ICPSR 25505

National Health and Nutrition Examination Survey (NHANES), 2007-2008

United States Department of Health and Human Services. Centers for Disease Control and Prevention. National Center for Health Statistics

NCHS User Guide -- Examination: Blood Pressure

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National Health and Nutrition Examination Survey

2007 - 2008 Data Documentation, Codebook, and Frequencies

Blood Pressure (BPX_E)

Data File: BPX_E.xpt

First Published: September, 2009 Last Revised: NA

Locator Record

Title: Blood Pressure (BPX_E)
Contact Number: 1-866-441-NCHS
Years of Content: 2007 - 2008
First Published: September, 2009

Revised: NA

Access Constraints: None Use Constraints: None

Geographic Coverage: National

Subject: The data in this file provide interview questions and blood pressure measurements taken in the mobile examination center by two physicians on sample persons eight years of

age and older.

Record Source: NHANES 2007 - 2008

Survey Methodology: NHANES 2007 - 2008 is a stratified multistage probability sample of

the civilian non-institutionalized population of the U.S.

Medium: NHANES Web site; SAS transport files

Component Description

Accurate measurement of blood pressure (BP) is a major public health concern; it is essential for hypertension screening, as well as for disease management. This section provides data for three consecutive blood pressure (BP) measurements and other methodological measurements to obtain an accurate blood pressure.

Eligible Sample

Heart rate is measured on all children 0-4 years of age; radial pulse is measured on examinees 5 years and older; and blood pressure (BP) is measured on all examinees 8 years and over.

Exclusion criteria: presence of the following on both arms: rashes, gauze dressings, casts, edema, paralysis, tubes, open sores or wounds, withered arms, a-v shunts, or if blood has been drawn from arm within last week.

Protocol and Procedure

After resting quietly in a sitting position for 5 minutes and determining the maximum inflation level (MIL), three consecutive blood pressure readings are obtained. If a blood pressure measurement is interrupted or incomplete, a fourth attempt may be made. All BP determinations (systolic and diastolic) are taken in the mobile examination center (MEC).

Quality Assurance & Quality Control

The BP examiners are certified for blood pressure measurement through a training program from Shared Care Research and Education Consulting. Certification is achieved when physician examiners meet all requirements of the training program. The initial training includes:

- didactic instruction about BP measurement and propensity for error;
- practice listening to systolic and diastolic BP sounds using a standardized audio-video tape presentation;
- audio-video tape test;
- written exam;
- examiner and gold standard instructor simultaneously listening to BP of a minimum of 20 volunteers of all ages through a Y- stethoscope to compare measures; and
- observation of protocol technique using a checklist.

Certification requires a score of 100 per cent on the audio-video tape test. Correct answers on the audio-video tape test require the examiner's answers and the standardized test answers to be within +/- 2mm mercury (Hg) on 92 per cent of 24 measures (12 systolic, 12 diastolic), and within +/- 4mm Hg on 100 percent of 24 measures (12 systolic, 12 diastolic). For more information on quality assurance and control, see Ostchega et al. (Ostchega et al, 2003).

For more details on the QA/QC process for this component, please refer to the Physician Section of the **MEC Operations Manual**.

Data Processing and Editing

The following are some required specifications used in capturing the blood pressure data:

- systolic blood pressure and maximum inflation level cannot be greater than 300 mmHg;
- systolic and diastolic blood pressure and maximum inflation level can be even numbers only;
- systolic blood pressure must be greater than diastolic blood pressure;
- if there is no systolic blood pressure, there can be no diastolic blood pressure;
- diastolic blood pressure can be zero

Analytic Notes

Changes Since 2005-2006:

The exam variable BPXDB is not continued in the 2007-2008.

Exam sample weights should be used for analyses. Please refer to the Analytic Guidelines for further details on the use of sample weights and other analytic issues. The Analytic Guidelines are available on the NHANES website.

References

 Ostchega Y, Prineas RJ, Paulose-Ram R, Grim CM, Willard C, Collins C. National Health and Nutrition Examination Survey (NHANES) 1999-2000: Effect of observer training and protocol standardization on reducing blood pressure measurement error. J Clinical Epidemiology. 2003 Aug; 56 (8): 768-774

Codebook and Frequencies

SEQN - Respondent sequence number

Variable Name: SEQN

SAS Label: Respondent sequence number

English Text: Respondent sequence number.

Target Gender: Both males and females

Target Age: 0 YEARS - 150 YEARS

PEASCST1 - Blood Pressure Status

Variable Name: PEASCST1

SAS Label: Blood Pressure Status

English Text: Blood Pressure Status

Target Gender: Both males and females

Code or Value	Value Description	Count	Cumulative	Skip to Item
1	Complete	9357	9357	
2	Partial	27	9384	
3	Not done	378	9762	
	Missing	0	9762	

PEASCTM1 - Blood Pressure Time in Seconds

Variable Name: PEASCTM1

SAS Label: Blood Pressure Time in Seconds

English Text: Blood Pressure Time in Seconds

Target Gender: Both males and females

Target Age: 0 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
3 to 1521	Range of Values	9369	9369	
	Missing	393	9762	

PEASCCT1 - Blood Pressure Comment

Variable Name: PEASCCT1

SAS Label: Blood Pressure Comment

English Text: Blood Pressure Comment

Target Gender: Both males and females

Target Age: 0 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
2	SP refusal	23	23	
3	No time	10	33	
4	Physical limitation	3	36	
5	Communication problem	3	39	
7	SP ill/emergency	8	47	
56	Came late/left early	333	380	
84	SP with child	6	386	
99	Other, specify	19	405	
	Missing	9357	9762	

BPXCHR - 60 sec HR (30 sec HR * 2)

Variable Name: BPXCHR

SAS Label: 60 sec HR (30 sec HR * 2)

English Text: 60 sec HR (30 sec HR * 2)

Target Gender: Both males and females

Target Age: 0 YEARS - 7 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
0 to 208	Range of Values	2016	2016	
	Missing	7746	9762	

BPQ150A - Had food in the past 30 minutes?

