

C1F02 - NOTES AND COMPUTED VARIABLES

(Blood Pressure)

C02AVGSY and C02AVGDI are the appropriate blood pressure variables to use in analyses. These were calculated by the data entry system and represent the average of the second and third blood pressure readings. Comparable variables in the Exam 1 data set are A02SBP and A02DBP. Comparable variables in the Exam 2 data set are B02AVGSY and B02AVGDI.

REAL-TIME EDITS PERFORMED ON VARIABLES IN FILE C1F02

```
IF DAY > 31;
IF MO > 12;
IF YR < 90 OR > 91;
IF C02SMOKE GT 3;
IF HH1 GT 12;
IF MM1 GT 59;
IF HH2 GT 12;
IF MM2 GT 59;
IF DAY1 GT 31;
IF MO1 GT 12;
IF YR1 < 90 OR > 91;
IF C02ARMCI GT 60;
IF (C02TEMP GT 0 AND C02TEMP LT 15) OR C02TEMP GT 30;
IF (C02PULSE GT 0 AND C02PULSE LT 20) OR C02PULSE GT 60;
IF C02CUFF = 0 OR C02CUFF GT 4;
IF (C02POP GT 0 AND C02POP LT 50) OR C02POP GT 240;
IF (C02PIL GT 0 AND C02PIL LT 80) OR C02PIL GT 270;
IF (C02R1S GT 0 AND C02R1S LT 80) OR C02R1S GT 260;
IF C02R1D GT 160;
IF C02RZ1S GT 40;
IF C02RZ1D GT 40;
IF (C02SBP1 GT 0 AND C02SBP1 LT 40) OR C02SBP1 GT 260;
IF C02DBP1 GT 160;
IF (C02R2S GT 0 AND C02R2S LT 80) OR C02R2S GT 260;
IF C02R2D GT 160;
IF C02RZ2S GT 40;
IF C02RZ2D GT 40;
IF (C02SBP2 GT 0 AND C02SBP2 LT 40) OR C02SBP2 GT 260;
IF C02DBP2 GT 160;
IF (C02R3S GT 0 AND C02R3S LT 80) OR C02R3S GT 260;
IF C02R3D GT 160;
IF C02RZ3S GT 40;
IF C02RZ3D GT 40;
IF (C02SBP3 GT 0 AND C02SBP3 LT 40) OR C02SBP3 GT 260;
IF C02DBP3 GT 160;
IF (C02SUMSY GT 0 AND C02SUMSY LT 80) OR C02SUMSY GT 520;
IF C02SUMDI GT 320;
IF (C02AVGSY GT 0 AND C02AVGSY LT 40) OR C02AVGSY GT 260;
IF C02AVGDI GT 160;
```

```

*****
* THIS CODE CREATES THE SAS DATA SET C1F02
* VERSION 3.1 OF THE CARDIA SAS FILES
* SEPTEMBER 1991
*****;
OPTIONS PS=60 NODATE NONUMBER;
LIBNAME F 'F:\VER_CO\VER1';

DATA TEMP;
  INFILE 'H:\FORM02.SEQ' LRECL=144;

  LENGTH
  C02SMOKE 3          C02EXDAT  C02DTSMK  C02TMSMK  C02TIME  8          C02ARMCI
  C02TEMP  C02PULSE  C02CUFF  C02POP   C02PIL   C02MAXZE  C02PILRZ  C02R1S
  C02R1D   C02RZ1S  C02RZ1D  C02SBP1  C02DBP1  C02R2S   C02R2D   C02RZ2S
  C02RZ2D  C02SBP2  C02DBP2  C02R3S   C02R3D   C02RZ3S  C02RZ3D  C02SBP3
  C02DBP3  C02SUMSY  C02SUMDI  C02AVGSY  C02AVGDI  C02RANZR  C02IVID  3;

  MISSING M;

  INPUT CENTER 1 ID 1-12
        YR 13-14 MO 15-16 DAY 17-18 @;

        C02EXDAT = MDY ( MO, DAY, YR );
        DROP MO DAY YR;

  INPUT C02SMOKE 44
        YR1 45-46 MO1 47-48 DAY1 49-50
        HH1 51-52 MM1 53-54 AM_PM_1 55
        HH2 56-57 MM2 58-59 AM_PM_2 60 @;

        C02DTSMK = MDY ( MO1, DAY1, YR1 );
        IF AM_PM_1 EQ 2 THEN HH1 = HH1+12;

        C02TMSMK = HMS(HH1, MM1, 0);
        IF AM_PM_2 EQ 2 THEN HH2 = HH2+12;

        C02TIME=HMS(HH2, MM2, 0);
        DROP MO1 DAY1 YR1 HH1 MM1 HH2 MM2 AM_PM_1 AM_PM_2;

  INPUT C02ARMCI 61-62
        C02TEMP 63-64
        C02PULSE 65-66
        C02CUFF 67
        C02POP 68-70
        C02PIL 71-73
        C02MAXZE 74-75
        C02PILRZ 76-78
        C02R1S 79-81
        C02R1D 82-84
        C02RZ1S 85-86
        C02RZ1D 87-88
        C02SBP1 89-91
        C02DBP1 92-94
        C02R2S 95-97
        C02R2D 98-100
        C02RZ2S 101-102
        C02RZ2D 103-104
        C02SBP2 105-107
        C02DBP2 108-110

