

NatCen

Social Research that works for society

English Longitudinal Study of Ageing

Nurse Questionnaire Wave 9 – 2018/19

Version 1 (February 2020)

NatCen Social Research
35 Northampton Square
London EC1V 0AX
T 020 7250 1866
www.natcen.ac.uk

A Company Limited by Guarantee.
Registered in England No. 4392418
A Charity registered in England and Wales (1091768) and Scotland (SC038454).

CONTENTS

INTRODUCTION.....	3
➤ Content of this document.....	3
➤ Important notes and usage information	3
➤ Contact details.....	4
NURSE VISIT - Questionnaire specification	5
1 - DEMOGRAPHIC QUESTIONS MODULE (DQ)	5
DQ Module Checks	7
2 - MEDICATION MODULE (MD).....	9
MD Module Checks.....	11
3 - BLOOD PRESSURE MODULE (BP).....	12
BP Module Checks	18
4 - GRIP STRENGTH MODULE (GS)	22
GS Module Checks	25
5 - BLOOD SAMPLE MODULE (BS).....	29
BS Module Checks	38
Venepuncture Checklist (paradata)	39
6 - NUMBER SERIES MODULE (FLUID INTELLIGENCE/COGNITIVE FUNCTION) (CF)..	42
7 - FINAL QUESTIONS (FQ).....	52

INTRODUCTION – How to read this document

➤ Content of this document

This document contains the specification of the CAPI questionnaire instrument used on the ELSA Wave 9 nurse fieldwork, carried out between July 2018 and August 2019.

➤ Important notes and usage information

Here follows important general information about the nurse questionnaire specification:

Modules

The Wave 9 nurse questionnaire includes seven modules, presented here in the order of the nurse visit. The Wave 9 archived nurse dataset reflects the same order of modules and variables. The blood sample module also includes a specific subparagraph (“*Venepuncture Checklist*”) documenting the administrative paradata collected during the blood sample administration. (The list of the blood assays can be found in the section ‘Archive Files’ later in this document.)

Note that a number of modules included on previous ELSA nurse waves have been omitted at Wave 8, including *Standing height, Waist and Hip circumference measurement, Lung function, Balance, Leg Rise, Chair Rise* and *Hair sample*. In addition, *Weight module* was moved from the nurse to the interviewer questionnaire at Wave 8 (see Wave 8 Interviewer Questionnaire in this same documentation). In contrast the set of *Number series (fluid intelligence)* questions, which have been included within the ELSA interviewer questionnaire Cognitive Function module on previous waves, was moved to the nurse visit at Wave 8 and is part of the nurse visit at Wave 9 as well. For further details about the content of the ELSA nurse visits across the waves, please refer to the ELSA Questionnaire Content Across Waves 1–9 at the end of this documentation and the ELSA Nurse User Guide.

Textfills

^ - This annotation is shown before any textfills that were used in questions. The different options of the textfill are provided in square brackets e.g. [^him/her].

Routing

<> - This annotation is used to indicate ‘not equals to’.

Respondents

* - This annotation after a question name indicates that it is asked of proxy and non-proxy respondents; two asterisks indicate a proxy only question. No asterisk indicates non-proxy only (i.e. questions only asked in personal interviews).

Non-archived variables

@ - This annotation is used to indicate that a variable has not been archived.

Checks

The CAPI instrument contains a number of checks to help ensure that the information entered by the nurse is accurate and consistent. The checks are numbered continuously through the modules of the questionnaire and all have the prefix "N" to indicate that they are in the nurse questionnaire (e.g. “[CHECK N1]”). There are two types of checks: soft checks and hard checks. A soft check is a warning that appears when the value entered is extreme or unlikely. It can be suppressed by the nurse without changing the value entered. A hard check is a warning that appears when the value entered is impossible. A hard check cannot be suppressed by the nurse without changing the value entered. The details of the checks – routing, wording and type – are given at the end of each module.

Non-response codes

Unless otherwise specified, nurses have an option to enter a Don't Know (DK) or a Refusal (RF) answer in all questions. Please see the ELSA Nurse User Guide for more details about how non-response answers are presented in the nurse dataset.

Archived variable names

Archived variable names are as shown unless otherwise specified (in brackets after the variable name or in a table for multicode variables).

Office-coded questions

The questionnaire specification also indicates where open text questions are coded in the office. Open answers are back-coded into one code if the target variable is single coded or into more than one code if the variable allows multicoding. Most of the coded questions are 'other' answers to existing coded questions. Where possible, the other answers are 'back-coded' in the office to the existing code-frame; otherwise they are either coded to a new office-only code or kept in an 'other – not codeable' category. As specified in the documentation, in most such cases, the archived dataset includes two sets of variables: the variables as they were collected in the CAPI interview (with 'other' answers unchanged), and the variables after office back-coding with 'other' answers back-coded. The latter set includes 'Merged' on the variable labels and "M" in the archived variable name. The following value codes are applicable for all back-coded variables.

85	Other answer – not codeable
86	Irrelevant answer – not codeable

➤ Contact details

- Please contact ELSAdata@natcen.ac.uk if you have any queries about the questionnaire.
- For information about how to access the data, please refer to the 'Archive Files' section of this documentation and UK Data Service website (<https://www.ukdataservice.ac.uk/>).

NURSE VISIT – Questionnaire specification

1 - DEMOGRAPHIC QUESTIONS MODULE (DQ)

NAME @

NURSE: Enter the name of person number [^person number from Household Grid] from section 7 on the NRF.

String 20

[Don't Know and Refusal are not allowed]

SEX @

NURSE: Code the sex of person number [^person number from Household Grid] from section 7 on the NRF.

1 Male

2 Female

[Don't Know and Refusal are not allowed]

AGE @

NURSE: Enter the age of person number [^person number from Household Grid] from section 7 on the NRF.

Range: 0..120

[Don't Know and Refusal are not allowed]

POC @

NURSE: Enter the nurse status code for person number ^PNo from section 7 on the NRF.

1 Core member and agreed Nurse visit

2 Core member and refused nurse visit

4 Partner requested Nurse Visit"

[Don't Know and Refusal are not allowed]

*IF (nurse status code for person number ^PNo from section 7 on the NRF [Core member and agreed Nurse visit, Core member and refused Nurse visit]) THEN Nurse status code := nurse status code for person number ^PNo from section 7 on the NRF. ELSEIF (nurse status code for person number ^PNo from section 7 on the NRF = Partner requested Nurse Visit) THEN nurse status code := Partner requested nurse visit
[(POC IN [1,2]) THEN OC := POC. ELSEIF (POC = 4) THEN OC := 5]*

OC @

Nurse status code:

1 Agreed Nurse Visit (including partners)

2 Refused Nurse Visit

5 Partner requested Nurse Visit

6 Partner refused nurse visit"

[Don't Know and Refusal are not allowed]

END OF FILTER

MORE @

NURSE: Is there anyone else in the household who agreed or refused to see you? (i.e. coded 1, 2 or 4 at section 7 on the NRF.)"

1 Yes

2 No

STRTNUR @

NURSE: Enter the start time of the interview in hours and minutes using the 24-hour clock (e.g 17:30).

[Don't Know and Refusal are not allowed]

IF Date of interview = EMPTY

[NurDate = EMPTY]

DATEOK @

NURSE: Today's date according to the laptop is [^automatically recorded date of interview]. Is this the correct date?

- 1 Yes
- 2 No

[Don't Know and Refusal are not allowed]

IF Whether today's date is shown correctly = Yes

[NurDate = EMPTY] AND [DateOK = 1]

ELSE IF Whether today's date is shown correctly = No

[NurDate = EMPTY] AND [DateOK = 2]

NURDATE @

NURSE: Enter the date of this interview.

[Don't Know and Refusal are not allowed]

[Month of interview is recorded in variable VISMON and year of interview is recorded in variable VISYEAR]

END OF FILTER

[CHECK N1]

END OF FILTER

NDOBD @

Can I just check your date of birth?

NURSE: Enter day, month and year of [^Name of respondent]'s date of birth separately. Enter the day here.

Range: 1..31

NDOBM @

NURSE: Enter the code for the month of [^Name of respondent]'s date of birth.

- 01 January
- 02 February
- 03 March
- 04 April
- 05 May
- 06 June
- 07 July
- 08 August
- 09 September
- 10 October
- 11 November
- 12 December

NDOBY¹ @

NURSE: Enter the year of [^Name of respondent]'s date of birth.

Range: 1890..2100

***[Year of birth is recorded in variable DOBYEAR.
Respondents aged 90 or over are coded as -7]***

¹ See variable Indoby in dataset for year of birth. Any respondent aged 90 or older is represented as 90+.

*[There are 2 age variables in the file:
HHAGE: Age derived from date of birth and date of nurse visit - used for eligibility for measures throughout interview
CONFAGE: Actual age at nurse visit]*

[CHECKS N2 - N5]

DISPAGE @

CHECK WITH RESPONDENT: So your age is [^respondent's age (derived from respondent's date of birth and today's date)]?

- 1 Yes
- 2 No

[CHECKS N6a – N6b]

DQ Module Checks

IF Whether today's date is shown correctly = Yes [DateOK = 1]

CHECK N1 (Soft) NURDATE @

CHECK: date of interview <> automatically recorded date of interview

[NurDate <> MachDate]

Are you sure? You previously entered the date of interview as [^MachDate: automatically recorded date of interview].

If [^MachDate: automatically recorded date of interview] is the correct date of interview, please change to this.

Else, press <S> to continue.

END OF CHECK

END OF FILTER

IF Checking respondent's date of birth - year <> EMPTY [NDoBY <> EMPTY]

CHECK N2 (Soft) NDOBY@

CHECK: date of birth (derived) = EMPTY [NDoB = EMPTY]

Please enter the day, month and year of a valid date.

If any of these are really unknown, suppress this warning.

END OF CHECK

END OF FILTER

IF Checking respondent's date of birth - year = RESPONSE [NDoBY = RESPONSE]

CHECK N3 (Hard) NDOBY@

CHECK: date of birth (derived) > date of interview [NDoB > NurDate]

NURSE: This date of birth is after the date you have entered for today's date.

Please change one or the other.

END OF CHECK

IF Date of birth = RESPONSE [DOB = RESPONSE]

CHECK N4 (Soft) NDOBY@

CHECK: date of birth (derived) <> date of birth (recorded) [NDoB <> DOB]

NURSE: The interviewer recorded [^DoB: date of birth (recorded)] as the date of birth, please query.

Then either amend the date of birth which you entered, or suppress this warning and explain in a note <Ctrl M>.

END OF CHECK

END OF FILTER

CHECK N5 (Soft) NDOBY@

CHECK: age of respondent (confirmed) > 99 [ConfAge > 99]

This gives an age of [^ConfAge: age of respondent (confirmed)] years old, please check.

END OF CHECK

END OF FILTER

*IF (Age of respondent (confirmed) = RESPONSE) AND (Age of respondent >= 1)
[[DispAge = RESPONSE) AND (RAge >= 1)]*

CHECK N6a (Soft) DISPAGE@

CHECK: age of respondent (from household grid) <> age of respondent (confirmed) [(RAge <> ConfAge)

NURSE: You recorded the age as [^RAge: age of respondent (from household grid)] in the Household Grid, please query.

Then either amend the date of birth which you entered, or suppress this warning and explain in a note <Ctrl M>.

END OF CHECK

END OF FILTER

CHECK N6b (Hard) DISPAGE@

CHECK: Whether age of respondent (confirmed) is right <> Yes [DispAge <> 1]

NURSE: Press <Enter> and sort out the correct date of birth.

END OF CHECK

2 - MEDICATION MODULE (MD)

ALL WITH A NURSE VISIT

MEDCNJD

Are you taking or using any medicines, pills, syrups, ointments, puffers or injections prescribed for you by a doctor or a nurse?

NURSE: If statins have been prescribed by a doctor please code them here. If they have been bought without a prescription code at the Statins question.

1 Yes

2 No

3 Yes, but unable to code as name of drug(s) not available

IF respondent taking medication = Yes

[MEDCNJD = 1]

MEDINTRO@

Could I take down the names of the medicines, including pills, syrups, ointments, puffers or injections, prescribed for you by a doctor or a nurse?

NURSE: Including the contraceptive pill.

Press <1> and <Enter> to continue."