Variable Name: BPQ150A

SAS Label: Had food in the past 30 minutes?

English Text: Have you had any of the following in the past 30

minutes?: Food

English Instructions: Check each that applies

Target Gender: Both males and females

Target Age: 8 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
1	Yes	1679	1679	
2	No	5691	7370	
	Missing	2392	9762	

BPQ150B - Had alcohol in the past 30 minutes?

Variable Name: BPQ150B

SAS Label: Had alcohol in the past 30 minutes?

English Text: Have you had any of the following in the past 30

minutes?: Alcohol

English Instructions: Check each that applies

Target Gender: Both males and females

Target Age: 8 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
1	Yes	3	3	
2	No	7367	7370	
•	Missing	2392	9762	

BPQ150C - Had coffee in the past 30 minutes?

Variable Name: BPQ150C

SAS Label: Had coffee in the past 30 minutes?

English Text: Have you had any of the following in the past 30

minutes?: Coffee

English Instructions: Check each that applies

Target Gender: Both males and females

Target Age: 8 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
1	Yes	49	49	
2	No	7321	7370	
	Missing	2392	9762	

BPQ150D - Had cigarettes in the past 30 minutes?

Variable Name: BPQ150D

SAS Label: Had cigarettes in the past 30 minutes?

English Text: Have you had any of the following in the past 30

minutes?: Cigarettes

English Instructions: Check each that applies

Target Gender: Both males and females

Code or Value	Value Description	Count	Cumulative	Skip to Item
1	Yes	140	140	
2	No	7230	7370	
	Missing	2392	9762	

BPAARM - Arm selected:

Variable Name: BPAARM

SAS Label: Arm selected: **English Text:** Arm selected:

Target Gender: Both males and females

Target Age: 8 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
1	Right	7326	7326	
2	Left	36	7362	
8	Could not obtain	8	7370	
	Missing	2392	9762	

BPACSZ - Coded cuff size

Variable Name: BPACSZ

SAS Label: Coded cuff size

English Text: Cuff size (cm) (width X length)

Target Gender: Both males and females

Code or Value	Value Description	Count	Cumulative	Skip to Item
1	Infant (6X12)	0	0	
2	Child (9X17)	448	448	
3	Adult (12X22)	2388	2836	
4	Large (15X32)	3530	6366	
5	Thigh (18X35)	987	7353	

				1
	Missing	2409	9762	

BPXPLS - 60 sec. pulse (30 sec. pulse * 2):

Variable Name: BPXPLS

SAS Label: 60 sec. pulse (30 sec. pulse * 2):

English Text: 60 sec. pulse (30 sec. pulse * 2):

Target Gender: Both males and females

Target Age: 8 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
40 to 224	Range of Values	7361	7361	
	Missing	2401	9762	

BPXPULS - Pulse regular or irregular?

Variable Name: BPXPULS

SAS Label: Pulse regular or irregular?

English Text: Pulse regular or irregular?

Target Gender: Both males and females

Target Age: 0 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
1	Regular	9215	9215	
2	Irregular	171	9386	
	Missing	376	9762	

BPXPTY - Pulse type:

Variable Name: BPXPTY

SAS Label: Pulse type:

English Text: Pulse type:

Target Gender: Both males and females

Target Age: 8 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
1	Radial	7365	7365	
2	Brachial	5	7370	
8	Could not obtain	0	7370	
	Missing	2392	9762	

BPXML1 - MIL: maximum inflation levels (mm Hg)

Variable Name: BPXML1

SAS Label: MIL: maximum inflation levels (mm Hg)

English Text: MIL: maximum inflation levels (mm Hg)

Target Gender: Both males and females

Target Age: 8 YEARS - 150 YEARS

Hard Edits: 70.0000 to 300.0000

Code or Value	Value Description	Count	Cumulative	Skip to Item
110 to 240	Range of Values	7352	7352	
888	Could not obtain	0	7352	
	Missing	2410	9762	

BPXSY1 - Systolic: Blood pres (1st rdg) mm Hg

Variable Name: BPXSY1

SAS Label: Systolic: Blood pres (1st rdg) mm Hg

English Text: Systolic: Blood pressure (first reading) mm Hg

Target Gender: Both males and females

Code or Value	Value Description	Count	Cumulative	Skip to Item

74 to 230	Range of Values	7147	7147	
	Missing	2615	9762	

BPXDI1 - Diastolic: Blood pres (1st rdg) mm Hg

Variable Name: BPXDI1

SAS Label: Diastolic: Blood pres (1st rdg) mm Hg

English Text: Diastolic: Blood pressure (first reading) mm Hg

Target Gender: Both males and females

Target Age: 8 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
0 to 116	Range of Values	7147	7147	
	Missing	2615	9762	

