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Midlife in the United States (MIDUS 2): Biomarker Project, 2004-2009

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Medication Data Documentation

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DOCUMENTATION

for

MEDICATION DATA

in the

MIDUS 2
BIOMARKER PROJECT
(P4)

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INTRODUCTION

This document provides an overview of the medication data collected in the MIDUS 2 Biomarker Project (P4). It describes the protocols for collecting and recording medication data, as well as coding medications and diagnoses. It also provides information about the construction and usage of related administrative and constructed variables.

Data users are also encouraged to review the Biomarker (P4) Readme Data File Notes. This document provides information about naming conventions, as well as administrative and filter variables included in the data file. It also includes information about how we handled missing values and other issues that arose over the course of the study.   For example, there are instances when variables were added or sections of an instrument were expanded for data entry purposes to accommodate additional information provided by the respondent.

This document will be periodically revised and updated as more information is gathered, and researchers continue to work with the MIDUS 2 Biomarker data. If there are suggestions or comments, please contact Gayle Love (glove@wisc.edu) or Barry Radler (bradler@wisc.edu).

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OVERVIEW OF DATA FILE AND COLLECTION PROTOCOLS

OVERVIEW OF DATA AND COLLECTION PROTOCOLS

The MIDUS 2 Biomarker Project (P4) includes comprehensive data about the medications study participants are taking at the time of data collection. Specifically information is recorded about the following medications types, as well as medication allergies:

- Prescription
- Over-The-Counter (OTC)
- Alternative Medications

These basic data are enhanced, in two ways, via a standardized set of procedures developed with the MIDUS 2 and MIDJA Biomarker Medication data. First, medication names are linked to Generic Names and corresponding DrugIDs via linkage to the Lexi-Data database and then linked to their associated therapeutic and pharmacologic class codes. Second, reasons for taking medications are reviewed and coded into one of two mutually exclusive categories. General information about these procedures is included below. However, more details are provided, in a separate document that applies to data from both studies. (See Documentation for MIDUS and MIDJA Medication Data).

NOTE: The Lexicomp® Lexi-Data base is a proprietary database. Pursuant to our license with them users of data derived from the Lexi-Data file should include the following in any publications or presentations:

> "Lexi-Data is a drug data solution offered by Wolters Kluwer Clinical Drug Information. Certain information about therapeutic effects and active ingredients of generic medications identified in the MIDUS (Midlife in the U.S.) or MIDJA study is derived from the Lexi-Data database and used under license from Lexi-Comp, Inc., which reserves all rights in that information."

The Medication data appear in the data file immediately following the Bone Scan data. A copy of the Medication Chart appears in Section B. The variable names have been added to the instrument in the cell where the data they represent is recorded. As described in "MIDUS 2 Biomarker Project (P4) Readme Data File Notes", the naming convention organizes variables according to the data type or method used for data collection. The variable names for the medication data begin with the unique 3 character set "B4X".

This data is obtained at all 3 P4 sites. The remainder of this section provides general information and also indicates where additional details can be found.

Medication Data Collection

Respondents are instructed to bring all their medications, in the original bottles, to the GCRC (General Clinical Research Center) when they come for their visit. We ask them to do this to ensure that we are able to record medication names and dosages accurately. The Medication Chart has three pages and includes sections to record information about:

- Prescription Medications: All FDA approved medications prescribed by someone authorized/licensed under the Western medical tradition, typically a physician.

- Over the Counter Medications: Include vitamins, minerals, non-prescription pain, antacids, anti-diarrheas, fiber, lubricating eye or nose preparations etc. that the subject uses regularly and can be purchased "Over the Counter" (OTC) without a prescription.

- Alternative Medications: Include herbs, herbal blends (not including herbal teas), homeopathic remedies, and other alternative remedies. These may be purchased over the counter or they may be "prescribed" by a health care practitioner trained in a non-western tradition.

- Medication Allergies: Any medication (prescription, OTC, alternative) that the subject reports being allergic to.

During the visit project staff record the following information about medications on the medication chart:
- Medication name, dosage, and route of administration
- How often the medication is taken
- How long the participant has been taking a given medication
- Why the participant thinks s/he is taking the medication

A standardized protocol for collecting medication data was implemented at all 3 sites. A copy of this protocol appears in Section C. See Appendix A in Section D for a sample of a completed medication chart.

NOTE: The order in which medications are recorded on the form is random and determined by the order in which the participant choses to report them. Thus there will be little direct correspondence between the medications or medication allergies reported in any given row of the form from one wave of data collection to another. The one exception is the first two rows in the OTC which, as noted above, are reserved for reporting multi-vitamin and calcium supplement usage.

Data File Structure
The medication data are released in the traditional flat (wide) format as part of the larger MIDUS Biomarker aggregate data file to facilitate their use in standard between person analyses. Details about the variables in this file are included in the current document. The scope of the medication data however also lends itself to within person analysis of medication use, thus the medication data are also released in a standalone stacked (long) format. The stacked file only contains data about medications used, thus it does not include any information about study participants who do not take any medications. It also does not include any data about medication allergies. Details about the stacked file can be found in the Documentation for MIDUS and MIDJA Medications.

The aggregate (flat) file includes some administrative variables indicating whether or not the participant takes medication of the indicated type and, if yes, the number of medications. It also includes a standardized variable set characterizing each medication recorded along with information about medication allergies. The final section of the medication data is a set of variables indicating therapeutic and pharmacologic classification of the medications reported. The remainder of this section provides additional details about these variables.

Administrative Variables
There are 4 administrative variables at the beginning of the medication section:

- B4XTM – total number of medications

- B4XPMD, B4XOMD, B4XAMD – administrative variables indicating if the respondent takes medications of the indicated type or not.

The first variable at the beginning of the Prescription, OTC, and Alternative medication sections indicates the total number of medications of a given type that the participant takes (B4XPM, B4XOM, B4XAM respectively). In addition, as noted above, the first two rows of the OTC medication section are designated for Multivitamins and Calcium Supplements, thus it also includes the following 2 administrative variables:

- B4XOMV - Yes/No, taking a multivitamin?

- B4XOCS - Yes/No, taking a calcium supplement?

<u>Prescription, OTC, and Alternative Medications: Standardized Variable Sets</u>
These variables appear in the following order for each medication reported. The "_" in the variable name is a place holder for the character indicating the medication type (P = Prescription, O = OTC, A = Alternative) while the "#' at the end of the variable names is a place holder for the row number on the chart where information about a given medication is reported.

- Created variables from the Lexi-Data database (see Documentation of MIDUS and MIDJA Medications for details):
    - B4X_MID# - DrugID from the Lexi-Data database
    - B4X_GN# - Generic Drug Name associated with the DrugID

    A list of DrugIDs and Generic Drug Names can be found in Section D, Appendix B below.

- Based on information from the medication chart:
    - B4X_DD#, B4X_DU# – drug dosage (dosage, units)
    - B4X_R# - route of administration (oral, topical, etc)
    - B4X_F#, B4X_FU# – how often the medication is taken (frequency, frequency units)
    - B4X_PRN# - these variables indicate whether or not a given medication is taken as needed (PRN=Pro Re Nata) rather than on a regular basis. This flag is created for each set of medication variables within each medication type. It can be used to filter out medications that are taken occasionally (i.e. aspirin for acute pain management) or in emergent situations (i.e. rescue inhaler during an asthma attack).
    - B4X_T#, B4X_TU# – how long has the medication been taken (number, time units)

- Mutually exclusive code variables representing the reasons why the participant thinks s/he is taking the medication:
    - B4X_ICD9M# -- 3 digit numeric codes representing major categories in the International Classification of Diseases, 9th Revision.

- o B4X_MDC# – 5 character alphanumeric variables representing a set of codes used to categorize reasons for taking a medication that could not be classified into an ICD-9 category

See Documentation of MIDUS and MIDJA Medications for details about the coding process for text responses to 'Why are you taking a medication?' A list of codes and category names for the two sets of code variables can be found in Section D, Appendix C, below.

There are 15 sets of Prescription medication variables, 12 sets of OTC medication variables, and 12 sets of Alternative medication variables in the Refresher Biomarker file. Some participants report more medications in a given category than the data file allows for (i.e. takes 15 OTC medications). These additional medications are not included in the flat file as they would potentially add over a hundred variables (10 variables per medication) most of which would be designated as INAPP. These additional medications are however included in the stacked file. Cases with additional medications can be identified by looking at the following variables:
- B4XXM - indicates whether the participant has any additional medications.
- B4X_M – Frequency distributions of these variables, representing the number of medications of a given type that the participant takes, will help users identify the type of medication for which there are additional medications.

Medication Allergies: Standardized Variable Sets
The final section of the Medication Chart is for reporting medication allergies. There are 2 administrative variables at the beginning of that section:
- B4XM – Yes/No does the respondent have Any Medication Allergies?
- B4XMM – number of allergies

There are 3 additional variables for each medication allergy reported (the # in the variable name indicates the row number in the chart):
- B4XMMID# – text variable containing Multum DrugID code
- B4MMGN# - text variable containing the Multum generic drug name
- B4XMMRC# - Codes representing the allergic reaction to the medication (see below for details.

Note, the allergy variables are only included in the Flat file.

Coding Medication Allergy Reactions
Participant descriptions of allergic reactions to medications were recorded verbatim. The number of medication allergies reported was relatively small compared to the larger set of medication data thus they were coded using standard manual approaches. Medical definitions of common types of reactions and anaphylactic shock were used as a reference for making decisions about coding categories. Most of the categories correspond to specific individual reactions reported (e.g. rash, nausea). If the participant reported multiple individual reactions that are part of the overall anaphylactic response then the code for anaphylaxis was assigned. Sometimes participants reported reactions that could not be identified as being either part of the anaphylactic response or a known reaction to a particular medication. In those instances the reaction was coded as 'Other'. The categories, codes, and key words are summarized below. Note, the same set of category codes is used for both MIDJA and MIDUS thus some categories (i.e. psychosis) may not appear in all files.

Code	Category Name	Keywords
1	ANAPHYLAXIS	Anaphylaxis, difficulty breathing, faint, wheezing, swelling & hives, sweating/shaking
2	RASH	Rash, Eczema
3	HIVES	Hives, eruptions, urticaria, blisters, welts
4	VOMITING	Vomiting, throwing up,
5	SWELLING	Swelling, swollen –hands, face, feet etc.
6	STOMACH UPSET	Upset stomach, feeling sick
7	ITCHING	Itching,
8	NAUSEA	Nausea
9	PSYCHOSIS	Psychosis, hallucinations, agitation, delirium, jitters
10	DIARRHEA	Diarrhea
11	OTHER	Joints ache, no energy, headache, sweats, etc.

Therapeutic and Pharmacologic Classes

The final section of the data file contains a series of dummy variables indicating whether or not the participant takes medications in commonly occurring categories of therapeutic (TC) and pharmacologic (PC) classes identified following linkage to the Lexi-Data database. The Lexi-Data linkage and creation of these variables along with corresponding count variables are described in the Documentation of MIDUS and MIDJA Medication. A list of the Therapeutic and Pharmacologic class codes and category names can be found in Section D, Appendix D, below.

NOTE: *These variables replace the medication control variables previously included in the M2 data.*

The variable names for these dummies incorporate the first 5-6 characters of the corresponding TC and PC variables as well as the numeric code for the TC or PC class. The variable label incorporates both the TC or PC class code and the category name. If a count variable was also created, then an "N" is added as the final character to the dummy variable name. For example a common parent (top tier) therapeutic class is 115=Nutritional Products. The dummy and count variables for this TC class are named/labeled as follow:

- o Dummy variable: B4XTC_115 = 'Multum Therapeutic Class 115 - nutritional products: YES/NO?'

- o Count variable: B4XTC_115_N = 'Multum Therapeutic Class 115 – nutritional products: HOW MANY?'

SECTION B

MEDICATION CHART

MIDUS PROJECT 4: **PRESCRIPTION MEDICATION**   Site #___   ID#_____

of prescription medications? __[B4XPM]____   Date_____

Drug code	Drug name and dosage	Route	Frequency	Taken for how long?	Why are you taking it?	Diagnosis code
[B4XPC1]	1. [B4XPDD1] [B4XPDU1]	[B4XPR1]	[B4XPF1] [B4XPFU1]	[B4XPT1] [B4XPTU1]		[B4XPDC1]
[B4XPC2]	2. [B4XPN2] [B4XPDD2] [B4XPDU2]	[B4XPR2]	[B4XPF2] [B4XPFU2]	[B4XPT2] [B4XPTU2]		[B4XPDC2]
[B4XPC3]	3. [B4XPN3] [B4XPDD3] [B4XPDU3]	[B4XPR3]	[B4XPF3] [B4XPFU3]	[B4XPT3] [B4XPTU3]		[B4XPDC3]
[B4XPC4]	4. [B4XPN4] [B4XPDD4] [B4XPDU4]	[B4XPR4]	[B4XPF4] [B4XPFU4]	[B4XPT4] [B4XPTU4]		[B4XPDC4]
[B4XPC5]	5. [B4XPN5] [B4XPDD5] [B4XPDU5]	[B4XPR5]	[B4XPF5] [B4XPFU5]	[B4XPT5] [B4XPTU5]		[B4XPDC5]
[B4XPC6]	6. [B4XPN6] [B4XPDD6] [B4XPDU6]	[B4XPR6]	[B4XPF6] [B4XPFU6]	[B4XPT6] [B4XPTU6]		[B4XPDC6]
[B4XPC7]	7. [B4XPN7] [B4XPDD7] [B4XPDU7]	[B4XPR7]	[B4XPF7] [B4XPFU7]	[B4XPT7] [B4XPTU7]		[B4XPDC7]
[B4XPC8]	8. [B4XPN8] [B4XPDD8] [B4XPDU8]	[B4XPR8]	[B4XPF8] [B4XPFU8]	[B4XPT8] [B4XPTU8]		[B4XPDC8]
[B4XPC9]	9. [B4XPN9] [B4XPDD9] [B4XPDU9]	[B4XPR9]	[B4XPF9] [B4XPFU9]	[B4XPT9] [B4XPTU9]		[B4XPDC9]
[B4XPC10]	10. [B4XPN10] [B4XPDD10] [B4XPDU10]	[B4XPR10]	[B4XPF10] [B4XPFU10]	[B4XPT10] [B4XPTU10]		[B4XPDC10]
[B4XPC11]	11. [B4XPN11] [B4XPDD11] [B4XPDU11]	[B4XPR11]	[B4XPF11] [B4XPFU11]	[B4XPT11] [B4XPTU11]		[B4XPDC11]

NON-PRESCRIPTION MEDICATION

(Over the Counter)

