HCHS/SOL Question by Question Instructions
Medication Use Form (MUE/MUS), Version A

General Instructions

The purpose of the Medication Survey is to assess medication usage in the four weeks preceding the examination date. Information on both prescription and over-the-counter medications is ascertained via scanning of bar code symbols, transcription of labels, and interview. To obtain this information, the participant is asked prior to the clinic visit to bring to the field center all medications, over-the counter preparations, vitamins, minerals, and dietary supplements taken in the four-week period preceding the visit, or their containers. Notification of this request is mailed to the participant with the written instructions for the exam visit, and is re-stated during the appointment reminder call. Interviewers require certification in interviewing techniques and familiarity with the data entry procedures for electronic and paper versions of the form (references: Data Entry System [DES] manual and the "General Instructions for Completing Paper Forms"). Paper data entry and subsequent keying will only be used in the event of equipment malfunction or DES inaccessibility. Scanners / transcribers of medication information also require certification. Header information (ID Number, Contact Occasion, and Seq #) are completed in the format described in the cited document.

Question by Question Instructions

Part A. Reception

Item 1 Read as written. If the response is "Yes, all", go to Section B (MEDICATION RECORD) and begin the scanning/transcription. This can take place at the reception station or while the participant proceeds with the clinic visit. As the participant delivers the medications, indicate where (and by whom) they will be returned before he / she leaves. Mention that medication names will be scanned / copied from the labels, and that if required, medications will be taken out of their container only in the presence of, and with approval of the participant. Finally, indicate that a trained interviewer will later ask a few questions about some specific medications. Verify that the medications bag is clearly identified with the participant's name. Do not open the medications bag or scan / transcribe medications until the participant has signed the informed consent.

If the response is "Some of them", go to Item 3 to make arrangements for those medications which were not brought and scan / transcribe those medications which were brought in Section B (MEDICATION RECORD).

If the response is "No", proceed to the next item.

Item 2 Read it as written. If the response is "Took no medications" in the past four weeks, Section A ends here. Leave Section B (MEDICATION RECORD) blank and skip to INTERVIEW, Section C (field or screen forward). Item 33 is left blank, and the interviewer continues administering items 34-40, either at the reception desk or a subsequent workstation.

If the response is "Forgot or was unable to bring medications", reassure the respondent and proceed to the next item.

Item 3 and Item 4 Read item 3 as written. Ideally, follow-up involves the participant returning to the

field center with the medications for Scanning / Transcription. Reasonable alternatives to the ideal include a telephone interview, et cetera.

If the participant agrees to follow-up, make arrangements for obtaining the information Describe the method of follow-up in Q4. If the participant brought some medications, complete as much of Section B (MEDICATION RECORD) as possible before going on to Q33.

In case of deliberate omission to bring medications to the field center, attempt participant conversion at the reception desk or a subsequent workstation. If participant conversion is to be attempted after reception, write a note to that effect on the tracking form. Leave Section B (MEDICATION RECORD) blank if no medications were brought in. Even if the participant declines to bring in (or provide medication names by telephone), attempt to complete as much of Section C (INTERVIEW) as possible. If the participant has not brought his / her medications, but remembers the medication name, strength and units of all medications taken during the previous four weeks with confidence, the interviewer should record this information, but arrange a follow-up to confirm its accuracy.

Part B. Medication Record

Introduction: Section B (MEDICATION RECORD) is designed to document information about each medication used by participants. Bar Code Scanning / Transcription includes recording the Universal Product Code (UPC) / National Drug Code (NDC) in section (a), the name in section (b), the strength in section (c), and the units in section (d) for each medication used within the four weeks prior to the interview.

Medication UPC / NDC, Medication Name, Strength, and Units (Questions 5-29a-d)

Overview: Open the participant's medications bag and remove all medication containers. Separate the medications into those with and without a UPC-labeled container. Attempt to scan the UPC-labeled containers. Set aside containers that are scanned *successfully* (automatically linked to information in sections [b-d] that matches information on their labels). For medications in UPC-labeled containers that cannot be scanned *successfully* (as defined above), transcribe the UPCs. When UPCs cannot be transcribed *successfully*, transcribe NDCs, if available, or medication names. When NDCs and medication names cannot be transcribed *successfully*, manually transcribe as much information as possible in sections (a-d).