BPAEN1 - Enhancement used first reading

Variable Name: BPAEN1

SAS Label: Enhancement used first reading

English Text: Enhancement used first reading

Target Gender: Both males and females

Target Age: 8 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
1	Yes	0	0	
2	No	7354	7354	
8	Could not obtain	0	7354	
	Missing	2408	9762	

BPXSY2 - Systolic: Blood pres (2nd rdg) mm Hg

Variable Name: BPXSY2

SAS Label: Systolic: Blood pres (2nd rdg) mm Hg

English Text: Systolic: Blood pressure (second reading) mm Hg

Target Gender: Both males and females

Target Age: 8 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
76 to 220	Range of Values	6876	6876	
	Missing	2886	9762	

BPXDI2 - Diastolic: Blood pres (2nd rdg) mm Hg

Variable Name: BPXDI2

SAS Label: Diastolic: Blood pres (2nd rdg) mm Hg

English Text: Diastolic: Blood pressure (second reading) mm Hg

Target Gender: Both males and females

Target Age: 8 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
0 to 122	Range of Values	6876	6876	
•	Missing	2886	9762	

BPAEN2 - Enhancement used second reading

Variable Name: BPAEN2

SAS Label: Enhancement used second reading

English Text: Enhancement used second reading

Target Gender: Both males and females

Code or Value	Value Description	Count	Cumulative	Skip to Item
1	Yes	72	72	
2	No	7282	7354	

8	Could not obtain	0	7354	
	Missing	2408	9762	

BPXSY3 - Systolic: Blood pres (3rd rdg) mm Hg

Variable Name: BPXSY3

SAS Label: Systolic: Blood pres (3rd rdg) mm Hg

English Text: Systolic: Blood pressure (third reading) mm Hg

Target Gender: Both males and females

Target Age: 8 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
74 to 222	Range of Values	6759	6759	
	Missing	3003	9762	

BPXDI3 - Diastolic: Blood pres (3rd rdg) mm Hg

Variable Name: BPXDI3

SAS Label: Diastolic: Blood pres (3rd rdg) mm Hg

English Text: Diastolic: Blood pressure (third reading) mm Hg

Target Gender: Both males and females

Target Age: 8 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
0 to 120	Range of Values	6759	6759	
	Missing	3003	9762	

BPAEN3 - Enhancement used third reading

Variable Name: BPAEN3

SAS Label: Enhancement used third reading

English Text: Enhancement used third reading

Target Gender: Both males and females

Target Age: 8 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
1	Yes	64	64	
2	No	7290	7354	
8	Could not obtain	0	7354	
	Missing	2408	9762	

BPXSY4 - Systolic: Blood pres (4th rdg) mm Hg

Variable Name: BPXSY4

SAS Label: Systolic: Blood pres (4th rdg) mm Hg

English Text: Systolic: Blood pressure (fourth reading if necessary)

mm Hg

Target Gender: Both males and females

Target Age: 8 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
80 to 214	Range of Values	225	225	
	Missing	9537	9762	

BPXDI4 - Diastolic: Blood pres (4th rdg) mm Hg

Variable Name: BPXDI4

SAS Label: Diastolic: Blood pres (4th rdg) mm Hg

English Text: Diastolic: Blood pressure (fourth reading if necessary)

mm Hg

Target Gender: Both males and females

Code or Value	Value Description	Count	Cumulative	Skip to Item
0 to 118	Range of Values	225	225	

. Missing 9537 9762

BPAEN4 - Enhancement used fourth reading

Variable Name: BPAEN4

SAS Label: Enhancement used fourth reading

English Text: Enhancement used fourth reading

Target Gender: Both males and females

Code or Value	Value Description	Count	Cumulative	Skip to Item
1	Yes	16	16	
2	No	784	800	
8	Could not obtain	0	800	
	Missing	8962	9762	

General Information About the Mobile Examination Center (MEC) Examination Data

Automated Data Collection

Each MEC examination had computerized data collection. The examination component data entry systems had built-in quality control checks. Unusual data entries were flagged and a message was sent to the technicians. The technicians were required to either verify the original entry or edit the response. At the end of each examination session, data were sent to a central survey database.

Spanish Translations of Protocol Instructions

All NHANES brochures, consent forms, hand cards, protocols, and correspondence were produced in English and Spanish. All materials were translated as part of the NHANES, Institutional Review Board (IRB) approved, forward translation process. Extensive training was completed with MEC staff to ensure the quality and comparability of staff interactions with Spanish-speaking respondents.

Technician Training

The qualifications for MEC laboratory, physician, dental, and health technician staff are described in the component training manuals. All MEC staff completed the requirements for safety, subject privacy and confidentiality, and cardiopulmonary resuscitation training. In addition, all staff completed component-specific training to learn the standardized NHANES protocol for each of the examinations they performed.

Quality Control Monitoring- General Procedures

Quality control measures included equipment calibration and observations of examinations in the field. Experienced trainers and observers monitored technician performance in the field. Periodic retraining sessions were conducted with the survey staff.

For a subset of examination components (e.g., body measurements, blood pressure and the dental examination), a "gold standard" examiner performed the second examinations during a site visit.

Consistency Checks

An extensive series of quality assurance and quality control analyses were completed for each examination component. The MEC examination component training manuals, provided with these data files, describe the measures taken in greater detail.