Site #_____   ID#_____

# of non-prescription medications? __[B4XOM]____   Date_____

Drug code	Drug name and dosage	Route	Frequency	Taken for how long?	Why are you taking it?	Diagnosis code
[B4XOC1]	1. Multiple vitamin Y N [B4XOMV] [B4XODD1] [B4XODU1]	[B4XOR1]	[B4XOF1] [B4XOFU1]	[B4XOT1] [B4XOTU1]		[B4XODC1]
[B4XOC2]	2. Calcium Y N [B4XOCS] [B4XODD2] [B4XODU2]	[B4XOR2]	[B4XOF2] [B4XOFU2]	[B4XOT2] [B4XOTU2] [B4XOTU2S]		[B4XODC2]
[B4XOC3]	3. [B4XODD3] [B4XODU3]	[B4XOR3]	[B4XOF3] [B4XOFU3]	[B4XOT3] [B4XOTU3]		[B4XODC3]
[B4XOC4]	4. [B4XODD4] [B4XODU4]	[B4XOR4]	[B4XOF4] [B4XOFU4]	[B4XOT4] [B4XOTU4]		[B4XODC4]
[B4XOC5]	5. [B4XODD5] [B4XODU5]	[B4XOR5]	[B4XOF5] [B4XOFU5]	[B4XOT5] [B4XOTU5]		[B4XODC5]
[B4XOC6]	6. [B4XODD6] [B4XODU6]	[B4XOR6]	[B4XOF6] [B4XOFU6]	[B4XOT6] [B4XOTU6]		[B4XODC6]
[B4XOC7]	7. [B4XODD7] [B4XODU7]	[B4XOR7]	[B4XOF7] [B4XOFU7]	[B4XOT7] [B4XOTU7]		[B4XODC7]
[B4XOC8]	8. [B4XODD8] [B4XODU8]	[B4XOR8]	[B4XOF8] [B4XOFU8]	[B4XOT8] [B4XOTU8]		[B4XODC8]
[B4XOC9]	9. [B4XODD9] [B4XODU9]	[B4XOR9]	[B4XOF9] [B4XOFU9]	[B4XOT9] [B4XOTU9]		[B4XODC9]
[B4XOC10]	10. [B4XODD10] [B4XODU10]	[B4XOR10]	[B4XOF10] [B4XOFU10]	[B4XOT10] [B4XOTU10]		[B4XODC10]

ALTERNATIVE MEDICATIONS (herbal, homeopathic, etc.)

Site #_____   ID#_____

# of alternative medications? ___[B4XAM]_____   Date_____

Drug code	Drug name and dosage	Route	Frequency	Taken how long?	Why are you taking it?	Diagnosis code
[B4XAC1]	1. [B4XADD1] [B4XADU1]	[B4XAR1]	[B4XAF1] [B4XAFU1]	[B4XAT1] [B4XATU1]		[B4XADC1]
[B4XAC2]	2. [B4XADD2] [B4XADU2]	[B4XAR2]	[B4XAF2] [B4XAFU2]	[B4XAT2] [B4XATU2]		[B4XADC2]
[B4XAC3]	3. [B4XADD3] [B4XADU3]	[B4XAR3]	[B4XAF3] [B4XAFU3]	[B4XAT3] [B4XATU3]		[B4XADC3]
[B4XAC4]	4. [B4XADD4] [B4XADU4]	[B4XAR4]	[B4XAF4] [B4XAFU4]	[B4XAT4] [B4XATU4]		[B4XADC4]

* Up to 8 alternative medications recorded in the actual data file. The variable names for record 5-8 follow the same convention as shown here for record 1-4.

MEDICATION ALLERGIES   Does R have any medication allergies? (circle one)   Yes   No [B4XM] [B4XMM]

Drug code	Drug name	Reaction
[B4XMC1]	1.	
[B4XMC2]	2.	
[B4XMC3]	3.	
[B4XMC4]	4.	

* Up to 6 medication allergies recorded in the actual data file. The variable names for record 5-6 follow the same convention as shown here for record 1-4.

SECTION C

DATA COLLECTION PROTOCOL

PROTOCOL FOR COLLECTING MEDICATION DATA

The following provides instructions for administering the Medication Chart for the MIDUS 2 Biomarker Project (P4).

Background

Respondents are instructed to bring all their medications in the original bottles. We ask them to do this to ensure that we are able to record medication names and dosages accurately.
The Medication Chart has three pages and includes sections to record information about:

Prescription Medications:
>All FDA approved medications prescribed by someone authorized/licensed under the Western medical tradition, typically physician.

>Note: Some vitamins (e.g. Folic Acid, Niacin /Niaspan below) are prescription strength and would be in a prescription bottle.

Over the Counter Medications:
>Include vitamins, minerals, non-prescription pain, antacids, anti-diarrheals, fiber, lubricating eye or nose preparations etc. that the subject uses regularly and can be purchased "Over the Counter" (OTC) without a prescription.

>There are two notable exceptions;
>- Folic Acid is a prescription medication if the dosage is 800 mcg or more.
>- Niacin (Niaspan) is a prescription medication if the dosage is 500 mg or more.

Examples: Over the Counter (non-prescription) General Medications

Advil	Fiber supplements	Motrin
Acetaminophen APAP	Fiber Con	Naproxen
Alleve	Floride Rinse	Nasalcrom
Ascriptin	Ibuprofen	Nasal spray (saline)
Aspirin	Immodium	Pepto Bismol
Benadryl	Hydrocortisone cream	Psyllium
Citrucel	Legatrim	Sennakot
Diphenhydramine	Loperimide	Simethicone
Docusate	Lactaid	Tums
Eye drops - artificial tears	Maalox	Tylenol
Excedrine	Metamucil	

Examples: Over the Counter (non-prescription) Vitamins & Minerals

Multi vitamin	Chromium picolinate	Phosphorus
Vitamin A	Copper	Potassium
Vitamin B's	Ferrous sulfate	Protegra
Vitamin C	Folic acid	Selenium
Vitamin D	Iron	Zinc
Vitamin E	Niacin	
Calcium	Magnesium	

Alternative Medications:
> Include herbs, herbal blends (<u>not including herbal teas</u>), homeopathic remedies, and other alternative remedies. These may be purchased OTC (over the counter) or they may be "prescribed" by a health care practitioner trained in a non-western tradition

Examples: Over the Counter (non-prescription) Vitamins & Minerals

Alfalfa	Echinacea	Lutein
Alpha lipoic Acid	Essential Fatty Acid	Lysine
Adrenal Support	Flax Seed Oil	Lymph gland cleanser
Bowel Aide	Fish Oil	Melatonin
Billberry Extract	Ginkgo biloba	MSMw/GS
Homeopathic	Garlic	Mega-chel
Cayenne	Ginseng	Nutri-calm
Chondrochondroitin	Ginger	Olive Leaf Extract
Cod liver oil	Glucosamine/	Osteobiflex
Co Q 10	glucosamine chondroitin	Primrose seed oil
Colostrum	Kava kava	St Johns wort
Cortislim	Kelp	Saw Palmetto
Cranberry Pill	Lecithin	Valerian

Medication Allergies
> Include any medication (prescription, OTC, alternative) that the subject believes s/he is allergic to.

<u>Instructions for Completing the Medication Chart</u>

General Guidelines:
1. If a respondent is taking multiple drugs of a particular type, or to treat a particular condition, record information about all the medications. For example a respondent may take two different types of insulin, or is taking multiple medications to treat high blood pressure.

2. Additional Medications: Some respondents will take more medications than our forms allow. To accommodate these situations, Project staff should carry an extra copy of the Medication Chart and use the appropriate page to record information about additional medications. Specifically, staff should:
   a. Write "See additional sheet" at the end of the appropriate section of the chart

     b. Fill out the appropriate additional sheet and *paper clip* it to the back of the completed chart.

     c. Make sure that the "# of _____medications?" line reflects the total number of medications of that type that the respondent takes.

3. Medications Not Currently Being Taken: If the respondent brings in prescription medication that they are no longer taking, do not record it on the form (or remove it during field editing).

Specific Instructions:

Collect medications from the participant after GCRC admission but before the nurse begins the admission assessments. The Medication Chart is completed in three steps. The first two are completed during the GCRC visit. The third step can be completed after the subject has left the GCRC.

An example of a completed Medication Chart can be found in Section D, Appendix A.

Step 1: *To ensure that medications are correctly organized by type*, **please complete this step while GCRC nurse is conducting admission assessment or while subject is eating dinner. Return the medications to the subject after completing this step.**

Staff will ask subjects to confirm the dosage information recorded in this step, thus it will be helpful to use a pencil.

If the subject is not taking medications of a certain type, record a 0 in the space for "# of ___ medications".

For all medications the subject is taking record the following:

1. <u>Drug name</u>: Copy from label on bottle.

    • Many subjects are likely to be taking a multiple vitamin or calcium supplement. Therefore, the first two lines on the chart for Non-Prescription Medications are reserved for these two medications.
        ○ If the subject <u>is not</u> taking any non-prescription medications ignore these two boxes.
        ○ If the subject <u>is</u> taking non-prescription medications, circle "Yes" or "No" and fill in the appropriate information.

2. <u>Dosage</u>: we want to know how much of the drug they take at any given time that they take it. Copy from label on bottle and ask respondents if this is how they actually take the drug. Write the exact dosage they take. For example, if the label reads:

    • Lipitor 80mg, take half tablet once a day & the respondent confirms taking only ½ tablet daily, then record 40mg as the dosage.

    • Atenolol 20 mg, take one tablet in the morning and one at bedtime, & the respondent confirms this, then record 20 mg as the dosage.

- Alfalfa 500mg per tablet & the respondent reports taking 6 tablets three times per day, then record 3,000 mg as the dosage.

- Inhaled Medications: dosage information for inhalers can be listed in two forms.
  - It may be listed in the standard units (e.g. mcg, mg etc.) reflecting the total dosage for the contents of the inhaler.
  - It should also be listed in terms of the number of puffs that person should inhale reflecting the amount taken when the inhaler is used. <u>Please be sure to record # of puffs as this is the dosage that we want to record.</u>

  <u>Note</u>: On rare occasions alternative medications may report dosage information in grains rather than mg, cc's, etc. This may be indicated by the word "grain" in the medication name. In those instances, record the full name of the medication, but report the dose in terms of the number of pills, tablets etc. that the respondent takes.

3. <u>Route</u>: this the route by which the medication is taken. The following abbreviations can be used:

PO	oral (tablets, capsules, liquid)
IM	intramuscular (Vitamin B12 shots)
SC or SQ	subcutaneous (insulin injections)
Inh	inhaled (nasal spray, asthma inhalers)
Top	topical (creams, eye drops, patches)
SL	sub-lingual (under the tongue)

4. <u>Frequency</u>: this tells us how often they take the dose recorded at # 2 above. The following abbreviations can be used:

QD	once daily
BID	twice a day
TID	three times a day
QID	four times a day
PRN	as needed

   - <u>Medications Taken As Needed (PRN)</u>:

     PRN ONLY – This refers to PRN medications that are taken irregularly in response to an acute need (e.g. cold medicine, sleep aids, antibiotics), they are generally OTC or alternative medications, but can be prescribed.
     - If a medication is taken PRN at a specific time of day, please only record "PRN". For example if the respondent takes a sleep aid in the evening as needed and both PRN and QD or at bedtime is recorded, it implies the respondent is taking the medication on both a regular schedule *and* as needed.
       - <u>The key piece of information is that it is taken '***as needed'***</u>

     - OTC medications taken for a single occurrence of some condition or illness that has not recurred for at least 3 months <u>should not</u> be recorded.
     - OTC medications taken on an irregular basis for recurring conditions (e.g. eczema, sinusitis) should be recorded.

PRN Supplemental – This refers to PRN medications that are taken as needed to supplement a regularly scheduled dosage, under certain circumstances.

- In those instances record the regular dosage on a single line then repeat the information on the next line for the PRN usage. <u>This is the only instance in which information about a single medication should appear on *two* lines.</u>

For example, asthmatics may have an inhaler that is used daily, but could also be used PRN in emergencies. This would be recorded as follows:

1. Albuterol 2 puffs   BID ….
2. Albuterol 1 puff   PRN ……

o <u>Medications Taken More Than Once A Day</u>:
Typically, the number of times the medication is taken and the amount are standardized. Sometimes the dosage is the same every time the medication is taken, other times the dosage taken in the morning time is different from that taken later in the day. As long as the amounts and time of day are standardized, the medication and all dosage information should be recorded on the same line.

For example someone with high Blood Pressure may be taking Altenolol twice a day, but at different dosages. This would be recorded as follows:

1. Altenolol 50mg a.m. 100 m.g. p.m.   BID ….
2. (next medication)

5. After recording the above information in the appropriate location for each medication the subject is taking, record the total number of medications of each type in the "# of _____ medications" line.

Step 2: This step can be performed in conjunction with the Medical History or the Physical Exam at the discretion of GCRC or Project Staff.

Review the Medication Chart with the subject. For each medication recorded on the chart:
6. Confirm that subject is taking the medication as indicated on the bottle. Sometimes the prescribed dosage is a certain amount but it is modified at the doctor's recommendation or the subject prefers not to take the recommended dose for a non-prescription or alternative medication.

7. Ask the subject how long s/he has been taking the medication, record days, months or years as appropriate.

- If the respondent reports the year, or a month and year that they started taking a medication please convert to the appropriate number of years, months etc.

8. Ask the subject why s/he is taking the medication. Medications are typically taken for specific reasons, but subjects sometimes take them for other atypical reasons or don't really understand why they are taking a particular medication. We want to know why

<u>they</u> think they are taking particular medications. Record the reason the subject is taking the drug verbatim.

- If the respondent says "The Dr. prescribed it" probe for more information (e.g. condition, symptom, prevention)!

  - If after probing it is clear that the respondent does not know why they are taking the medication then record "Don't Know".

- <u>Please be sure to ask this question for ALL medications</u>.

9. Ask the subject if s/he has any medication allergies. If 'Yes' record the medication name(s) and the nature of the reaction(s) experienced.

SECTION D

<u>APPENDICES</u>

Appendix A: **Sample Completed Medication Chart**

Appendix B: **Generic Medication Names and DrugIDs**

Appendix C: **Reasons for Taking Medication – Codes and Category Names**

Appendix D: **Therapeutic and Pharmacologic Class Codes and Names**

APPENDIX A:

SAMPLE OF COMPLETED MEDICATION CHART

PRESCRIPTION MEDICATION

of prescription medications? __3__

Site # __2__   ID# __12345__

Date __3/25/04__

Drug code	Drug name and dosage	Route	Frequency	Taken for how long?	Why are you taking it?	Diagnosis code
	1. Celebrex 100mg	PO	BID	2mos	arthritis	
	2. Synthroid 75mcg	PO	QD	2yrs	hypo-thyroid.	
	3. Nasonex 2sprays	inh	QD	6mos	allergies	
	4.					
	5.					
	6.					
	7.					
	8.					
	9.					
	10.					
	11.					