```

C02R3S 111-113
 C02R3D 114-116
 C02RZ3S 117-118
 C02RZ3D 119-120
 C02SBP3 121-123
 C02DBP3 124-126
 C02SUMSY 127-129
 C02SUMDI 130-132
 C02AVGSY 133-135
 C02AVGDI 136-138
 C02RANZR 139-141
 C02IVID 142-144;

FORMAT C02EXDAT C02DTSMK DATE7.
 C02TIME C02TMSMK TIME5.;

LABEL

C02SMOKE ='SMOKES, DOESN'T REMEMBER, DOESN'T SMOKE'
 C02DTSMK ='DATE SUBJECT LAST SMOKED'
 C02TMSMK ='TIME SUBJECT LAST SMOKED'
 C02TIME ='TIME OF DAY'
 C02EXDAT ='DATE OF EXAM'
 C02ARMC I ='ARM CIRCUMFERENCE IN CM'
 C02TEMP ='ROOM TEMPERATURE IN DEGREES CENTIGRADE'
 C02PULSE ='PULSE BEATS IN 30 SECONDS'
 C02CUFF ='PEDIATRIC, REGULAR, LARGE, AND OTHER'
 C02POP ='PULSE OBLITERATION PRESSURE'
 C02PIL ='PEAK INFLATION LEVEL, (STD) (POP + 30)'
 C02MAXZE ='MAXIMUM ZERO'
 C02PILRZ ='PEAK INFLATION LEVEL, (RZ)'
 C02R1S ='FIRST READING SBP'
 C02R1D ='FIRST READING DBP 5TH PHASE'
 C02RZ1S ='RZ1 SBP'
 C02RZ1D ='RZ1 DBP'
 C02SBP1 ='FIRST CORRECTED SBP (R1_S - RZ1_S)'
 C02DBP1 ='FIRST CORRECTED DBP (R1_D - RZ1_D)'
 C02R2S ='SECOND READING SBP'
 C02R2D ='SECOND READING DBP'
 C02RZ2S ='RZ2 SBP'
 C02RZ2D ='RZ2 DBP'
 C02SBP2 ='SECOND CORRECTED SBP (R2_S - RZ2_S)'
 C02DBP2 ='SECOND CORRECTED DBP (R2_D - RZ2_D)'
 C02R3S ='THIRD READING SBP'
 C02R3D ='THIRD READING DBP'
 C02RZ3S ='RZ3 SBP'
 C02RZ3D ='RZ3 DBP'
 C02SBP3 ='THIRD CORRECTED SBP (R3_S - RZ3_S)'
 C02DBP3 ='THIRD CORRECTED DBP (R3_D - RZ3_D)'
 C02SUMSY ='2ND AND 3RD SYS (R2_RZ2_S + R3_RZ3_D)'
 C02SUMDI ='2ND AND 3RD DIAS (R2_RZ2_D + R3_RZ3_D)'
 C02AVGSY ='AVERAGE SBP (SUM_S/2)'
 C02AVGDI ='AVERAGE DBP (SUM_D/2)'
 C02RANZR ='RANDOM ZERO MACHINE NUMBER'
 C02IVID ='INTERVIEWER'S ID NUMBER';

RUN;

PROC SORT;
 BY ID;

RUN;

```
DATA F.C1F02;  
    MERGE TEMP F.EX3ID (IN=IN_ID KEEP=ID);  
    BY ID;  
    IF IN_ID;  
RUN;
```

```
PROC CONTENTS;  
TITLE1 'CONTENTS OF EXAM 3 V.1';  
TITLE2 'FORM 2 - BLOOD PRESSURE';  
RUN;
```

CONTENTS OF EXAM 3 VERSION 1
FORM 2 - BLOOD PRESSURE

CONTENTS PROCEDURE

Data Set Name: G.C1F02	Type:
Observations: 4352	Record Len: 151
Variables: 39	
Label:	