Data Preparation

Routine data preparation procedures included a review of frequency data, outliers, and technician notes. Analysts should review the data reported for each component or laboratory assay, prior to beginning data analyses. Analysts should examine the data spread and consider whether or not it is appropriate to include or exclude extreme values in a given analysis.

2007 - 2008 Examination Variable List

Blood Pressure (BPX_E)

Data File: BPX_E.xpt

Item Label	SAS Label
SEQN	Respondent sequence number
PEASCST1	Blood Pressure Status
PEASCTM1	Blood Pressure Time in Seconds
PEASCCT1	Blood Pressure Comment
BPXCHR	60 sec HR (30 sec HR * 2)
BPQ150A	Had food in the past 30 minutes?
BPQ150B	Had alcohol in the past 30 minutes?
BPQ150C	Had coffee in the past 30 minutes?
BPQ150D	Had cigarettes in the past 30 minutes?
BPAARM	Arm selected:
BPACSZ	Coded cuff size
BPXPLS	60 sec. pulse (30 sec. pulse * 2):
BPXPULS	Pulse regular or irregular?
BPXPTY	Pulse type:
BPXML1	MIL: maximum inflation levels (mm Hg)
BPXSY1	Systolic: Blood pres (1st rdg) mm Hg
BPXDI1	Diastolic: Blood pres (1st rdg) mm Hg
BPAEN1	Enhancement used first reading
BPXSY2	Systolic: Blood pres (2nd rdg) mm Hg
BPXDI2	Diastolic: Blood pres (2nd rdg) mm Hg
BPAEN2	Enhancement used second reading
BPXSY3	Systolic: Blood pres (3rd rdg) mm Hg
BPXDI3	Diastolic: Blood pres (3rd rdg) mm Hg
BPAEN3	Enhancement used third reading
BPXSY4	Systolic: Blood pres (4th rdg) mm Hg
BPXDI4	Diastolic: Blood pres (4th rdg) mm Hg
BPAEN4	Enhancement used fourth reading

Body Measurements (BMX_E)

Data File: BMX_E.xpt

Item Label	SAS Label
SEQN	Respondent sequence number
BMDSTATS	Body Measures Component Status Code
BMXWT	Weight (kg)
BMIWT	Weight Comment
BMXRECUM	Recumbent Length (cm)
BMIRECUM	Recumbent Length Comment
BMXHEAD	Head Circumference (cm)
BMIHEAD	Head Circumference Comment
BMXHT	Standing Height (cm)
BMIHT	Standing Height Comment
BMXBMI	Body Mass Index (kg/m**2)
BMXLEG	Upper Leg Length (cm)
BMILEG	Upper Leg Length Comment
BMXARML	Upper Arm Length (cm)
BMIARML	Upper Arm Length Comment
BMXARMC	Arm Circumference (cm)
BMIARMC	Arm Circumference Comment
BMXWAIST	Waist Circumference (cm)
BMIWAIST	Waist Circumference Comment
BMXTRI	Triceps Skinfold (mm)
BMITRI	Triceps Skinfold Comment
BMXSUB	Subscapular Skinfold (mm)
BMISUB	Subscapular Skinfold Comment

Dual Energy X-ray Absorptiometry - Femur (DXXFEM_E)

Data File: DXXFEM_E.xpt

Item Label	SAS Label
SEQN	Respondent sequence number
DXAFMRST	Femur scan status
DXXFMBCC	Total femur BMD invalidity code
DXXOFBMD	Total femur BMD
DXXOFBMC	Total femur BMC
DXXOFA	Total femur area

DXXNKBMD	Femoral neck BMD
DXXNKBMC	Femoral neck BMC
DXXNKA	Femoral neck area
DXXTRBMD	Trochanter BMD
DXXTRBMC	Trochanter BMC
DXXTRA	Trochanter area
DXXINBMD	Intertrochanter BMD
DXXINBMC	Intertrochanter BMC
DXXINA	Intertrochanter area
DXXWDBMD	Ward's triangle BMD
DXXWDBMC	Ward's triangle BMC
DXXWDA	Ward's triangle area
DXAFMRK	Calculated K for femur
DXAFMRD0	Calculated DO for femur

Ophthalmology - Frequency Doubling Technology (OPXFDT_E)

Data File: OPXFDT_E.xpt

Item Label	SAS Label
SEQN	Respondent sequence number
OPASCST1	FDT Exam Status
OPASCCT1	FDT Exam Status Comment
VIQ110	SP has severe eye infection?
VIQ121	If so, which eye?
VIQ130	SP wearing eye patch
OPDODFDT	Final FDT Right Eye Status
OPDOSFDT	Final FDT Left Eye Status
OPX10DBS	Response to BS stimulus - Right - Test 1
OPX10DFP	Response to FP stimulus - Right - Test 1
OPX1ODTN	No fixation per Tech - Right - Test 1
OPX1OD02	CT result - Right - Test 1
OPX1OD03	T6 results - Right - Test 1
OPX1OD04	T2 results - Right - Test 1
OPX1OD05	T5 results - Right - Test 1
OPX1OD06	T1 results - Right - Test 1
OPX1OD07	N2 results - Right - Test 1
OPX1OD08	N6 results - Right - Test 1