D3

NON-PRESCRIPTION MEDICATION

(Over the Counter)

# of non-prescription medications? **5**

Site # **2**   ID# **12345**

Date **3/25/04**

Drug code	Drug name and dosage	Route	Frequency	Taken for how long?	Why are you taking it?	Diagnosis code
	1. Multiple vitamin ⓨ N	PO	QD	5 yrs	gen health	
	2. Calcium Y Ⓝ					
	3. aspirin 81mg	PO	QD	6mos	heart health	
	4. Vit C 500mg	PO	QD	5yrs	gen health	
	5. Tylenol 1000mg	PO	PRN	5yrs	pain or headache	
	6. Metamucil 1 Tbsp	PO	QD	6mos	fiber supplement	
	7.					
	8.					
	9					
	10.					

D4

ALTERNATIVE MEDICATIONS (herbal, homeopathic, etc.)

Site # 2   ID # 12345

# of alternative medications? 2

Date 3/25/04

Drug code	Drug name and dosage	Route	Frequency	Taken how long?	Why are you taking it?	Diagnosis code
	1. Glucosamine Sulfater 1500mg	PO	TID	1yr	arthritis	
	2. 2caps Immune Aide	PO	BID	2yrs	allergies	
	3.					
	4.					

MEDICATION ALLERGIES   Does R have any medication allergies? (circle one)   No   (Yes)

Drug code	Drug name	Reaction
	1. penicillin	hives
	2. Codeine	hallucinations
	3.	
	4.	

D5

APPENDIX B:

GENERIC MEDICATION NAMES AND DRUGIDS

APPENDIX B: GENERIC NAMES and DRUGIDs

The following lists the Lexi-Data DrugIDs and Generic Names in the MIDUS and MIDJA data files as of May 2017. The list is in order by DrugID and will be updated as needed with future data releases.

DRUG_ID	GENERIC_NAME
d00001	acyclovir
d00002	amiodarone
d00004	atenolol
d00006	captopril
d00011	ciprofloxacin
d00012	codeine
d00013	enalapril
d00015	ibuprofen
d00016	labetalol
d00018	nadolol
d00019	naproxen
d00021	ranitidine
d00022	warfarin
d00023	allopurinol
d00024	azaTHIOprine
d00025	chloramphenicol
d00027	haloperidol
d00028	ketoprofen
d00031	probenecid
d00032	propranolol
d00033	sulindac
d00034	zidovudine
d00037	doxycycline
d00039	indomethacin
d00043	clindamycin
d00044	cloNIDine
d00045	diltiazem
d00046	erythromycin
d00047	rifampin
d00048	verapamil
d00049	acetaminophen
d00050	methadone
d00051	NIFEdipine
d00056	cefuroxime
d00058	carBAMazepine
d00060	methotrexate
d00061	lithium
d00068	ethambutol
d00069	tobramycin
d00070	furosemide
d00071	fluconazole
d00078	didanosine
d00079	cycloSPORINE
d00083	valproic acid
d00084	prednisoLONE
d00086	amantadine
d00088	amoxicillin
d00089	amoxicillin-clavulanate
d00091	azithromycin
d00096	cephalexin
d00097	clarithromycin
d00101	isoniazid
d00102	itraconazole
d00106	methenamine
d00108	metroNIDAZOLE
d00110	minocycline
d00112	nitrofurantoin
d00117	pyrazinamide
d00124	sulfamethoxazole-trimethoprim
d00132	hydrALAZINE
d00134	metoprolol
d00135	minoxidil
d00137	pindolol
d00138	prazosin
d00140	cimetidine
d00141	famotidine
d00142	theophylline
d00143	phenytoin
d00144	nortriptyline
d00145	desipramine
d00146	amitriptyline
d00148	diazepam
d00149	LORazepam
d00150	colchicine
d00151	bacampicillin
d00164	adenosine
d00168	ALPRAZolam
d00169	aMILoride
d00170	aspirin
d00175	benztropine
d00176	betaxolol
d00179	bumetanide
d00181	buPROPion
d00182	busPIRone
d00191	chlorpheniramine
d00192	chlorthalidone
d00193	cholestyramine
d00197	clonazePAM
d00198	clorazepate
d00207	dextromethorphan
d00210	digoxin
d00212	diphenhydrAMINE
d00213	dipyridamole
d00217	doxepin
d00223	epoetin alfa
d00227	ethosuximide
d00231	felodipine
d00233	fentaNYL
d00234	flecainide

d00236	FLUoxetine		d00381	tamoxifen
d00237	fluPHENAZine		d00384	temazepam
d00241	folic acid		d00386	terazosin
d00242	fosinopril		d00395	traZODone
d00245	gemfibrozil		d00396	triamterene
d00246	glipiZIDE		d00397	triazolam
d00248	glyBURIDE		d00402	vitamin A
d00253	hydrochlorothiazide		d00405	vitamin E
d00254	hydrocortisone		d00409	riboflavin
d00255	HYDROmorphone		d00412	pyridoxine
d00259	imipramine		d00413	cyanocobalamin
d00260	indapamide		d00417	bioflavonoids
d00262	insulin		d00425	calcium carbonate
d00268	isosorbide dinitrate		d00426	ascorbic acid
d00269	isosorbide mononitrate		d00427	potassium phosphate-sodium phosphate
d00270	isradipine			
d00273	ketorolac		d00440	sodium bicarbonate
d00275	leucovorin		d00484	selenium
d00278	levothyroxine		d00488	lysine
d00280	lovastatin		d00491	levOCARNitine
d00284	medroxyPROGESTERone		d00496	inositol
d00289	mercaptopurine		d00497	omega-3 polyunsaturated fatty acids
d00290	methimazole			
d00293	methylPREDNISolone		d00514	ticlopidine
d00298	metoclopramide		d00529	tranexamic acid
d00300	mexiletine		d00534	estrone
d00303	misoprostol		d00537	estradiol
d00308	morphine		d00541	conjugated estrogens
d00310	nabumetone		d00542	esterified estrogens
d00314	niacin		d00543	estropipate
d00316	nicotine		d00550	progesterone
d00321	nitroglycerin		d00555	norethindrone
d00322	nizatidine		d00557	levonorgestrel
d00325	omeprazole		d00558	testosterone
d00328	oxybutynin		d00563	finasteride
d00329	oxyCODONE		d00572	chorionic gonadotropin (HCG)
d00330	pancuronium		d00578	arginine
d00336	pentoxifylline		d00583	desmopressin
d00337	phenazopyridine		d00595	glucose
d00340	PHENobarbital		d00598	calcitonin
d00343	piroxicam		d00608	fludrocortisone
d00345	potassium chloride		d00609	cortisone
d00346	povidone iodine topical		d00620	triamcinolone
d00348	pravastatin		d00628	betamethasone
d00350	predniSONE		d00646	trichlormethiazide
d00352	primidone		d00651	urea topical
d00355	prochlorperazine		d00653	isosorbide
d00358	propafenone		d00655	thyroid desiccated
d00363	pyridostigmine		d00658	liothyronine
d00365	quinapril		d00683	lidocaine topical
d00366	quiNINE		d00688	bepridil
d00370	octreotide		d00689	amLODIPine
d00371	sotalol		d00699	EPINEPHrine
d00373	spironolactone		d00701	mephentermine
d00377	sucralfate		d00704	phenylephrine
d00379	sulfaSALAzine		d00709	bisoprolol

d00726	doxazosin		d01003	pancreatin
d00728	ramipril		d01005	ursodiol
d00730	benazepril		d01008	magnesium citrate
d00732	lisinopril		d01010	cascara sagrada
d00743	sodium polystyrene sulfonate		d01013	senna
d00746	simvastatin		d01015	bisacodyl
d00749	albuterol		d01017	polycarbophil
d00750	metaproterenol		d01018	psyllium
d00755	pirbuterol		d01021	docusate
d00760	beclomethasone		d01025	loperamide
d00761	flunisolide		d01026	bismuth subsalicylate
d00762	acetylcysteine		d01027	simethicone
d00769	pseudoephedrine		d01031	mesalamine
d00771	naphazoline ophthalmic		d01032	olsalazine
d00772	oxymetazoline nasal		d01133	immune globulin intravenous
d00773	tetrahydrozoline ophthalmic		d01185	apraclonidine ophthalmic
d00787	promethazine		d01187	levobunolol ophthalmic
d00797	guaiFENesin		d01200	tropicamide ophthalmic
d00801	caffeine		d01231	chlorhexidine topical
d00806	phentermine		d01233	nystatin
d00810	diethylpropion		d01244	tretinoin topical
d00813	benzocaine topical		d01256	etretinate
d00814	methotrimeprazine		d01267	mupirocin topical
d00817	hydroxychloroquine		d01272	ciclopirox topical
d00838	butorphanol		d01274	tolnaftate topical
d00842	salsalate		d01288	clobetasol topical
d00848	diclofenac		d01290	desonide topical
d00851	etodolac		d01291	desoximetasone topical
d00855	perphenazine		d01293	fluocinolone topical
d00859	meclizine		d01294	fluocinonide topical
d00861	dimenhyDRINATE		d01296	fluticasone
d00867	ondansetron		d01300	mometasone topical
d00874	amoxapine		d01319	hydroquinone topical
d00876	clomiPRAMINE		d01321	capsaicin topical
d00877	maprotiline		d01322	aluminum chloride hexahydrate topical
d00880	sertraline			
d00900	methylphenidate		d01325	arnica topical
d00901	pemoline		d01333	benzalkonium chloride topical
d00907	hydrOXYzine		d01353	leuprolide
d00910	zolpidem		d01373	hydroxyurea
d00915	estazolam		d01376	PACLitaxel
d00960	carisoprodol		d01385	beta-carotene
d00961	chlorphenesin		d01386	yohimbine
d00963	cyclobenzaprine		d01387	alprostadil
d00964	metaxalone		d01406	naltrexone
d00965	methocarbamol		d01407	flumazenil
d00966	orphenadrine		d01423	potassium citrate
d00967	baclofen		d03050	loratadine
d00970	trihexyphenidyl		d03051	interferon beta-1b
d00972	biperiden		d03052	hydrochlorothiazide-triamterene
d00985	hyoscyamine		d03061	butalbital
d00986	scopolamine		d03064	choline bitartrate
d00991	clidinium		d03075	HYDROcodone
d00992	glycopyrrolate		d03092	protease
d00999	dicyclomine		d03126	calcitriol
d01002	pancrelipase		d03128	ergocalciferol

d03129	cholecalciferol	d03342	APAP/dextromethorphan /pseudoephedrine
d03130	thiamine		
d03131	pantothenate	d03349	acetaminophen /dextromethorphan/doxylamine /PSE
d03135	phytonadione		
d03137	calcium-vitamin D		
d03140	multivitamin	d03357	codeine-promethazine
d03141	multivitamin with iron	d03359	chlorpheniramine- dextromethorphan
d03145	multivitamin with minerals		
d03148	multivitamin, prenatal	d03360	dextromethorphan-promethazine
d03154	doxylamine	d03379	guaiFENesin-pseudoephedrine
d03157	PARoxetine	d03381	guaiFENesin-phenylephrine
d03159	choline	d03389	estradiol-testosterone
d03160	SUMAtriptan	d03393	codeine-guaifenesin
d03180	risperiDONE	d03400	dextromethorphan-guaifenesin
d03181	venlafaxine	d03409	dextromethorphan/guaiFENesin /pseudoephedrine
d03182	gabapentin		
d03183	fluvastatin		
d03189	torsemide	d03423	acetaminophen-codeine
d03191	terbinafine topical	d03425	APAP/butalbital/caffeine/codeine
d03195	miconazole topical	d03428	acetaminophen-HYDROcodone
d03197	betamethasone topical	d03431	acetaminophen-oxyCODONE
d03200	erythromycin topical	d03432	aspirin-oxycodone
d03201	acyclovir topical	d03434	acetaminophen-propoxyphene
d03202	ketoconazole topical	d03439	APAP/ASA/caffeine
d03204	fluorouracil topical	d03443	APAP/Al hydroxide /ASA/caffeine/Mg hydroxide
d03205	hydrocortisone topical		
d03206	triamcinolone topical	d03445	acetaminophen-diphenhydrAMINE
d03208	metroNIDAZOLE topical	d03449	aspirin-caffeine
d03210	selenium sulfide topical	d03455	APAP/butalbital/caffeine
d03221	prednisoLONE ophthalmic	d03456	acetaminophen-butalbital
d03226	saliva substitutes	d03459	APAP/dichloralphenazone /isometheptene
d03227	fluorometholone ophthalmic		
d03229	levocabastine ophthalmic	d03473	carbidopa-levodopa
d03238	ethinyl estradiol-norethindrone	d03478	Al hydroxide/Mg hydroxide /simethicone
d03241	ethinyl estradiol-norgestrel		
d03242	ethinyl estradiol-levonorgestrel	d03485	atropine/hyoscyamine/PB /scopolamine
d03245	esterified estrogens- methylTESTOSTERone		
		d03492	chlordiazePOXIDE-clidinium
d03247	hydrochlorothiazide- spironolactone	d03495	belladonna/ergotamine /PHENobarbital
		d03496	docusate-senna
d03258	atenolol-chlorthalidone	d03506	atropine-diphenoxylate
d03261	hydrochlorothiazide-propranolol	d03517	benzoic acid/methenamine /sodium salicylate
d03265	benazepril-hydrochlorothiazide		
d03266	hydrochlorothiazide-lisinopril	d03524	bacitracin/neomycin/polymyxin B topical
d03289	acetaminophen-pseudoephedrine		
d03292	ibuprofen-pseudoephedrine	d03536	dexamethasone-tobramycin ophthalmic
d03296	acetaminophen-chlorpheniramine		
d03298	chlorpheniramine- pseudoephedrine	d03543	hydrocortisone/neomycin /polymyxin B otic
		d03561	betamethasone-clotrimazole topical
d03300	chlorpheniramine-phenylephrine		
d03311	brompheniramine-phenylephrine		
d03313	chlorpheniramine/phenylephrine /pyrilamine	d03562	nystatin-triamcinolone topical
		d03566	captopril-hydrochlorothiazide
d03331	APAP/chlorpheniramine /phenylephrine	d03591	alginic acid/Al hydroxide/Mg carbonate