-----Alphabetic List of Variables and Attributes-----

#	Variable	Type	Len	Pos	Format	Label
6	C02ARMC	Num	3	39		ARM CIRCUMFERENCE IN CM
35	C02AVGDI	Num	3	126		AVERAGE DBP (SUM_D/2)
34	C02AVGSY	Num	3	123		AVERAGE SBP (SUM_S/2)
9	C02CUFF	Num	3	48		PEDIATRIC, REGULAR, LARGE, AND OTHER
19	C02DBP1	Num	3	78		FIRST CORRECTED DBP (R1_D - RZ1_D)
25	C02DBP2	Num	3	96		SECOND CORRECTED DBP (R2_D - RZ2_D)
31	C02DBP3	Num	3	114		THIRD CORRECTED DBP (R3_D - RZ3_D)
3	C02DTSMK	Num	8	15	DATE7.	DATE SUBJECT LAST SMOKED
2	C02EXDAT	Num	8	7	DATE7.	DATE OF EXAM
37	C02IVID	Num	3	132		INTERVIEWER'S ID NUMBER
12	C02MAXZE	Num	3	57		MAXIMUM ZERO
11	C02PIL	Num	3	54		PEAK INFLATION LEVEL, (STD) (POP + 30)
13	C02PILRZ	Num	3	60		PEAK INFLATION LEVEL, (RZ)
10	C02POP	Num	3	51		PULSE OBLITERATION PRESSURE
8	C02PULSE	Num	3	45		PULSE BEATS IN 30 SECONDS
15	C02R1D	Num	3	66		FIRST READING DBP 5TH PHASE
14	C02R1S	Num	3	63		FIRST READING SBP
21	C02R2D	Num	3	84		SECOND READING DBP
20	C02R2S	Num	3	81		SECOND READING SBP
27	C02R3D	Num	3	102		THIRD READING DBP
26	C02R3S	Num	3	99		THIRD READING SBP
36	C02RANZR	Num	3	129		RANDOM ZERO MACHINE NUMBER
17	C02RZ1D	Num	3	72		RZ1 DBP
16	C02RZ1S	Num	3	69		RZ1 SBP
23	C02RZ2D	Num	3	90		RZ2 DBP
22	C02RZ2S	Num	3	87		RZ2 SBP
29	C02RZ3D	Num	3	108		RZ3 DBP
28	C02RZ3S	Num	3	105		RZ3 SBP
18	C02SBP1	Num	3	75		FIRST CORRECTED SBP (R1_S - RZ1_S)
24	C02SBP2	Num	3	93		SECOND CORRECTED SBP (R2_S - RZ2_S)
30	C02SBP3	Num	3	111		THIRD CORRECTED SBP (R3_S - RZ3_S)
1	C02SMOKE	Num	3	4		SMOKES, DOESN'T REMEMBER, DOESN'T SMOKE
33	C02SUMDI	Num	3	120		2ND AND 3RD DIAS (R2_RZ2_D + R3_RZ3_D)
32	C02SUMSY	Num	3	117		2ND AND 3RD SYS (R2_RZ2_S + R3_RZ3_D)
7	C02TEMP	Num	3	42		ROOM TEMPERATURE IN DEGREES CENTIGRADE
5	C02TIME	Num	8	31	TIME5.	TIME OF DAY
4	C02TMSMK	Num	8	23	TIME5.	TIME SUBJECT LAST SMOKED
38	CENTER	Num	8	135		
39	ID	Num	8	143		

```

/* FORM02.DD      "C" struct tag is f02                               */
/* Data dictionary for BLOOD PRESSURE FORM for CARDIA EXAM THREE     */
/*                                                         */
/* FLD NAME TYPE BYTES  FIELDS  DESCRIPTION                               */
/*
id          c  12  /*   1 subject id number                               */
c02exmdt   c   6  /*  13 Exam date, Viking subroutine DATECK is used           */
           /*      to check for valid range                             */
c02num     c   2  /*  19 form number                                           */
c02ver     c   1  /*  21 form version, "3" for Exam 3                          */
c02dtent   c   5  /*  22 last date of entry for this record, updated each     */
           /*      time the record is updated. stored in YYMMDD format */
c02deid    c   3  /*  27 data entry person's id number; updated each time     */
           /*      the record is updated                               */
c02mod     c   1  /*  30 indicates record has been modified                    */
c02tment   c   4  /*  31 amount of time taken for data entry for this record  */
           /*      computed by system on the initial entry of the     */
           /*      record. stored in MMSS format                         */
c02totky   c   3  /*  35 total number of keystrokes for initial entry of     */
           /*      the record                                           */
c02valky   c   3  /*  38 number of valid keystrokes for initial entry of     */
           /*      the record                                           */
filler     c   3  /*  41 left for future requirements                           */
           /*      bytes total in header                               */
/*----- END HEADER -----*/
c02smoke   c   1  /*  44 Q.1.1  smokes, doesn't remember, doesn't smoke     */
           /*      allowable code - (1,2,or 3)                          */
c02dtsmk   c   6  /*  45 Q.1.2  date subject last smoke in MMDDYY format     */
           /*      numeric only, Viking subroutine DATECK used         */
c02tmsmk   c   5  /*  51 Q.1.3  time subject last smoked in HHMMx format     */
           /*      numeric values only,  hour range 0-23,              */
           /*      minute range 0-59, Viking subroutine IRANGE         */
           /*      checks for valid codes last byte : 1=am 2=pm       */
/*-----*/
/* Viking subroutine IRANGE is used to check the coding of the following */
/* fields                                                                    */
/*-----*/
c02time    c   5  /*  56 Q.2    time of day in HHMMx format hour range 0-23, */
           /*      minute range 0-59, last byte allowable code       */
           /*      1 - AM, 2 - PM                                     */
c02armci   c   2  /*  61 Q.3    arm circumference in cm, range 10 - 60       */
c02temp    c   2  /*  63 Q.4    room temperature in degrees centigrade,     */
           /*      range : 15 - 30                                     */
c02pulse   c   2  /*  65 Q.5    pulse beats in 30 seconds, range 20 - 60    */
c02cuff    c   1  /*  67 Q.6    pediatric, regular, large, and Thigh Cuff  */
           /*      range 1 - 4                                        */
c02pop     c   3  /*  68 Q.7    pulse obliteration pressure, range: 50 - 240 */
c02pil     c   3  /*  71 Q.8    peak inflation level, (std) (pop + 30),     */
           /*      range : 80 - 270                                    */
c02maxze   c   2  /*  74 Q.9    maximum zero, range : 11 - 40                */
c02pilrz   c   3  /*  76 Q.10   peak inflation level, (RZ), range :120 - 310 */
c02r1s    c   3  /*  79 Q.11.1 first reading systolic, range 80 - 260      */
c02r1d    c   3  /*  82 Q.11.2 First reading diastolic 5th phase,          */
           /*      range:0-160                                         */
c02rz1s   c   2  /*  85 Q.12.1 RZ1 systolic, range : 0 - 40                 */
/*