Scanning: A UPC bar code symbol is a pattern of black bars and white spaces, below (or above) which are twelve numbers. In example [1], the first six numbers—614141—comprise the globally unique company prefix assigned by the Uniform Code Council. The next five—54321—comprise the item reference. The last—2—is a computer-generated check digit used to verify accuracy. The symbol encodes all twelve numbers (collectively referred to as the Global Trade Item Number [GTIN]). In this context, we informally refer to the GTIN as a Universal Product Code (UPC). A ten- or eleven-digit National Drug Code (NDC), which by federal law is assigned to all pharmaceuticals sold in the U.S., is often represented within the UPC and recorded elsewhere on medication packaging. Several variations in UPC / NDC spacing, and hyphenation are illustrated in examples [2-3]. Scan the bar code symbol with the wand to capture the UPC / NDC. Rescan it as needed. *EXTREMELY IMPORTANT: JUDGE SUCCESS OF THE SCAN BY VERIFYING THAT THE INFORMATION THAT AUTOMATICALLY POPULATES SECTIONS (B-D) MATCHES INFORMATION ON THE MEDICATION LABEL.*

UPC / NDC: 306030048167 311017110010
Name: Azo-Septic..... Dr. Scholl's Clear Away Plantar
Strength: 95 40
Units: MG %

Transcription: Transcribe all medications without a UPC-labeled container *and* those with a UPC-labeled container that cannot be scanned *successfully* (as defined above). Specifically, in section (a), transcribe the unsuccessfully scanned UPC, if possible. If the UPC cannot be transcribed *successfully*, transcribe the NDC in section (a). The NDC is often recorded elsewhere on the medication packaging. If the NDC cannot be transcribed *successfully* transcribe in section (b) the complete medication name as written on the container. Medication labels may contain standard abbreviations (Table 1). In section (c), transcribe the numeric strength (weight for solids and concentration for non-solids). In section (d), transcribe the units that measure strength using a standard abbreviation (Table 2). Formatting and transcription standards are detailed below.

Table 1. Standard abbreviations of medication names

Medication Name	Abbreviation	Medication Name	Abbreviation	Medication Name	Abbreviation
A Acetaminophen	APAP	Aluminum	AL	Amitriptyline	AMITRIP
Antibiotic	ANTIBIO	Antihistamine	ANTIHIST	Arthritic	ARTHR
Aspirin	ASA	Aspirin, phenacetin & caffeine	APC	Ammononium	AMMON
B Balanced Salt Solution	BSS	Buffered	BUF		
C Caffeine	CAFF	Calcium	CA	Capsules	CAP
Carbonate	CARBON	Chewable	CHEW	Chlordiazepoxide	CHLORDIAZ
Chloride	CL	Chlorpheniramine	CHLORPHEN	Codeine	COD
Compound	CPD or CMP or CMPD	Concentrate	CON		
D Decongestant	DECONG	Dextromethorphan	DM	Dioctylsodium sulfosuccinate	DSS
E Expectorant	EXP	Extra	EX		
F Ferrous	FE	Fluoride	FL	Formula	FORM
G Gluconate	GLUCON	Glyceryl Guacolate	GG	Guaifenesin	GG
H Hydrochloride	HCL	Hydrochlorthiazide	HCTZ	Hydrocortisone	HC
Hydroxide	HYDROX				
I Inhalation	INHAL	Injection	INJ	Intravenous	IV
J Junior	JR				
L Laxative	LAX	Liquid	LIQ	Long acting	LA
Lotion	LOT				
M Magnesium	MG	Maximum	MAX	Minerals	M
Multivitamins	MULTIVIT				
N Nitroglycerin	NTGN				
O Ointment	OINT	Ophthalmic	OPTH		
P Penicillin	PCN	Pediatric	PED	Perphenazine	PERPHEN
Phenobarbitol	PB	Phenylephrine	PE	Phenylpropanolamine	PPA
Potassium	K	Potassium Chloride	KCL	Potassium Iodide	KI
Powder	PWD	Pyrilamine	PYRIL		
R Reliever	REL				
S Simethicone	SIMETH	Sodium	SOD	Solution	SOLN
Strength	STR	Suppository	SUPP	Suspension	SUSP
Sustained action	SA	Sustained release	SR	Syrup	SYR
T Tablets	TAB	Theophyllin	THEOPH	Therapeutic	T
Time disintegration	TD				
V Vaccine	VAC	Vitamin	VIT		
W With	W				

Table 2. Standard abbreviations of metric units

Units	Standard Abbreviation	Units	Standard Abbreviation
Anti-Clotting Factor Xa International Units/Milliliter	A-XA IU/ML	Milligram/Drop	MG/DROP
Billion Cells of Lactobacilli	B CELL	Milligram/Gram	MG/GM
Bioequivalent Allergy Units/Milliliter	BAU/ML	Milligram/Inhalation‡	MG/INH
Actuation*	ACT	Milligram/Hour	MG/HR