d03596	alginic acid/Al hydroxide/Mg trisilicate	d03848	azelaic acid topical
d03640	budesonide nasal	d03849	alendronate
d03644	lactobacillus acidophilus	d03850	bicalutamide
d03650	candida albicans extract	d03858	lamiVUDine
d03655	lidocaine-prilocaine topical	d03864	glimepiride
d03663	lecithin	d03866	calcium citrate
d03664	phenol topical	d03873	anastrozole
d03665	menthol topical	d03879	cannabis (Schedule I substance)
d03668	methyl salicylate topical	d03884	trolamine salicylate topical
d03674	pectin	d03897	lactase
d03680	ASA/citric acid/Na bicarb	d03898	sodium chloride, hypertonic, ophthalmic
d03686	undecylenic acid topical	d03908	APAP/chlorpheniramine /dextromethorphan/PPA
d03689	calcium acetate		
d03740	enalapril-hydrochlorothiazide	d03922	acetaminophen-caffeine
d03744	bisoprolol-hydrochlorothiazide	d03923	acetaminophen-phenylephrine
d03751	dexbrompheniramine-pseudoephedrine	d03957	calcium/ferrous fumarate /vitamin D
d03752	tacrolimus	d03968	dexamethasone ophthalmic
d03756	bacitracin topical	d03984	ritonavir
d03759	salmeterol	d03990	carbamide peroxide otic
d03760	diphenhydrAMINE topical	d04008	trandolapril
d03768	ocular lubricant	d04011	interferon beta-1a
d03770	emollients, topical	d04012	terbinafine
d03781	ethinyl estradiol-norgestimate	d04015	adapalene topical
d03782	desogestrel-ethinyl estradiol	d04017	latanoprost ophthalmic
d03788	calcipotriene topical	d04025	mirtazapine
d03789	potassium gluconate	d04029	nevirapine
d03796	magnesium chloride	d04031	pilocarpine
d03797	magnesium oxide	d04032	sulfacetamide sodium-sulfur topical
d03802	calcium lactate		
d03803	calcium phosphate, tribasic	d04034	remifentanil
d03804	fluvoxaMINE	d04035	amphetamine-dextroamphetamine
d03805	dorzolamide ophthalmic		
d03807	metFORMIN	d04037	timolol ophthalmic
d03808	nefazodone	d04039	carteolol ophthalmic
d03809	lamoTRIgine	d04040	fexofenadine
d03818	loratadine-pseudoephedrine	d04047	midodrine
d03819	conjugated estrogens-medroxyPROGESTERone	d04048	brimonidine ophthalmic
		d04050	OLANZapine
d03821	losartan	d04052	pentosan polysulfate sodium
d03822	ferrous gluconate	d04055	zinc chloride
d03823	iron polysaccharide	d04056	zinc gluconate
d03824	ferrous sulfate	d04057	zinc sulfate
d03825	nisoldipine	d04058	melatonin
d03826	traMADol	d04063	butenafine topical
d03827	cetirizine	d04066	albuterol-ipratropium
d03828	lansoprazole	d04068	azelastine nasal
d03829	amLODIPine-benazepril	d04099	donepezil
d03830	hydrochlorothiazide-losartan	d04101	ivermectin
d03833	divalproex sodium	d04102	tiZANidine
d03835	moexipril	d04105	atorvastatin
d03838	valACYclovir	d04106	fosfomycin
d03839	mycophenolate mofetil	d04109	levofloxacin
d03846	acarbose	d04111	glatiramer
d03847	carvedilol	d04113	valsartan

d04115	topiramate	d04299	sildenafil
d04117	olopatadine ophthalmic	d04300	risedronate
d04120	caffeine-ergotamine	d04303	dorzolamide-timolol ophthalmic
d04121	tamsulosin	d04322	candesartan
d04125	imiquimod topical	d04328	rizatriptan
d04141	hydrochlorothiazide-moexipril	d04329	sodium hyaluronate
d04142	chromium picolinate	d04332	citalopram
d04145	pramipexole	d04341	estradiol-norethindrone topical
d04156	letrozole	d04342	inFLIXimab
d04157	loperamide-simethicone	d04349	leflunomide
d04168	acetaminophen /diphenhydramine /pseudoephedrine	d04357	trastuzumab
		d04362	copper gluconate
		d04363	sevelamer
d04181	cysteine	d04364	telmisartan
d04186	phenylephrine nasal	d04365	etanercept
d04195	chlorophyllin	d04369	insulin regular
		d04370	insulin isophane
d04197	hydrocortisone/neomycin /polymyxin B topical	d04373	insulin lispro
		d04374	insulin isophane-insulin regular
d04210	estradiol topical	d04375	estradiol-norethindrone
d04213	progesterone topical	d04376	abacavir
d04215	rOPINIRole	d04378	modafinil
d04219	lamivudine-zidovudine	d04380	celecoxib
d04220	QUEtiapine	d04382	cilostazol
d04222	irbesartan	d04395	clotrimazole topical
d04223	mometasone nasal	d04396	conjugated estrogens topical
d04233	triamcinolone nasal	d04399	nystatin topical
d04235	ipratropium nasal	d04407	echinacea
d04241	potassium chloride-sodium chloride	d04408	St. John's wort
		d04411	garlic
d04242	sodium chloride nasal	d04412	ginseng
d04245	hydrochlorothiazide-irbesartan	d04413	ginkgo
d04248	methylcellulose	d04414	ginger
d04253	ZOLMitriptan	d04415	saw palmetto
d04258	clopidogrel	d04416	valerian
d04261	raloxifene	d04417	creatine
d04266	eprosartan	d04418	glucosamine
d04267	repaglinide	d04419	chondroitin
d04268	dihydroergotamine nasal	d04420	chondroitin-glucosamine
d04270	fexofenadine-pseudoephedrine	d04421	evening primrose
d04271	diclofenac-misoprostol	d04424	licorice
d04273	testosterone topical	d04425	dehydroepiandrosterone
d04275	beclomethasone nasal	d04426	red yeast rice
d04276	budesonide	d04427	levalbuterol
d04279	flunisolide nasal	d04429	orlistat
d04283	fluticasone nasal	d04432	carbonyl iron
d04284	fluticasone topical	d04434	rosiglitazone
d04285	naratriptan	d04440	perindopril
d04286	fenofibrate	d04442	pioglitazone
d04289	montelukast	d04448	RABEprazole
d04290	calcium carbonate-magnesium hydroxide	d04452	zaleplon
		d04459	dofetilide
d04292	loteprednol ophthalmic	d04461	exemestane
d04293	hydrochlorothiazide-valsartan	d04460	entacapone
d04294	tolterodine	d04463	grape seed oil
d04298	phenylephrine topical	d04465	gotu kola

d04466	milk thistle	d04784	pimecrolimus topical
d04467	cat's claw	d04785	desloratadine
d04469	bee pollen	d04787	lovastatin-niacin
d04470	cranberry	d04788	dutasteride
d04472	black cohosh	d04795	budesonide-formoterol
d04476	bilberry	d04797	alfuzosin
d04477	slippery elm	d04798	tegaserod
d04478	wild yam	d04801	olmesartan
d04480	eyebright	d04803	voriconazole
d04481	royal jelly	d04806	sodium oxybate
d04484	shark cartilage	d04812	escitalopram
d04486	rose hips	d04813	horse chestnut
d04487	peppermint	d04815	eplerenone
d04488	lavender	d04819	buprenorphine-naloxone
d04490	green tea	d04820	metFORMIN-rosiglitazone
d04491	flax	d04823	glipiZIDE-metFORMIN
d04499	levETIRAcetam	d04824	ezetimibe
d04503	nedocromil ophthalmic	d04825	ARIPiprazole
d04509	hydrochlorothiazide-quinapril	d04827	atomoxetine
d04510	insulin lispro-insulin lispro protamine	d04828	teriparatide
		d04829	tiotropium
d04513	OXcarbazepine	d04835	adalimumab
d04514	pantoprazole	d04836	cycloSPORINE ophthalmic
d04521	nettles	d04839	insulin aspart-insulin aspart protamine
d04522	papaya		
d04523	ubiquinone	d04844	camphor-menthol topical
d04527	zonisamide	d04849	eletriptan
d04532	meloxicam	d04851	rosuvastatin
d04538	insulin glargine	d04857	gatifloxacin ophthalmic
d04541	azelastine ophthalmic	d04860	moxifloxacin ophthalmic
d04572	formoterol	d04875	betaine
d04611	fluticasone-salmeterol	d04878	hydrochlorothiazide-olmesartan
d04695	colesevelam	d04881	omalizumab
d04697	insulin aspart	d04882	atazanavir
d04702	docosanol topical	d04893	vardenafil
d04703	glyBURIDE-metFORMIN	d04896	tadalafil
d04708	zoledronic acid	d04898	epinastine ophthalmic
d04711	candesartan-hydrochlorothiazide	d04899	memantine
d04722	diclofenac topical	d04901	fosamprenavir
d04723	calcium carbonate/famotidine/Mg hydroxide	d04929	trospium
		d04939	sodium picosulfate
d04737	hydrochlorothiazide-telmisartan	d05027	estriol
d04740	tacrolimus topical	d05044	betamethasone-calcipotriene topical
d04743	nateglinide		
d04747	ziprasidone	d05048	amLODIPine-atorvastatin
d04749	esomeprazole	d05062	carbocysteine
d04753	travoprost ophthalmic	d05218	cinacalcet
d04754	bimatoprost ophthalmic	d05234	hyaluronan
d04760	drospirenone-ethinyl estradiol	d05265	nebivolol
d04764	cetirizine-pseudoephedrine	d05283	brimonidine-timolol ophthalmic
d04765	hydrocortisone-lidocaine topical	d05348	ezetimibe-simvastatin
d04766	acetaminophen-traMADol	d05350	polyethylene glycol 3350
d04773	ethinyl estradiol-etonogestrel	d05352	emtricitabine-tenofovir
d04774	tenofovir	d05355	DULoxetine
d04776	frovatriptan	d05357	ibandronate
d04778	valdecoxib		

d05365	dexchlorpheniramine /HYDROcodone/phenylephrin	d07113	desvenlafaxine
		d07130	naproxen-SUMAtriptan
d05413	solifenacin	d07132	olopatadine nasal
d05414	natalizumab	d07137	dabigatran
d05421	eszopiclone	d07315	glutamine
d05422	darifenacin	d07347	bifidobacterium infantis
d05436	insulin detemir	d07349	lacosamide
d05471	alpha-D-galactosidase	d07354	silodosin
d05488	pramlintide	d07356	rivaroxaban
d05508	pregabalin	d07373	d-xylitol
d05526	alendronate-cholecalciferol	d07374	bimatoprost topical ophthalmic
d05529	exenatide	d07395	dexlansoprazole
d05578	ramelteon	d07397	febuxostat
d05583	APAP/dextromethorphan /phenylephrine	d07400	bifidobacterium-lactobacillus
		d07409	prasugrel
d05635	metFORMIN-pioglitazone	d07466	liraglutide
d05637	lactobacillus rhamnosus GG	d07482	bepotastine ophthalmic
d05646	saccharomyces boulardii lyo	d07498	amLODIPine-telmisartan
d05702	methylsulfonylmethane	d07505	copper
d05703	chondroitin/glucosamine /methylsulfonylmethane	d07637	pitavastatin
		d07639	acetaminophen/CPM /dextromethorphan/GG
d05719	ranolazine		
d05748	brewer's yeast	d07640	denosumab
d05770	omeprazole-sodium bicarbonate	d07645	onabotulinumtoxinA
d05776	iodine	d07659	caffeine-magnesium salicylate
d05807	varenicline	d07660	formoterol-mometasone
d05819	diphenhydrAMINE-ibuprofen		
d05825	darunavir	d07668	amlodipine/hydrochlorothiazide /olmesartan
d05847	efavirenz/emtricitabine/tenofovir		
d05851	levocetirizine	d07693	aspirin-calcium carbonate
d05856	glimepiride-pioglitazone	d07705	lurasidone
d05896	sitaGLIPtin	d07709	metformin-saxagliptin
d05899	ciclesonide nasal	d07717	acyclovir-hydrocortisone topical
d05964	aloe vera	d07740	vilazodone
d06032	fluocinolone otic	d07754	azilsartan
d06214	collagen	d07764	famotidine-ibuprofen
d06297	paliperidone	d07767	linagliptin
d06370	turmeric	d07804	apixaban
d06392	wheat dextrin	d07831	tyrosine
d06507	cinnamon	d07876	mirabegron
d06649	calcium carbonate-magnesium chloride	d07885	aclidinium
		d07891	icosapent
d06652	strontium gluconate	d07902	linaclotide
d06655	alpha-lipoic acid	d07905	teriflunomide
d06662	amLODIPine-valsartan	d07921	capsaicin-menthol topical
d06663	lisdexamfetamine	d08070	ospemifene
d06720	metFORMIN-sitaGLIPtin	d08079	dimethyl fumarate
d06833	acetaminophen-aspirin	d08080	canagliflozin
d06842	armodafinil	d08117	dolutegravir
d06848	lutein	d08187	umeclidinium
d06852	maraviroc	d08272	tavaborole topical
d06867	biotin	d08275	empagliflozin
d06905	amlodipine-olmesartan	d08349	diphenhydramine-naproxen
d07048	raltegravir	d08362	olodaterol-tiotropium
d07076	etravirine	d99999	Unmatched, no generic name

APPENDIX C:

REASONS FOR TAKING MEDICATION –

CODES AND CATEGORY NAMES

APPENDIX C: REASON FOR TAKING MEDICATIONS –

CODES AND CATEGORY NAMES

This Appendix contains two lists of codes representing reasons why participants think they are taking medications reported on the Medication Chart (See Appendix A above). The list of modified ICD-9 (__ICD9M) codes and category names is presented first and then the list of MIDUS (__MDC) codes and category names. See Section A above and the MIDUS-MIDJA Biomarker Medication Documentation for details about the coding process. The lists begin on the next page.

Modified ICD-9 Codes and Labels

The ICD9M category labels are based on clinical descriptions of diseases etc., thus this table also contains a column listing key words/common phrases indicating the conditions/symptoms etc. included in a given category.