LOOP: Repeat **MEDBI, MEDBIA, MEDBIC** for up to 40 drugs

MEDBI@

NURSE: Enter name of drug number. Ask if you can see the containers for all prescribed medicines currently being taken. If Aspirin, record dosage as well as name."

STRING[50]

MEDBIA (archived under SL as MEDBIA – MEDBIA22)

Have you taken/used ^MedBI in the last 7 days?"

1 Yes

2 No

MEDBIC@

NURSE CHECK: Any more drugs to enter?"

1 Yes

2 No

NUMMEDS (archived under SL)

Computed: Number of medicines mentioned at MEDBI.

Range: 1..40

END OF LOOP

END OF FILTER

IF aged 16 of over [HHAge >= 16]

STATINS

Are you taking statins (drugs to lower cholesterol) bought over the counter from a pharmacist, without prescription from a doctor?

NURSE: Here are some examples of common statins, which may be bought over the counter:
Atorvastatin (Lipitor)

Fluvastatin (Lescol, Lescol XL)
Pravastatin (Lipostat)
Rosuvastatin (Crestor) and Simvastatin (Zocor)

- 1 Yes
- 2 No

IF taking statins bought over the counter = Yes
[STATINS=1]

STATINA

Have you taken/used statins in the last 7 days?

- 1 Yes
- 2 No

END OF FILTER
END OF FILTER

IF nurse entered drug coding section

DRC1 (archived under SL as DRC1 – DRC22)

NURSE: Enter code for (name of drug)

STRING 6

Loop for up to 22 drug codes

[CHECKS N7a-N7c]

*IF first two digits of drug code = 02 and drug code is not '021200' (formerly Statins/Lipid-lowering drugs) and aged 16 or over [DRC1= "02****" and DRC1 <> 021200 and HHAge >= 16]*

YTAKE1 (archived under SL)

Do you take ^MedBl because of a heart problem, high blood pressure or for some other reason?

CODE ALL THAT APPLY

- 1 Heart problem
- 2 High blood pressure
- 3 Other reason

[Code maximum 3 out of 3 answer options]

Description	Variable	Archive (22 loops)
Heart problem	YTake11	ytakehp1 – ytakehp22
High blood pressure	YTake12	ytakebp1 – ytakebp22
Cholesterol ²	YTake13e	ytakech1 – ytakech22
Other reason	YTake13	ytakeot1 – ytakeot22

IF take drug for another reason [YTake1 = 3]

TAKEOTH1 @

NURSE: Give full details of reason(s) for taking ^MedBl.

Press <Esc> when finished.

END OF FILTER

² This answer option was created retrospectively and back coded in the office from the open answers given at TAKEOTH1 (see below).

|
|
END OF FILTER
END OF FILTER

MD Module Checks

CHECK N7a (Hard) DRC1

CHECK: Whether drug code length is 6 digits]

|
NURSE: The drug code is a six digit number. Please enter it using only the digits 0-9
END OF CHECK

CHECK N7b (Hard) DRC2

CHECK: Whether drug code is valid based on the look up table of codes from the codeframe]

|
NURSE: Please check, this drug code doesn't seem to be valid.
END OF CHECK

CHECK N7c (Soft) DRC3

CHECK: Whether drug code = 020102 OR 021001 OR 021002]

|
NURSE: Are you sure? This code is used for acute hospital treatment of heart attack. Please check your coding.
END OF CHECK

3 - BLOOD PRESSURE MODULE (BP)

BPMOD @

NURSE: Now follows the Blood Pressure module.

Press <1> and <Enter> to continue.

Range: 1..1

BPCONST

(As I mentioned earlier) We would like to measure your blood pressure. The analysis of blood pressure readings will tell us a lot about the health of the population.

NURSE: Does the respondent agree to blood pressure measurement?

- 1 Yes, agrees
- 2 No, refuses
- 3 Unable to measure BP for reason other than refusal

[Don't Know and Refusal are not allowed]

IF Whether respondent agrees to BP measurement = Yes [BPConst = 1]

CONSUBX

May I just check, have you eaten, smoked, drunk alcohol or done any [^BLANK / vigorous] exercise in the past 30 minutes?

CODE ALL THAT APPLY.

- 1 Eaten
- 2 Smoked
- 3 Drunk alcohol
- 4 Done [^BLANK / vigorous] exercise
- 5 (None of these)

[Don't Know and Refusal are not allowed]

[Code maximum 4 out of 5 possible responses]

Description	Variable	Archive
Whether done anything that will affect BP in last 30 minutes: Eaten	ConSubX1	<i>consubea</i>
Whether done anything that will affect BP in last 30 minutes: Smoked	ConSubX2	<i>consubsm</i>
Whether done anything that will affect BP in last 30 minutes: Drunk alcohol	ConSubX3	<i>consubdr</i>
Whether done anything that will affect BP in last 30 minutes: Done vigorous exercise	ConSubX4	<i>consubex</i>
Whether done anything that will affect BP in last 30 minutes: (None of these)	ConSubX5	<i>consubno</i>

[CHECKS N8-N9]

OMRONNO @

NURSE: Record blood pressure equipment serial number.

Range: 1..999

CUFSIZE (archive: cuffsize)

NURSE: Select cuff and attach to the respondent's right arm.

Ask the respondent to sit still for five minutes.

READ OUT: 'I am going to leave you to sit quietly now for 5 minutes. During that you must not read and your legs are to remain uncrossed. After the 5 minutes, I will carry out 3 recordings with a minute between them. While I am doing these recordings I will not speak to you, and you must not speak to me. Once I have completed the recordings I will tell you what they are.'

Record cuff size chosen.

- 1 Child (15-22 cm)
- 2 Adult (22-32 cm)
- 3 Large adult (32-42 cm)"

AIRTEMP

NURSE: Record the ambient air temperature.
 Enter the temperature in centigrades to one decimal place.
 Range: 0.0..40.0

[CHECKS N10 - N11]

BPREADY @

NURSE: During five minute wait, prepare documents for rest of Nurse Visit:

- Consent booklet
- Grip strength measurement card
- Measurement record card

If appropriate, prepare equipment for rest of Nurse Visit.

Once respondent has sat still for 5 minutes you are ready to take the measurements.

Ensure the Ready to measure symbol is lit before pressing the Start button to start the measurements.

Press <1> and <Enter> to continue.

String 1

LOOP: MEASUREMENT THREE TIMES (if SYS is not 996) [LOOP FOR I:= 1 TO 3 if BPCnst = Agree AND SYS <> 996]

SYS

NURSE: Take three measurements from right arm.
 Enter [^first / second / third] systolic reading (mmHg).
 If reading not obtained, enter 999.
 If you are not going to get any BP readings at all, enter 996.
 Range: 1..999

[The three loops of SYS are archived in sys1 to sys3]

[CHECK N12]

DIAS

Enter [^first / second / third] diastolic reading (mmHg).
 If reading not obtained, enter 999.
 Range: 1..999

[The three loops of DIAS are archived in dias1 to dias3]

[CHECKS N13 - N14]

PULSE

Enter [^first / second / third] pulse reading (bpm).
 If reading not obtained, enter 999.
 Range: 1..999

[The three loops of PULSE are archived in pulse1 to pulse3]

MAP

Computed: Mean Arterial Pressure (MAP) reading (mmHG) "
 Range: 001..999

[The three loops of MAP are archived in map1 to map3]

FULL

Computed: Whether set of Blood Pressure readings is complete
 1 Yes

2 No

**[The three loops of FULL are archived in full1 to full3]
[CHECKS N15 - N25]**

END OF LOOP

IF Number of valid BP readings = 0

YNoBP (Archive: whynobp)

NURSE: Enter reason for not recording any full BP readings.

- 1 Blood pressure measurement attempted but not obtained
- 2 Blood pressure measurement not attempted
- 3 Blood pressure measurement refused

END OF FILTER

END OF FILTER

[Whether all BP measurements have been obtained is computed and recorded in variable RespBPS]

RespBPS

Computed: Number of BP measurements obtained

- 1 Three
- 2 Two
- 3 One
- 4 Tried
- 5 No Try
- 6 Refused

IF (Response to BP measurements = [Two, one, tried, did not try, refused]) OR (Whether respondent agrees to have blood pressure measured = No)
[(RespBPS = [2 - 6]) OR (BPConst = 2)]

NATTBPD

NURSE: Record why [^only two readings obtained /only one reading obtained / reading not obtained / reading not attempted / reading refused / unable to take reading].

CODE ALL THAT APPLY.

- 1 Problems with PC
- 2 Respondent upset / anxious / nervous
- 3 Error reading
- 4 Problems with cuff fitting / painful
- 5 Problems with equipment (not error reading)
- 6 Other reason(s) (specify at next question)

[Code maximum 6 out of 6 possible responses]

Description	Variable	Archive
Problems with PC	NAttBPD1	nattbpco
Respondent upset / anxious / nervous	NAttBPD2	nattbpup
Error reading	NAttBPD3	nattbper
Problems with cuff fitting / painful	NAttBPD4	nattbpcu
Problems with equipment (not error reading)	NAttBPD5	nattbpeq
Other reason(s)	NAttBPD6	nattbp95 (previously archived as 'nattbpot')

END OF FILTER

IF (Reason why full set of BP measurements was not collected = Other) [NAttBPD = 6]

OTHNBP @

NURSE: Enter full details of other reason(s) for not obtaining / attempting three BP readings.

String 140

END OF FILTER

IF Response to BP measurements = [Three, two, one] [RespBPS = [1 - 3]]

DIFBPC

NURSE: Record any problems taking readings.

CODE ALL THAT APPLY.

- 1 No problems taking blood pressure
- 2 Reading taken on left arm because right arm not suitable
- 3 Respondent was upset / anxious / nervous
- 4 Problems with cuff fitting / painful
- 5 Problems with equipment (not error reading)
- 6 Error reading
- 7 Other problems (specify at next question)

[Code maximum 3 out of 7 possible responses]

Description	Variable	Archive
No problems taking blood pressure	DifBPC1	difbpcno
Reading taken on left arm because right arm not suitable	DifBPC2	difbpcle
Respondent was upset / anxious / nervous	DifBPC3	difbpcup
Problems with cuff fitting / painful	DifBPC4	difbpcu
Problems with equipment (not error reading)	DifBPC5	difbpcq
Error reading	DifBPC6	difbpcer
Other problems (specify at next question)	DifBPC7	dibpc95 (previously archived as 'dibpcot')

[CHECK N26]

END OF FILTER

IF Problem taking BP readings = Other [DifBPC = 7]

OTHDIFBP @

NURSE: Record full details of other problem(s) taking readings.

String 140

END OF FILTER

IF Response to BP measurements = [Three, two, one] [RespBPS = [1 - 3]]

GPREGB @

Are you registered with a GP?

- 1 Yes
- 2 No

END OF FILTER

IF Whether respondent registered with GP = Yes [GPRegB = 1]

GPSEND @

May we send your blood pressure readings to your GP?

- 1 Yes
- 2 No

IF Whether results may be sent to GP = No [GPSend = 2]

GPREFC @

NURSE: Specify reason(s) for refusal to allow BP readings to be sent to GP.
CODE ALL THAT APPLY.

- 1 Hardly / Never sees GP
- 2 GP knows respondent's BP level
- 3 Does not want to bother GP
- 4 Other (specify at next question)

[Code maximum 4 out of 4 possible responses]

*IF Reason why respondent does not want BP results sent to their GP = Other
[GPRefC = 4]*

OTHREFC @

NURSE: Give full details of reason(s) for refusal.
String 140

END OF FILTER

END OF FILTER

END OF FILTER

IF Response to BP measurements = [Three, two, one] [RespBPS = [1 - 3]]

BPOFFER @ [See Nurse Project Instructions for definitions of mildly, moderately and considerably raised BP]

NURSE: Offer blood pressure results to respondent.

	Systolic	Diastolic	Pulse
i)	[^Sys1]	[^Dias1]	[^Pulse1]
ii)	[^Sys2]	[^Dias2]	[^Pulse2]
iii)	[^Sys3]	[^Dias3]	[^Pulse3]

Enter these on [^Name of respondent]'s Measurement Record Card.

