PACK YEARS OF SMOKING ALGORITHM

Variable Name: PACKYRS, PACKYRSC
Description: Pack-years of smoking (continuous and categorical)

Title: Pack-years of smoking

Variable Name: PACKYRS, PACKYRSC

Category: Psychosocial and personal habits

Description: Pack-years of smoking

Purpose: Compute continuous variable and categories for pack-years of smoking for each participant

PACKYRS Values: continuous
PACKYRSC Values:

0 =	Never smoker
1 =	<5
2 =	5 - <20
3 =	≥20

Denominator: All CT+OS participants

Form Variables

Form: 34 – Personal Habits   **Question Text from Version:** Ver. 2

Variable Name	Question Number	Question
SMOKEVR	1	During your entire life, have you smoked at least 100 cigarettes?
SMOKAGE	1.1	How old were you when you <u>first</u> started SMOKING cigarettes regularly? **(Give your best guess.)**
SMOKNOW	1.2	Do you smoke cigarettes now?
QSMOKAGE	1.3	How old were you when you quit SMOKING regularly?
CIGSDAY	1.5	On the average, how many cigarettes do you (did you) usually smoke each day?
SMOKYRS	1.6	How many years have you been (were you) a regular smoker? Do not count the times you stayed off cigarettes.
SMOKING	Computed Variable	Categorizes never/past/current smoker

Form: 2 – Eligibility Screen   **Question Text from Version:** Ver. 3

Variable Name	Question Number	Question
AGE	7	Age at screening computed from birth date

Intermediate Variables:

Variable Name	Description
YRS	Years of regular SMOKING

YRSX	Years of regular SMOKING

Algorithm:

INTERMEDIATE VARIABLE CREATION AND DATA EDITS:

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IF SMOKEVR = 1 AND SMOKYRS = 7 AND AGE < 61 THEN DO;
    IF SMOKNOW = 1 THEN DO;
        IF SMOKAGE = 1 THEN YRS = AGE - 12.5;
            ELSE IF 2 <= SMOKAGE <= 8 THEN YRS = AGE - ((SMOKAGE + 1)*5 + 2);
            ELSE IF SMOKAGE = 9 THEN YRS = AGE - 50;
    END;
    IF SMOKNOW = 0 THEN DO;
        IF (QSMOKAGE + 1)*5 <= AGE <= (QSMOKAGE + 2)*5 - 1 THEN DO;
            IF SMOKAGE = 1 THEN
                YRS = ((AGE - (QSMOKAGE + 1)*5)/2 + (QSMOKAGE + 1)*5) - 12.5;
                ELSE IF 2 <= SMOKAGE <= 8 THEN YRS = ((AGE - (QSMOKAGE + 1)*5)/2 +
                    (QSMOKAGE + 1)*5) - ((SMOKAGE + 1)*5 + 2);
                ELSE IF SMOKAGE = 9 THEN
                    YRS = ((AGE - (QSMOKAGE + 1)*5)/2 + (QSMOKAGE + 1)*5) - 50;
        END;
        ELSE IF AGE > (QSMOKAGE + 2)*5 - 1 THEN DO;
            IF SMOKAGE = 1 THEN YRS = (QSMOKAGE + 1)*5 - 12.5;
                ELSE IF 2 <= SMOKAGE <= 8 THEN
                    YRS = (QSMOKAGE + 1)*5 - ((SMOKAGE + 1)*5 + 2);
                ELSE IF SMOKAGE = 9 THEN YRS = (QSMOKAGE + 1)*5 - 50;
        END;
    END;
END;

ELSE IF SMOKEVR = 1 AND SMOKYRS = 7 and AGE >= 61 THEN DO;
    IF SMOKAGE = 1 THEN YRSX = AGE - 12.5;
        ELSE IF 2 <= SMOKAGE <= 8 THEN YRSX = AGE - ((SMOKAGE + 1)*5 + 2);
        ELSE IF SMOKAGE = 9 THEN YRSX = AGE - 50;
    YRS = MAX(50,YRSX);
END;
DROP YRSX;