ICD9M CODE	ICD9 CODE LABEL	Key Words/Common Responses
10	PRIMARY TUBERCULOUS INFECTION	Tuberculosis bacillus
41	BACT INF IN OTH DIS/NOS	Infectious disease
42	HUMAN IMMUNO VIRUS DIS	HIV
53	HERPES ZOSTER	Shingles
54	HERPES SIMPLEX	Cold sores, herpes
78	OTHER VIRAL DISEASE	Warts
79	VIRAL INFECTION	Anti-viral, viral infection
110	DERMATOPHYTOSIS	Athlete's foot, toe nail fungus, fungal infection, ringworm
112	CANDIDIASIS	Yeast infection
133	SCABIES	Scabies
135	SARCOIDOSIS	Sarcoidosis
150	MALIGNANT NEOPLASM OF ESOPHAGUS	Esophagus cancer
173	OTHER MALIGNANT NEOPLASM OF SKIN	Skin cancer
174	MALIG NEO FEMALE BREAST	Breast cancer
185	MALIGN NEOPL PROSTATE	Prostate cancer
188	MALIGN NEOPL BLADDER	Bladder cancer
209	NEUROENDOCRINE TUMORS	Neuroendocrine carcinoid cancer
211	BENIGN NEOPLASM OF OTHER PARTS OF DIGESTIVE SYSTEM	Colon polyp
212	BENIGN NEOPLASM OF RESPIRATORY AND INTRATHORACIC ORGANS	Thymoma
218	UTERINE LEIOMYOMA	Fibroids, myoma of uterus
239	UNSPECIFIED NEOPLASM	Cancer non-specific

ICD9M CODE	ICD9 CODE LABEL	Key Words/Common Responses
240	GOITER	Goiters-thyroid med, keeps goiters away
242	TOXIC DIFFUSE GOITER	Grave's disease
244	ACQUIRED HYPOTHYROIDISM	Hypothyroidism, thyroiditis
246	OTH DISORDERS OF THYROID	Thyroid hormone, thyroid
250	DIABETES MELLITUS	Diabetes, high blood sugar
251	OTH PANCREATIC DISORDER	Hypoglycemia
255	ADRENAL GLAND DISORDERS	Adrenal gland disorder, adrenal gland dysfunction
256	OVARIAN DYSFUNCTION	Polycystic ovarian syndrome
257	TESTICULAR DYSFUNCTION	Low testosterone levels
259	OTH ENDOCRINE DISORDERS	Imbalance in endocrine system
266	B-COMPLEX DEFICIENCIES	Low B12
267	ASCORBIC ACID DEFICIENCY	Vitamin C deficiency
268	VITAMIN D DEFICIENCY	Rickets, low vitamin D, vitamin D deficiency
269	OTH NUTRITION DEFICIENCY	Iodine deficiency, calcium deficiency
272	PURE HYPERCHOLESTEROLEM	High cholesterol, hyperlipidemia, high neutral lipid,
274	GOUT	Gout
275	DIS MINERAL METABOLISM	Magnesium supplement, reduce phosphate, supplement iron
276	FLUID/ELECTROLYTE DIS	Low potassium, hypokalemia
279	DISORDER OF IMMUNE MECHANISM	Autoimmune disease
280	IRON DEFICIENCY ANEMIA	Iron deficiency
281	PERNICIOUS ANEMIA	Pernicious anemia
285	ANEMIA NEC/NOS	Anemia
287	PURPURA & OTH HEMOR COND	Low platelet count
295	SCHIZOPHRENIC DISORDERS	Schizophrenia
296	AFFECTIVE PSYCHOSES	Bipolar disorder, mood swings

ICD9M CODE	ICD9 CODE LABEL	Key Words/Common Responses
297	DELUSIONAL DISORDERS	Hallucinations, paranoia, ease up on symptoms of delusion
298	OTH NONORGANIC PSYCHOSES	Psychosis
300	NEUROTIC DISORDERS	Tranquilizer, stay calm, anxiety, nervousness, stabilizer
302	SEXUAL DISORDERS	Impotence, erectile dysfunction
303	ALCOHOL DEPENDENCE	Preventing craving alcohol
304	DRUG DEPENDENCE	Heroin addiction maintenance
305	NONDEPENDENT DRUG ABUSE	Smoking cessation
308	ACUTE REACTION TO STRESS	Stress
309	ADJUSTMENT REACTION	PTSD
311	DEPRESSIVE DISORDER NEC	Depression, anti-depressant
314	HYPERKINETIC SYNDROME	ADD, ADHD
323	ENCEPHALITIS, MYELITIS, AND ENCEPHALOMYELITIS	Myelitis
331	CEREBRAL DEGENERATION	Alzheimer's
332	PARKINSON'S DISEASE	Parkinson's disease
333	EXTRAPYRAMIDAL DIS NEC	Restless leg syndrome, tick in eye, tremors, Huntington's disease
337	AUTONOMIC NERVE DISORDER	Treat disorder of peripheral nerve, neuropathy in heart
338	PAIN, NOT ELSEWHERE CLASSIFIED	Pain, pain in multiple locations,
340	MULTIPLE SCLEROSIS	MS, Multiple sclerosis, muscle fatigue
345	EPILEPSY	Epilepsy, seizure disorder, focal seizures
346	MIGRAINE	Migraine
347	CATAPLEXY AND NARCOLEPSY	Narcolepsy
349	CNS DISORDER NEC/NOS	Neurological problems
350	TRIGEMINAL NERVE DISORDERS	Trigeminal neuralgia

ICD9M CODE	ICD9 CODE LABEL	Key Words/Common Responses
354	CARPAL TUNNEL SYNDROME	Carpal tunnel syndrome
356	HERED & IDIOPATH PERIPH NEUROPATHY	Improvement of peripheral nervous system
358	MYONEURAL DISORDERS	Myasthenia gravis
361	RETINAL DETACHMENTS AND DEFEATS	Retinal detachment
362	RETINAL DISORDERS NEC	Macular degeneration
365	GLAUCOMA	Glaucoma, pressure in eye, lower ocular pressure
366	CATARACT	Cataract
370	KERATITIS	Ulcer in eye
371	CORNEAL OPACITY/DISORDER	Corneal problem
372	DISORDERS OF CONJUNCTIVA	Prevent eye infection
373	INFLAMMATION OF EYELIDS	Sty, blepharitis
375	LACRIMAL SYSTEM DISORDER	Dry eyes, lacrimal gland disorder
379	EYE DISORDERS NEC	Inflammation of eye, itchy eyes
380	DISORDER OF EXTERNAL EAR	Ear infection
386	VERTIGINOUS SYNDROMES	Meniere's disease, inner ear
388	DISORDERS OF EAR NEC	Ringing ears, tinnitus, ear pain, dry ear
389	HEARING LOSS	Helps with hearing, hearing loss
401	ESSENTIAL HYPERTENSION	High blood pressure, hypertension, reduce/lower blood pressure, blood pressure, anti-hypertensive
410	ACUTE MYOCARDIAL INFARCT	Myocardial infarction, cardiac infarction
413	ANGINA PECTORIS	Angina pectoris, angina
414	OTH CHR ISCHEMIC HRT DIS	Arterial sclerosis
415	ACUTE PULMONARY HEART DISEASE	Heart pulmonary embolism
424	OTH ENDOCARDIAL DISEASE	Mitral stenosis, prolapsed mitral valve
427	CARDIAC DYSRHYTHMIAS	Irregular pulse, atrial fibrillation
428	HEART FAILURE	Heart failure

ICD9M CODE	ICD9 CODE LABEL	Key Words/Common Responses
429	ILL-DEFINED HEART DIS	Cardiac disease, heart dilation, dysraphism of aortic valve
431	INTRACEREBRAL HEMORRHAGE	Intracerebral hemorrhage, brain hemorrhage
434	CEREBRAL ARTERY OCCLUS	Cerebral infarction sequelae, cerebral thrombosis, mini stroke
435	TRANSIENT CEREB ISCHEMIA	TIA
440	ATHEROSCLEROSIS	Atherosclerosis
441	AORTIC ANEURYSM AND DISSECTION	Aortic aneurysm
442	OTHER ANEURYSM	Aneurysm
443	RAYNAUD'S SYNDROME	Raynaud's syndrome
446	POLYARTERIT NODOSA ET AL	Wegener's disease
447	OTHER ARTERIAL DISEASE	Twisted carotid artery, vasculitis
451	THROMBOPHLEBITIS	Recurring phlebitis
453	OTH VENOUS THROMBOSIS	Anticoagulant, thrombosis, prevent thrombosis, prevent blood clot, thrombus
455	HEMORRHOIDS	Hemorrhoids
458	HYPOTENSION	Low blood pressure
460	ACUTE NASOPHARYNGITIS	Treat Cold, acute upper respiratory infection
461	ACUTE SINUSITIS	Acute sinus problems, post nasal drip, nasal inflammation, nasal mucus
470	DEVIATED NASAL SEPTUM	Deviated septum
471	NASAL POLYPS	Polyps in sinus
472	CHR PHARYNG/NASOPHARYNG	Rhinitis, chronic nasal congestion, reduce swelling of nasal passages
473	CHRONIC SINUSITIS	Chronic sinus
477	ALLERGIC RHINITIS	Hay fever, dust allergy, allergic rhinitis
478	OTH UPPR RESPIRATORY DIS	Drippy/clogged nose
486	PNEUMONIA, ORGANISM NOS	Pneumonia

ICD9M CODE	ICD9 CODE LABEL	Key Words/Common Responses
487	INFLUENZA	Flu
490	BRONCHITIS NOS	Bronchitis
492	EMPHYSEMA	Emphysema
493	ASTHMA	Asthma, pulmonary emphysema, emphysema
496	CHR AIRWAY OBSTRUCT NEC	COPD
518	OTHER LUNG DISEASES	Repair damage to lung
519	OTHER DISEASES OF RESPIRATORY SYSTEM	Bronchial spasm prevention
523	GINGIVAL/PERIODONTAL DIS	Gum disease/problems
524	DENOFACIAL ANOMALIES	Temporomandibular joint disorders, TMJ
525	OTHER DENTAL DISORDER	Extracted teeth, treatment for a tooth, toothache
526	DISEASES OF THE JAWS	Root canal, root canal infection
527	SALIVARY GLAND DISEASES	Dry mouth
528	ORAL SOFT TISSUE DISEASE	Stomatitis, chapped lips, canker sores, dental abscess
529	TONGUE DISORDERS	Geographic tongue
530	DISEASES OF ESOPHAGUS	Acid reflux, GERD, gastritis, esophagus trouble, backward flow of gastric acid,
531	GASTRIC ULCER	Gastric ulcer
532	DUODENAL ULCER	Duodenal ulcer
533	PEPTIC ULCER, SITE NOS	Helicobacter pylori, gastric & duodenal ulcer, peptic ulcer
535	GASTRITIS AND DUODENITIS	Inflammation of stomach
536	STOMACH FUNCTION DISORD	Gastric hyperacidity, dyspepsia, neutralize/reduce gastric acid, stomach pain
553	OTHER ABDOMINAL HERNIA	Hernia, high hiatal hernia
555	REGIONAL ENTERITIS	Crohn's disease
556	IDIOPATHIC PROCTOCOLITIS	Colitis
558	OTH NONINF GASTROENTERIT	Diarrhea, gastroenteritis

ICD9M CODE	ICD9 CODE LABEL	Key Words/Common Responses
562	DIVERTICULA OF INTESTINE	Diverticulitis
564	FUNCT DIGESTIVE DIS NEC	Constipation, bowel movement, colon cramps, irritable bowel
569	OTH INTESTINAL DISORDERS	Intestinal disorder, inflammation of intestines, proctitis
571	CHR LIVER DIS/CIRRHOSIS	Liver disease, primary biliary cirrhosis
574	CHOLELITHIASIS	Gall stone
575	OTHER DISORDERS OF GALLBLADDER	Gallbladder polyp
579	INTESTINAL MALABSORPTION	Celiac disease nutrition
583	NEPHRITIS NOS	Lupus in kidneys
585	CHRONIC RENAL FAILURE	Kidney disease
586	RENAL FAILURE NOS	Renal failure
590	KIDNEY INFECTION	Kidney infection, antibiotics for kidney
592	RENAL/URETERAL CALCULUS	Kidney stones
593	OTH RENAL & URETERAL DIS	Prevention/help with renal insufficiency
596	OTHER BLADDER DISORDERS	Bladder tone, neurogenic bladder
599	OTH URINARY TRACT DISOR	Urinary tract infection, UTI
600	HYPERPLASIA OF PROSTATE	Prostatic hypertrophy, prostatic hyperplasia
601	PROSTATIC INFLAMMATION	Prostatitis, enlarged prostate, help reduce swelling of prostate
607	DISORDER OF PENIS	Due to prostate cancer/vitality
608	MALE GENITAL DIS NEC	Transitions
611	OTHER BREAST DISORDERS	Breast pain
616	INFLAMMATORY DISEASE OF CERVIX, VAGINA, AND VULVA	Vaginitis
625	FEMALE GENITAL SYMPTOMS	Dysmenorrhea, premenstrual tension
626	DISORDER OF MENSTRUATION	Menstrual pain, irregular period

ICD9M CODE	ICD9 CODE LABEL	Key Words/Common Responses
627	MENOPAUSAL DISORDERS	Menopausal disorder, balancing hormones, stabilizer for menopause, menopause
628	FEMALE INFERTILITY	Fertility, prepare uterus
682	CELLULITIS AND ABSCESS, UNSPEC	Cellulitis
686	OTHER LOCAL INFECTIONS OF SKIN AND SUBCUTANEOUS TISSUE	Skin palmoplantar pustulosis
690	ERYTHEMATOSQUAMOUS DERM	Dry scalp
691	ATOPIC DERMATITIS AND RELATED CONDITIONS	Atopic dermatitis
692	CONTACT DERMATITIS	Eczema, dermatitis, poison oak
695	ERYTHEMATOUS CONDITIONS	Rosacea, lupus
696	PSORIASIS/LIKE DISORDERS	Psoriasis
697	LICHEN	Lichen
698	PRURITUS & LIKE COND	Itch, itching
702	OTHER DERMATOSES	Actinic keratosis
704	HAIR & FOLLICLE DISEASE	Hair thinning
705	DISORDERS OF SWEAT GLANDS	Miliaria
706	SEBACEOUS GLAND DISEASE	Acne
707	CHRONIC ULCER OF SKIN	Sores in ears (hearing aid), sores under arms
708	URTICARIA	Hives, chronic urticaria
709	OTHER SKIN DISORDERS	Scar
714	RHEUMATOID & OTH INFLAMM POLYARTHROP	Rheumatoid arthritis, RA
715	OSTEOARTHROSIS ET AL	Osteoarthritis
716	ARTHROPATHIES NEC/NOS	Arthritis, arthritis pain
718	OTHER JOINT DERANGEMENT	Pain in hip
719	JOINT DISORDER NEC & NOS	Knee, shoulder, joint etc. pain or problem, athralgia,
721	SPONDYLOSIS AND ALLIED DISORDERS	Undifferentiated spondyloarthropathy
722	INTERVERTEBRAL DISC DIS	Degenerative spine condition