Tick the [^considerably raised / moderately raised / mildly raised / normal] box and read out to respondent:

[If BP is considerably raised:

^Your blood pressure is high today. Blood pressure can vary from day to day and throughout the day so that one high reading does not necessarily mean that you suffer from high blood pressure. You are strongly advised to visit your GP within 5 days to have a further blood pressure reading to see whether this is a once-off finding or not.

NURSE: If respondent is elderly, advise [^him / her] to contact GP within next 7 - 10 | days. Please report this reading to the Survey Doctor when you get home.

[If BP is moderately raised:

^Your blood pressure is a bit high today. Blood pressure can vary from day to day and throughout the day so that one high reading does not necessarily mean that

you suffer from high blood pressure. You are advised to visit your GP within 2 weeks to have a further blood pressure reading to see whether this is a once-off finding or not.]

[If BP is mildly raised:

^Your blood pressure is a bit high today. Blood pressure can vary from day to day and throughout the day so that one high reading does not necessarily mean that you suffer from high blood pressure. You are advised to visit your GP within 2 months to have a further blood pressure reading to see whether this is a once-off finding or not.]

[If BP is normal:

^Your blood pressure is normal.]

Press <1> and <Enter> to continue.

String 1

END OF FILTER

IF (Whether respondent registered with GP <> Yes) OR (Whether BP results may be sent to GP = No) [(GPRegB <> 1) OR (GPSend = 2)]

Code022@

NURSE: Circle consent code 02 on the front of the Consent Booklet.

Explain the need for written consent and ask the respondent to print name, sign and date the Consent Form in the spaces provided at the bottom of page 5 of the Consent Booklet.

Nurse: Print your name, sign and date in the spaces provided at the bottom of page 5 of the Consent Booklet.

Press <1> and <Enter> to continue.

Record not consented for BP results to GP

Press <1> to continue.

END OF FILTER

IF Whether results may be sent to GP = Yes [GPSend = 1]

CONSRM1 @

NURSE:

a) Ask respondent to read and initial 'Blood pressure to GP on page 2 of the Consent Booklet. Explain the need for written consent and ask the respondent to print name, sign and date the Consent Form in the spaces provided at the bottom of page 5 of the Consent Booklet.

Nurse: Print your name, sign and date in the spaces provided at the bottom of page 5 of the Consent Booklet.

b) Check that GP name, address and phone no. are recorded on the front of the Consent Booklet.

c) Check the name by which GP knows respondent.

d) Circle consent code 01 on front of the Consent Booklet.

Press <1> and <Enter> to continue.

END OF FILTER

ConsCode @

Computed: Consent code for whether can send results to GP

IF (GPRegB <> Yes) OR (GPSend = No)

ConsCode = No

IF (GPSend = Yes)

ConsCode = Yes

- 1 Yes
- 2 No

BP Module Checks

IF Whether respondent has done anything that will affect their BP measurement = None [CONSUBX = 5]

CHECK N8 (Hard) CONSUBX

CHECK: (whether respondent has done anything that will affect their BP measurement = none of these) AND (whether respondent has done anything that will affect their BP measurement = at least one other answer)
[ConSubX.CARDINAL <> 1]

ConSubX: '(None of these)' is an exclusive category.

END OF CHECK

END OF FILTER

CHECK N9 (Soft) CONSUBX

CHECK: (Done anything that will affect BP in last 30 minutes = eaten, smoked, drunk alcohol, or done exercise) [(ConSubX=1,2,3 or 4)]

NURSE: This could affect their blood pressure measurements. If possible see other members of the household first in order to give time for the effects to wear off. If you ARE able to do this please change answer here to 5 (None of these).

END OF CHECK

IF (ambient air temperature (centigrades) = RESPONSE) [AirTemp = RESPONSE]

CHECK N10 (Soft) AIRTEMP

CHECK: Air temperature: decimal point = 0 [FRAC(AirTemp) = 0]

Please record air temperature with one decimal digit, using the full stop as decimal point. If the decimal is zero, suppress this warning and continue.

END OF CHECK

CHECK N11 (Soft) AIRTEMP

CHECK: (air temperature > 25) OR (air temperature < 15)
[(AirTemp > 25) OR (AirTemp < 15)]

Please check, is very unusual for the room temperature to be more than 25 centigrades or less than 15 centigrades. If this temperature is correct, please try to alter it before taking blood pressure readings.

END OF CHECK

END OF FILTER

CHECK N12 (Hard) SYS

CHECK: (BP: systolic reading <> [51 - 299, 844, 996, 999]) AND (BP: systolic reading = RESPONSE)
[(Sys <> [51 - 299, 844, 996, 999]) AND (Sys = RESPONSE)]

Systolic reading should be between 51 and 299 or 844 or 999.

END OF CHECK

CHECK N13 (Hard) DIAS

CHECK: (BP: diastolic reading <= 31) AND (BP: diastolic reading = RESPONSE)

[(Dias <= 31) AND (Dias = RESPONSE)]

Diastolic should be more than 31.

END OF CHECK

CHECK N14 (Hard) DIAS

CHECK: (BP: diastolic reading > 199) AND (BP: diastolic reading <> [844, 999])

[(Dias > 199) AND (Dias <> 844, 999)]

Diastolic should be less than 200 or 844 or 999.

END OF CHECK

CHECK N15 (Hard) PULSE

CHECK: (BP: pulse reading < 30) AND (BP: pulse reading = RESPONSE)

[(Pulse < 30) AND (Pulse = RESPONSE)]

Pulse should be more than 29.

END OF CHECK

CHECK N16 (Hard) PULSE

CHECK: (BP: pulse reading <> [30 .. 160, 844, 999]) AND (BP: pulse reading = RESPONSE)

[(Pulse <> [30 - 160, 844, 999]) AND (Pulse = RESPONSE)]

Pulse should be between 30 and 160 or 844 or 999.

END OF CHECK

CHECK N17 (Soft) PULSE

CHECK: (BP: pulse reading <= 48) AND (BP: pulse reading = RESPONSE)

[(Pulse <= 48) AND (Pulse = RESPONSE)]

This Pulse reading is rather low. Please double check.

END OF CHECK

CHECK N18 (Soft) PULSE

CHECK: (BP: pulse reading <> [1 .. 110, 844, 999]) AND (BP: pulse reading = RESPONSE)

[(Pulse <> [1 - 110, 844, 999]) AND (Pulse = RESPONSE)]

This Pulse reading is rather high. Please double check.

END OF CHECK

CHECK N19 (Soft) PULSE

CHECK: (BP: systolic reading < 90) AND (BP: systolic reading = RESPONSE)

[(Sys < 90) AND (Sys = RESPONSE)]

This Systolic reading is rather low. Please double check.

END OF CHECK

CHECK N20 (Soft) PULSE

CHECK: (BP: systolic reading > 250) AND (BP: systolic reading <> [844, 996, 999])
| [(Sys > 250) AND (Sys <> [844, 996, 999])]

| This Systolic reading is rather high. Please double check.

END OF CHECK

CHECK N21 (Soft) PULSE

CHECK: (BP: diastolic reading < 60) AND (BP: diastolic reading = RESPONSE)
| [(Dias < 60) AND (Dias = RESPONSE)]

| This Diastolic reading is rather low. Please double check.

END OF CHECK

CHECK N22 (Soft) PULSE

CHECK: (BP: diastolic reading > 130) AND (BP: diastolic reading <> [844, 999])
| [(Dias > 130) AND (Dias <> [844, 999])]

| This Diastolic reading is rather high. Please double check.

END OF CHECK

*IF (BP: systolic reading = [1 - 843, 845 - 995]) AND (BP: pulse reading = [1 - 843, 845 - 998]) AND (BP: diastolic reading = [1 - 843, 845 - 998])
| [(Sys = [1 - 843, 845 - 995]) AND (Pulse = [1 - 843, 845 - 998]) AND (Dias = [1 - 843, 845 - 998])]*

*IF (BP: systolic reading = [1 - 843]) AND (BP: diastolic reading = [1 - 843])
| [(Sys = [1 - 843]) AND (Dias = [1 - 843])]*

CHECK N23 (Hard) PULSE

CHECK: BP: systolic reading <= BP: diastolic reading [Sys <= Dias]

| Systolic reading must be greater than diastolic reading. Go back and amend.

END OF CHECK

END OF FILTER

END OF FILTER

*IF (Number of BP reading = [2, 3]) AND ((BP: First systolic reading < 844)
AND (BP: First diastolic reading < 844))
| (((I = [2, 3]) AND (Sys[I] < 844) AND (Dias[I] < 844)))*

*IF ((Previous systolic reading < 844) AND (Previous diastolic reading < 844))
| (((Sys[I-1] < 844) AND (Dias[I-1] < 844)))*

CHECK N24 (Soft) PULSE

CHECK: Absolute difference between two systolic readings >= 40
| [ABS (BPRead[I].Sys - BPRead[I-1].Sys) >= 40]

| The difference between the two systolic readings is equal to or more than 40mmHg. Please check you have entered the readings correctly.

END OF CHECK

CHECK N25 (Soft) PULSE

CHECK: Difference between two diastolic readings ≥ 30
[ABS (BPread[I].Dias - BPread[I-1].Dias) ≥ 30]

The difference between the two diastolic readings is equal to or more than 30mmHg. Please check you have entered the readings correctly.

END OF CHECK

END OF FILTER

END OF FILTER

IF Whether any difficulty with taking BP measurements = no problems (DifBPC = 1)

CHECK N26 (Hard) DIFBPC

CHECK: (difficulty with taking BP measurements = no difficulty) AND (difficulty with | taking BP measurements = at least one other answer) [DifBPC.CARDINAL $\neq 1$]

DifBPC: code 1 is exclusive for this question.

END OF CHECK

END OF FILTER

4 - GRIP STRENGTH MODULE (GS)

GRINT @

NURSE: Now follows the Grip Strength module.

Press <1> and <Enter> to continue.

Range: 1..1

MMGSWIL

Now I would like to assess the strength of your hand in a gripping action.

I will count up to three and then ask you to squeeze this handle as hard as you can, just for two or three seconds and then let go.

NURSE: Demonstrate.

READ OUT: I will take alternately three measurements from your right and your left hand.

Would you be willing to have your handgrip measured?

- 1 Yes
- 2 No
- 3 Unable to take measurement

IF Whether respondent is unwilling or unable to have grip strength measured [MMGSWil = [2, 3]]

MMGSWN @

NURSE: Give details why grip strength test not attempted.

String 60

END OF FILTER

IF Whether respondent is willing to have grip strength measured = Yes [MMGSWil = 1]

MMGSDOM

NURSE: ASK OR CODE : Which is your dominant hand?

- 1 Right hand
- 2 Left hand

MMGSSTA

Can I just check, have you had a recent hand injury or surgery to either hand within the last six months?

NURSE: If yes, do not attempt grip strength measure with affected hand(s).

If respondent cannot use hand(s) for this or any other reason, code below.

Record respondent status.

- 1 Respondent has the use of both hands
- 2 Respondent is unable to use [^left / right (dominant)] hand
- 3 Respondent is unable to use [^left / right (non-dominant)] hand
- 4 Respondent is unable to use either hand

END OF FILTER

*IF (Whether respondent is willing to have grip strength measured <> Yes) OR
(Whether respondent is able to use both, one or neither hands = Unable to use either)
[(MMGSWil <> 1) OR (MMGSSta = 4)]*

MMGSSTP @

NURSE: Stop test, no handgrip measurement to be taken.

Press <1> and <Enter> to continue with the next section.

Range: 1..1

END OF FILTER

IF Respondent is willing to have grip strength measured [MMGSWil = Yes]

MMGSINT @

NURSE: Position the respondent correctly.

Adjust gripometer to hand size by turning the lever and reset arrow at zero.

Explain the procedure once again.

Show the respondent how to do the test and let [^him / her] have a practice with one hand.

Press <1> and <Enter> to continue.

Range: 1..1

IF Whether respondent is able to use both, one or neither hands = [both, unable to use dominant] [MMGSSta = [1, 2]]

MMGSN1

NURSE: [^Left / Right (Non-dominant)] hand, first measurement.

Say: 'One, two, three, squeeze!'

Enter the result to the nearest whole value.

Range: 0..100

END OF FILTER

IF Whether respondent is able to use both, one or neither hands = [both, unable to use non-dominant] [MMGSSta = [1, 3]]

MMGSD1

NURSE: [^Left / Right (**Dominant**)] hand, **first** measurement.