Enzyme-Linked Immunosorbent Assay Units/Milliliter	ELU/ML	Milligram/Milligram	MG/MG
Gram†	GM	Milligram/Milliliter	MG/ML
Gram/Dose	GM/DOSE	Milligram/Spray	MG/SPRAY
Gram/Gram	GM/GM	Milligram/Teaspoon§	MG/TSP
Gram/Milliliter	GM/ML	Milliliter	ML
Kallikrien Inactivator Units/Milliliter	KIU/ML	Milliliter/Milliliter	ML/ML
Flocculation Units	LFU	Millimole	MMOLE
Megabecquerels/Milliliter	MBQ/ML	Millimole/Milliliter	MMOLE/ML
Microgram†	MCG	Million International Units	MIU
Microgram/Actuation	MCG/ACT	Million International Units/Milliliter	MIU/ML
Microgram/Hour	MCG/HR	Million Units	MU
Microgram/Inhalation‡	MCG/INH	Million Units/Gram	MU/GM
Microgram/Milliliter	MCG/ML	Million Units/Milliliter	MU/ML
Microgram/Spray	MCG/SPRAY	Minim	MINIM
Microgram/Square Centimeter	MCG/SQCM	Minim/Milliliter	MINIM/ML
Millicuries/Milliliter	MCI/ML	Percent	%
Milliequivalent	MEQ	Plaque Forming Units/Milliliter	PFU/ML
Milliequivalent/Gram	MEQ/GM	Protein Nitrogen Units/Milliliter¶	PNU/ML
Milliequivalent/Liter	MEQ/L	Unit	UNIT
Milliequivalent/Milligram	MEQ/MG	Unit/Actuation	UNIT/ACT
Milliequivalent/Milliliter	MEQ/ML	Unit/Gram	UNIT/GM
Milligram†	MG	Unit/Milligram	UNIT/MG
Milligram/Actuation	MG/ACT	Unit/Milliliter	UNIT/ML

*Actuation = activation of a dispensing device. †1 GM = 1000 MG; 1 MG = 1000 MCG. ‡Of aerosolized powder. §Of e.g. powdered or granulated oral medications. ¶Of allergenic extracts.

Standard Format: Beginning with item 5, transcribe the numeric UPC / NDC (a) working from the right-most box. Transcribe all parts of each medication name as written on the container (b), numeric strength (c), and standard units (d). If using the paper form, carefully transcribe medication name and units in UPPER CASE CHARACTERS (CAPITAL LETTERS). When necessary, use a period (.) to indicate the location of a decimal point in strength and a forward slash (/) to separate active ingredients of generic products, their respective strengths and units. In every case, transcribe in standard format even when the same information or a portion of the information appears in the previous item. Do not use ditto marks (") to indicate a repeat of the previous item.

Medication UPC / NDC (Items 5-29a): Transcribe the UPC / NDC when it cannot be scanned *successfully* (as defined above). Be sure to transcribe the first and last numbers of the UPC which may be found in the lower (middle or upper) left and right regions of the UPC bar code symbol (e.g. 6 and 2 in example [1], above).

Medication Name (Items 5-29b): Transcribe the medication name using a forward slash (/) to separate active ingredients of generic medications. *EXTREMELY IMPORTANT: DO NOT TRANSCRIBE E.G. MANUFACTURER NAME, FLAVOR, WHETHER MEDICATIONS ARE SUGAR-FREE, OR LOW-SODIUM.* Since a few companies have trademarked their formulation (dosage form), the complete medication name may include it. Although we do not transcribe the number of pills dispensed, the prescribed dose, actual dose, or frequency of medications taken, medication names also may include numbers or characters that can be mistaken for number dispensed, dose or frequency. If in doubt, it is preferable to include questionable information in the medication name to facilitate identification, coding and classification. Therefore, transcribe all formulations, numbers and characters that may be part of the medication name. Examples are provided in Table 3. Standard abbreviations of medication names were provided in Table 1 (above).

Table 3. Examples of medication names that include special formulations, numbers or characters

Medication Name	
DILANTIN KAPSEALS*	ORTHO-NOVUM 10/11-28
ASA ENSEALS†	STUARTNATAL 1 + 1
ANACIN-3	NPH ILETIN I
ACEROLA-C	SK-AMPICILLIN
TRIAMINIC-12	CALTRATE 600 PLUS VITAMIN D
OVRAL-28	HCTZ/TRIAMTERENE‡

*Kapseals = capsules. †Enseals = enteric-coated capsules. ‡The "/" separates HCTZ (hydrochlorothiazide) and triamterene, two active ingredients.

Strength (Items 5-29c): The strength of most solid medications is given in number of milligrams. Transcribe the numeric strength (weight for solids and concentration for non-solids) using a period (.) to indicate the location of a decimal point and a forward slash (/) to separate the strength of active ingredients of generic products (e.g. medication name = HCTZ/TRIAMTERENE, strength = 25/37.5).

Units (Items 5-29d): Transcribe the metric units that measure strength using one of the standard abbreviations in Table 2 (continuing the above example, units = MG/MG). Prior metric conversion of non-standard units (e.g. for liquids: 1 fluid ounce = 30 ML; 1 tablespoon = 15 ML; 1 teaspoon = 5 ML; and for solids: 1 grain = 65 MG; 1 ounce = 31 GM) may be necessary in unusual cases. Note that for insulin, strength is often given in number of units per milliliter (e.g. 100U/ML, 100/ML and U100). All three of these non-standard abbreviations are equivalent to the preferred format (strength = 100; units = UNIT/ML).

