

MODULE 7

MEDICATION NON-ADHERENCE

Preload needed: mutually exclusive random variables, range 1 - 6

X527_M7Random1
X528_M7Random2
X529_M7Random3
X530_M7Random4

The random assignments match up with condition sequences as follows:

1=blood pressure
2=diabetes
3=lung
4=heart
5=kidney
6=depression

Other section variables needed:

C006 (blood pressure medication)
C011 (diabetes medication)
C032 (lung disease medication)
C037, C042, C046, C050, C282 (heart medications)
C271 (for depression)
A019 (age)
N352 (Medicare Part D coverage)

7 permanent calculated variables created as follows:

Calculations: Create 6 indicators for whether R is taking medications for each of the 6 conditions (1 if yes, 0 if no). Then sum the indicators to generate a count of the number of conditions for which R is taking medications.

Note to Programmer: Use text below for the descriptors

V561_BP_MED: HIGH BLOOD PRESSURE: If C006=1 then V561_BP_MED=1 else
V561_BP_MED=0
V562_DIAB_MED: DIABETES: If C011=1 then V562_DIAB_MED=1 else V562_DIAB_MED=0
V563_LUNG_MED: LUNG: If C032=1 then V563_LUNG_MED=1 else V563_LUNG_MED=0
V564_HEART_MED: HEART: If C037=1 or C042=1 or C046=1 or C050=1 or C282=1 then
V564_HEART_MED=1 else V564_HEART_MED=0
V565_KIDNEY_MED: KIDNEY: If V503=1 then V565_KIDNEY_MED=1 else
V565_KIDNEY_MED=0
V566_DEPRESS_MED: DEPRESSION: If V504=1 then V566_DEPRESS_MED=1 else
V566_DEPRESS_med=0

V567_NUMMEDS=V561_BP_MED+V562_DIAB_MED+V563_LUNG_MED+V564_HEART_MED+
V565_KIDNEY_MED+V566_DEPRESS_MED
NUMBER OF THE 6 CONDITIONS R TAKES MEDS FOR

Fills: None

Variables in this module: V501 – V567

Sample: This module is to be administered to Rs age 65 or over. It will be paired with module 5

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V501 BRANCHPOINT: IF THIS IS A PROXY INTERVIEW (A009={2 or 3}) or R IS UNDER 65 (A019 <65), GO TO END OF MODULE

V501_NUMPRESCMEDS
TOTAL NUMBER OF PRESCRIPTN MEDS IN LAST MONTH

These last questions are about prescription medications you may be taking for various health conditions. Altogether, how many different prescription medications did you use in the last month?

_____ Number of different medications. Range 0 – 50

- 98. DK
- 99. RF

V502_KIDNEYDISEAS
IF R EVER TOLD HAS KIDNEY DISEASE

Next, has a doctor ever told you that you have kidney disease or chronic kidney disease?

- 1. Yes
- 5. No → Go to V504 Branchpoint
- 8. DK → Go to V504 Branchpoint
- 9. RF → Go to V504 Branchpoint

V503_IFKIDNEYMEDS
IF TAKING MEDS FOR KIDNEY DISEASE

Do you now take any medication for your kidney disease?

- 1. Yes
- 5. No
- 8. DK
- 9. REF

V504 BRANCHPOINT: IF C271 NOT IN(1,3) THEN GO TO V505 BRANCHPOINT

V504_IFDEPRESMEDS
IF R TAKES MEDS FOR DEPRESSION

Do you now take any medications for depression?

- 1. Yes
- 5. No
- 8. DK
- 9. REF

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Note to Programmer: The 7 calculated variables are used after this point.

V505 BRANCHPOINT: IF V501=0 OR V567_NUMMEDS = 0 THEN GO TO V547 BRANCHPOINT
ELSE IF ([V561_BP_MED EQ 1] OR [V567_NUMMEDS > 4 AND
X527_M7RANDOM1 EQ 1 OR X528_M7RANDOM2 EQ 1 OR
X529_M7RANDOM3 EQ 1 OR X530_M7RANDOM4 EQ 1]) CONTINUE
ELSE GO TO V512 (DIABETES) BRANCHPOINT

***** Blood pressure meds sequence (V505-V511) *****

V505_BP-ABILITY
RATE ABILITY TO TAKE BP MEDS AS PRESCRIBED

Earlier you mentioned that you are taking medications for your blood pressure. Thinking about the past four weeks, please rate your ability to take your blood pressure medications as prescribed. Would you say it was excellent, very good, good, fair or poor?