Say: 'One, two, three, squeeze!'

Enter the result to the nearest whole value.

Range: 0..100

END OF FILTER

IF Whether respondent is able to use both, one or neither hands = [both, unable to use dominant] [MMGSSta = [1, 2]]

MMGSN2

NURSE: [^Left / Right (**Non-dominant**)] hand, **second** measurement.

Say: 'One, two, three, squeeze!'

Enter the result to the nearest whole value.

Range: 0..100

END OF FILTER

IF Whether respondent is able to use both, one or neither hands = [both, unable to use non-dominant] [MMGSSta = [1, 3]]

MMGSD2

NURSE: [^Left / Right (**Dominant**)] hand, **second** measurement.

Say: 'One, two, three, squeeze!'

Enter the result to the nearest whole value.

Range: 0..100

END OF FILTER

IF Whether respondent is able to use both, one or neither hands = [both, unable to

use dominant] [MMGSSta = [1, 2]]

MMGSN3

NURSE: [^Left / Right (**Non-dominant**)] hand, **third** measurement.

Say: 'One, two, three, squeeze!'

Enter the result to the nearest whole value.

Range: 0..100

END OF FILTER

IF Whether respondent is able to use both, one or neither hands = [both, unable to use non-dominant] [MMGSSta = [1, 3]]

MMGSD3

NURSE: [^Left / Right (**Dominant**)] hand, **third** measurement.

Say: 'One, two, three, squeeze!'

Enter the result to the nearest whole value.

Range: 0..100

END OF FILTER

MMGSTP

NURSE: Record respondent's position.

- 1 Standing without arm support
- 2 Sitting without arm support
- 3 Standing with arm support
- 4 Sitting with arm support

[CHECKS N27 - N38]

MMGSRES

NURSE CHECK: Code one only.

- 1 All measures obtained
- 2 Some measures obtained
- 3 No measures obtained

IF Number of grip strength measurements obtained = All [MMGSRes = 1]

MMGSPRX @

NURSE: Record any problems taking the grip strength measurement.

Press <Enter> if no problems encountered.

Press <Alt S> to close the text window and save your answer.

Open

ELSE IF Number of grip strength measurements obtained = [some, none] [MMGSRes = [2, 3]

MMGSPR

NURSE: Give reasons why no or only some measures were obtained.

CODE ALL THAT APPLY.

- 1 Respondent refusal
- 2 Respondent in pain in hand / joints / muscles
- 3 Equipment failure
- 95 Other (specify at next question)

[Code maximum 4 out of 4 possible responses]

Description	Variable	Archive
Respondent refusal	MMGSPrB1	Mmgsprre
Respondent in pain in hand / joints / muscles	MMGSPrB2	Mmgsprpa
Equipment failure	MMGSPrB3	mmgspreq
Other	MMGSPrB9	Mmgspr95 (previously archived as 'mmgsprot')

IF Reasons why no or only some measures obtained = Other [MMGSPrB = 95]

MMGSPRO @

NURSE: Give details of why no or only some measures obtained.

String 40

END OF FILTER

END OF FILTER

END OF FILTER

GS Module Checks

IF First measurement with dominant hand = RESPONSE [MMGSD1 = RESPONSE]

CHECK N27 (Soft) MMGSTP

CHECK: First measurement with dominant hand > 65 [MMGSD1 > 65]

NURSE: Are you sure? This reading (^MMGSD1: First measurement with dominant hand) is very high!

END OF CHECK

END OF FILTER

*IF Second measurement with dominant hand = RESPONSE
[MMGSD2 = RESPONSE]*

CHECK N28 (Soft) MMGSTP

CHECK: Second measurement with dominant hand > 65 [MMGSD2 > 65]

NURSE: Are you sure? This reading (^MMGSD2: Second measurement with dominant hand) is very high!

END OF CHECK

END OF FILTER

IF Third measurement with dominant hand = RESPONSE [MMGSD3 = RESPONSE]

CHECK N29 (Soft) MMGSTP

CHECK: Third measurement with dominant hand > 65 [MMGSD3 > 65]

NURSE: Are you sure? This reading (^MMGSD3: Third measurement with dominant hand) is very high!

END OF CHECK

END OF FILTER

IF First measurement with non-dominant hand = RESPONSE

[MMGSN1 = RESPONSE]

CHECK N30 (Soft) MMGSTP

CHECK: First measurement with non-dominant hand ≤ 65 [MMGSN1 ≤ 65]

NURSE: Are you sure? This reading (^MMGSN1: First measurement with non-dominant hand) is very high!

END OF CHECK

END OF FILTER

IF Second measurement with non-dominant hand = RESPONSE

[MMGSN2 = RESPONSE]

CHECK N31 (Soft) MMGSTP

CHECK: Second measurement with non-dominant hand ≤ 65 [MMGSN2 ≤ 65]

NURSE: Are you sure? This reading (^MMGSN2: Second measurement with non-dominant hand) is very high!

END OF CHECK

END OF FILTER

IF Third measurement with non-dominant hand = RESPONSE

[MMGSN3 = RESPONSE]

CHECK N32 (Soft) MMGSTP

CHECK: Third measurement with non-dominant hand > 65 [MMGSN3 > 65]

NURSE: Are you sure? This reading (^MMGSN3: Third measurement with non-dominant hand) is very high!

END OF CHECK

END OF FILTER

IF (Second measurement with dominant hand = RESPONSE) AND (First measurement with dominant hand = RESPONSE)

[(MMGSD2 = RESPONSE) AND (MMGSD1 = RESPONSE)]

CHECK N33 (Soft) MMGSTP

CHECK: ((First measurement with dominant hand - Second measurement with dominant hand) > 20) OR ((Second measurement with dominant hand - First measurement with dominant hand) > 20)
[[(MMGSD1 - MMGSD2) > 20] OR [(MMGSD2 - MMGSD1) > 20]]

NURSE: Please check you have entered the correct value!

END OF CHECK

END OF FILTER

IF (Third measurement with dominant hand = RESPONSE) AND (First measurement

with dominant hand = RESPONSE)
[[MMGSD3 = RESPONSE) AND (MMGSD1 = RESPONSE)]

CHECK N34 (Soft) MMGSTP

CHECK: ((First measurement with dominant hand - Third measurement with dominant hand) > 20) OR ((Third measurement with dominant hand - First measurement with dominant hand) >20)
[[((MMGSD1 - MMGSD3) > 20) OR ((MMGSD3 - MMGSD1) > 20)]

NURSE: Please check you have entered the correct value!

END OF CHECK

END OF FILTER

IF (Third measurement with dominant hand = RESPONSE) AND (Second measurement with dominant hand = RESPONSE)
[[MMGSD3 = RESPONSE) AND (MMGSD2 = RESPONSE)]

CHECK N35 (Soft) MMGSTP

CHECK: ((Second measurement with dominant hand - Third measurement with dominant hand) > 20) OR ((Third measurement with dominant hand - Second measurement with dominant hand) > 20)
[[((MMGSD2 - MMGSD3) > 20) OR ((MMGSD3 - MMGSD2) > 20)]

NURSE: Please check you have entered the correct value!

END OF CHECK

END OF FILTER

IF (Second measurement with non-dominant hand = RESPONSE) AND (First measurement with non-dominant hand = RESPONSE)
[[MMGSN2 = RESPONSE) AND (MMGSN1 = RESPONSE)]

CHECK N36 (Soft) MMGSTP

CHECK: ((First measurement with non-dominant hand - Second measurement with non-dominant hand) > 20) OR ((Second measurement with non-dominant hand - First measurement with non-dominant hand) >20)
[[((MMGSN1 - MMGSN2) > 20) OR ((MMGSN2 - MMGSN1) > 20)]

NURSE: Please check you have entered the correct value!

END OF CHECK

END OF FILTER

IF (Third measurement with non-dominant hand = RESPONSE) AND (First measurement with non-dominant hand = RESPONSE)
[[MMGSN3 = RESPONSE) AND (MMGSN1 = RESPONSE)]

CHECK N37 (Soft) MMGSTP

CHECK: ((First measurement with non-dominant hand - Third measurement with non-dominant hand) > 20) OR ((Third measurement with non-dominant hand - First measurement with non-dominant hand) >20)
[[((MMGSN1 - MMGSN3) > 20) OR ((MMGSN3 - MMGSN1) > 20)]

NURSE: Please check you have entered the correct value!

END OF CHECK

END OF FILTER

*IF (Third measurement with non-dominant hand = RESPONSE) AND (Second measurement with non-dominant hand = RESPONSE)
[(MMGSN3 = RESPONSE) AND (MMGSN2 = RESPONSE)]*

CHECK N38 (Soft) MMGSTP

CHECK: ((Second measurement with non-dominant hand - Third measurement with non-dominant hand) > 20) OR ((Third measurement with non-dominant hand - Second measurement with non-dominant hand) > 20)
[((MMGSN2 - MMGSN3) > 20) OR ((MMGSN3 - MMGSN2) > 20)]

NURSE: Please check you have entered the correct value!

END OF CHECK

END OF FILTER

5 - BLOOD SAMPLE MODULE³ (BS)

BLINTRO @

NURSE: Now follows the Blood Sample module.

Press <1> and <Enter> to continue.

Range: 1..1

CLOTB

NURSE: The next part of my visit is a blood sample. Before I can take blood, I need to ask you a couple of questions and then I will explain what is involved. READ OUT: May I just check, do you have a clotting or bleeding disorder or are you currently on anti-coagulant drugs such as Warfarin or other blood thinning drugs?

(NURSE: Aspirin or other antiplatelet therapy is not a contraindication for blood sample. If in doubt press F9 to check list of anticoagulant / antiplatelet drugs).

HELP <F9> DO NOT TAKE A BLOOD SAMPLE IF RESPONDENT IS TAKING: Warfarin Sinthrome (Acenocoumarol) Phenindione Pradaxa (Dabigatran Etexilate) Xareloto (Rivaroxaban).

TAKE A BLOOD SAMPLE IF RESPONDENT IS TAKING: Aspirin (Caprin; Nu-Seals) Flamasacard Clopidogrel (Plavix) Dipyridamole (Persantin, Persantin Retard, Asasantin Retard) Prasugrel (Efient) Eptifibatide (Inteligrin) Tirofiban (Aggrastat) PRESS <Esc> TO CLOSE.

- 1 Yes
- 2 No

[CHECK N39]

IF Whether has a clotting disorder = No [ClotB = 2]

FIT

May I just check, have you ever had a fit (including epileptic fit or convulsion)?

- 1 Yes
- 2 No

END OF FILTER

IF Whether ever had a fit = No [Fit = 2]

BSWILL

Would you be willing to have a blood sample taken?

- 1 Yes
- 2 No
- 3 Unable to

[Don't Know and Refusal are not allowed]

IF Whether is willing to give blood sample = Yes [BSWill = 1]

IF respondent's age < 80 [PAge < 80]

FASTASK

NURSE: Did you ask the respondent to fast?

- 1 Yes
- 2 No, advised respondent was not safe to fast
- 3 Did not contact respondent prior to visit

Computed: IF respondent's age = 80 or over, FASTASK = No [over 80 year olds are not asked to fast]

³ This module documents the administration of the blood samples. For a list of the Wave 8 blood assays and their archived variable names, please see table 1 in Appendix A of this documentation and the ELSA Nurse User Guide ([Waves 2,4,6,8 Nurse Data User Guide](#)).

IF Whether respondent was asked to fast = [Yes or Did not contact prior to visit] [FastAsk = 1 or 3]

DATELEAT @

When did you last have anything to eat or drink (excluding water)?

NURSE: Enter the date (dd / mm / yyyy).

Enter the time at a later question.

[Don't Know and Refusal are not allowed]

IF Date when last had anything to eat or drink = RESPONSE [DateLEat = RESPONSE]

[CHECKS N40 – N41]

IF Date when last had anything to eat or drink = Date at start of Blood module

[DateLEat = BIDate]

DLEATC1@

NURSE: It seems that the respondent last ate ^whenate. Is this correct?

- 1 Yes
- 2 No

IF Whether time when respondent last ate is correct = No [Dleatc1 = 2]

DLEATC2@

NURSE: Please enter when the respondent last ate.