P	
OPX1OD09	N1 results - Right - Test 1
OPX1OD10	N5 results - Right - Test 1
OPX1OD11	N3 results - Right - Test 1
OPX1OD12	N7 results - Right - Test 1
OPX1OD13	N4 results - Right - Test 1
OPX1OD14	N8 results - Right - Test 1
OPX1OD15	T7 results - Right - Test 1
OPX1OD16	T3 results - Right - Test 1
OPX1OD17	T8 results - Right - Test 1
OPX1OD18	T4 results - Right - Test 1
OPX1OD19	NS results - Right - Test 1
OPX1OD20	NI results - Right - Test 1
OPX1OSBS	Response to BS stimulus - Left - Test 1
OPX1OSFP	Response to FP stimulus - Left - Test 1
OPX1OSTN	No fixation per Tech - Left - Test 1
OPX1OS00	NS result - Left - Test 1
OPX1OS01	NI results - Left - Test 1
OPX1OS02	CT results - Left - Test 1
OPX1OS03	N2 results - Left - Test 1
OPX1OS04	N6 results - Left - Test 1
OPX1OS05	N1 results - Left - Test 1
OPX1OS06	N5 results - Left - Test 1
OPX1OS07	T6 results - Left - Test 1
OPX1OS08	T2 results - Left - Test 1
OPX1OS09	T5 results - Left - Test 1
OPX1OS10	T1 results - Left - Test 1
OPX1OS11	T7 results - Left - Test 1
OPX1OS12	T3 results - Left - Test 1
OPX1OS13	T8 results - Left - Test 1
OPX1OS14	T4 results - Left - Test 1
OPX1OS15	N3 results - Left - Test 1
OPX1OS16	N7 results - Left - Test 1
OPX1OS17	N4 results - Left - Test 1
OPX1OS18	N8 results - Left - Test 1
OPX2ODBS	Response to BS stimulus - Right - Test 2
OPX2ODFP	Response to FP stimulus - Right - Test 2
OPX2ODTN	No fixation per Tech - Right - Test 2
II .	

OPX2OD02	CT result - Right - Test 2
OPX2OD03	T6 results - Right - Test 2
OPX2OD04	T2 results - Right - Test 2
OPX2OD05	T5 results - Right - Test 2
OPX2OD06	T1 results - Right - Test 2
OPX2OD07	N2 results - Right - Test 2
OPX2OD08	N6 results - Right - Test 2
OPX2OD09	N1 results - Right - Test 2
OPX2OD10	N5 results - Right - Test 2
OPX2OD11	N3 results - Right - Test 2
OPX2OD12	N7 results - Right - Test 2
OPX2OD13	N4 results - Right - Test 2
OPX2OD14	N8 results - Right - Test 2
OPX2OD15	T7 results - Right - Test 2
OPX2OD16	T3 results - Right - Test 2
OPX2OD17	T8 results - Right - Test 2
OPX2OD18	T4 results - Right - Test 2
OPX2OD19	NS results - Right - Test 2
OPX2OD20	NI results - Right - Test 2
OPX2OSBS	Response to BS stimulus - Left - Test 2
OPX2OSFP	Response to FP stimulus - Left - Test 2
OPX2OSTN	No fixation per Tech - Left - Test 2
OPX2OS00	NS result - Left - Test 2
OPX2OS01	NI results - Left - Test 2
OPX2OS02	CT results - Left - Test 2
OPX2OS03	N2 results - Left - Test 2
OPX2OS04	N6 results - Left - Test 2
OPX2OS05	N1 results - Left - Test 2
OPX2OS06	N5 results - Left - Test 2
OPX2OS07	T6 results - Left - Test 2
OPX2OS08	T2 results - Left - Test 2
OPX2OS09	T5 results - Left - Test 2
OPX2OS10	T1 results - Left - Test 2
OPX2OS11	T7 results - Left - Test 2
	II -
OPX2OS12	T3 results - Left - Test 2
OPX2OS12 OPX2OS13	T3 results - Left - Test 2 T8 results - Left - Test 2

PX2OS15	N3 results - Left - Test 2	
PX2OS16	N7 results - Left - Test 2	
PX2OS17	N4 results - Left - Test 2	
PX2OS18	N8 results - Left - Test 2	

Ophthalmology - Retinal Imaging (OPXRET_E)

Data File: OPXRET_E.xpt

Item Label	SAS Label
SEQN	Respondent sequence number
OPASCST2	Exam status
OPASCCT2	Reason for not done/partial
VIQ110	SP has severe eye infection?
VIQ121	If so, which eye?
VIQ130	SP wearing eye patch
OPXDCOMP	Are field 1 & field 2 present, right eye
OPXDF1	Field 1 Present, Right Eye
OPXDF1FO	Field 1 Focus, Right Eye
OPXDF2	Field 2 Present, Right Eye
OPXDF2FO	Field 2 Focus, Right Eye
OPXDGRBL	Gradability of images, Right Eye
OPXDPMM	Pupil Size, Right Eye
OPXDPHPR	Photo Problems, Right Eye
OPXDPHIL	Photo Prob - Illumination, Right Eye
OPXDPHFD	Photo Prob - Field Definition, Right Eye
OPXDPHHZ	Photo Prob - Haze, Right Eye
OPXDPHDD	Photo Prob - Dust/Dirt, Right Eye
OPXDPHLA	Photo Prob - Lashes, Right Eye
OPXDPHAR	Photo Prob - Arc, Right Eye
OPXDPHRC	Photo Prob - Red Channel, Right Eye
OPXDPHOT	Photo Prob - Other, Right Eye
OPDURET	Retinopathy level, worse eye
OPDURL4	4 levels retinopathy severity, worse eye
OPDUARMA	Any retinopathy, worse eye
OPDUHMA	MAS, HEM, worse eye
OPDUMA	Retinal microaneurysms, worse eye
OPDUHEM	Retinal blot hemorrhages, worse eye

