8
INAPP	9	9		9			

Close

- Survey
 - Administration
 - Recession Experience
 - Health
 - Self-Evaluated Health**
 - Physical/Mental Health Limits Work
 - Health at Age 16
 - History of Neurological Disorder
 - History of Heart Trouble
 - Cardiovascular Health
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 - Anxiety/Worry/Panic
 - Education, Occupation, and Marital Status
 - Household Roster and Children
 - Caregiving
 - Living Arrangements
 - Race and Ethnicity
 - Life Satisfaction
 - Your Health
 - Health Questions for Women

	M1P1	M2P1	M3P1	MKE1	MKE2	MRP1	MKER
 Physical health	A1PA4	B1PA1	C1PA1	BACA1	CACA1	RA1PA1	RAACA1
 Mental or emotional health	A1PA5	B1PA2	C1PA2	BACA2	CACA2	RA1PA2	RAACA2
 Self-evaluated health	A1PA6	B1PA3	C1PA3	BACA3		RA1PA3	RAACA3

MANAGE

Create a Basket



BASKETS

NADDI 2019 Demo



NADDI 2019 Demo

This is your active basket.

Download

This basket contains 22 items.

[Download PDF Codebook](#)[Download DDI 3.2 XML](#)[Download CSV](#)[Download SPSS](#)

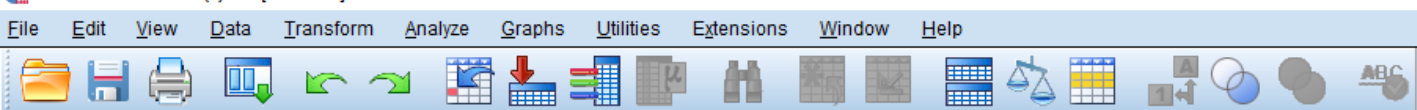
Manage

[Rename](#)[Remove](#)

Variables (22)

	BACA1	Physical health self-evaluated
	B1PA1	Physical health self-evaluated
	C1PA1	Physical health self-evaluated
	RAACA1	Physical health self-evaluated
	RA1PA1	Physical health self-evaluated
	CACA1	Physical health self-evaluated
	A1PA4	

TRANSLATE



	Name	Label	Values	Missing
1	MIDUSID	Master ID created by concatenating M2ID, MRID, M...	None	None
2	SAMPLMAJ	Major sample identification (aka Sample)	{1, MAIN RDD}...	None
3	M2ID	MIDUS 2 ID number	None	None
4	MRID	MIDUS Refresher ID number	None	None
5	RA1PA1	Physical health self-evaluated	{1, EXCELLENT}...	7, 8, 7
6	RA1PA42	Age last smoked regularly	{97, DONT KNOW}...	97, 98, 99
7	RA1PA46	In home anyone smoke/use tobacco current	{1, YES}...	7, 8, 7
8	RAACA1	Physical health self-evaluated	{1, EXCELLENT}...	7, 8, 7
9	RAACA42	Age last smoked regularly	{97, DONT KNOW}...	97, 98, 99
10	RAACA46	In home anyone smoke/use tobacco current	{1, YES}...	7, 8, 7
11	B1PA1	Physical health self-evaluated	{1, EXCELLENT}...	7, 8, 9
12	B1PA42	Age last smoked regularly	{97, DONT KNOW}...	97, 98, 99
13	B1PA46	In home anyone smoke/use tobacco current	{1, YES}...	7, 8, 9
14	C1PA1	Physical health self-evaluated	{1, EXCELLENT}...	7, 8, 7
15	C1PA42	Age last smoked regularly	{97, DONT KNOW}...	97, 98, 99
16	C1PA46	In home anyone smoke/use tobacco current	{1, YES}...	7, 8, 7
17	A1PA4	Physical health self-evaluated	{1, POOR}...	7, 8, 9
18	A1PA46	Age last smoked regularly	{-1, RESPONDENT DOES NOT HAVE SAQ DAT...	97, 98, 99
19	BACA1	Physical health self-evaluated	{1, EXCELLENT}...	7, 8, 9
20	BACA42	Age last smoked regularly	{97, DONT KNOW}...	97, 98, 99
21	BACA46	In home anyone smoke-use tobacco current	{1, YES}...	7, 8, 9
22	CACA1	Physical health self-evaluated	{1, EXCELLENT}...	7, 8, 7
23	CACA42	Age last smoked regularly	{97, DON'T KNOW}...	97, 98, 99
24	CACA46	In home anyone smoke/use tobacco current	{1, YES}...	7, 8, 7
25	C3TSCGRAC	SGST: General Switch Cost (reverse), absolute [me...	{98, REFUSED/MISSING}...	98, 98
26	RA3TSCGRAC	SGST: General Switch Cost (reverse), absolute [me...	{98, REFUSED/MISSING}...	98, 98

DEMO NIA_Example

Generated on Thursday, September 21, 2017 2:22 PM

Data File

MIDUSID

Label

Master ID created by concatenating M2ID, MRID, MIDJA_IDs

Representation

Type

Numeric

Role

input

Dataset

MIDUSID_SampleID_20160526.sav

Valid	Invalid	Minimum	Maximum
13225	0	10001	39999

SAMPLMAJ

Label

Major sample identification (aka Sample)

Representation

Role

input

Dataset

MIDUSID_SampleID_20160526.sav

Value	Label	Frequency	%
1	MAIN RDD	3,487	26.4%
2	SIBLING	952	7.2%
3	TWIN	1,996	15.1%
4	CITY OVERSAMPLE	757	5.7%

4086	9139	30000	39999
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MIDJA_IDs

Label

Midlife in Japan ID number

Representation

Type

Numeric

Role

input

Dataset

MIDUSID_SampleID_20160526.sav

Valid	Invalid	Minimum	Maximum
1027	12198	20008	29987

BACA36

Label

Age had first cigarette

Representation

Forward Skip

IF [BACA36](#) = 96, GO TO [BACA44](#).

Interviewer Instructions

INTERVIEWER: IF R SAYS "I don't smoke", PROBE: "At what age did you have your very FIRST cigarette, if EVER?"

Question Text

At what age did you have your very first cigarette?

Pre-Question Text

The next questions are about smoking cigarettes.

Dataset

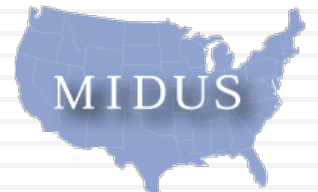
M2ID_MILWAUKEE_DATA WITH 19 NEW SAQS_N=592_3-29-12.sav

ICPSR DOI for Project

<http://dx.doi.org/10.3886/ICPSR22840>

Value	Label	Frequency	%
96	NEVER HAD A CIGARETTE	123	20.8%

Wrap Up and Future Directions



Future Directions – A Wishlist

- **DDI is question- and survey-centric**
 - ▣ **Bake more details into biomarker, laboratory, and derived variables**
- **Explore harmonization with other DDI-compliant studies**
 - ▣ **Use DDI to identify and link variables**
- **Employ DDI metadata earlier in research lifecycle**
 - ▣ **Introduces efficiencies, reduces duplicative effort**
 - ▣ **Drive data collection in CAI systems**





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