1. Excellent
2. Very good
3. Good
4. Fair
5. Poor
7. [VOL] Did not take blood pressure medications in past 4 weeks
8. DK
9. REF

V506 BRANCHPOINT: IF V505 IN (1,8,9) THEN GO TO V512 BRANCHPOINT

V506_INTRO-BP
INTRODUCTION TO BLOOD PRESSURE SEQUENCE

There are many reasons people are not able to take their blood pressure medications. Thinking specifically about all of your blood pressure medications, please tell me if you experienced any of the following during the past four weeks.

First, did you have any side effects from these medications?

1. Yes
5. No
8. DK
9. REF

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V507_BP-MONEY

IF ENOUGH MONEY TO PAY FOR BP MEDICATIONS

(During the past four weeks) Did you have enough money to pay for these medications?

1. Yes
5. No
7. [VOL] I do not have to pay for the medications
8. DK
9. REF

V508_BP-NOTNEEDED

DID R THINK BP MEDICATIONS WERE NOT NEEDED

(During the past four weeks) Did you think these medications were not needed anymore?

1. Yes
5. No
8. DK
9. REF

V509_BP-LONGTERM

CONCERNED ABOUT LONG-TERM EFFECTS OF BP MEDS

(During the past four weeks) Were you concerned about long-term effects from these medications?

1. Yes
5. No
8. DK
9. REF

V510_BP-RUNOUT

DID R RUN OUT OF BP MEDICATIONS

(During the past four weeks) Did you run out of these medications?

1. Yes
5. No
8. DK
9. REF

V511_BP-FORGET

DID R FORGET TO TAKE BP MEDICATIONS

(During the past four weeks) Did you forget to take these medications because of your busy schedule?

1. Yes
2. Yes, forgot, but not because of busy schedule
5. No
8. DK

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9. REF

DIABETES PILLS sequence (V512-V518)

V512 BRANCHPOINT: IF ([V562_DIAB_MED EQ 1] OR [V567_NUMMEDS > 4 AND X527_M7RANDOM1 EQ 2 OR X528_M7RANDOM2 EQ 2 OR X529_M7RANDOM3 EQ 2 OR X530_M7RANDOM4 EQ 2]) CONTINUE ELSE GO TO V519 (LUNG) BRANCHPOINT

V512_DIAB-ABILITY
RATE ABILITY TO TAKE DIABETES MEDS AS PRESCRIBED

Earlier you mentioned that you are taking medications that you swallow for your diabetes. Thinking about the past four weeks, please rate your ability to take your diabetes pills as prescribed. Would you say it was excellent, very good, good, fair or poor?

1. Excellent
2. Very good
3. Good
4. Fair
5. Poor
7. [VOL] Did not take diabetes pills in past 4 weeks
8. DK
9. REF

V513 BRANCHPOINT: IF V512 IN(1,8,9) THEN GO TO V519 BRANCHPOINT

V513_INTRO-DIAB
INTRODUCTION TO DIABETES SEQUENCE

There are many reasons people are not able to take their medications. Thinking specifically about all of your diabetes medications that you swallow, please tell me if you experienced any of the following during the past four weeks.

Did you have side effects from these medications?

1. Yes
5. No
8. DK
9. REF

V514_DIAB-MONEY
IF ENOUGH MONEY TO PAY FOR DIABETES MEDICATIONS

(During the past four weeks) Did you have enough money to pay for these medications?

1. Yes
5. No
7. [VOL] I do not have to pay for the medications
8. DK

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9. REF

V515_DIAB-NOTNEED

DID R THINK DIABETES MEDICATIONS WERE NOT NEEDED

(During the past four weeks) Did you think these medications were not needed anymore?

- 1. Yes
- 5. No
- 8. DK
- 9. REF

V516_DIAB-LONGTRM

CONCERNED ABOUT LONG-TERM EFFECTS OF DIABETES MEDS

(During the past four weeks) Were you concerned about long-term effects from these medications?

- 1. Yes
- 5. No
- 8. DK
- 9. REF

V517_DIAB-RUNOUT

DID R RUN OUT OF DIABETES MEDICATIONS

(During the past four weeks) Did you run out of these medications?

- 1. Yes
- 5. No
- 8. DK
- 9. REF

V518_DIAB-FORGET

DID R FORGET TO TAKE DIABETES MEDICATIONS

(During the past four weeks) Did you forget to take these medications because of your busy schedule?