OPDUHE	Retinal hard exudate, worse eye
OPDUSE	Retinal soft exudate, worse eye
OPDUIRMA	IRMA, worse eye
OPDUVB	Retinal venous beading, worse eye
OPDUNVO	Retinal new vessels on disc, worse eye
OPDUNVE	Retinal new vessels elsewhere, worse eye
OPDURFP	Retinal fibrous proliferation, worse eye
OPDUPHVH	Pre-ret./ vitreous hemorrhage, worse eye
OPDUME	Macular edema, worse eye
OPDUMEC	Macular edema in center, worse eye
OPDUPPS	Panret. photocoagulation scar, worse eye
OPDUFOC	Focal photocoag. scars for ME, worse eye
OPDUARM	ARM, 3 severity levels, worse eye
OPDUPIGA	Ret. & pigmentary abnorm., worse eye
OPDULARM	Late ARM, worse eye
OPDUGA	Geographic atrophy, worse eye
OPDUEXU	Exudative ARM, worse eye
OPDUHD	Hard distinct drusen, worse eye
OPDUD125	Drusen>=125 microns, worse eye
OPDUD500	Drusen>=500 microns, worse eye
OPDUASD	Any soft drusen, worse eye
OPDUSDD	Soft distinct drusen, worse eye
OPDUSID	Soft indistinct drusen, worse eye
OPDUIRP	Increased retinal pigment, worse eye
OPDURPE	RPE depigmentation, worse eye
OPDUAGA	Any geographic atrophy, worse eye
OPDUPED	RPE/sensory ret. detachment, worse eye
OPDUSNV	Subretinal new vessels, worse eye
OPDUSUBH	Subretinal hemorrhage, worse eye
OPDUSFS	Subretinal fibrous scar, worse eye
OPDUARMX	Treatment for ARM, worse eye
OPDUBCO	Retinal artery occlusion, worse eye
OPDUBVO	Retinal branch vein occlusion, worse eye
OPDUCVO	Ret. central vein occlusion, worse eye
OPDUAVN	Retinal AV nicking, worse eye
OPDUFAN	Focal arteriolar narrowing, worse eye
OPDUHOLL	Hollenhorst plaque, worse eye

OPDUPPA	Peripapillary atrophy, worse eye
OPDUASHY	Asteroid Hyalosis, worse eye
OPDUCHRA	Chorioretinal abnormality, worse eye
OPDUMACH	Macular hole, worse eye
OPDUCHN	Choroidal nevus, worse eye
OPDUOTRX	Any other treatment, worse eye
OPDUPOHS	Histoplasmosis syndrome, worse eye
OPDURDET	Retinal detachment, worse eye
OPDUSWR	SW, cellophane changes, worse eye
OPDUSWRT	SW, traction changes, worse eye
OPDUOTHC	Other ocular conditions, worse eye
OPDDRET	Retinopathy level, right eye.
OPDDRL4	4 levels retinopathy severity, right eye
OPDDARMA	Any retinopathy, right eye
OPDDHMA	MAS, HEM, right eye
OPDDMA	Retinal microaneurysms, right eye
OPDDHEM	Retinal blot hemorrhages, right eye
OPDDHE	Retinal hard exudate, right eye
OPDDSE	Retinal soft exudate, right eye
OPDDIRMA	IRMA, right eye
OPDDVB	Retinal venous beading, right eye
OPDDNVO	Retinal new vessels on disc, right eye
OPDDNVE	Retinal new vessels elsewhere, right eye
OPDDRFP	Retinal fibrous proliferation, right eye
OPDDPHVH	Pre-ret./ vitreous hemorrhage, right eye
OPDDME	Macular edema, right eye
OPDDMEC	Macular edema in center, right eye
OPDDPPS	Panret. photocoagulation scar, right eye
OPDDFOC	Focal photocoag. scars for ME, right eye
OPDDARM	ARM, 3 severity levels, right eye
OPDDPIGA	Ret. & pigmentary abnorm., right eye
OPDDLARM	Late ARM, right eye
OPDDGA	Geographic atrophy, right eye
OPDDEXU	Exudative ARM, right eye
OPDDAREX	Excluded for ARM, right eye
OPDDREA	Reason for ARM exclusion, right eye
OPDDHD	Hard distinct drusen, right eye