ICD9M CODE	ICD9 CODE LABEL	Key Words/Common Responses
723	OTHER CERVICAL SPINE DIS	Cervical vertebra pain, pinched nerve, neck pain
724	BACK DISORDER NEC & NOS	Back pain, sciatica, lumbar canal stenosis, back spasms
726	PERIPH ENTHESOPATHIES	Torn rotator cuff, tendonitis of jaw
727	OTH DIS SYNOV/TEND/BURSA	Bursitis
728	DIS OF MUSCLE/LIG/FASCIA	Muscle spasm
729	OTHER SOFT TISSUE DIS	Sore muscles, leg pain/cramps, muscle constriction, rheumatism
730	OSTEOMYELITIS, PERIOSTITIS, AND OTHER INFECTIONS INVOLVING BONE	Osteomyelitis
731	OSTEITIS DEFORMANS	Paget's disease, brittle bone
733	OTH BONE & CARTILAGE DIS	Osteoporosis, osteopenia, pain in bone, low bone density
745	CARDIAC SEPTAL CLOS ANOM	Foramen ovale
753	CONGENITAL ANOMALIES OF URINARY SYSTEM	Polycystic kidney disease
780	GENERAL SYMPTOMS	Sleep aid, night sweats, vasovagal syncope, sensitive to cold, stiff, giddy, insomnia, vertigo, memory problems
781	NERV/MUSCULSKEL SYS SYMP	Tremor
782	SKIN/OTH INTEGUMENT SYMP	Rash, numbness of feet/finger/legs, reduce keloidosis, reduce skin inflammation, edema
783	NUTRIT/METAB/DEVEL SYMP	Anorexia, weight loss, appetite suppressant
784	SYMPTOMS INVOL HEAD/NECK	Headache, sore throat
785	CARDIOVASCULAR SYS SYMP	Heart murmur
786	RESP SYS/OTH CHEST SYMP	Difficulty breathing, loosen phlegm, short breath, whooping cough, chest tightness
787	GI SYSTEM SYMPTOMS	Gassy, heartburn, nausea
788	URINARY SYSTEM SYMPTOMS	Urination disorder, frequent urination, urination trouble/problem, bladder control
789	OTH ABDOMEN/PELVIS SYMP	Stomach spasm, stomach cramp, groin pain

ICD9M CODE	ICD9 CODE LABEL	Key Words/Common Responses
790	NONSPECIFIC FINDINGS ON EXAMINATION OF BLOOD	High uric acid, hyperuricemia
795	ABN HISTOLOG/IMMUNO FIND	Positive TB test
797	SENILITY WITHOUT MENTION OF PSYCHOSIS	Memory
805	FRACTURE OF VERTEBRAL COLUMN WITHOUT MENTION OF SPINAL CORD INJURY	Broken back bone
904	INJURY TO BLOOD VESSELS OF LOWER EXTREMITY AND UNSPECIFIED SITES	Blood vessel injury
918	SUPERFICIAL INJURY OF EYE AND ADNEXA	Eye injury
919	SUPERFICIAL INJ OTH SITE	Blisters
957	INJURY TO NERVE NEC/NOS	Nerve damage
965	POIS-ANALGESIC/ANTIPYRET	Counteract Naproxen
993	EFFECTS OF AIR PRESSURE	Altitude sickness
994	EFFECT EXTERNAL CAUS NEC	Motion sickness
995	CERTAIN ADVERSE EFF NEC	Inflammation, food allergy, allergy (non-specific)
9996	UNABLE TO CLASSIFY	
9997	DON'T KNOW	
9998	MISSING	
9999	INAPP	

MIDUS Codes and Labels

To assist users in understanding the type of responses in the MIDUS code categories this table also contains a column listing key words/common phrases used to assign a response to a given category. Note all the MIDUS codes are alphanumeric and begin with an "M" followed by a 4 digit numeric code. The exception is the codes for Unable to Classify, Don't Know, Missing, and INAPP which begin with a "Z" and the usual missing value codes.

MIDUS CODE	MIDUS CODE LABEL	Key words/Common Phrases
M1000	GENERAL HEALTH	Health, for health, maintain health
M1010	IMPROVE HEALTH	Improve health, strengthen the system, for healing, recovery from (cancer, surgery, etc.), getting better
M1020	ENERGY	Gives me a boost, when feel run down, increase energy, improve drive, when tired
M1030	GENERAL HEALTH, OTHERS	Beauty, aging, stay younger, detox, cleanse body
M1040	GENERAL HEALTH, PREVENTIVE	Preventive, prevention, prevent potential sickness
M2000	SUPPLEMENT	Supplement (just the word)
M2010	VITAMIN SUPPLEMENT	Lacking vitamins, to supply vitamins, get balance of vitamins
M2020	CALCIUM SUPPLEMENT	Calcium, need more calcium, don't drink milk
M2030	DIETARY SUPPLEMENT	Supplement diet, balance diet needs
M2040	ENSURE NUTRITIONAL INTAKES	Nutrient fortification, add nutrients, balance nutrition
M2050	POOR DIET	Diet, don't always eat well, dietary reasons
M2060	ANTIOXIDANT	Antioxidants, help with free radicals,
M2070	SUPPLEMENT, OTHERS	Iron pill, resupply iron, omega 3, fiber, probiotics
M3010	CARDIOVASCULAR HEALTH	Heart health, good for heart, cardiovascular health
M3011	CARDIOVASCULAR HEALTH, PREVENTIVE	Cardiac family history, prevent clots/stroke/heart attack/atherosclerosis
M3012	CARDIOVASCULAR HEALTH, BLOOD THINNER	Blood thinner
M3013	CARDIOVASCULAR HEALTH, OTHERS	Improve blood circulation, neutral fat,
M3020	MUSCULOSKELETAL HEALTH	Bone health, because of broken bones, health leg and hip
M3021	BONE STRENGTH/DENSITY	Bone strength/density/loss/mass
M3022	JOINT HEALTH	Healthy joints, good for bones-joints, maintain bone and joint health

MIDUS CODE	MIDUS CODE LABEL	Key words/Common Phrases
M3023	MUSCULOSKELETAL HEALTH, PREVENTIVE	Prevent bone loss, prevent osteoporosis
M3024	MUSCULOSKELETAL HEALTH, OTHERS	Repair muscles, get older legs weaken, bone/muscle
M3030	DIGESTIVE HEALTH	Digestion, break down food, help digest food, condition of my stomach
M3031	INTESTINAL/COLON HEALTH	Colon health, cleans out colon, regularity, to condition intestinal functions
M3032	STOMACH ACID	Stomach acid
M3040	PROSTATE HEALTH	Prostate health, prostate gland, prostate problem,
M3050	EYE HEALTH	Eye health, good for eyes, nutrients for eyes, tired eyes, eye problem, uveal tract
M3060	BRAIN HEALTH	Boost cognitive abilities, memory, good for your brain, brain health, brain function, avoid senile brain
M3070	IMMUNE HEALTH	Boost/support immune system, beneficial for immune system,
M3071	PREVENT COLDS	Prevent catching cold, improve sensitivity to colds
M3072	IMMUNOSUPRESSION	Immunosuppressant, immunosuppressant after kidney transplant
M3080	INTEGUMENT HEALTH	Hair/Skin/Nail health, dry skin/hair, for skin, to avoid tanning/sunburn, liver spot, rough hands
M3090	OTHER TARGETED HEALTH	Low frequency reasons that cannot be assigned elsewhere (e.g. Multiple organ/system support (i.e. eye & bone, prevent cancer and strokes), bladder protection, protect liver from alcohol, liver, chronic illness)
M4010	MD RECOMMEND	Doctor suggested/prescribed/recommended/ "told me to"
M4020	GOOD FOR YOU/ME	Good for me/you, everyone says it's a good idea, healthy thing to do, heard it's good for you, saw on TV etc.
M4030	FAMILY/FRIEND RECOMMEND	Friend, family member, mother, etc. recommended it, spouse puts it out
M5000	WEIGHT LOSS	Lose weight, weight management, diet plan pills
M5100	STRESS	For stress, helps with stress
M5200	CONTRACEPTION	Birth Control, prevent pregnancy
M5300	COUNTER/PREVENT DRUG SIDE EFFECTS	Counter the affects of statin, prevent side effect of Lipitor, help with side effects of atorvastatin, etc.

MIDUS CODE	MIDUS CODE LABEL	Key words/Common Phrases
Z9996	UNABLE TO CLASSIFY	
Z9997	DON'T KNOW	
Z9998	MISSING	
Z9999	INAPP	

APPENDIX D:

THERAPEUTIC AND PHARMACOLOGIC

CLASS CODES AND NAMES

APPENDIX D: THERAPEUTIC AND PHARMACOLOGIC CLASS CODES AND NAMES

This Appendix contains two lists 1) Therapeutic Class (TC) codes and category names, and 2) Pharmacologic Class (PC) codes and categories included in the MIDUS and MIDJA data files as of May 2017. These lists will be updated as needed at future releases. See Section A above and MIDUS-MIDJA Biomarker Medication Documentation for details.

Therapeutic Class Codes and Names

The Therapeutic Classification (TC) system has three tiers consisting of a set of nested (parent-child) categories that parallels the ways in which clinicians think about medications. The system is polyhierarchical and each therapeutic class has a unique code. See Section B above for details. The list below is organized in nested in numeric order. The top tier (Parent/Grandparent) class codes are in the leftmost column. All middle tier (Parent/Child) class codes are listed under their top tier parent code. Similarly, all bottom tier (Child/Grandchild) class codes are listed under their middle tier "Parent" codes. All category names are listed in the rightmost column. Color coding is used to help illustrate the relationships among the therapeutic classes.

			Multum Therapeutic Classes
Top Tier (Parent/ Grandparent)	Middle Tier (Parent/ Child)	Bottom Tier (Child/ GrandChild)	Therapeutic Class Names
1			ANTI-INFECTIVES
	2		AMEBICIDES
	3		ANTHELMINTICS
	4		ANTIFUNGALS
		235	POLYENES
		236	AZOLE ANTIFUNGALS
		237	MISCELLANEOUS ANTIFUNGALS
	5		ANTIMALARIAL AGENTS
		238	ANTIMALARIAL QUINOLINES
		239	MISCELLANEOUS ANTIMALARIALS
	6		ANTITUBERCULOSIS AGENTS
		232	RIFAMYCIN DERIVATIVES
		234	MISCELLANEOUS ANTITUBERCULOSIS AGENTS
		457	HYDRAZIDE DERIVATIVES
	7		ANTIVIRAL AGENTS
		175	PROTEASE INHIBITORS
		176	NRTIS
		177	MISCELLANEOUS ANTIVIRALS

Top Tier (Parent/ Grandparent)	Middle Tier (Parent/ Child)	Bottom Tier (Child/ GrandChild)	Therapeutic Class Names
		227	NNRTIS
		229	PURINE NUCLEOSIDES
		281	NEURAMINIDASE INHIBITORS
		327	ANTIVIRAL COMBINATIONS
		364	ANTIVIRAL CHEMOKINE RECEPTOR ANTAGONIST
		366	INTEGRASE STRAND TRANSFER INHIBITOR
		480	ANTIVIRAL BOOSTERS
	9		CEPHALOSPORINS
		159	FIRST GENERATION CEPHALOSPORINS
		160	SECOND GENERATION CEPHALOSPORINS
		161	THIRD GENERATION CEPHALOSPORINS
	11		MACROLIDE DERIVATIVES
		304	MACROLIDES
	12		MISCELLANEOUS ANTIBIOTICS
	13		PENICILLINS
		224	AMINOPENICILLINS
		225	PENICILLINS BETA LACTAMASE INHIBITORS
	14		QUINOLONES
	15		SULFONAMIDES
	16		TETRACYCLINES
	17		URINARY ANTI INFECTIVES
	18		AMINOGLYCOSIDES
	240		LINCOMYCIN DERIVATIVES
20			ANTINEOPLASTICS
	23		ANTIMETABOLITES
	24		ANTINEOPLASTIC HORMONES
	454		PROTEASOME INHIBITORS
28			BIOLOGICALS
	34		IN VIVO DIAGNOSTIC BIOLOGICALS
40			CARDIOVASCULAR AGENTS
	42		ANGIOTENSIN CONVERTING ENZYME INHIBITORS
	43		ANTIADRENERGIC AGENTS PERIPHERALLY ACTING
	44		ANTIADRENERGIC AGENTS CENTRALLY ACTING
	45		ANTIANGINAL AGENTS
	46		ANTIARRHYTHMIC AGENTS
		385	GROUP I ANTIARRHYTHMICS

Top Tier (Parent/ Grandparent)	Middle Tier (Parent/ Child)	Bottom Tier (Child/ GrandChild)	Therapeutic Class Names
		386	GROUP II ANTIARRHYTHMICS
		387	GROUP III ANTIARRHYTHMICS
		388	GROUP IV ANTIARRHYTHMICS
		389	GROUP V ANTIARRHYTHMICS
	47		BETA ADRENERGIC BLOCKING AGENTS
		274	CARDIOSELECTIVE BETA BLOCKERS
		275	NON-CARDIOSELECTIVE BETA BLOCKERS
	48		CALCIUM CHANNEL BLOCKING AGENTS
	49		DIURETICS
		154	LOOP DIURETICS
		155	POTASSIUM-SPARING DIURETICS
		156	THIAZIDE AND THIAZIDE-LIKE DIURETICS
	50		INOTROPIC AGENTS
	51		MISCELLANEOUS CARDIOVASCULAR AGENTS
	52		PERIPHERAL VASODILATORS
	53		VASODILATORS
	54		VASOPRESSORS
	55		ANTIHYPERTENSIVE COMBINATIONS
		467	ACE INHIBITORS WITH THIAZIDES
		470	MISCELLANEOUS ANTIHYPERTENSIVE COMBINATIONS
		472	BETA BLOCKERS WITH THIAZIDES
		473	ANGIOTENSIN II INHIBITORS WITH THIAZIDES
		474	BETA BLOCKERS WITH CALCIUM CHANNEL BLOCKERS
		475	POTASSIUM SPARING DIURETICS WITH THIAZIDES
		476	ACE INHIBITORS WITH CALCIUM CHANNEL BLOCKING AGENTS
		479	ANGIOTENSIN II INHIBITORS WITH CALCIUM CHANNEL BLOCKERS
	56		ANGIOTENSIN II INHIBITORS
	303		AGENTS FOR PULMONARY HYPERTENSION
	340		ALDOSTERONE RECEPTOR ANTAGONISTS
	433		CATECHOLAMINE VASOPRESSORS
57			CENTRAL NERVOUS SYSTEM AGENTS
	58		ANALGESICS
		59	MISCELLANEOUS ANALGESICS
		60	NARCOTIC ANALGESICS