Combination Medications: Combination medications contain multiple active ingredients (two or more medications in a single formulation). For example, consider a brand name combination of HCTZ 25 MG and TRIAMTERENE 37.5 MG called DYAZIDE. In the U.S., it is sold only in this fixed combination. Because fixed combination medications do not generally list a strength (c) or units (d), these fields may be left blank when transcribing them (i.e. medication name = DYAZIDE; strength = _[blank]_ ; units = __[blank]__). Other combination medications are sold in more than one fixed combination. For example, consider a brand name combination of HCTZ and PROPRANOLOL called INDERIDE (LA). In the U.S., it is sold in many different combinations (HCTZ 25 or 50 MG and PROPRANOLOL 40, 80, 120 or 160 MG). Because variable combination medications generally list the strength and units, complete these fields when transcribing them (i.e. medication name = INDERIDE; strength =25/40 or 25/80; units = MG/MG; or medication name = INDERIDE LA; strength = 50/80, 50/120 or 50/160; units = MG/MG).

Examples: Feosol Iron Supplement Therapy 45 mg

#	(a) Medication UPC / NDC													Medication name (b)
5.	**3**	**4**	**9**	**6**	**9**	**2**	**9**	**4**	**1**	**6**	**0**	**5**		FEOSOL IRON SUPPLEMENT THERAPY
	(c) Strength						(d) Units							
	45						MG							

Lipitor 10 mg

#	(a) Medication UPC / NDC												Medication name (b)
6.	**3**	**0**	**0**	**7**	**1**	**0**	**1**	**5**	**5**	**2**	**3**	**7**	LIPITOR
	(c) Strength						(d) Units						
	10						MG						

Regular Strength Tylenol 325 mg

#	(a) Medication UPC / NDC												Medication name (b)
7.	**5**	**0**	**5**	**8**	**0**	**4**	**9**	**6**	**6**	**0**			REGULAR STRENGTH TYLENOL
	(c) Strength						(d) Units						
	325						MG						

Neosynephrine Regular Strength ½ percent

#	(a) Medication UPC / NDC												Medication name (b)
8.	**3**	**0**	**0**	**2**	**4**	**1**	**3**	**5**	**3**	**0**	**1**	**0**	NEOSYNEPHRINE REGULAR STRENGTH
	(c) Strength						(d) Units						
	0.5						%						

Metamucil 3.4 g per dose

#	(a) Medication UPC / NDC												Medication name (b)
9.	**0**	**3**	**7**	**0**	**0**	**0**	**7**	**4**	**0**	**7**	**8**	**0**	METAMUCIL
	(c) Strength						(d) Units						
	3.4						G/DOSE						

Robitussin 100 mg per teaspoon

#	(a) Medication UPC / NDC												Medication name (b)
10.	**3**	**0**	**0**	**3**	**1**	**8**	**6**	**2**	**4**	**1**	**2**	**8**	ROBITUSSIN
	(c) Strength						(d) Units						
	100/5						MG/ML						

Magnesium Citrate Solution 1.745 g per ounce

#	(a) Medication UPC / NDC												Medication name (b)
11.	**8**	**4**	**0**	**9**	**8**	**6**	**0**	**1**	**0**	**2**	**5**	**5**	MAGNESIUM CITRATE SOLUTION
	(c) Strength						(d) Units						
	1.745/30						G/ML						

Prioritizing Transcription: Polypharmacy tends to increase with age, but even if a participant is using more than 25 medications, only 25 can be transcribed in items (5-29). Therefore, prioritize transcription if there are more than 25 medications. If it is clearly necessary to defer prioritization, transcribe the UPC (a), name (b), strength (c), and units (d) of additional medications on the back of the last page of the form. Deferral may allow more effective prioritization based on the number and type of medications available for transcription. In any case, use the following algorithm to guide prioritization: [1] prescription medications; then [2] aspirin, aspirin-containing medications and non-steroidal anti-inflammatory drugs (e.g. Alka-Seltzer, headache powders, cold or arthritis medications, et cetera); followed by [3] other over-the-counter preparations; and finally [4] vitamins and food supplements.

The Medication Dictionary: For reference, paper versions of the Medication Dictionary will be distributed to each Field Center. The dictionary lists medication names (trade / brand and generic ingredient) in alphabetical order. Medication names that begin with a number, ditto ("), or a hyphen (-) are listed first. If a medication name is separated by a hyphen (-), the portion of the name preceding the hyphen is listed in alphabetical order. Strength and units are not included in the dictionary, so only use the numbers appearing in it to differentiate between medications.