- 1 Today
- 2 Yesterday
- 3 Other answer (explain in a note)

END OF FILTER

IF (Date last ate = Date at start of Blood module AND Whether time when respondent last ate is correct = Yes) Or (Day last ate [if computer derivation incorrect] = Today) [(DateLEat = BIDate AND Dleatc1 = 1) Or (Dleatc2 = 1)]

TIMELEAT @

NURSE: Enter the time in hours and minutes using the 24 hour clock (e.g. 17:30).

[Don't Know and Refusal are not allowed]

END OF FILTER

IF Time last ate = RESPONSE [TimeLEat = RESPONSE]

[CHECK N42]

IF Time last ate is before or at Time at start of Blood module [TimeLEat <= BITime]

CHKDRK@

Have you been drinking water during this time?

- 1 Yes
- 2 No

[Don't Know and Refusal are not allowed]

IF Time last ate is before or at Time at start of blood module [TimeLEat <= BITime]

TLEATC1@

NURSE: It seems that the respondent last ate ^TimeAgo. Is this

correct?

1 Yes

2 No

[Don't Know and Refusal are not allowed]

END OF FILTER

END OF FILTER

IF (Nurse check when respondent last ate = No) OR (Time last ate is after Time at start of blood module) [(Tleatc1 = 2) OR (TimeLEat > BTime)]

TLEATC2@

NURSE: Did the respondent eat less than 5 hours ago?

1 Yes

2 No

[Don't Know and Refusal are not allowed]

IF (Whether last ate less than 5 hours ago = No) [Tleatc2 = 2]

TLEATC3@

NURSE: Did the respondent eat less than 8 hours ago?

1 Yes

2 No

[Don't Know and Refusal are not allowed]

END OF FILTER

END OF FILTER

IF ((Time last ate is more than 5 hours before Time at start of blood module) AND (Nurse check when respondent last ate = Yes)) OR (Whether last ate less than 5 hours ago = No) [((TimeLEat + 5hrs < BTime) AND (Tleatc1 = 1)) OR (Tleatc2 = 2)]

LIGHTEAT

What did you have to eat?

NURSE: Only code 1 below if the respondent has followed the instructions on the appointment record card, that is either:

Afternoon appointment - a light breakfast only

Evening appointment - a light lunch and/or their usual breakfast only

1 EITHER light breakfast OR light lunch &/ usual breakfast

2 Anything else (specify at next question)

IF Type of meal last eaten = Other [LightEa = 2]

WHATEAT

Did you have...

1 ...a drink only

2 ...a piece of fruit only

3 ...a snack, such as a sandwich or crisps or a snack bar or biscuit or bar of chocolate only

4 ...or a meal?

END OF FILTER

END OF FILTER

END OF FILTER

END OF FILTER

END OF FILTER

END OF FILTER

END OF FILTER

FASTELIG

Computed: Whether eligible for a fasting sample? Based on when and what last ate

1 Yes

2 No

Compute: FASTELIG: Yes IF last ate before day of appointment, or ate on the day of the appointment but more than five hours before Time at start of blood module and (only ate according to fasting instructions, or had only a drink or fruit in addition)

[[((DateLEat < BDate) OR (LightEa = 1) OR (WhatEat = [1, 2]))]]

Otherwise: FASTELIG: No

BLREADY @

NURSE: This respondent can give a blood sample now.

Remember to complete the Consent Forms.

Press <1> and <Enter> to continue.

Range: 1..1

BSCONS @

NURSE: Explain need for written consent:

'Before I can take any blood, I have to obtain written consent from you.'

Press <1> and <Enter> to continue.

Range: 1..1

CODE03 @

NURSE: Ask the respondent to read and initial 'Blood Sample Consent part 1', on page 3 of the Consent Booklet. Explain the need for written consent and ask the respondent to print name, sign and date the Consent Form in the spaces provided at the bottom of page 4 of the Consent Booklet (if not done already).

Nurse: Print your name, sign and date in the spaces provided at the bottom of page 54 of the Consent Booklet.

- Circle consent code **03** on front of the Consent Booklet.

Press <1> and <Enter> to continue.

IF Whether respondent registered with GP <> RESPONSE [GPreGB <> RESPONSE]

GPSAM @

NURSE CHECK:

1 Respondent registered with GP

2 Respondent not registered with GP

END OF FILTER

IF (Whether respondent registered with GP = Yes) OR (Whether respondent registered with GP = Registered) [[(GPreGB = 1 OR GPSam = 1)]

SENDSAM @

May we send the results of your blood sample analysis to your GP?

1 Yes

2 No

[Don't Know and Refusal are not allowed]

IF Whether results of blood sample analysis may be sent to GP = Yes

[SendSam = 1]

BSSIGN @

NURSE: Ask the respondent to read and initial 'Blood Sample Consent part 2', on page 3 of the Consent Booklet. Explain the need for written consent and ask the respondent to print name, sign and date the Consent Form in the spaces provided at the bottom of page 4 of the Consent Booklet (if not done already).

Nurse: Print your name, sign and date in the spaces provided at the bottom of page 4 of the Consent Booklet.

- Circle consent code **05** on front of the Consent Booklet.

Press <1> and <Enter> to continue.

ELSE IF Whether results of blood sample analysis may be sent to GP = No [SendSam = 2]

SENSAM @

Why do you not want your blood sample results sent to your GP?

- 1 Hardly / never sees GP
- 2 GP recently took blood sample
- 3 Does not want to bother GP
- 4 Other

[Code maximum 4 out of 4 possible responses]

IF Reason why respondent does not want blood results sent to their GP = Other

[SenSam = 4])

OTHSAM @

NURSE: Give full details of reason(s) for not wanting results sent to GP.

String 140

END OF FILTER

END OF FILTER

END OF FILTER

IF (Whether respondent registered with GP = Not registered) OR (Whether results of blood sample analysis may be sent to GP = No) [(GPSam = 2) OR (SendSam = 2)]

CODE06 @

NURSE: Circle consent code **06** on front of the Consent Booklet.

Press <1> and <Enter> to continue.

Range: 1..1

END OF FILTER

CONSTORB @

May we have your consent to store any remaining blood for future analysis?

- 1 Storage consent given
- 2 Consent refused

[Don't Know and Refusal are not allowed]

IF Whether consent granted for storing blood for future analysis = Yes [ConStorB = 1]

CODE09 @

NURSE: Ask the respondent to read and initial 'Blood Sample Consent part 3', on page 4 of the Consent Booklet. Explain the need for written consent and ask the respondent to print name, sign and date the Consent Form in the spaces provided at the bottom of page 4 of the Consent Booklet (if not done already).

Nurse: Print your name, sign and date in the spaces provided at the bottom of page 5 of the Consent Booklet.

- Circle consent code **09** on front of the Consent Booklet.

Press <1> and <Enter> to continue.

ELSE IF Whether consent granted for storing blood for future analysis = No [ConStorB = 2]

CODE10 @

NURSE: Circle consent code **10** on front of the Consent Booklet.

Press <1> and <Enter> to continue.

Range: 1..1

END OF FILTER

ConsPAX

May we have your consent to extract the PAXgene from your blood sample and store this for future analysis?

Do you have any questions about this?

NURSE: Answer any questions by referring to the nurse leaflet and your project instructions.

1. PAXgene consent given
2. Consent refused

IF consents to PAXGene [ConsPAX=1]

Code11 @

NURSE: Ask the respondent to read and initial 'blood sample consent – PAXgene', on page 4 of the Consent Booklet.

Explain the need for written consent and ask the respondent to print name, sign and date the Consent Form in the spaces provided at the bottom of page 4 of the Consent Booklet (if not done already).

Nurse: Print your name, sign and date in the spaces provided at the bottom of page 4 of the Consent Booklet.

- Circle consent code **11** on front of the Consent Booklet.

Press <1> and <Enter> to continue."

Range: 1..1

ELSE IF no consent to PAXGene [ConsPAX=2]

Code12 @

NURSE: Circle consent code **12** on front of the Consent Booklet.

Press <1> and <Enter> to continue.

Range: 1..1

END OF FILTER

TAKESA1 @

NURSE:

- Check that the respondent has initialled all applicable boxes.

Take the samples in order of priority:

First, only if using a butterfly needle, 3ml clear top Discard tube

Then the 1.8ml citrate tube (blue)

then the 6ml plain tube (red)

[^BLANK / then the 2ml fluoride tube (grey)]

[^then] the 2ml EDTA tube (light purple)

[IF ConsPAX = Yes]: ^Finally 2.5ml PAXgene TUBE (red top)].

Press <1> and <Enter> to continue.

Range: 1..1

TAKESA2 @

NURSE:

- Check that you have the correct sheet of barcode labels for the respondent.
- Check with respondent their name and date of birth on the label sheet.
- Stick one barcode label on each tube.

Press <1> and <Enter> to continue.

Range: 1..1

SAMPF1 @

NURSE: Code if the plain **red** tube was filled (include partially filled tube):

- 1 Yes
- 2 No

[Don't Know and Refusal are not allowed]

SAMPF2 @

NURSE: Code if the citrate **blue** tube was filled (include partially filled tube):

- 1 Yes
- 2 No

[Don't Know and Refusal are not allowed]

IF Whether eligible for a fasting sample based on when and what last ate = Yes [FastElig = 1]

SAMPF3 @

NURSE: Code if the fluoride **grey** tube was filled (include partially filled tube):

- 1 Yes
- 2 No

[Don't Know and Refusal are not allowed]

END OF FILTER

SAMPF4 @

NURSE: Code if the 2ml EDTA **LIGHT purple** tube was filled (include partially filled tube):

- 1 Yes
- 2 No

[Don't Know and Refusal are not allowed]

IF consents to PAXGene [ConsPAX=1]

SampF7 @

NURSE: Code if the 2.5ml PAXgene **RED top** tube was filled (include partially filled tube):

- 1. Yes, completely filled (2.5ml)
- 2. Yes, partially filled
- 3. No

END OF FILTER

SampTak

Computed: Whether a blood sample was obtained

- 1 Yes
- 2 No

Compute SampTak = Yes: IF((SAMPF1 = 1) OR (SAMPF2 = 1) OR (SAMPF3 = 1) OR (SAMPF4 = 1) | | OR (SAMPF7 = 1))

IF Blood sample outcome (computed) = Sample obtained [SampTak = 1]

SAMPARM @

NURSE: Code from which arm the blood was taken.

- 1 Right arm
 - 2 Left arm
- [Don't Know and Refusal are not allowed]

SAMDIF

NURSE: Record any problems in taking blood sample.
CODE ALL THAT APPLY.

- 1 No problem
- 2 Incomplete sample
- 3 Collapsing / poor veins
- 4 Second attempt necessary
- 5 Some blood obtained, but respondent felt faint/fainted
- 6 Unable to use tourniquet
- 7 Other (specify at next question)

[Code maximum 6 out of 7 possible responses]

Description	Variable	Archive
No problem	SamDifC1	samdifno
Incomplete sample	SamDifC2	samdifin
Collapsing / poor veins	SamDifC3	samdifve
Second attempt necessary	SamDifC4	samdifse
Some blood obtained, but respondent felt faint/fainted	SamDifC5	samdiffa
Unable to use tourniquet	SamDifC6	samdifto
Other (specify)	SamDifC7	samdif95 (previously archived as 'samdifot')

[CHECKS N43 - N44]

IF (Problems taking blood sample = Other [SamDifC = 7]

OTHBDIF @

NURSE: Give full details of other problem(s) in taking blood sample.

String 140

END OF FILTER

IF Whether eligible for a fasting sample based on when and what last ate = Yes [FastElig = 1]

BREAKFAST @

Press <1> and <Enter> to continue. [At previous waves, nurse encouraged respondents to eat at this point before taking further physical measures not included at W8.]

Range: 1..1

END OF FILTER

SNDRSAM @

Would you like to be sent the results of your blood sample analysis?

- 1 Yes
- 2 No

[Don't Know and Refusal are not allowed]

IF Whether respondent would like to be sent the results of the analysis = Yes [SnDrSam = 1]

CODE07 @

NURSE: Circle consent **code 07** on front of the Consent Booklet.

Press <1> and <Enter> to continue.

Range: 1..1

ELSE IF Whether respondent would like to be sent the results of the analysis = No [SnDrSam = 2]

CODE08 @

NURSE: Circle consent **code 08** on front of the Consent Booklet.