- 1. Yes
- 2. Yes, forgot, but not because of busy schedule
- 5. No
- 8. DK
- 9. REF

***** LUNG meds sequence (V519-V525) *****

V519 BRANCHPOINT: IF ([V563_LUNG_MED EQ 1] OR [V567_NUMMEDS > 4 AND X527_M7RANDOM1 EQ 3 OR X528_M7RANDOM2 EQ 3 OR X529_M7RANDOM3 EQ 3 OR X530_M7RANDOM4 EQ 3]) CONTINUE ELSE GO TO V526 (HEART) BRANCHPOINT

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V519_LUNG-ABILITY
RATE ABILITY TO TAKE LUNG MEDS AS PRESCRIBED

Earlier you mentioned that you are taking medications for your lung condition. Thinking about the past four weeks, please rate your ability to take your lung pills as prescribed. Would you say it was excellent, very good, good, fair or poor?

1. Excellent
2. Very good
3. Good
4. Fair
5. Poor
7. [VOL] Did not take lung pills in past 4 weeks
8. DK
9. REF

V520 BRANCHPOINT: IF V519 IN(1,8,9) THEN GO TO V526 BRANCHPOINT

V520_INTRO-LUNG
INTRODUCTION TO LUNG SEQUENCE

There are many reasons people are not able to take their medications. Thinking specifically about all of your lung medications, please tell me if you experienced any of the following during the past four weeks.

Did you have side effects from these medications?

1. Yes
5. No
8. DK
9. REF

V521_LUNG-MONEY
IF ENOUGH MONEY TO PAY FOR LUNG MEDICATIONS

(During the past four weeks) Did you have enough money to pay for these medications?

1. Yes
5. No
7. [VOL] I do not have to pay for the medications
8. DK
9. REF

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V522_LUNG-NOTNEED

DID R THINK LUNG MEDICATIONS WERE NOT NEEDED

(During the past four weeks) Did you think these medications were not needed anymore?

1. Yes
5. No
8. DK
9. REF

V523_LUNG-LONGTRM

CONCERNED ABOUT LONG-TERM EFFECTS OF LUNG MEDS

(During the past four weeks) Were you concerned about long-term effects from these medications?

1. Yes
5. No
8. DK
9. REF

V524_LUNG-RUNOUT

DID R RUN OUT OF LUNG MEDICATIONS

(During the past four weeks) Did you run out of these medications?

1. Yes
5. No
8. DK
9. REF

V525_LUNG-FORGET

DID R FORGET TO TAKE LUNG MEDICATIONS

(During the past four weeks) Did you forget to take these medications because of your busy schedule?

1. Yes
2. Yes, forgot, but not because of busy schedule
5. No
8. DK
9. REF

*****HEART meds sequence (V526-V532) *****

V526 BRANCHPOINT: IF ([V564_HEART_MED EQ 1] OR [V567_NUMMEDS > 4 AND X527_M7RANDOM1 EQ 4 OR X528_M7RANDOM2 EQ 4 OR X529_M7RANDOM3 EQ 4 OR X530_M7RANDOM4 EQ 4]) CONTINUE ELSE GO TO V533 (KIDNEY) BRANCHPOINT

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V526_HEART-ABILITY
RATE ABILITY TO TAKE HEART MEDS AS PRESCRIBED

Earlier you mentioned that you are taking medications for your heart. Thinking about the past four weeks, please rate your ability to take your heart pills as prescribed. Would you say it was excellent, very good, good, fair or poor?

1. Excellent
2. Very good
3. Good
4. Fair
5. Poor
7. [VOL] Did not take heart pills in past 4 weeks
8. DK
9. REF

V527 BRANCHPOINT: IF V526 IN(1,8,9) THEN GO TO V533 BRANCHPOINT

V527_INTRO-HEART
INTRODUCTION TO HEART SEQUENCE

There are many reasons people are not able to take their medications. Thinking specifically about all of your heart medications, please tell me if you experienced any of the following during the past four weeks.

Did you have side effects from these medications?

1. Yes
5. No
8. DK
9. REF

V528_HEART-MONEY
IF ENOUGH MONEY TO PAY FOR HEART MEDICATIONS

(During the past four weeks) Did you have enough money to pay for these medications?