Preparing to Use the Medication Dictionary: Before using the medication dictionary to look up a medication, first check the spelling of its transcribed name against its container's label. Verify that numbers referring to quantity dispensed, dose, or frequency were not inappropriately transcribed as part of the medication name because they should not be used in the matching process. Be aware that while some pharmacists use standardized abbreviations (Table 1, above) others do not. Also be aware that some medications use suffixes to distinguish between different combinations containing the same primary ingredient (Table 4).

Table 4. Examples of medication suffixes used to distinguish combinations

Medication Name	1° Ingredient	2° Ingredients	
DARVON	propoxyphene hydrochloride		
DARVON N	propoxyphene napsylate		
DARVON W ASA	propoxyphene hydrochloride	aspirin	
DARVON CMPD	propoxyphene hydrochloride	aspirin	caffeine

Using the Medication Dictionary: Use the dictionary as needed to look up medications (that when scanned or transcribed) do not automatically populate sections [a-d] with an appropriate match or list of potential matches from which to choose. For medication names containing more than one word, look for a match of the complete medication name in the dictionary. If the complete name matches, enter the corresponding UPC. If a complete match cannot be found, but the dictionary contains a single entry for the ingredient(s) in the medication (usually the first word of the medication name), and there are no other entries containing this word, select the corresponding UPC. This often occurs when [1] the brand *and* generic medication name are transcribed, but only one is in the dictionary; [2] the formulation of the medication is transcribed, but is not in the dictionary; [3] the manufacturer name is transcribed, but is not in the dictionary; or [4] words referring to other ingredients are transcribed, but are not in the dictionary or are in the dictionary in a different order (Table 5). *EXTREMELY IMPORTANT: IF A MEDICATION NAME IS NOT IN THE DICTIONARY, DO NOT GUESS AT A MATCH. SIMPLY SET THE STATUS CODE TO Q (QUESTIONABLE) SO THAT THE COLLABORATIVE STUDIES COORDINATING CENTER CAN INVESTIGATE.*

Table 5. Examples of medication names that may not automatically populate sections [a-d]

Medication Name Transcribed As	Reason For Failure	Re-Transcribe As
CORDARONE/AMIODARONE	CORDARONE is the brand name for AMIODARONE	AMIODARONE
DIMETAPP ELIXIR	ELIXER is the formulation	DIMETAPP
ECKERD ALLERGY RELIEF TABS	ECKERD is the manufacturer	ALLERGY RELIEF
TYLENOL NO. 3	NO. 3 refers to another active ingredient (codeine)	APAP W CODEINE

Items 30-31: Once all medications that can be successfully scanned or transcribed have been processed, count the total number of different medications (including those that cannot be successfully scanned or transcribed). Enter this number in Item 30. Count the actual medications to determine the total. Do not refer to the record numbers on the screen or form. Set aside loose pills, containers that are unmarked, unclearly labeled, or hold more than one medication (e.g. medisets), if necessary in consultation with another trained staff person, for later examination by a trained interviewer. Add the

number of medications that you are unable to successfully scan or transcribe. Enter this number in Item 31. For example, if there were 7 medications in the bag, and you were able to successfully scan or transcribe 5 of them, Items 30 and 31 would be completed as follows:

30. Total number of medications in bag..... | 0 | 7 |

31. Number of medications unable to successfully scan or transcribe… | 0 | 2 |

Items 32a,b: The staff person scanning / transcribing the medications must enter their three-digit HCHS/SOL Staff ID number in item 32a and the date of medication scanning / transcription in item 32b. Return the medications to their bag. If necessary, make a note on the Medication Survey Form, and inform the participant that a trained interviewer will ask for help identifying loose pills and medications in containers that are unmarked, unclearly labeled, or hold more than one medication. Place the Medication Survey paper form (if appropriate) in the medication bag and take it to the workstation where the interview will be administered or to a secure place at the physical exam workstation. *EXTREMELY IMPORTANT: AT NO TIME SHOULD MEDICATIONS BE LEFT UNATTENDED IN THE RECEPTION AREA OR MEDICATION CONTAINERS BE OPENED IN THE ABSENCE OF THE PARTICIPANT.*

Part C. Medication Use Interview

Identifying Unknown Medications: Determine from Item 31 on the form at the end Section B whether there are any medications in the bag that were not successfully scanned or transcribed including loose pills, medications in containers that are unmarked, unclearly labeled, or hold more than one medication. With the participant's help, read the imprint(s) on each unknown pill, then search [1] the *Facts and Comparisons Drug Identifier* on your computer, or if necessary, [2] the *Ident-A-Drug,Reference* on the web (**www.identadrug.com**; username=_____; password=_____) to identify each pill from its imprint(s), shape, and / or color. If possible, record the UPC / NDC (a) or medication name (b) and if not transcribed *successfully* (as defined above), its strength (c) and units (d). If the medication cannot be identified, record UNKNOWN and the imprint(s) under medication name (b) and draw two horizontal lines (=) through the boxes for the UPC / NDC (a). If additional medications can be identified and recorded, adjust the total for item 31 accordingly. Thereafter, probe the participant about any other medications that may have been taken in the previous four weeks. For additional medications recalled by the participant, record with as much detail as possible the medication name (b), and if not automatically linked to information in sections [c-d] that matches information provided by the participant, strength (c), and units (d). If there is any doubt, arrange for follow-up to obtain more accurate information from the participant.