Press <1> and <Enter> to continue.

Range: 1..1

END OF FILTER

ELSE IF Blood sample outcome (derived) = Sample not obtained [SampTak = 2]

NOBSM

NURSE: Code reason(s) no blood obtained.

CODE ALL THAT APPLY.

- 1 No suitable or no palpable vein / collapsed veins
- 2 Respondent was too anxious / nervous
- 3 Respondent felt faint / fainted
- 4 Other

[Code maximum 4 out of 4 possible responses]

Description	Variable	Archive
No suitable or no palpable vein / collapsed veins	NoBSM1	nobsmsv
Respondent was too anxious / nervous	NoBSM2	nobsmup
Respondent felt faint / fainted	NoBSM3	nobsmfa
Other	NoBSM4	nobsm95 (previously archived as 'nobsmot')

IF (Reasons for not obtaining blood sample = Other) [NoBSM = 4]

OTHNOBSM @

NURSE: Give full details of reason(s) no blood obtained.

String 140

END OF FILTER

CODE10A @

NURSE: Cross out consent codes **03, 05, 07, 09, and 11** if already circled on the front of the Consent Booklet.

Replace with consent codes **04, 06, 08, 10, and 12** on the front of the Consent Booklet.

Press <1> and <Enter> to continue.

Range: 1..1

END OF FILTER

ELSE IF Whether is willing to give blood sample = No [BSWill = 2]

REFBSC

NURSE: Record why blood sample refused.

CODE ALL THAT APPLY.

- 1 Previous difficulties with venepuncture
- 2 Dislike / fear of needles
- 3 Respondent recently had blood test / health check
- 4 Refused because of current illness

- 5 Worried about HIV or AIDS
- 6 Other

[Code maximum 6 out of 6 possible responses]

Description	Variable	Archive
Previous difficulties with venepuncture	RefBSC1	refbscdi
Dislike / fear of needles	RefBSC2	refbscne
Respondent recently had blood test / health check	RefBSC3	refbscte
Refused because of current illness	RefBSC4	refbscil
Worried about HIV or AIDS	RefBSC5	refbschi
Other	RefBSC6	refbsc95 (previously archived as 'refbscot')

IF (Reason why blood sample refused = Other [RefBSC = 6]

OTHREFBS @

NURSE: Give full details of other reason(s) for refusing blood sample.
String 135

END OF FILTER

END OF FILTER

END OF FILTER

*IF((Whether has a clotting disorder = [Yes, NONRESPONSE]) OR (Whether ever had a fit = [Yes, NONRESPONSE]) OR (Whether is willing to give blood sample = No))
[[ClotB = [1, NONRESPONSE] OR (Fit = [1, NONRESPONSE]) OR (BSWill = 2)]]*

NOCODES @

NURSE: No blood to be taken.

Circle consent codes **04, 06, 08, 10, and 12** on the front of the Consent Booklet.

Press <1> and <Enter> to continue.

Range: 1..1

END OF FILTER

BS Module Checks

CHECK N39 (Soft) CLOTB

CHECK: Blood sample: whether has a clotting disorder = Yes [ClotB = 1]

NURSE: You have coded that the respondent has a clotting / bleeding disorder or is taking anti-coagulant drugs. This means that no blood is to be taken.

Is this correct?

If yes suppress this warning and continue. If no, go back and code 2.

END OF CHECK

CHECK N40 (Hard) DATELEAT

CHECK: date when last had anything to eat or drink > date at start of Blood module [DateLEat > BDate]

Please check, you have entered a future date.

END OF CHECK

CHECK N41 (Soft) DATELEAT

CHECK: date when last had anything to eat or drink > two days before date at start of Blood module [DateLEat < (BIDate-(0, 0, 2))]

Please check, that is more than 24 hours ago.

If respondent has not eaten/drunk anything in the last 24 hours please explain in a note.

END OF CHECK

CHECK N42 (Soft) TIMELEAT@

CHECK: time when last had anything to eat or drink <= time at start of Blood module [TimeLEat <= BITime]

Please check, you seem to have entered a future time.

If time is correct please explain in a note why this has occurred.

END OF CHECK

IF ((Whether citrate blue tube was filled = No) OR (Whether plain red tube was filled = No) OR (Whether fluoride grey tube was filled = No) OR (Whether (first) EDTA purple tube was filled = No) OR (Whether second EDTA purple tube was filled = No) OR (Whether third EDTA purple tube was filled = No))

[((SampF1 = 2) OR (SampF2 = 2) OR (SampF3 = 2) OR (SampF4 = 2) OR (SampF5 = 2) OR (SampF6 = 2))]

CHECK N43 (Soft) SAMDIF

CHECK: Whether any problems in taking sample = no problem [(SamDifC = 1)]

You should not code 'No problems' as you did not fill all six tubes.

Please amend or explain in a note <Ctrl M>.

END OF CHECK

END OF FILTER

CHECK N44 (Hard) SAMDIF

CHECK: (Whether any problems in taking sample = no problem) AND (Whether any problems in taking sample = at least one other answer)

[SamDifC.CARDINAL <> 1]

If code 1 'No problem' is used then no other codes are allowed.

END OF CHECK

Venepuncture Checklist (paradata)

IF attempted to take blood AND not mentioned "No suitable or palpable vein/collapsed vein" OR "Anxious" as reason for not taking blood) [TakeSa = 1 and (NOBSM <> 1 And NOBSM <> 2)]

VPSYS⁴ @

⁴ Between June and December 2016 an average of 16.0% of citrate tubes used for CFIB analysis were insufficiently filled to be able to conduct analysis. This under-filling was found to be considerably more prevalent when butterfly needles were used to collect the sample. From January 2018 nurses were asked to take and

NURSE: Which system did you use to take blood?

- 1 Vacutainer needle
- 2 Butterfly needle

VPHAND @

NURSE: Was the respondent left handed or right handed?

- 1 Left handed
- 2 Right handed

VPARM @

NURSE: Which arm did you use to take blood?

- 1 The right arm
- 2 The left arm
- 3 Both arms

VPSKIN @

NURSE: Code the skin condition of the arm used.

- 1 Skin intact
- 2 Skin not intact

VPALCO @

NURSE: Did you use an alcohol wipe?

- 1 Yes
- 2 No - water-based wipe used
- 3 No wipe used

IF no alcohol wipe used [VPALCO = 2 or 3]

VPALCONO @

NURSE: Why was alcohol wipe not used?

OPEN

END OF FILTER

VPSAM @

NURSE: Code the number of attempts made to take blood.

- 1 Sample taken on first attempt
- 2 Sample taken on second attempt
- 3 Both attempts failed
- 4 First attempt failed, did not make second attempt

VPPRESS @

NURSE: Code who applied pressure to the puncture site.
CODE ALL THAT APPLY.

- 1 Nurse,
- 2 Respondent
- 3 Partner or spouse

VPSENS @

NURSE: Was the respondent sensitive to the tape or plaster?

- 1 Sensitive to tape/plaster
- 2 Not sensitive to tape/plaster
- 3 Did not check

VPPROB @

discard a small sample of blood before the citrate tube when using a butterfly needle. Between January and May 2017 an average of 6.5% of citrate tubes were under-filled.

NURSE: Was there any abnormality noted after 5 minutes?
Please remember to recheck the site after completion of the blood sample module.
CODE ALL THAT APPLY.

- 1 Sensory deficit
- 2 Haematoma
- 3 Swelling
- 4 Other (describe at next question)
- 5 None

IF Other Abnormality noted after 5 minutes [VpProb=OTHER]

VPOTHER @

NURSE: Record the details of the other abnormality fully.

STRING: 135

END OF FILTER

IF Any Abnormality noted after 5 minutes [VPPROB = VPPROB <> None]

VPDETAIL @

NURSE: You have coded that an abnormality was noted after 5 minutes.
Please record the action you took when you noticed this.

OPEN

END OF FILTER

VPCHECK @

NURSE: Did you re-check the puncture site after completion of the blood sample module?

- 1 Yes, site was re-checked
- 2 No, site was not re-checked

END OF FILTER

6 - NUMBER SERIES MODULE (FLUID INTELLIGENCE/ COGNITIVE FUNCTION) (CF)

CF200PRE @

In the next section of the interview, we will do a task that looks at number sequences.

You may remember doing some memory and concentration tasks in your ELSA interview, and this task will be similar to those.

The task is designed so that no-one gets the highest score possible. Please just do the best you can.

NURSE: BEFORE STARTING THE TEST, MAKE SURE RESPONDENT HAS GLASSES ETC IF NEEDED.

Press <1> and <Enter> to continue.

CF200PRE

Next I'm going to read you several numbers and I'd like you to write them down from left to right.

There will be a blank number in the series that I read to you. Draw a dash or short blank line when I say 'blank'.

Then look at the series of numbers, and based on the pattern of numbers tell me what number goes in the blank. Sometimes the blank will be at the end of the series, and sometimes the blank will be in the middle.

NURSE: MAKE SURE RESPONDENT HAS PENCIL AND PAPER READY FOR WRITING DOWN THE NUMBERS.

REPEAT INSTRUCTIONS FOR THE RESPONDENT IF NECESSARY.

ALLOW ENOUGH TIME WHEN READING NUMBERS FOR RESPONDENT TO WRITE DOWN SEQUENCE.

For example, if I said the numbers '2. . . 4. . . 6. . . BLANK' then what number would go in the blank?

CORRECT RESPONSE: 8

NURSE: IF RESPONDENT DOES NOT GIVE THE CORRECT RESPONSE (8) THEN SAY:

THE NUMBER 8 GOES IN THE BLANK BECAUSE THE CORRECT ORDER IS 2 4 6 8.

PROBE TO CHECK THAT THE RESPONDENT UNDERSTANDS TASK.

01 Correct

05 Incorrect

06 Respondent doesn't understand instructions

IF example1 = Incorrect, Respondent doesn't understand instructions OR example1 = DK

[(CF200pre =5,6) OR (CF200pre = DK)]

CF240

Let's try another one. I'm going to read you a series of numbers. There will be a blank number in the series that I read to you. I would like you to write down the numbers from left to right and then tell me what number goes in the blank based on the pattern of numbers.

1. . . 2. . . BLANK. . . 4

CORRECT RESPONSE: 3

IF THE RESPONDENT SAYS THEY DO NOT KNOW THE ANSWER, RECORD 'DON'T KNOW' (CTRL-K). IF RESPONDENT IS UNABLE TO UNDERSTAND HOW TO DO THE TEST, CODE 6, RATHER THAN (CTRL-K)

01 Correct

05 Incorrect

06 Respondent doesn't understand instructions

IF example2 = Incorrect, Respondent doesn't understand instructions OR example2=DK

[(CF240 =Incorrect,DoesntUndInstruct) OR (CF240=DK)]

CF241

The correct answer is 3.

NURSE: PROBE TO CHECK THAT THE RESPONDENT UNDERSTANDS THE TASK

01 Continue

05 Respondent seems confused or does not understand task

END OF FILTER

END OF FILTER

IF example 1 = Correct OR example2 = Correct or check respondent understands task = continue
[(CF200pre = Correct) OR (CF240 = Correct) OR (CF241 = Cont)]

CF242

I am now going to ask you six more questions like the one you just did.

Sometimes the blank will be at the end of the series, and sometimes it may be at the beginning or in the middle.

You may be asked a question with more than one blank in the sequence.

The numbers might increase, like 2, 4, 6, or decrease, like 6, 4, 2.

Some of the problems may be easy but others may be hard. Just do the best you can.

It is more important to answer the item correctly than to answer quickly, so take a little time to think before answering. It is okay if you do not know the answer because some of the items are intended to be very difficult.

You can go on to the next item at any time. Are you ready to begin?

NURSE: MAKE SURE RESPONDENT HAS PENCIL AND PAPER READY FOR WRITING DOWN THE | NUMBERS.

REPEAT INSTRUCTIONS IF NECESSARY.

PERMIT AS MUCH TIME AS RESPONDENT WISHES FOR EACH QUESTION. IF

THE RESPONDENT HAS NOT GIVEN AN ANSWER AFTER ABOUT A MINUTE,

ASK: 'WOULD YOU JUST LIKE TO GO ON TO THE NEXT QUESTION?

Press <1> and <Enter> to continue.