1. Yes
5. No
7. [VOL] I do not have to pay for the medications
8. DK
9. REF

V529_HEART-NOTNEED
DID R THINK HEART MEDICATIONS WERE NOT NEEDED

(During the past four weeks) Did you think these medications were not needed anymore?

1. Yes
5. No

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- 8. DK
- 9. REF

V530_HEART-LONGTRM

CONCERNED ABOUT LONG-TERM EFFECTS OF HEART MEDS

(During the past four weeks) Were you concerned about long-term effects from these medications?

- 1. Yes
- 5. No
- 8. DK
- 9. REF

V531_HEART-RUNOUT

DID R RUN OUT OF HEART MEDICATIONS

(During the past four weeks) Did you run out of these medications?

- 1. Yes
- 5. No
- 8. DK
- 9. REF

V532_HEART-FORGET

DID R FORGET TO TAKE HEART MEDICATIONS

(During the past four weeks) Did you forget to take these medications because of your busy schedule?

- 1. Yes
- 2. Yes, forgot, but not because of busy schedule
- 5. No
- 8. DK
- 9. REF

*****KIDNEY meds sequence (V533-V539)*****

V533 BRANCHPOINT: IF ([V565_KIDNEY_MED EQ 1] OR [V567_NUMMEDS > 4 AND X527_M7RANDOM1 EQ 5 OR X528_M7RANDOM2 EQ 5 OR X529_M7RANDOM3 EQ 5 OR X530_M7RANDOM4 EQ 5]) CONTINUE ELSE GO TO V540 (DEPRESSION) BRANCHPOINT

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V533_KIDNEY-ABILITY
RATE ABILITY TO TAKE KIDNEY MEDS AS PRESCRIBED

Thinking about the past four weeks, please rate your ability to take your kidney pills as prescribed. Would you say it was excellent, very good, good, fair or poor?

1. Excellent
2. Very good
3. Good
4. Fair
5. Poor
7. [VOL] Did not take kidney pills in past 4 weeks
8. DK
9. REF

V534 BRANCHPOINT: IF V533 IN(1,8,9) THEN GO TO V540 BRANCHPOINT

V534_INTRO-KIDNEY
INTRODUCTION TO KIDNEY SEQUENCE

There are many reasons people are not able to take their medications. Thinking specifically about all of your kidney medications, please tell me if you experienced any of the following during the past four weeks.

Did you have side effects from these medications?

1. Yes
5. No
8. DK
9. REF

V535_KIDNEY-MONEY
IF ENOUGH MONEY TO PAY FOR KIDNEY MEDICATIONS

(During the past four weeks) Did you have enough money to pay for these medications?

1. Yes
5. No
7. [VOL] I do not have to pay for the medications
8. DK
9. REF

V536_KIDNEY-NOTNEED
DID R THINK KIDNEY MEDICATIONS WERE NOT NEEDED

(During the past four weeks) Did you think these medications were not needed anymore?

1. Yes
5. No
8. DK

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9. REF

V537_KIDNEY-LONGTRM

CONCERNED ABOUT LONG-TERM EFFECTS OF KIDNEY MEDS

(During the past four weeks) Were you concerned about long-term effects from these medications?

1. Yes
5. No
8. DK
9. REF

V538_KIDNEY-RUNOUT

DID R RUN OUT OF KIDNEY MEDICATIONS

(During the past four weeks) Did you run out of these medications?

1. Yes
5. No
8. DK
9. REF

V539_KIDNEY-FORGET

DID R FORGET TO TAKE KIDNEY MEDICATIONS

(During the past four weeks) Did you forget to take these medications because of your busy schedule?

1. Yes
2. Yes, forgot, but not because of busy schedule
5. No
8. DK
9. REF

***** DEPRESSION meds sequence (V540-V546) *****

V540 BRANCHPOINT: IF ([V566_KIDNEY_MED EQ 1] OR [V567_NUMMEDS > 4 AND X527_M7RANDOM1 EQ 6 OR X528_M7RANDOM2 EQ 6 OR X529_M7RANDOM3 EQ 6 OR X530_M7RANDOM4 EQ 6]) CONTINUE ELSE GO TO V547 (PHARMACY) BRANCHPOINT

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V540_DEPRESSION-ABILITY

RATE ABILITY TO TAKE DEPRESSION MEDS AS PRESCRIBED

Thinking about the past four weeks, please rate your ability to take your depression pills as prescribed. Would you say it was excellent, very good, good, fair or poor?