During the remainder of the Medication Survey interview or during a subsequent interview, the participant may recall other medications taken during the past four weeks. Transcribe the medication UPC (a), name (b), strength (c) and units (d) of each just as if they had been in the medication bag. However, do not adjust the total for item 31. This documents that information on some medications was provided from the participant's memory.

Items 33a-l: Following the transition statement provided, ask if medications were taken in the past four weeks for the twelve listed reasons. Synonyms that may be used in response to participant questions are listed parenthetically and below (Table 6).

Table 6. Synonyms that may be used in response to participant questions about items 33a-k

Question text	Synonyms
a. Asthma	
b. Chronic bronchitis or emphysema	Chronic obstructive pulmonary disease or COPD
c. High blood sugar	Diabetes
d. High blood pressure	Hypertension
e. High blood cholesterol	Hypercholesterolemia
f. Chest pain	Angina
g. Abnormal heart rhythm	Arrhythmia
h. Heart failure	Congestive heart failure or CHF
i. Blood thinning	Anticoagulation
j. Stroke	Cerebrovascular accident or CVA
k. Mini-stroke	Transient ischemic attack or TIA
l. Leg pain while walking	Claudication or peripheral arterial disease or PAD

For example, if the participant had taken medication for asthma and claudication and no other listed conditions, code item 33 as follows:

	Yes	No	Unknown
a. Asthma	(Y)	N	U
b. Chronic bronchitis or emphysema (chronic obstructive pulmonary disease [COPD])	Y	(N)	U
c. High blood sugar (diabetes)	Y	(N)	U
d. High blood pressure (hypertension)	Y	(N)	U
e. High blood cholesterol (hypercholesterolemia)	Y	(N)	U
f. Chest pain (angina)	Y	(N)	U
g. Abnormal heart rhythm (arrhythmia)	Y	(N)	U
h. Heart failure (congestive heart failure [CHF])	Y	(N)	U
i. Blood thinning (anticoagulation)	Y	(N)	U
j. Stroke (cerebrovascular accident [CVA])	Y	(N)	U
k. Mini-stroke (transient ischemic accident [TIA])	Y	(N)	U
l. Leg pain while walking (claudication or peripheral arterial disease [PAD])	(Y)	N	U

If any of the conditions are answered affirmatively, be sure that the medication is recorded in Section B by asking "Did we include that medicine in the list I just transcribed?". DO NOT ask the participant to identify which medication was used to treat any of the conditions. For example, if the participant reported taking a medication to lower blood pressure during the last two weeks (Item 33a), and no recognized antihypertensive medications were recorded in Section B, DO NOT probe to determine if the names of all medications taken during the last two weeks were recorded. If the participant indicates that the names of all his / her medications have been transcribed, DO NOT probe further to determine which medication was used to treat the high blood pressure. Regardless of whether the participant reported taking any medications during the past four weeks or whether they brought any medication to the field center, proceed with the next item.

Item 34: If skipping in from Item 2, preface this question with an explanation e.g. *"I know you said you took no medications, but we include the next few questions as a memory jogger."* Then ask the question as worded and show participant List #1: Commonly Used Aspirin or Aspirin-Containing Medications. Although its primary purpose is to identify participants who are taking aspirin, item 34 is broadly constructed to include aspirin and other medications which may contain aspirin but are not necessarily labeled as aspirin, such as "Alka-Seltzer, cold medicine or headache powder". Therefore, this question may identify persons taking medications that do not include "aspirin", per se. With a positive response, continue with item 35 and verify that the relevant information on the medication(s) was recorded in Items 5-29. If the response is NO or UNKNOWN, skip to item 37.

Item 35: Item 35 is narrower in scope and refers specifically to aspirin or aspirin-containing medications that have been taken within the four weeks preceding the clinic visit. Record the number

of days in this four week period (maximum of 28 days) that aspirin or aspirin-containing medications were taken. If no aspirin or aspirin-containing medications were taken, enter "00" and skip to Item 37.

Item 36: Ask item 36 as written, but DO NOT READ THE CHOICES. If the participant mentions avoiding heart attack or stroke as part of his / her response, record "1". Participants could be following the advice of their provider of medical care in doing this, or they could be acting on their own, based on information obtained through the media, friends or other sources. If the participant mentions "blood thinning" or avoiding blood clots as the reason for taking aspirin, record "1". If neither a heart attack nor stroke is mentioned, record "2", even if the aspirin were prescribed by a physician.