END OF FILTER

CFFIRND @

Random number for group of fluid intelligence questions

1..2

IF ready to begin = continue [CF242 = Cont]

IF automatically generated random number =1 [CFFIRnd = 1]

CF201G1

Please write down the following numbers from left to right: 8 . . . BLANK . . . 12 . . . 14.

Now look at the numbers that you just wrote down and tell me the number that belongs in the blank.

NURSE: DO NOT PROVIDE FURTHER PROMPTS, AND DO NOT GIVE THE CORRECT ANSWER OR TELL THE RESPONDENT IF HIS OR HER ANSWER IS CORRECT. IF THE RESPONDENT SAYS THEY DO NOT KNOW THE ANSWER, RECORD CTRL-K. DO NOT RECORD A DON'T KNOW RESPONSE AS UNABLE TO DO.

01 Correct answer 10

02 Incorrect answer

03 Unable to do any of these tests

IF CF201G1 = answered [(CF201g1 = DK) OR (CF201g1 =Correct,Incorrect)]

CF202H1

Next, please write down the following numbers: 23 . . . 26 . . . 30 . . 35 . . . BLANK.

(Now look at the numbers that you just wrote down and tell me the number that belongs in the blank.

NURSE: DO NOT PROVIDE FURTHER PROMPTS, AND DO NOT GIVE

THE CORRECT ANSWER OR TELL THE RESPONDENT IF HIS OR HER ANSWER IS CORRECT. CORRECT RESPONSE: 41

01 Correct answer 41

02 Incorrect answer

IF CF202H1= answered [(CF202h1 = RESPONSE) OR (CF202h1 = DK)]

CF20311

Next, please write down the following numbers: 18 . . 17 . . . 15 . . . BLANK . . . 8.
Now look at the numbers that you just wrote down and tell me the number that belongs in the blank.

NURSE: DO NOT PROVIDE FURTHER PROMPTS, AND DO NOT GIVE THE CORRECT ANSWER OR TELL THE RESPONDENT IF HIS OR HER ANSWER IS CORRECT. CORRECT RESPONSE: 12

01 Correct answer 12

02 Incorrect answer

CF216c @

Computed: Number of correct answers in question set 1 so far (CF201g1, CF202H1, CF20311)

Range: 0..97

IF question set 1 = no questions answered correctly [CF216c = 0]

CF204A1

Next, please write down the following numbers: 6 . . . 7 . . . BLANK . . . 9.
Now look at the numbers that you just wrote down and tell me the number that belongs in the blank.

NURSE: DO NOT PROVIDE FURTHER PROMPTS, AND DO NOT GIVE THE CORRECT ANSWER OR TELL THE RESPONDENT IF HIS OR HER ANSWER IS CORRECT. CORRECT RESPONSE: 8

01 Correct answer 8

02 Incorrect answer

IF CF204a1 = answered [(CF204a1 = RESPONSE) OR (CF204a1 = DK)]

CF205B1

Next, please write down the following numbers: 6 . . . BLANK . . . 4 . . . 3.
Now look at the numbers that you just wrote down and tell me the number that belongs in the blank.

NURSE: DO NOT PROVIDE FURTHER PROMPTS, AND DO NOT GIVE THE CORRECT ANSWER OR TELL THE RESPONDENT IF HIS OR HER ANSWER IS CORRECT. CORRECT RESPONSE: 5

01 Correct answer 5

02 Incorrect answer

IF CF205b1 = answered [(CF205b1 = RESPONSE) OR (CF205b1 = DK)]

CF206C1

Next, please write down the following numbers: 5 . . . 8 . . . 11 . . . BLANK.
Now look at the numbers that you just wrote down and tell me the number that belongs in the blank.

NURSE: DO NOT PROVIDE FURTHER PROMPTS, AND DO NOT GIVE THE CORRECT ANSWER OR TELL THE RESPONDENT IF HIS OR HER ANSWER IS

CORRECT. CORRECT RESPONSE: 14

01 Correct answer 14

02 Incorrect answer

END OF FILTER

END OF FILTER

ELSE IF question set 1 = one question answered correctly [CF216c = 1]

CF207D1

Next, please write down the following numbers: BLANK . . . 4 . . . 6 . . . 8.
Now look at the numbers that you just wrote down and tell me the number that belongs in the blank.

NURSE: DO NOT PROVIDE FURTHER PROMPTS, AND DO NOT GIVE THE CORRECT ANSWER OR TELL THE RESPONDENT IF HIS OR HER ANSWER IS CORRECT. CORRECT RESPONSE: 2

01 Correct answer 2

02 Incorrect answer

IF CF207D1 = answered [(CF207d1 = RESPONSE) OR (CF207d1 = DK)]

CF208E1

Next, please write down the following numbers: 1 . . . 3 . . . 3 . . . 5 . . . 7 . . . 7 . . . BLANK.

Now look at the numbers that you just wrote down and tell me the number that belongs in the blank.

NURSE: DO NOT PROVIDE FURTHER PROMPTS, AND DO NOT GIVE THE CORRECT ANSWER OR TELL THE RESPONDENT IF HIS OR HER ANSWER IS CORRECT. CORRECT RESPONSE: 9

01 Correct answer 9

02 Incorrect answer

IF CF208E1 = answered [(CF208e1 = RESPONSE) OR (CF208e1 = DK)]

CF209F1

Next, please write down the following numbers: 18 . . . 10 . . . 6 . . . BLANK . . . 3.

Now look at the numbers that you just wrote down and tell me the number that belongs in the blank.

NURSE: DO NOT PROVIDE FURTHER PROMPTS, AND DO NOT GIVE THE CORRECT ANSWER OR TELL THE RESPONDENT IF HIS OR HER ANSWER IS CORRECT. CORRECT RESPONSE: 4

01 Correct answer 4

02 Incorrect answer

END OF FILTER

END OF FILTER

ELSE IF question set 1 = two questions answered correctly [CF216c = 2]

CF210J1

Next, please write down the following numbers: 17 . . . BLANK . . . 12 . . . 8
Now look at the numbers that you just wrote down and tell me the number that belongs in the blank.

NURSE: DO NOT PROVIDE FURTHER PROMPTS, AND DO NOT GIVE THE CORRECT ANSWER OR TELL THE RESPONDENT IF HIS OR HER ANSWER IS CORRECT. CORRECT RESPONSE: 15

01 Correct answer 15

02 Incorrect answer

IF CF210J1 = answered [(CF210j1 = RESPONSE) OR (CF210j1 = DK)]

CF211K1

Next, please write down the following numbers: 10 ... BLANK ... 3 ...
1 .

Now look at the numbers that you just wrote down and tell me the number that belongs in the blank.

NURSE: DO NOT PROVIDE FURTHER PROMPTS, AND DO NOT GIVE THE CORRECT ANSWER OR TELL THE RESPONDENT IF HIS OR HER ANSWER IS CORRECT. CORRECT RESPONSE: 6

01 Correct answer 6

02 Incorrect answer

IF CF211K1 = answered [(CF211k1 = RESPONSE) OR (CF211k1 = DK)]

CF212L1

Next, please write down the following numbers: 17 ... 16 ... 14 ... 10 ...
. BLANK . Now look at the numbers that you just wrote down and tell me the number that belongs in the blank.

NURSE: DO NOT PROVIDE FURTHER PROMPTS, AND DO NOT GIVE THE CORRECT ANSWER OR TELL THE RESPONDENT IF HIS OR HER ANSWER IS CORRECT. CORRECT RESPONSE: 2 OR 3

01 Correct answer, either 2 or 3

02 Incorrect answer

END OF FILTER

END OF FILTER

ELSEIF question set 1 = three questions answered correctly [CF216c = 3]

CF213M1

Next, please write down the following numbers: BLANK ... 20 ... 26 ... 38
... 62

Now look at the numbers that you just wrote down and tell me the number that belongs in the blank.

NURSE: DO NOT PROVIDE FURTHER PROMPTS, AND DO NOT GIVE THE CORRECT ANSWER OR TELL THE RESPONDENT IF HIS OR HER ANSWER IS CORRECT. CORRECT RESPONSE: 17

01 Correct answer 17

02 Incorrect answer

IF CF213M1 = answered [(CF213m1 = RESPONSE) OR (CF213m1 = DK)]

CF214N1

Next, please write down the following numbers: 5 ... BLANK ... 11 ...
19 ... 35 .

Now look at the numbers that you just wrote down and tell me the number that belongs in the blank.

NURSE: DO NOT PROVIDE FURTHER PROMPTS, AND DO NOT GIVE THE CORRECT ANSWER OR TELL THE RESPONDENT IF HIS OR HER ANSWER IS CORRECT. CORRECT RESPONSE: 7

01 Correct answer 7

02 Incorrect answer

IF CF214N1 = answered [(CF214n1 = RESPONSE) OR (CF214n1 = DK)]

CF21501

Next, please write down the following numbers: 70 ... BLANK ...
BLANK ... 84 .

Now look at the numbers that you just wrote down and tell me the number that belongs in the blank.

NURSE: DO NOT PROVIDE FURTHER PROMPTS, AND DO NOT GIVE THE CORRECT ANSWER OR TELL THE RESPONDENT IF HIS OR HER ANSWER IS CORRECT. CORRECT ANSWERS COULD BE 72 & 76 OR 78 & 82

01 Correct answer either 72 & 76 or 78 & 82

02 Incorrect answer

END OF FILTER

END OF FILTER

END OF FILTER

END OF FILTER

END OF FILTER

IF automatically generated number = 2 [CFFIRnd = 2]

CF221G2

Please write down the following numbers: 7 ... 10 ... 13 ... BLANK .

Now look at the numbers that you just wrote down and tell me the number that belongs in the blank.

NURSE: DO NOT PROVIDE FURTHER PROMPTS, AND DO NOT GIVE THE CORRECT ANSWER OR TELL THE RESPONDENT IF HIS OR HER ANSWER IS CORRECT. CORRECT RESPONSE: 16

01 Correct answer 16

02 Incorrect answer

IF CF221G2 = answered [(CF221g2 = DK) OR (CF221g2 =Correct,Incorrect)]

CF222H2

Next, please write down the following numbers: BLANK ... 13 ... 15 ... 18 ... 22.

Now look at the numbers that you just wrote down and tell me the number that belongs in the blank.

NURSE: DO NOT PROVIDE FURTHER PROMPTS, AND DO NOT GIVE THE CORRECT ANSWER OR TELL THE RESPONDENT IF HIS OR HER ANSWER IS CORRECT. CORRECT RESPONSE: 12

01 Correct answer 12

02 Incorrect answer

IF CF222H2 = answered [(CF222h2 = RESPONSE) OR (CF222h2 = DK)]

CF223I2

Next, please write down the following numbers: 18 ... 17 ... BLANK ... 12 ... 8 .

Now look at the numbers that you just wrote down and tell me the number that belongs in the blank.

NURSE: DO NOT PROVIDE FURTHER PROMPTS, AND DO NOT GIVE THE CORRECT ANSWER OR TELL THE RESPONDENT IF HIS OR HER ANSWER IS CORRECT. CORRECT RESPONSE: 15

01 Correct answer 15

02 Incorrect answer

CF226c @

Computed: Number of correct answers in question set 2 so far (CF221G2, CF222H2, CF223I2)
Range: 0..97

IF CF223I2 = answered [(CF223i2 = RESPONSE) OR (CF223i2 = DK)]

IF question set 2 = no questions answered correctly [CF226c = 0]

CF224A2

Next, please write down the following numbers: 4 . . .5 . . . 6 . . . BLANK .
Now look at the numbers that you just wrote down and tell me the number that belongs in the blank.

NURSE: DO NOT PROVIDE FURTHER PROMPTS, AND DO NOT
GIVE THE CORRECT ANSWER OR TELL THE RESPONDENT IF HIS OR
HER ANSWER IS CORRECT. CORRECT RESPONSE: 7

- 01 Correct answer 7
- 02 Incorrect answer

IF CF224A2 = answered [(CF224a2 = RESPONSE) OR (CF224a2 = DK)]

CF225B2

Next, please write down the following numbers: 5 . . .4 . . . 3 . . . BLANK .
Now look at the numbers that you just wrote down and tell me the number that belongs in the blank.