```

```

*/
c02rz1d   c   2   /* 87 Q.12.2 RZ1 diastolic, , range : 0 - 40 */
c02sbp1   c   3   /* 89 Q.13.1 first corrected systolic (R1_s - RZ1_s), */
           /* range : 40 - 260 */
c02dbp1   c   3   /* 92 Q.13.2 first corrected diastolic (R1_d - RZ1_d), */
           /* range 0 - 160 */
c02r2s    c   3   /* 95 Q.14.1 second reading systolic, range : 80 - 260 */
c02r2d    c   3   /* 98 Q.14.2 second reading diastolic, range 0 - 160 */
c02rz2s   c   2   /* 101 Q.15.1 RZ2 systolic, range : 0 - 40 */
c02rz2d   c   2   /* 103 Q.15.2 RZ2 diastolic, range : 0 - 40 */
c02sbp2   c   3   /* 105 Q.16.1 second corrected systolic (R2_s - RZ2_s) */
           /* range 40 - 260 */
c02dbp2   c   3   /* 108 Q.16.2 second corrected diastolic (R2_d - RZ2_d), */
           /* range : 0 - 160 */
c02r3s    c   3   /* 111 Q.17.1 third reading systolic, range : 80 - 260 */
c02r3d    c   3   /* 114 Q.17.2 third reading diastolic, range : 0 - 160 */
c02rz3s   c   2   /* 117 Q.18.1 RZ3 systolic, range : 0 - 40 */
c02rz3d   c   2   /* 119 Q.18.2 RZ3 diastolic, range : 0 - 40 */
c02sbp3   c   3   /* 121 Q.19.1 third corrected systolic (R3_s - RZ3_s), */
           /* range : 40 - 260 */
c02dbp3   c   3   /* 124 Q.19.2 third corrected diastolic (R3_d - RZ3_d), */
           /* range : 0 - 160 */
c02sumsy  c   3   /* 127 Q.20.1 sum of second & third systolic (R2_RZ2_s + */
           /* R3_RZ3_s), range 80 - 520 */
c02sumdi  c   3   /* 130 Q.20.2 sum of second & third diastolic (R2_RZ2_d + */
           /* R3_RZ3_d), range : 0 - 320 */
c02avgsy  c   3   /* 133 Q.21.1 average systolic (sum_s/2), range : 40 - 260 */
c02avgdi  c   3   /* 136 Q.21.2 average diastolic (sum_d/2), range 0 - 160 */
c02ranzr  c   3   /* 139 random zero machine number, */
c02ivid   c   3   /* 142 Interviewer's ID number, Viking TABLES used */

```

```

keys
1: id

```

```

/* Total number of bytes : 144, Total number of fields : 47 */

```