1. Excellent
2. Very good
3. Good
4. Fair
5. Poor
7. [VOL] Did not take depression pills in past 4 weeks
8. DK
9. REF

V541 BRANCHPOINT: IF V540 IN(1,8,9) THEN GO TO V547 BRANCHPOINT

V541_INTRO-DEPRESSION

INTRODUCTION TO DEPRESSION SEQUENCE

There are many reasons people are not able to take their medications. Thinking specifically about all of your depression medications, please tell me if you experienced any of the following during the past four weeks.

Did you have side effects from these medications?

1. Yes
5. No
8. DK
9. REF

V542_DEPRESSION-MONEY

IF ENOUGH MONEY TO PAY FOR DEPRESSION MEDICATIONS

(During the past four weeks) Did you have enough money to pay for these medications?

1. Yes
5. No
7. [VOL] I do not have to pay for the medications
8. DK
9. REF

V543_DEPRESSION-NOTNEED

DID R THINK DEPRESSION MEDICATIONS WERE NOT NEEDED

(During the past four weeks) Did you think these medications were not needed anymore?

1. Yes
5. No
8. DK

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9. REF

V544_DEPRESSION-LONGTRM

CONCERNED ABOUT LONG-TERM EFFECTS OF DEPRESSION MEDS

(During the past four weeks) Were you concerned about long-term effects from these medications?

- 1. Yes
- 5. No
- 8. DK
- 9. REF

V545_DEPRESSION-RUNOUT

DID R RUN OUT OF DEPRESSION MEDICATIONS

(During the past four weeks) Did you run out of these medications?

- 1. Yes
- 5. No
- 8. DK
- 9. REF

V546_DEPRESSION-FORGET

DID R FORGET TO TAKE DEPRESSION MEDICATIONS

(During the past four weeks) Did you forget to take these medications because of your busy schedule?

- 1. Yes
- 2. Yes, forgot, but not because of busy schedule
- 5. No
- 8. DK
- 9. REF

V547 BRANCHPOINT: IF V501 = 0 THEN CONTINUE ELSE GO TO V555

Note to programmer: If timings are running long in production, we will modify the second condition in the branchpoint to include fewer people.

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V547_PHARM-INTRO
INTRODUCTION TO PHARMACY QUESTIONS

In the last 12 months have you received any of the following services from a pharmacist?

Iwer: The pharmacist can be located in a medical practice or in a hospital, as well as in a commercial pharmacy.

1. Continue

	1. Yes	5. No	8. DK	9. RF
V548_MEDINFO GIVEN INFORMATION ABOUT MEDICATIONS First, were you given verbal or written information about your medications from a pharmacist?				
V549_CONDINFO GIVEN INFORMATION ABOUT MEDICAL CONDITIONS (In the last 12 months) were you given verbal or written information about your <u>medical conditions</u> from a pharmacist?				
V550_OVERCOUNTER IF OVER THE COUNTER MEDS WERE RECOMMENDED (In the last 12 months) were you given a recommendation of over-the-counter medication <u>by a pharmacist</u> ?				
V551_VACCINATE IF RECEIVED VACCINATION OR IMMUNIZATION (In the last 12 months) did you get any immunizations or vaccinations <u>from a pharmacist</u> ?				
V552_BPMEASURED IF BLOOD PRESSURE WAS TAKEN (In the last 12 months) was a measurement of your blood pressure taken <u>by a pharmacist</u> ?				
V553_GLUC-CHOLEST IF TESTED FOR GLUCOSE OR CHOLESTEROL LEVELS (In the last 12 months) did you get a tested in a pharmacy for glucose or cholesterol levels?				
V554_PACKAGE IF GIVEN PACKAGING FOR ADHERENCE (In the last 12 months) were you given any prescriptions in special packaging to help you take them as directed?				

V555 BRANCHPOINT: IF N352 = 1 (R HAS MEDICARE PART D) THEN CONTINUE ELSE GO TO END OF MODULE

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V555_IF-CMR
IF COMPREHENSIVE MEDICATION REVIEW

A Comprehensive Medication Review is an interactive review of medications, including prescription, over-the-counter medications, natural therapies, and supplements. In the review, each medication is considered for its beneficial effects, side effects, adherence and costs. It may be given as part of your Part D drug plan.

In the past 12 months, have you had a Comprehensive Medication Review performed by a pharmacist, either in person or over the phone?

1. Yes
5. No
8. DK
9. REF

----- **END OF MODULE** -----