NURSE: DO NOT PROVIDE FURTHER PROMPTS, AND DO NOT
GIVE THE CORRECT ANSWER OR TELL THE RESPONDENT IF HIS OR
HER ANSWER IS CORRECT. CORRECT RESPONSE: 2

- 01 Correct answer 2
- 02 Incorrect answer

IF CF225B2 = answered [(CF225b2 = RESPONSE) OR (CF225b2 = DK)]

CF226C2

Next, please write down the following numbers: 11 . . . BLANK . . . 15 . . . 17 .
Now look at the numbers that you just wrote down and tell me the number that belongs in the blank.

NURSE: DO NOT PROVIDE FURTHER PROMPTS, AND DO NOT
GIVE THE CORRECT ANSWER OR TELL THE RESPONDENT IF HIS OR
HER ANSWER IS CORRECT. CORRECT RESPONSE: 13

- 01 Correct answer 13
- 02 Incorrect answer

END OF FILTER

END OF FILTER

ELSE IF question set 2 = one question answered correctly [CF226c = 1]

CF227D2

Next, please write down the following numbers: BLANK . . . 15 . . . 13 . . . 11 .
Now look at the numbers that you just wrote down and tell me the number that belongs in the blank.

NURSE: DO NOT PROVIDE FURTHER PROMPTS, AND DO NOT
GIVE THE CORRECT ANSWER OR TELL THE RESPONDENT IF HIS OR
HER ANSWER IS CORRECT. CORRECT RESPONSE: 17

- 01 Correct answer 17,
- 02 Incorrect answer

IF CF227D2 = answered (CF227d2 = RESPONSE) OR (CF227d2 = DK)

CF228E2

Next, please write down the following numbers: 10 . . . 6 . . . 3 . . . BLANK

Now look at the numbers that you just wrote down and tell me the number that belongs in the blank.

NURSE: DO NOT PROVIDE FURTHER PROMPTS, AND DO NOT GIVE THE CORRECT ANSWER OR TELL THE RESPONDENT IF HIS OR HER ANSWER IS CORRECT. CORRECT RESPONSE: 1

- 01 Correct answer 1
- 02 Incorrect answer

IF CF228E2 = answered [(CF228e2 = RESPONSE) OR (CF228e2 = DK)]

CF229F2

Next, please write down the following numbers: 11 ... 9 ... 6 ... BLANK
Now look at the numbers that you just wrote down and tell me the number that belongs in the blank.

NURSE: DO NOT PROVIDE FURTHER PROMPTS, AND DO NOT GIVE THE CORRECT ANSWER OR TELL THE RESPONDENT IF HIS OR HER ANSWER IS CORRECT. CORRECT RESPONSE: 2

- 01 Correct answer 2
- 02 Incorrect answer

END OF FILTER

END OF FILTER

ELSE IF question set 2 = two questions answered correctly [CF226c = 2]

CF230J2

Next, please write down the following numbers: 1 ... 3 ... 9 ... BLANK .
Now look at the numbers that you just wrote down and tell me the number that belongs in the blank.

NURSE: DO NOT PROVIDE FURTHER PROMPTS, AND DO NOT GIVE THE CORRECT ANSWER OR TELL THE RESPONDENT IF HIS OR HER ANSWER IS CORRECT. CORRECT ANSWER IS 27.

- 01 Correct answer 27
- 02 Incorrect answer

IF CF230J2 = answered [(CF230j2 = RESPONSE) OR (CF230j2 = DK)]

CF231K2

Next, please write down the following numbers: 13 ... 15 ... 19 ... BLANK .
Now look at the numbers that you just wrote down and tell me the number that belongs in the blank.

NURSE: DO NOT PROVIDE FURTHER PROMPTS, AND DO NOT GIVE THE CORRECT ANSWER OR TELL THE RESPONDENT IF HIS OR HER ANSWER IS CORRECT. CORRECT RESPONSE: 27, 35, 25 OR 26

- 01 Correct answer 27, 35, 25 or 26
- 02 Incorrect answer

IF CF232K2 = answered [(CF231k2 = RESPONSE) OR (CF231k2 = DK)]

CF232I2

Next, please write down the following numbers: 3 ... 3 ... 4 ... 6 ...
6 ... 7 ... BLANK ... BLANK .

Now look at the numbers that you just wrote down and tell me the number that belongs in the blank.

NURSE: DO NOT PROVIDE FURTHER PROMPTS, AND DO NOT GIVE THE CORRECT ANSWER OR TELL THE RESPONDENT IF HIS OR HER ANSWER IS CORRECT. CORRECT ANSWERS ARE 9 & 9

- 01 Correct answer 9 & 9
- 02 Incorrect answer

END OF FILTER

END OF FILTER

ELSE IF question set 2 = three questions answered correctly [CF226c = 3]

CF233M2

Next, please write down the following numbers: 6 ... BLANK ... 15 ... 27 ... 51 .

Now look at the numbers that you just wrote down and tell me the number that belongs in the blank.

NURSE: DO NOT PROVIDE FURTHER PROMPTS, AND DO NOT GIVE THE CORRECT ANSWER OR TELL THE RESPONDENT IF HIS OR HER ANSWER IS CORRECT. CORRECT RESPONSE: 9

01 Correct answer 9

02 Incorrect answer

IF CF233M2 = answered [(CF233m2 = RESPONSE) OR (CF233m2 = DK)]

CF234N2

Next, please write down the following numbers: BLANK ... 18 ... 24 ... 36 ... 60 .

Now look at the numbers that you just wrote down and tell me the number that belongs in the blank.

NURSE: DO NOT PROVIDE FURTHER PROMPTS, AND DO NOT GIVE THE CORRECT ANSWER OR TELL THE RESPONDENT IF HIS OR HER ANSWER IS CORRECT. CORRECT RESPONSE: 15

01 Correct answer 15

02 Incorrect answer

IF CF234N2 = answered [(CF234n2 = RESPONSE) OR (CF234n2 = DK)]

CF235O2

Next, please write down the following numbers: 60 ... 33 ... 24 ... 21 ... BLANK .

Now look at the numbers that you just wrote down and tell me the number that belongs in the blank.

NURSE: DO NOT PROVIDE FURTHER PROMPTS, AND DO NOT GIVE THE CORRECT ANSWER OR TELL THE RESPONDENT IF HIS OR HER ANSWER IS CORRECT. CORRECT RESPONSE: 20

01 Correct answer 20

02 Incorrect answer

END OF FILTER

END OF FILTER

END OF FILTER

END OF FILTER

END OF FILTER

END OF FILTER

END OF FILTER

END OF FILTER

IF any questions refused

[CF200pre=RF OR CF240=RF OR CF241=RF OR CF242=RF OR CF201g1=RF OR CF202h1=RF OR CF203i1=RF OR CF216c=RF OR CF204a1=RF OR CF205b1=RF OR CF206c1=RF OR CF207d1=RF OR CF208e1=RF OR CF209f1=RF OR CF210j1=RF OR CF211k1=RF OR CF212l1=RF OR CF213m1=RF OR CF214n1=RF OR CF215o1=RF OR CF221g2=RF OR CF222h2=RF OR CF223i2=RF OR CF226c=RF OR CF224a2=RF OR CF225b2=RF OR

CF226c2=RF OR CF227d2=RF OR CF228e2=RF OR CF229f2=RF OR CF230j2=RF OR
 CF231k2=RF OR CF232l2=RF OR |
 CF233m2=RF OR CF234n2=RF OR CF235o2=RF]

CFSTOP

NURSE: WHY WAS THIS TEST NOT CONDUCTED OR STOPPED PRIOR TO COMPLETION? CODE ALL THAT APPLY

- 01 Insufficient understanding of the instructions
- 02 Physical disability made completing the test impossible
- 03 Attention problems, excessive distraction
- 04 Insufficient time
- 05 Extreme anxiety or discomfort
- 06 Other person present
- 07 Respondent doesn't want to do the test
- 08 Language problems
- 97 Other reasons

[Code maximum 8 out of 8 possible responses]

Description	Variable	Archive
Insufficient understanding of the instructions	CFStop1	CFStop1
Physical disability made completing the test impossible	CFStop2	CFStop2
Attention problems, excessive distraction	CFStop3	CFStop3
Insufficient time	CFStop4	CFStop4
Extreme anxiety or discomfort		
Other person present	CFStop5	CFStop5
Respondent doesn't want to do the test	CFStop6	CFStop6
Language problems	CFStop7	CFStop7
Other reasons	CFStop8	CFStop8

END OF FILTER

CFEND @

NURSE: Please press 1 to set time stamp for end of fluid intelligence questions.
 Press <1> and <Enter> to continue.

7 - FINAL QUESTIONS (FQ)

ALLCHECK @

Check before leaving the respondent:

1. PUNCTURE SITE AFTER TAKING BLOOD (IF APPLICABLE)
2. CONSENT BOOKLET PRESENT IF APPLICABLE
3. CHECK BOOKLET FOR:
 - A. INITIALS FOR ALL SECTIONS RESPONDENT AGREED TO
 - B. SIGNATURES AT THE END OF THE BOOKLET
 - C. FULL GP AND RESPONDENT DETAILS
 - D. CONSENT CODES [for measures agreed/not agreed] ARE CIRCLED ON THE FRONT
 - E. TEAR OUT THE WHITE COPIES OF THE CONSENT BOOKLET AND LEAVE WITH THE RESPONDENT

Press <1> and <Enter> to continue.

Range: 1..1

ENDREACH @

NURSE: End of questionnaire reached.

Press <1> and <Enter> to continue.

Range: 1..1

NUROUTC (Archive: w8nurout)

NURSE: Why were you not able to complete the nurse schedule for person ^PerNum ^RName?"

77 Core member ineligible for nurse visit (not part of nurse sub-sample)

78 Partner ineligible for Nurse Visit

79 Ineligible but nurse schedule completed

79 Partner but nurse schedule completed

80 Refused nurse visit in main interview - and still refuses nurse visit",

81 Nurse schedule completed

82 No contact made

83 Refusal by person

84 Proxy refusal

85 Broken appointment

86 Ill (at home)

87 Ill (in hospital)

88 Away (other reason)

89 Other reason for schedule not being completed

[Don't Know and Refusal are not allowed]

Computed if nurse schedule completed: productive code 78, 79 or 81 based on sample member status and nurse eligibility flag

INTSC2 @

NURSE: Has the respondent completed and sent back all the self-completion questionnaires?

All respondents are asked to complete the GREEN self-completion questionnaire. Men are also asked to fill in the TEAL BLUE self-completion and women are asked to fill in the PEACH self-completion.

1 All completed, posted back by respondent or interviewer

All completed, but (some) not returned yet

Some not completed yet

Not asked to complete any self-completion questionnaires

IF respondent not yet completed all self-completion questionnaire(s) [!IntSC2=3]

INTSC5 @

NURSE: Has the respondent completed the self-completion questionnaire(s)?

1 Completed, to be posted back by nurse

2 To be posted back by respondent

3 Respondent refused

| *[Don't Know and Refusal are not allowed]*

END OF FILTER

SURDOC @

NURSE: Has the respondent given you any survey (other) documents left with them by the interviewer?

- 1 Yes
- 2 No

IF whether respondent gave nurse interviewer document = Yes [SurDoc = 1]

WHHDOC @

NURSE: Code which document(s) you have been given.

CODE ALL THAT APPLY.

- 1 Orange self completion booklet
- 2 Purple or green self completion booklet
- 3 Yellow consent form
- 4 Pink NHS register linkage consent form

IF Interviewer documents given to nurse = Blue self completion booklet [Whhdoc=1]

SCDOC @

Please put the self completion booklet in pre-paid envelope and post back to the office.

Press <1> and <Enter> to continue.

1..1

END OF FILTER

IF Interviewer documents given to nurse = Yellow consent form OR Pink NHS register linkage consent form [Whhdoc=2 or 3]

FULLDOC @

NURSE: If the respondent is giving you a completed consent form - check that serial number, check letter and person number have been filled in on the relevant form(s) (yellow and/or pink).

Tear off top copy and return to office in prepaid envelope.

Leave bottom copy with respondent for their records.

Press <1> and <Enter> to continue."

1..1

END OF FILTER

END OF FILTER

THANK @

NURSE: Thank the respondent for [^his / her] co-operation.

Then press <1> and <Enter> to finish.

Range: 1..1