OPDDD125	Drusen>=125 microns, right eye
OPDDD500	Drusen>=500 microns, right eye
OPDDASD	Any soft drusen, right eye
OPDDSDD	Soft distinct drusen, right eye
OPDDSID	Soft indistinct drusen, right eye
OPDDIRP	Increased retinal pigment, right eye
OPDDRPE	RPE depigmentation, right eye
OPDDAGA	Any geographic atrophy, right eye
OPDDPED	RPE/sensory ret. detachment, right eye
OPDDSNV	Subretinal new vessels, right eye
OPDDSUBH	Subretinal hemorrhage, right eye
OPDDSFS	Subretinal fibrous scar, right eye
OPDDARMX	Treatment for ARM, right eye
OPDDBCO	Retinal artery occlusion, right eye
OPDDBVO	Retinal branch vein occlusion, right eye
OPDDCVO	Ret. central vein occlusion, right eye
OPDDAVN	Retinal AV nicking, right eye
OPDDFAN	Focal arteriolar narrowing, right eye
OPDDHOLL	Hollenhorst plaque, right eye
OPDDPPA	Peripapillary atrophy, right eye
OPDDASHY	Asteroid Hyalosis, right eye
OPDDCHRA	Chorioretinal abnormality, right eye
OPDDMACH	Macular hole, right eye
OPDDCHN	Choroidal nevus, right eye
OPDDOTRX	Any other treatment, right eye
OPDDPOHS	Histoplasmosis syndrome, right eye
OPDDRDET	Retinal detachment, right eye
OPDDSWR	SW, cellophane changes, right eye
OPDDSWRT	SW, traction changes, right eye
OPDDOTHC	Other ocular conditions, right eye
OPDDVCDR	Vertical cup disc ratio, right eye
OPXSCOMP	Are field 1 & field 2 present, left eye
OPXSF1	Field 1 Present, Left Eye
OPXSF1FO	Field 1 Focus, Left Eye
OPXSF2	Field 2 Present, Left Eye
OPXSF2FO	Field 2 Focus, Left Eye
OPXSGRBL	Gradability of images, Left Eye

OPXSPMM	Pupil Size, Left Eye
OPXSPHPR	Photo Problems, Left Eye
OPXSPHIL	Photo Prob - Illumination, Left Eye
OPXSPHFD	Photo Prob - Field Definition, Left Eye
OPXSPHHZ	Photo Prob - Haze, Left Eye
OPXSPHDD	Photo Prob - Dust/Dirt, Left Eye
OPXSPHLA	Photo Prob - Lashes, Left Eye
OPXSPHAR	Photo Prob - Arc, Left Eye
OPXSPHRC	Photo Prob - Red Channel, Left Eye
OPXSPHOT	Photo Prob - Other, Left Eye
OPDSRET	Retinopathy level, left eye.
OPDSRL4	4 levels retinopathy severity, left eye
OPDSARMA	Any retinopathy, left eye
OPDSHMA	MAS, HEM, left eye
OPDSMA	Retinal microaneurysms, left eye
OPDSHEM	Retinal blot hemorrhages, left eye
OPDSHE	Retinal hard exudate, left eye
OPDSSE	Retinal soft exudate, left eye
OPDSIRMA	IRMA, left eye
OPDSVB	Retinal venous beading, left eye
OPDSNVO	Retinal new vessels on disc, left eye
OPDSNVE	Retinal new vessels elsewhere, left eye
OPDSRFP	Retinal fibrous proliferation, left eye
OPDSPHVH	Pre-ret./ vitreous hemorrhage, left eye
OPDSME	Macular edema, left eye
OPDSMEC	Macular edema in center, left eye
OPDSPPS	Panret. photocoagulation scar, left eye
OPDSFOC	Focal photocoag. scars for ME, left eye
OPDSARM	ARM, 3 severity levels, left eye
OPDSPIGA	Ret. & pigmentary abnorm., left eye
OPDSLARM	Late ARM, left eye
OPDSGA	Geographic atrophy, left eye
OPDSEXU	Exudative ARM, left eye
OPDSAREX	Excluded for ARM, left eye
OPDSREA	Reason for ARM exclusion, left eye
OPDSHD	Hard distinct drusen, left eye
OPDSD125	Drusen>=125 microns, left eye

OPDSD500	Drusen>=500 microns, left eye
OPDSASD	Any soft drusen, left eye
OPDSSDD	Soft distinct drusen, left eye
OPDSSID	Soft indistinct drusen, left eye
OPDSIRP	Increased retinal pigment, left eye
OPDSRPE	RPE depigmentation, left eye
OPDSAGA	Any geographic atrophy, left eye
OPDSPED	RPE/sensory ret. detachment, left eye
OPDSSNV	Subretinal new vessels, left eye
OPDSSUBH	Subretinal hemorrhage, left eye
OPDSSFS	Subretinal fibrous scar, left eye
OPDSARMX	Treatment for ARM, left eye
OPDSBCO	Retinal artery occlusion, left eye
OPDSBVO	Retinal branch vein occlusion, left eye
OPDSCVO	Ret. central vein occlusion, left eye
OPDSAVN	Retinal AV nicking, left eye
OPDSFAN	Focal arteriolar narrowing, left eye
OPDSHOLL	Hollenhorst plaque, left eye
OPDSPPA	Peripapillary atrophy, left eye
OPDSASHY	Asteroid Hyalosis, left eye
OPDSCHRA	Chorioretinal abnormality, left eye
OPDSMACH	Macular hole, left eye
OPDSCHN	Choroidal nevus, left eye
OPDSOTRX	Any other treatment, left eye
OPDSPOHS	Histoplasmosis syndrome, left eye
OPDSRDET	Retinal detachment, left eye
OPDSSWR	SW, cellophane changes, left eye
OPDSSWRT	SW, traction changes, left eye
OPDSOTHC	Other ocular conditions, left eye
OPDSVCDR	Vertical cup disc ratio, left eye

Oral Health (OHX_E)

Data File: OHX_E.xpt

Item Label	SAS Label
SEQN	Respondent sequence number
OHAEXSTS	Overall Oral Health Exam Status