Item 37: Read item 37 to all participants following the instructions provided at the end of the question, i.e., read the bracketed "other" if the response to Item 34 was "Yes". The use of analgesic and anti-inflammatory medications that do not contain aspirin is verified because these medications (like aspirin) may affect some of the hemostasis tests. With a "Yes" response, confirm whether the reported medications are transcribed in Section B.

Item 38-40: Read item 38 to all participants and show them List #2: Commonly Used Non-Steroidal Anti-Inflammatory Drugs (NSAIDS), the most common, non-aspirin-containing treatments for arthritis. Item 38 excludes acetaminophen (e.g. Tylenol) and aspirin (as separate entities) as well as steroids. This item focuses on current, regular use (NOW) of NSAIDS, regardless of the reason for their use. If asked by the participant, "regular" is defined as at least once a week for several months. If the response is "No" or "Unknown", go to closing. If the response is "Yes", continue by completing Item 39 (unless already recorded in Section B) and Item 40 (in response to the question, "How many pills per week are you taking on average?")

Item 41: The staff person who interviewed the participant must their three-digit HCHS/SOL Staff ID number in item 41.

List #1: Commonly Used Aspirin-Containing Medications (3 page list, page 1)

1/2HALFPRIN
ACETAMINOPHEN / MAGNESIUM SALICYLATE / CAFFEINE
ACETAMINOPHEN / SALICYLAMIDE
ACETAMINOPHEN / SALICYLAMIDE / CAFFEINE
ACETAMINOPHEN / SALICYLAMIDE / PHENYLTOLOXAMINE
ACETYL SALICYLIC ACID
ADDED STRENGTH HEADACHE R
ADDED STRENGTH PAIN RELIE
ADPRIN B
ADULT STRENGTH ANALGESIC
ADULT STRENGTH PAIN RELIE
AF-MIGRAINE
ALBERTSON'S EFFERVESCENT
ALBERTSON'S ENTERIC COATE
ALBERTSON'S HEADACHE FORM
ALKA-SELTZER
AMIGESIC
ANABAR
ANACIN
ANALGESIC
ACETAMINOPHEN / SALICYLAMIDE / PHENYLTOLOXAMINE / CAFFEINE
ARTHRITIS PAIN FORMULA
ARTHRITIS STRENGTH BC
ARTHROPAN
ASA
ASCRIPTIN
ASP
ASPERGUM
ASPIR-81
ASPIRCAF
ASPIRIN
ASPIRIN GUM
ASPIRIN / DIPHENHYDRAMINE EFFERVESCENT
ASPIRIN / ANTACID
ASPIRIN / CAFFEINE
ASPIRIN / ACETAMINOPHEN / CAFFEINE
ASPIRIN / ALUMINUM HYDROXIDE / MAGNESIUM HYDROXIDE / CALCIUM CARBONATE
ASPIRIN / ALUMINUM HYDROXIDE / MAGNESIUM HYDROXIDE
ASPIRIN / ACETAMINOPHEN / CAFFEINE / CALCIUM GLUCONATE
ASPIRIN / ACETAMINOPHEN / SALICYLAMIDE / CAFFEINE
ASPIRIN / CAFFEINE
ASPIRIN / CAFFEINE / BUTALBITAL
ASPIRIN / CA CARBONATE
ASPIRIN / CINNAMEDRINE / CAFFEINE
ASPIRIN / SALICYLAMIDE / CAFFEINE
ASPIR-LOW
ASPIR-MOX
ASPIRTAB
ASPIR-TRIN
ASPRIDROX
BACK PAIN-OFF
BACKACHE MAXIMUM STRENGTH
BACKACHE RELIEF EXTRA STR
BAYER LOW STRENGTH
BAYER PLUS EXTRA STRENGTH
BC
BL MIGRAINE FORMULA
BUFFASAL
BUFFERIN
BUFPIRIN
BUTALBITAL / ASA / CAFFEINE
BUTALBITAL / ASPIRIN / CAFFEINE
BUTALBITAL COMPOUND
CETAZONE-T
CHOLINE / MAGNESIUM SALICYLATES
CHOLINE MAGNESIUM TRISALICYLATE

List #1: Commonly Used Aspirin-Containing Medications (3 page list, page 2)