ELSE IF SMOKEVR = 1 AND SMOKYRS = . AND SMOKAGE <= QSMOKAGE THEN DO;
    IF SMOKNOW = 1 THEN DO;
        IF SMOKAGE = 1 THEN YRS = AGE - 12.5;
            ELSE IF 2 <= SMOKAGE <= 8 THEN YRS = AGE - ((SMOKAGE + 1)*5 + 2);
            ELSE IF SMOKAGE = 9 THEN YRS = AGE - 50;
    END;
    IF SMOKNOW = 0 THEN DO;
        IF (QSMOKAGE + 1)*5 <= AGE <= (QSMOKAGE + 2)*5 - 1 THEN DO;
            IF SMOKAGE = QSMOKAGE and SMOKAGE NE . THEN YRS = 2.5;
                ELSE IF SMOKAGE = 1 THEN
                    YRS = ((AGE - (QSMOKAGE + 1)*5)/2 + (QSMOKAGE + 1)*5) - 12.5;
                ELSE IF 2 <= SMOKAGE <= 8 THEN YRS = ((AGE - (QSMOKAGE + 1)*5)/2 +
                    (QSMOKAGE + 1)*5) - ((SMOKAGE + 1)*5 + 2);
                ELSE IF SMOKAGE = 9 THEN
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                    YRS = ((AGE - (QSMOKAGE + 1)*5)/2 + (QSMOKAGE + 1)*5) - 50;
        END;
        ELSE IF AGE > (QSMOKAGE + 2)*5 - 1 THEN DO;
            IF SMOKAGE = QSMOKAGE and SMOKAGE NE . THEN YRS = 2.5;
                ELSE IF SMOKAGE = 1 THEN YRS = (QSMOKAGE + 1)*5 - 12.5;
                ELSE IF 2 <= SMOKAGE <= 8 THEN
                    YRS = (QSMOKAGE + 1)*5 - ((SMOKAGE + 1)*5 + 2);
                ELSE IF SMOKAGE = 9 THEN YRS = (QSMOKAGE + 1)*5 - 50;
        END;
    END;
END;

ELSE IF SMOKEVR = 1 AND SMOKYRS IN(1,2,3,4,5,6) THEN DO;
    IF SMOKYRS = 1 THEN YRS = 2.5;
    IF SMOKYRS = 2 THEN YRS = 7;
    IF SMOKYRS = 3 THEN YRS = 15;
    IF SMOKYRS = 4 THEN YRS = 25;
    IF SMOKYRS = 5 THEN YRS = 35;
    IF SMOKYRS = 6 THEN YRS = 45;
END;


VARIABLE COMPUTATION:


IF CIGSDAY = 1 THEN PACKYRS = 0.5/20 * YRS;
        ELSE IF CIGSDAY = 2 THEN PACKYRS = 2.5/20 * YRS;
        ELSE IF CIGSDAY = 3 THEN PACKYRS = 10/20 * YRS;
        ELSE IF CIGSDAY = 4 THEN PACKYRS = 20/20 * YRS;
        ELSE IF CIGSDAY = 5 THEN PACKYRS = 30/20 * YRS;
        ELSE IF CIGSDAY = 6 THEN PACKYRS = 40/20 * YRS;
        ELSE IF CIGSDAY = 7 THEN PACKYRS = 50/20 * YRS;

Missing:
IF SMOKING = 0 THEN PACKYRS = 0;
IF SMOKING = . THEN PACKYRS = .;


IF PACKYRS = 0 THEN PACKYRSC = 0;
 ELSE IF 0 < PACKYRS < 5 THEN PACKYRSC = 1;
 ELSE IF 5 <= PACKYRS <20 THEN PACKYRSC = 2;
 ELSE IF PACKYRS >= 20 THEN PACKYRSC = 3;
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