Top Tier (Parent/ Grandparent)	Middle Tier (Parent/ Child)	Bottom Tier (Child/ GrandChild)	Therapeutic Class Names
		61	NONSTEROIDAL ANTI-INFLAMMATORY AGENTS
		62	SALICYLATES
		63	ANALGESIC COMBINATIONS
		191	NARCOTIC ANALGESIC COMBINATIONS
		193	ANTIMIGRAINE AGENTS
		278	COX-2 INHIBITORS
	64		ANTICONVULSANTS
		199	HYDANTOIN ANTICONVULSANTS
		200	SUCCINIMIDE ANTICONVULSANTS
		201	BARBITURATE ANTICONVULSANTS
		203	BENZODIAZEPINE ANTICONVULSANTS
		204	MISCELLANEOUS ANTICONVULSANTS
		311	DIBENZAZEPINE ANTICONVULSANTS
		345	FATTY ACID DERIVATIVE ANTICONVULSANTS
		347	GAMMA-AMINOBUTYRIC ACID ANALOGS
		348	TRIAZINE ANTICONVULSANTS
		350	PYRROLIDINE ANTICONVULSANTS
		351	CARBONIC ANHYDRASE INHIBITOR ANTICONVULSANTS
	65		ANTIEMETIC ANTIVERTIGO AGENTS
		195	5HT3 RECEPTOR ANTAGONISTS
		196	PHENOTHIAZINE ANTIEMETICS
		197	ANTICHOLINERGIC ANTIEMETICS
		198	MISCELLANEOUS ANTIEMETICS
	66		ANTIPARKINSON AGENTS
		205	ANTICHOLINERGIC ANTIPARKINSON AGENTS
		276	DOPAMINERGIC ANTIPARKINSONISM AGENTS
	67		ANXIOLYTICS SEDATIVES AND HYPNOTICS
		68	BARBITURATES
		69	BENZODIAZEPINES
		70	MISCELLANEOUS ANXIOLYTICS, SEDATIVES AND HYPNOTICS
	71		CNS STIMULANTS
	73		MUSCLE RELAXANTS
		74	NEUROMUSCULAR BLOCKING AGENTS
		178	SKELETAL MUSCLE RELAXANTS
	80		MISCELLANEOUS CENTRAL NERVOUS SYSTEM AGENTS

Top Tier (Parent/ Grandparent)	Middle Tier (Parent/ Child)	Bottom Tier (Child/ GrandChild)	Therapeutic Class Names
	313		CHOLINESTERASE INHIBITORS
	378		DRUGS USED IN ALCOHOL DEPENDENCE
81			COAGULATION MODIFIERS
	82		ANTICOAGULANTS
		262	COUMARINS AND INDANEDIONES
		283	THROMBIN INHIBITORS
		285	FACTOR XA INHIBITORS
	83		ANTIPLATELET AGENTS
		211	PLATELET AGGREGATION INHIBITORS
	85		MISCELLANEOUS COAGULATION MODIFIERS
87			GASTROINTESTINAL AGENTS
	88		ANTACIDS
	90		ANTIDIARRHEALS
	91		DIGESTIVE ENZYMES
	92		GALLSTONE SOLUBILIZING AGENTS
	93		GI STIMULANTS
	94		H2 ANTAGONISTS
	95		LAXATIVES
	96		MISCELLANEOUS GI AGENTS
	272		PROTON PUMP INHIBITORS
	277		5 AMINOSALICYLATES
	355		FUNCTIONAL BOWEL DISORDER AGENTS
		89	ANTICHOLINERGICS ANTISPASMODICS
		455	GUANYLATE CYCLASE C AGONISTS
97			HORMONES/HORMONE MODIFIERS
	98		ADRENAL CORTICAL STEROIDS
		301	GLUCOCORTICOIDS
		302	MINERALOCORTICOIDS
	101		SEX HORMONES
		102	CONTRACEPTIVES
		182	ANDROGENS AND ANABOLIC STEROIDS
		183	ESTROGENS
		184	GONADOTROPINS
		185	PROGESTINS
		186	SEX HORMONE COMBINATIONS
		279	GONADOTROPIN-RELEASING HORMONE AND ANALOGS

Top Tier (Parent/ Grandparent)	Middle Tier (Parent/ Child)	Bottom Tier (Child/ GrandChild)	Therapeutic Class Names
	103		THYROID HORMONES
	288		5 ALPHA REDUCTASE INHIBITORS
	411		CALCITONIN
	416		SOMATOSTATIN AND SOMATOSTATIN ANALOGS
	417		SELECTIVE ESTROGEN RECEPTOR MODULATORS
	418		PARATHYROID HORMONE AND ANALOGS
	420		ANTIANDROGENS
	423		AROMATASE INHIBITORS
105			MISCELLANEOUS AGENTS
	106		ANTIDOTES
	107		CHELATING AGENTS
	108		CHOLINERGIC MUSCLE STIMULANTS
	109		LOCAL INJECTABLE ANESTHETICS
	110		MISCELLANEOUS UNCATEGORIZED AGENTS
	114		ILLICIT STREET DRUGS
	192		ANTIRHEUMATICS
	270		ANTIPSORIATICS
	284		VISCOSUPPLEMENTATION AGENTS
	320		SMOKING CESSATION AGENTS
113			GENITOURINARY TRACT AGENTS
	263		IMPOTENCE AGENTS
	264		URINARY ANTISPASMODICS
	265		URINARY PH MODIFIERS
	266		MISCELLANEOUS GENITOURINARY TRACT AGENTS
115			NUTRITIONAL PRODUCTS
	116		IRON PRODUCTS
	117		MINERALS AND ELECTROLYTES
	118		ORAL NUTRITIONAL SUPPLEMENTS
	119		VITAMINS
	120		VITAMIN AND MINERAL COMBINATIONS
	121		INTRAVENOUS NUTRITIONAL PRODUCTS
122			RESPIRATORY AGENTS
	123		ANTIHISTAMINES
	124		ANTITUSSIVES
	125		BRONCHODILATORS
		126	METHYLXANTHINES

Top Tier (Parent/ Grandparent)	Middle Tier (Parent/ Child)	Bottom Tier (Child/ GrandChild)	Therapeutic Class Names
		180	ADRENERGIC BRONCHODILATORS
		181	BRONCHODILATOR COMBINATIONS
		299	ANTICHOLINERGIC BRONCHODILATORS
	127		DECONGESTANTS
	128		EXPECTORANTS
	130		RESPIRATORY INHALANT PRODUCTS
		296	INHALED CORTICOSTEROIDS
		407	INHALED ANTI INFECTIVES
	132		UPPER RESPIRATORY COMBINATIONS
	243		LEUKOTRIENE MODIFIERS
133			TOPICAL AGENTS
	135		ANTISEPTIC AND GERMICIDES
	136		DERMATOLOGICAL AGENTS
		137	TOPICAL ANTI INFECTIVES
		138	TOPICAL STEROIDS
		139	TOPICAL ANESTHETICS
		140	MISCELLANEOUS TOPICAL AGENTS
		141	TOPICAL STEROIDS WITH ANTI INFECTIVES
		143	TOPICAL ACNE AGENTS
		248	TOPICAL EMOLLIENTS
		290	TOPICAL ANTIBIOTICS
		292	TOPICAL ANTIFUNGALS
		381	TOPICAL DEPIGMENTING AGENTS
		382	TOPICAL ANTIHISTAMINES
		448	TOPICAL NON-STEROIDAL ANTI-INFLAMMATORIES
		450	TOPICAL ANTINEOPLASTICS
		453	TOPICAL RUBEFACIENT
		461	TOPICAL ANTI ROSACEA AGENTS
	146		MOUTH AND THROAT PRODUCTS
	147		OPHTHALMIC PREPARATIONS
		163	OPHTHALMIC ANTI-INFECTIVES
		164	OPHTHALMIC GLAUCOMA AGENTS
		165	OPHTHALMIC STEROIDS
		166	OPHTHALMIC STEROIDS WITH ANTI INFECTIVES
		167	OPHTHALMIC ANTI INFLAMMATORY AGENTS
		168	OPHTHALMIC LUBRICANTS AND IRRIGATIONS

Top Tier (Parent/ Grandparent)	Middle Tier (Parent/ Child)	Bottom Tier (Child/ GrandChild)	Therapeutic Class Names
		169	MISCELLANEOUS OPHTHALMIC AGENTS
		267	OPHTHALMIC ANTIHISTAMINES AND DECONGESTANTS
		286	MYDRIATICS
	148		OTIC PREPARATIONS
		393	CERUMENOLYTICS
	151		VAGINAL PREPARATIONS
		268	VAGINAL ANTI-INFECTIVES
		269	MISCELLANEOUS VAGINAL AGENTS
	247		NASAL PREPARATIONS
		244	NASAL LUBRICANTS AND IRRIGATIONS
		245	NASAL STEROIDS
		246	NASAL ANTIHISTAMINES AND DECONGESTANTS
153			PLASMA EXPANDERS
218			ALTERNATIVE MEDICINES
	219		NUTRACEUTICAL PRODUCTS
	220		HERBAL PRODUCTS
	363		PROBIOTICS
242			PSYCHOTHERAPEUTIC AGENTS
	249		ANTIDEPRESSANTS
		76	MISCELLANEOUS ANTIDEPRESSANTS
		208	SSRI ANTIDEPRESSANTS
		209	TRICYCLIC ANTIDEPRESSANTS
		306	PHENYLPIPERAZINE ANTIDEPRESSANTS
		307	TETRACYCLIC ANTIDEPRESSANTS
		308	SSNRI ANTIDEPRESSANTS
	251		ANTIPSYCHOTICS
		77	MISCELLANEOUS ANTIPSYCHOTIC AGENTS
		210	PHENOTHIAZINE ANTIPSYCHOTICS
		341	ATYPICAL ANTIPSYCHOTICS
254			IMMUNOLOGIC AGENTS
	33		IMMUNE GLOBULINS
	104		IMMUNOSUPPRESSIVE AGENTS
		441	CALCINEURIN INHIBITORS
		442	TNF ALPHA INHIBITORS
		444	SELECTIVE IMMUNOSUPPRESSANTS
		445	OTHER IMMUNOSUPPRESSANTS

Top Tier (Parent/ Grandparent)	Middle Tier (Parent/ Child)	Bottom Tier (Child/ GrandChild)	Therapeutic Class Names
	437		IMMUNOSTIMULANTS
		439	OTHER IMMUNOSTIMULANTS
331			RADIOLOGIC AGENTS
	332		RADIOLOGIC ADJUNCTS
		374	CARDIAC STRESSING AGENTS
358			METABOLIC AGENTS
	19		ANTIHYPERLIPIDEMIC AGENTS
		173	HMG-COA REDUCTASE INHIBITORS
		174	MISCELLANEOUS ANTIHYPERLIPIDEMIC AGENTS
		241	FIBRIC ACID DERIVATIVES
		252	BILE ACID SEQUESTRANTS
		316	CHOLESTEROL ABSORPTION INHIBITORS
		317	ANTIHYPERLIPIDEMIC COMBINATIONS
	99		ANTIDIABETIC AGENTS
		213	SULFONYLUREAS
		214	BIGUANIDES
		215	INSULIN
		216	ALPHA-GLUCOSIDASE INHIBITORS
		271	THIAZOLIDINEDIONES
		282	MEGLITINIDES
		314	ANTIDIABETIC COMBINATIONS
		371	DIPEPTIDYL PEPTIDASE 4 INHIBITORS
		373	GLP 1 RECEPTOR AGONISTS
		458	SGLT 2 INHIBITORS
	194		ANTIGOUT AGENTS
	289		ANTIHYPERURICEMIC AGENTS
	293		GLUCOSE ELEVATING AGENTS
	359		PERIPHERALLY ACTING ANTIOBESITY AGENTS
	409		BONE RESORPTION INHIBITORS
		217	BISPHOSPHONATES
		415	MISCELLANEOUS BONE RESORPTION INHIBITORS
365			MEDICAL GAS
462			ALLERGENICS
999			INAPP

Pharmacologic Class Codes and Names

The Pharmacologic Classification (PC) system is flat thus the classes are in numeric order by class code. This system does not include parent/child relationships, but drugs can be assigned to multiple pharmacologic categories. Within MIDUS/MIDJA medications can be assigned to up to 6 PC categories. See Section A above and MIDUS-MIDJA Biomarker Medication Documentation for more details.

Multum Pharmacologic Classes	
Codes	Class Names
901	ACNE PRODUCTS
902	ACETYLCHOLINESTERASE INHIBITOR
903	ACETYLCHOLINESTERASE INHIBITOR (CENTRAL)
909	ADRENERGIC AGONIST AGENT
915	ALKALINIZING AGENT
918	ALPHA 1 AGONIST
919	ALPHA 1 BLOCKER
928	ALPHA-/BETA- AGONIST
930	ALPHA 2 -ADRENERGIC AGONIST
931	ALPHA 2 AGONIST, OPHTHALMIC
935	AMINOQUINOLINE (ANTIMALARIAL)
938	5-AMINOSALICYLIC ACID DERIVATIVE
943	ANALGESIC COMBINATION (OPIOID)
946	ANALGESIC, OPIOID
947	ANALGESIC NONOPIOID
951	ANALGESIC, TOPICAL
952	ANALGESIC, URINARY
953	ANALGESIC, MISCELLANEOUS
954	ANDROGEN
955	ANESTHETIC/CORTICOSTEROID
956	ANESTHETIC, TOPICAL
957	ANGIOTENSIN-CONVERTING ENZYME (ACE) INHIBITOR
958	ANGIOTENSIN II RECEPTOR BLOCKER
961	ANTACID
963	ANTHELMINTIC
971	ANTIANGINAL AGENT
973	ANTIANXIETY AGENT, MISCELLANEOUS
976	ANTIARRHYTHMIC AGENT, CLASS IB
977	ANTIARRHYTHMIC AGENT, CLASS IC
978	ANTIARRHYTHMIC AGENT, CLASS II

Codes	Class Names
979	ANTIARRHYTHMIC AGENT, CLASS III
980	ANTIARRHYTHMIC AGENT, CLASS IV
983	ANTIARRHYTHMIC AGENT, MISCELLANEOUS
989	ANTIBIOTIC, AMINOGLYCOSIDE
994	ANTIBIOTIC, CEPHALOSPORIN (FIRST GENERATION)
995	ANTIBIOTIC, CEPHALOSPORIN (SECOND GENERATION)
998	ANTIBIOTIC/CORTICOSTEROID, OPHTHALMIC
1000	ANTIBIOTIC CORTICOSTEROID TOPICAL
1002	ANTIBIOTIC, MACROLIDE
1004	ANTIBIOTIC, OPHTHALMIC
1005	ANTIBIOTIC, ORAL RINSE
1008	ANTIBIOTIC, PENICILLIN
1009	ANTIBIOTIC, FLUOROQUINOLONE
1011	ANTIBIOTIC, SULFONAMIDE DERIVATIVE
1013	ANTIBIOTIC, TETRACYCLINE DERIVATIVE
1014	ANTIBIOTIC, TOPICAL
1017	ANTIBIOTIC, MISCELLANEOUS
1019	ANTICHOLINERGIC AGENT
1022	ANTICOAGULANT
1026	ANTICONVULSANT, BARBITURATE
1027	ANTICONVULSANT BENZODIAZEPINE
1029	ANTICONVULSANT, HYDANTOIN
1031	ANTICONVULSANT, SUCCINIMIDE
1032	ANTICONVULSANT, MISCELLANEOUS
1044	ANTIDEPRESSANT, ALPHA-2 ANTAGONIST
1050	ANTIDEPRESSANT, SELECTIVE SEROTONIN REUPTAKE INHIBITOR
1051	ANTIDEPRESSANT, SEROTONIN/NOREPINEPHRINE REUPTAKE INHIBITOR
1052	ANTIDEPRESSANT, SEROTONIN REUPTAKE INHIBITOR/ANTAGONIST
1057	ANTIDEPRESSANT, TRICYCLIC (SECONDARY AMINE)
1058	ANTIDEPRESSANT, TRICYCLIC (TERTIARY AMINE)
1063	ANTIDIABETIC AGENT, BIGUANIDE
1065	ANTIDIABETIC AGENT, SULFONYLUREA
1066	ANTIDIABETIC AGENT, THIAZOLIDINEDIONE
1069	ANTIDIARRHEAL
1073	CORTICOSTEROID PARENTERAL
1074	ANTIDOTE
1095	ANTIDOTE, EXTRAVASATION