CHOLINE SALICYLATE	GENACOTE	OSCO ADDED STRENGTH PAIN
CMT	GOODY'S	OSCO ANALGESIC ADULT STRE
COPE	HALFPRIN	OSCO EFFERVESCENT ANTACID
CVS BACKACHE RELIEF	HCA PAIN RELIEVER	OSCO LOW STRENGTH ENTERIC
CVS EFFERVESCENT ANTACID	HEADACHE FORMULA ADDED ST	P-A-C
CVS HEADACHE RELIEF	HEADACHE RELIEF	PAIN RELIEF
CVS MIGRAINE RELIEF	HEADRIN EX STRENGTH PAIN	PAIN RELIEF EXTRA STRENGT
DEWITT'S PILLS	HM ADULT ANALGESIC	PAIN RELIEF EXTRA STRENGT
DIFLUNISAL	LEVACET	PAIN RELIEVER ADDED STREN
DISALCID	LOBAC	PAIN RELIEVER PLUS
DOAN'S	MAGAN	PAINAID
DOLOBID	MAGNAPRIN	PAIN-OFF
DOLOREX	MAGNESIUM SALICYLATE	PANRITIS FORTE
DURABAC	MAGNESIUM SALICYLATE / ACETAMINOPHEN	PHENYLTOLOXAMINE / MAGNESIUM SALICYLATE
DURAXIN	MAGNESIUM SALICYLATE / DIPHENHYDRAMINE	PIROSAL
EASPRIN	MAG-PHEN	QC PAIN RELIEVER PLUS
ECASA	MAGSAL	RA ANTACID PAIN RELIEF
ECK MIGRAINE RELIEF	MEDI-SELTZER	RA MIGRAINE RELIEF
ECOTRIN	MEPROBAMATE / ASPIRIN	RID-A-PAIN COMPOUND
ECPIRIN	MIDOL MAXIMUM STRENGTH	SALETO
ED-FLEX	MIGRAINE FORMULA	SALICYLAMIDE / CAFFEINE
EFFERVESCENT ANTACID / PAIN	MIGRAINE RELIEF	SALFLEX
EFFERVESCENT PAIN RELIEF	MINITABS	SALSALATE
EFFERVESCENT PAIN RELIEVE	MOBIDIN	SAV-ON ADDED STRENGTH PAI
EQUAGESIC	MOBIGESIC	SAV-ON ANALGESIC ADULT ST
EXCEDRIN	MOMENTUM MUSCULAR BACKACH	SAV-ON BACKACHE RELIEF EX
EX-PAIN	MONO-GESIC	SAV-ON EFFERVESCENT ANTAC
EXTRA STRENGTH BAYER	MP ENCOPRIN	SB BACKACHE EXTRA STRENGT
EXTRAPRIN	MP REGRIPRIN	SB EFFRSCENT ANTACID/PAIN
FARBITAL	MST 600	SB LOW DOSE ASA EC
FIORINAL	MYOGESIC	SB MENSTRUAL
FORTABS	NEUTRALIN	SB PAIN RELIEF F/ACT
FRENADOL	NINOPRIN	SB PAIN RELIEF X-STR
GENACED	NOVASAL	SG EFFERVESCENT ANTACID/P

List #1: Commonly Used Aspirin-Containing Medications (3 page list, page 3)

SG PAIN RELIEVER ADDED ST	SUPAC	UNI-TREN
SM HEADACHE ADDED STRENGT	SUPER STRENGTH PAIN RELIE	VANQUISH
SM HEADACHE PAIN RELIEVER	SUREPRIN	V-R EFFERVESCENT PAIN REL
SOBA ANALGESIC	TETRA-MAG	ZEE-ZELTZER
SOBA PAIN RELIEVER HEADAC	THERAPY BAYER	ZORPRIN
SODIUM SALICYLATE	THIOCYL	
ST JOSEPH ADULT	TRICOSAL	
STANBACK	TRILISATE	

List #2: Commonly Used Non-Steroidal Anti-Inflammatory Drugs (NSAIDS)

ACTRON	KETOPROFEN
ADDAPRIN	KETOROLAC
ADVANCED PAIN RELIEF	LANSOPRAZOLE / NAPROXEN
ADVIL	LODINE
ALEVE	MECLOFENAMATE
ALL DAY RELIEF	MEDI-PROFEN
ANAPROX	MEDIPROXEN
ANSAID	MEFENAMIC ACID
ARTHROTEC	MELOXICAM
BEXTRA	MENADOL
CATAFLAM	MIDOL
CELEBREX	MOBIC
CELECOXIB	MOTRIN
CLINORIL	NABUMETONE
CVS INFANTS' CONCENTRATED	NALFON
DAYPRO	NAPRELAN
DICLOFENAC	NAPROSYN
DICLOFENAC / MISOPROSTOL	NAPROXEN
DYSPEL	NUPRIN
ELIXSURE	ORUDIS
ETODOLAC	ORUVAIL
FELDENE	OXAPROZIN
FENOPROFEN	PHENYLBUTAZONE
FLURBIPROFEN	PIROXICAM
GENPRIL	PONSTEL
HALTRAN	PREVACID / NAPRAPAC
IBU	PROFEN
IBU-DROPS	PROVIL
IBUPROFEN	Q-PROFEN
IBUTAB	RELAFEN
INDOCIN	ROFECOXIB
INDOMETHACIN	RUFEN
I-PRIN	SULINDAC
TAB-PROFEN	VALDECOXIB
TOLECTIN	VIOXX
TOLMETIN	VOLTAREN
TORADOL	