ОНХ08НТС	Tooth count: #8
OHX07HTC	Tooth count: #7
ОНХ06НТС	Tooth count: #6
OHX05HTC	Tooth count: #5
OHX04HTC	Tooth count: #4
OHX03HTC	Tooth count: #3
OHX02HTC	Tooth count: #2
OHX01HTC	Tooth count: #1
OHX09HTC	Tooth count: #9
OHX10HTC	Tooth count: #10
OHX11HTC	Tooth count: #11
OHX12HTC	Tooth count: #12
OHX13HTC	Tooth count: #13
OHX14HTC	Tooth count: #14
OHX15HTC	Tooth count: #15
OHX16HTC	Tooth count: #16
OHX24HTC	Tooth count: #24
OHX23HTC	Tooth count: #23
OHX22HTC	Tooth count: #22
OHX21HTC	Tooth count: #21
OHX20HTC	Tooth count: #20
OHX19HTC	Tooth count: #19
OHX18HTC	Tooth count: #18
OHX17HTC	Tooth count: #17
OHX25HTC	Tooth count: #25
OHX26HTC	Tooth count: #26
OHX27HTC	Tooth count: #27
OHX28HTC	Tooth count: #28
OHX29HTC	Tooth count: #29
OHX30HTC	Tooth count: #30
OHX31HTC	Tooth count: #31
OHX32HTC	Tooth count: #32
OHXDECAY	Dental decay present
OHXREST	Dental restoration present
OHXSEAL	Dental sealant present
OHXFCRZ1	Right - Zone 1
OHXFCRZ2	Right - Zone 2

OHXFCRZ3	Right - Zone 3
OHXFCRZ4	Right - Zone 4
OHXFCRZ5	Right - Zone 5
OHXFCRZ6	Right - Zone 6
OHXFCRZ7	Right - Zone 7
OHXFCRZ8	Right - Zone 8
OHXFCLZ1	Left - Zone 1
OHXFCLZ2	Left - Zone 2
OHXFCLZ3	Left - Zone 3
OHXFCLZ4	Left - Zone 4
OHXFCLZ5	Left - Zone 5
OHXFCLZ6	Left - Zone 6
OHXFCLZ7	Left - Zone 7
OHXFCLZ8	Left - Zone 8
OHXFCANT	Anterior Zone:
OHQ410	Removable complete/partial max denture
OHQ420	Wears complete/partial max denture
OHQ430	Removable complete/partial mand. denture
OHQ440	Wears complete/partial Mand. denture
OHAPOS	Was participant exam position recumbent

Vision (VIX_E)

Data File: VIX_E.xpt

Item Label	SAS Label
SEQN	Respondent sequence number
VIQ110	SP has a severe eye infection?
VIQ121	Which eye(s) infected?
VIQ130	Is SP wearing an eye patch?
VIQ141	Which eye has eye patch?
VIQ150	Glasses/contact lenses for near work?
VIQ160	Glasses/contact lenses available?
VIQ170	Glasses or contacts worn for near test?
VIXNC1	Line read on near card
VIXNC2	Testing distance of near card
VIQ180	Eye surgery for near sightedness?
VIQ191	Which eye(s) surgery - near-sightedness?

VII 0 2 0 0	
VIQ200	Eye surgery for cataracts?
VIQ211	Which eye(s) cataract surgery?
VIQ220	Glasses/contact lenses worn for distance
VIQ230	Is distance correction available?
VIQ240	Which type? Glasses or contacts?
VIQ250	Was prescription obtained?
VIXPRS	Prescription, right sphere
VIXPRC	Prescription, right cylinder
VIXPRA	Prescription, right axis
VIXPLS	Prescription, left sphere
VIXPLC	Prescription, left cylinder
VIXPLA	Prescription, left axis
VIXOCMT	Visual Acuity Comments
VIXORSM	OR right sphere, median
VIXORCM	OR right cylinder, median
VIXORAM	OR right axis, median
VIDORFM	OR right confidence level reading
VIXOLSM	OR left sphere, median
VIXOLCM	OR left cylinder, median
VIXOLAM	OR left axis, median
VIDOLFM	OR left confidence level reading
VIXKRM1	Right keratometry radius flat curve (mm)
VIXKRD1	Right keratometry power flat curve (D)
VIXKRG1	Right keratometry axis flat curve (deg)
VIXKRM2	Right keratometry radius steep curve(mm)
VIXKRD2	Right keratometry power steep curve (D)
VIXKRG2	Right keratometry axis steep curve (deg)
VIXKRMM	Right keratometry radius, average (mm)
VIXKRDM	Right keratometry power, average (D)
VIXKRCD	Right keratometry cylinder
VIXKRCG	Right keratometry axis (deg)
VIXKLM1	Left keratometry radius flat curve (mm)
VIXKLD1	Left keratometry power flat curve (D)
VIXKLG1	Left keratometry axis flat curve (deg)
VIXKLM2	Left keratometry radius steep curve (mm)
VIXKLD2	Left keratometry power steep curve (D)
VIXKLG2	Left keratometry axis steep curve (deg)

VIXKLMM	Left keratometry radius, average (mm)
VIXKLDM	Left keratometry power, average (D)
VIXKLCD	Left keratometry cylinder
VIXKLCG	Left keratometry axis (deg)
VIDRVA	Right visual acuity, presenting
VIDLVA	Left visual acuity, presenting
VIDROVA	Right visual acuity, w/ obj. refraction
VIDLOVA	Left visual acuity, w/ obj. refraction