Codes	Class Names
1122	ANTIEMETIC
1125	ANTIFLATULENT
1126	ANTIFUNGAL AGENT, IMIDAZOLE DERIVATIVE
1130	ANTIFUNGAL AGENT, ORAL
1131	ANTIFUNGAL AGENT, ORAL NONABSORBED
1134	ANTIFUNGAL AGENT, TOPICAL
1135	ANTIFUNGAL AGENT, VAGINAL
1138	ANTIGOUT AGENT
1156	ANTIHYPERTENSIVE
1162	ANTI-INFLAMMATORY AGENT
1169	ANTILIPEMIC AGENT, BILE ACID SEQUESTRANT
1170	ANTILIPEMIC AGENT, FIBRIC ACID
1171	ANTILIPEMIC AGENT, HMG-COA REDUCTASE INHIBITOR
1172	ANTILIPEMIC AGENT, MISCELLANEOUS
1173	ANTIMALARIAL AGENT
1174	ANTIMANIC AGENT
1177	ANTIMIGRAINE AGENT
1189	ANTINEOPLASTIC AGENT, ANTIMETABOLITE
1195	ANTINEOPLASTIC AGENT, AROMATASE INHIBITOR
1216	ANTINEOPLASTIC AGENT, MISCELLANEOUS
1219	ANTI-PARKINSON'S AGENT, ANTICHOLINERGIC
1221	ANTI-PARKINSON'S AGENT, DOPAMINE AGONIST
1225	ANTIPLATELET AGENT
1253	ANTIRETROVIRAL, PROTEASE INHIBITOR (ANTI-HIV)
1254	ANTIRETROVIRAL, REVERSE TRANSCRIPTASE INHIBITOR, NON-NUCLEOSIDE (ANTI-HIV)
1255	ANTIRETROVIRAL, REVERSE TRANSCRIPTASE INHIBITOR, NUCLEOSIDE (ANTI-HIV)
1257	ANTIRETROVIRAL, REVERSE TRANSCRIPTASE INHIBITOR, NUCLEOTIDE (ANTI-HIV)
1259	ANTIRHEUMATIC, DISEASE MODIFYING
1260	ANTISEBORRHEIC AGENT TOPICAL
1263	ANTISPASMODIC AGENT, URINARY
1268	ANTITUSSIVE
1277	ANTIVIRAL AGENT
1280	ANTIVIRAL AGENT, ORAL
1282	ANTIVIRAL AGENT, TOPICAL
1284	ASTRINGENT

Codes	Class Names
1286	BARBITURATE
1289	BENZODIAZEPINE
1291	BETA-BLOCKER, BETA-1 SELECTIVE
1293	BETA-BLOCKER, NONSELECTIVE
1294	BETA-BLOCKER WITH ALPHA-BLOCKING ACTIVITY
1295	BETA BLOCKER WITH INTRINSIC SYMPATHOMIMETIC ACTIVITY
1299	BETA 2 AGONIST
1303	BIOLOGICAL, MISCELLANEOUS
1305	BISPHOSPHONATE DERIVATIVE
1308	BLOOD VISCOSITY REDUCER AGENT
1313	CALCIUM CHANNEL BLOCKER
1314	CALCIUM SALT
1318	CARDIAC GLYCOSIDE
1320	CARDIOVASCULAR AGENT, MISCELLANEOUS
1326	CENTRAL NERVOUS SYSTEM DEPRESSANT
1343	CONTRACEPTIVE
1363	CORTICOSTEROID, INHALANT (ORAL)
1364	CORTICOSTEROID, NASAL
1365	CORTICOSTEROID, OPHTHALMIC
1367	CORTICOSTEROID, RECTAL
1369	CORTICOSTEROID, SYSTEMIC
1370	CORTICOSTEROID, TOPICAL
1379	COUGH PREPARATION
1380	DECONGESTANT
1382	DECONGESTANT/ANALGESIC
1390	DIAGNOSTIC AGENT
1428	DIETARY SUPPLEMENT
1435	DIURETIC, LOOP
1438	DIURETIC, POTASSIUM SPARING
1439	DIURETIC, THIAZIDE
1440	DIURETIC, THIAZIDE-RELATED
1447	ELECTROLYTE SUPPLEMENT, ORAL
1448	ELECTROLYTE SUPPLEMENT, PARENTERAL
1449	ENZYME
1463	ESTROGEN AND PROGESTIN COMBINATION
1464	ESTROGEN DERIVATIVE
1472	EXPECTORANT

Codes	Class Names
1481	GALLSTONE DISSOLUTION AGENT
1486	GASTROINTESTINAL AGENT, PROKINETIC
1488	GASTROINTESTINAL AGENT, MISCELLANEOUS
1489	GENERAL ANESTHETIC
1497	GONADOTROPIN
1504	HEMOSTATIC AGENT
1507	HISTAMINE H 2 ANTAGONIST
1509	HOMOCYSTINURIA, TREATMENT AGENT
1510	HORMONE
1523	HYPNOTIC, MISCELLANEOUS
1528	IMMUNOSUPPRESSANT AGENT
1534	IRON SALT
1536	KERATOLYTIC AGENT
1537	LAXATIVE
1539	LAXATIVE, BULK-PRODUCING
1543	LAXATIVE, OSMOTIC
1544	LAXATIVE, SALINE
1545	LAXATIVE, STIMULANT
1551	LEUKOTRIENE RECEPTOR ANTAGONIST
1554	LIPASE INHIBITOR
1557	LOCAL ANESTHETIC
1576	MAGNESIUM SALT
1577	MAST CELL STABILIZER
1585	MONOCLONAL ANTIBODY
1589	OPIOID ANTAGONIST
1597	NEUROMUSCULAR BLOCKER AGENT, TOXIN
1599	NONSTEROIDAL ANTI-INFLAMMATORY DRUG (NSAID)
1600	NONSTEROIDAL ANTI-INFLAMMATORY DRUG (NSAID), COX-2 SELECTIVE
1602	NONSTEROIDAL ANTI-INFLAMMATORY DRUG (NSAID), ORAL
1603	NONSTEROIDAL ANTI-INFLAMMATORY DRUG (NSAID), PARENTERAL
1604	NUTRITIONAL SUPPLEMENT
1607	OPHTHALMIC AGENT, ANTIGLAUCOMA
1611	OPHTHALMIC AGENT, TOXIN
1612	OPHTHALMIC AGENT, VASOCONSTRICTOR
1614	OPHTHALMIC AGENT, MISCELLANEOUS
1620	OVULATION STIMULATOR
1627	PHENOTHIAZINE DERIVATIVE

Codes	Class Names
1629	PHOSPHATE BINDER
1644	PROGESTIN
1646	PROSTAGLANDIN
1647	PROSTAGLANDIN, OPHTHALMIC
1651	PROTON PUMP INHIBITOR
1661	RETINOIC ACID DERIVATIVE
1665	SALICYLATE
1670	SEDATIVE
1671	SELECTIVE ESTROGEN RECEPTOR MODULATOR (SERM)
1672	SELECTIVE 5-HT 3 RECEPTOR ANTAGONIST
1681	SKELETAL MUSCLE RELAXANT
1683	SKIN AND MUCOUS MEMBRANE AGENT
1687	SKIN AND MUCOUS MEMBRANE AGENT, MISCELLANEOUS
1688	SMOKING CESSATION AID
1691	SOMATOSTATIN ANALOG
1694	STOOL SOFTENER
1700	SYMPATHOMIMETIC
1710	THYROID PRODUCT
1712	TOPICAL SKIN PRODUCT
1713	TOPICAL SKIN PRODUCT, ACNE
1718	TRACE ELEMENT
1719	TRACE ELEMENT, PARENTERAL
1729	URICOSURIC AGENT
1742	VASODILATOR
1750	VITAMIN
1752	VITAMIN D ANALOG
1753	VITAMIN, FAT SOLUBLE
1756	VITAMIN, WATER SOLUBLE
1757	XANTHINE OXIDASE INHIBITOR
1762	SEROTONIN 5-HT 1B, 1D RECEPTOR AGONIST
1765	CENTRAL NERVOUS SYSTEM STIMULANT
1768	HISTAMINE H 1 ANTAGONIST
1779	5 ALPHA-REDUCTASE INHIBITOR
1781	ANTILIPEMIC AGENT, 2-AZETIDINONE
1808	MONOCLONAL ANTIBODY, ANTI-ASTHMATIC
1810	N-METHYL-D-ASPARTATE RECEPTOR ANTAGONIST
1811	PHOSPHODIESTERASE-5 ENZYME INHIBITOR

Codes	Class Names
1822	ANTINEOPLASTIC AGENT, ANTIMETABOLITE (ANTIFOLATE)
1824	SUBSTITUTED BENZIMIDAZOLE
1825	ANTISEPTIC, TOPICAL
1827	SECOND GENERATION (ATYPICAL) ANTIPSYCHOTIC
1828	FIRST GENERATION (TYPICAL) ANTIPSYCHOTIC
1830	AMINO ACID
1831	TUMOR NECROSIS FACTOR (TNF) BLOCKING AGENT
1833	MONOCLONAL ANTIBODY, SELECTIVE ADHESION-MOLECULE INHIBITOR
37021	PROBIOTIC
309141	ANTIBIOTIC, LINCOSAMIDE
369942	INSULIN, INTERMEDIATE-ACTING
369943	INSULIN, LONG-ACTING
370141	INSULIN, RAPID-ACTING
512625	PARTIAL NICOTINE AGONIST
515063	IMIDAZOLINE DERIVATIVE
580286	ANTIDIABETIC AGENT, DIPEPTIDYL PEPTIDASE IV (DPP-IV) INHIBITOR
944618	ANTIRETROVIRAL, CCR5 ANTAGONIST (ANTI-HIV)
996578	ANTIRETROVIRAL, INTEGRASE INHIBITOR (ANTI-HIV)
996698	ANTINEOPLASTIC AGENT, ANTIMETABOLITE (PYRIMIDINE ANALOG)
1035979	ANILIDOPIPERIDINE OPIOID
1154061	RESCUE AGENT (CHEMOTHERAPY)
1154062	CHEMOTHERAPY MODULATING AGENT
1160459	BETA 2 -ADRENERGIC AGONIST, LONG-ACTING
1160479	BETA 2 AGONIST, LONG-ACTING
1163619	NONSTEROIDAL ANTI-INFLAMMATORY DRUG (NSAID), TOPICAL
1177583	HISTAMINE H 1 ANTAGONIST, SECOND GENERATION
1177584	HISTAMINE H 1 ANTAGONIST, FIRST GENERATION
1191179	VASODILATOR, DIRECT-ACTING
1274399	IMMUNOMODULATOR, SYSTEMIC
1284841	HISTONE DEACETYLASE INHIBITOR
1797079	CALCIUM CHANNEL BLOCKER, NONDIHYDROPYRIDINE
1797080	CALCIUM CHANNEL BLOCKER, DIHYDROPYRIDINE
1801719	CALCINEURIN INHIBITOR
1826674	ANTIPLATELET AGENT, THIENOPYRIDINE
2148013	ANTIDIABETIC AGENT, GLUCAGON-LIKE PEPTIDE-1 (GLP-1) RECEPTOR AGONIST
2759759	ANTI-PARKINSON'S AGENT, DECARBOXYLASE INHIBITOR

Codes	Class Names
2759760	ANTI-PARKINSON'S AGENT, DOPAMINE PRECURSOR
2792400	ANTINEOPLASTIC AGENT, ANTIMETABOLITE (PURINE ANALOG)
2807279	TRANSIENT RECEPTOR POTENTIAL VANILLOID 1 (TRPV1) AGONIST
2952225	ALKYLAMINE DERIVATIVE
2952299	ETHANOLAMINE DERIVATIVE
2952340	PIPERAZINE DERIVATIVE
2952559	PIPERIDINE DERIVATIVE
2965759	FIBER SUPPLEMENT
2988377	ANALGESIC, OPIOID PARTIAL AGONIST
3015214	ANTIDEPRESSANT, SELECTIVE SEROTONIN REUPTAKE INHIBITOR/5-HT 1A RECEPTOR PARTIAL AGONIST
3451903	BONE-MODIFYING AGENT
3501084	GABA ANALOG
3509782	ALPHA-ADRENERGIC AGONIST
3819764	BETA 3 AGONIST
3861322	PHOSPHODIESTERASE ENZYME INHIBITOR, NONSELECTIVE
3964448	PYRIMIDINE SYNTHESIS INHIBITOR
3974202	ANTILIPEMIC AGENT, OMEGA-3 FATTY ACIDS
3988862	ANTICHOLINERGIC AGENT, LONG-ACTING
4230723	SODIUM-GLUCOSE COTRANSPORTER 2 (SGLT2) INHIBITOR
4230724	ANTIDIABETIC AGENT, SODIUM-GLUCOSE COTRANSPORTER 2 (SGLT2) INHIBITOR
4230742	FUMARIC ACID DERIVATIVE
4496663	CARBONIC ANHYDRASE INHIBITOR (OPHTHALMIC)
4649822	ANTIHEMORRHOIDAL AGENT
4857382	ANTIHEPADNAVIRAL, REVERSE TRANSCRIPTASE INHIBITOR, NUCLEOSIDE (ANTI-HBV)
5002622	ANTICOAGULANT, FACTOR XA INHIBITOR
5002623	ANTICOAGULANT, VITAMIN K ANTAGONIST
5002625	ANTICOAGULANT, DIRECT THROMBIN INHIBITOR
5251182	MEDICAL FOOD
5357662	ANTIDEPRESSANT, DOPAMINE/NOREPINEPHRINE-REUPTAKE INHIBITOR
5585170	MINERALOCORTICOID (ALDOSTERONE) RECEPTOR ANTAGONISTS
6004244	ANTIFUNGAL AGENT ORAL NONABSORBED PARTIALLY ABSORBED
6024732	DIRECT ORAL ANTICOAGULANT DOAC
6433523	GUANYLATE CYCLASE C GC C AGONIST
9999999	INAPP