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options notes nosource;
proc datasets lib=work nolist memtype=data kill; quit;
* macro to save output and log to appropriate areas ;
%_mprintto;
%put NOTE:
=====;
%put NOTE: Covance Study Number : 000000106324;
%put NOTE: Client Protocol ID : ZRHR-REXC-03-EU;
%put NOTE: Program Name : d_2ADFA.sas;
%put NOTE: Purpose : create ADFA dataset;
%put NOTE: ;
%put NOTE: Input Data : STDLIB.ADFA SDTM.FA ADAM.ADSL
SDTM.SUPPFA;
%put NOTE: Output : ADAM.ADFA;
%put NOTE: Macros Called : _MPRINTTO;
%put NOTE: ;
%put NOTE: Programmed by : cvn_smulholl;
%put NOTE: Creation Date : 2013-09-26;
%put NOTE: SAS Version : 9.3;
%put NOTE: ;
%put NOTE: == Latest Run
=====;
%put NOTE: Run by : &sysuserid;
%put NOTE: Date/Time :
%sysfunc(putn(%sysfunc(date()),e8601da.))T%sysfunc(putn(%sysfunc(time()),
e86011z.));
%put NOTE: ;
%put NOTE: == Modification History
=====;
%put NOTE: Date Initials No. Reason;
%put NOTE: 02Dec2013 SM 1) Remove VISITx variables;
%put NOTE: 03Dec2013 SM 2) Amended coding for Y/N to Yes/No
due to data update in FA;
%put NOTE: 30Apr2014 KB 3) Added EPOCH to keep statement;
%put NOTE: 30Apr2014 KB 4) Removed SCRNBAN and kept FAOBJ and
FAREASND;
%put NOTE: 30Apr2014 KB 5) Removed format from FASEQ;
%put NOTE: 30Apr2014 KB 6) Amended sorting by key variables;
%put NOTE: 30Apr2014 KB 7) Amended AVALC;
%put NOTE: 30Apr2014 KB 8) Removed REASND and added NUMSTIC;
%put NOTE: 30Apr2014 KB 9) Added format for AVISITN;
%put NOTE: 30Apr2014 KB 10) Used SV dates if not populated in
FA;
%put NOTE: 30Apr2014 KB 11) Removed SUPPFA as we do not have
it;
%put NOTE: 06Jun2014 KB 12) Amended AVALC for certain
parameters due to leading zero issue;
%put NOTE: 27Jul2014 KB 13) Added EXNOTRFL;
%put NOTE: 12Sep2014 KB 14) Amended NICOTH PARAM;
%put NOTE: 12Sep2014 KB 15) Removed FASTAT from drop;
%put NOTE: 14Sep2014 KB 16) Added BRAND variable;
%put NOTE:
=====;

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options notes source source2 nofullstimer validvarname=upcase missing='
';
ods _all_ close;
ods listing;

*=====;
* START OF PROGRAM CODE ;
*=====;
*****;
* bring in ADSL ;
*****;

data adsl;
    set adam.adsl;
    keep studyid usubjid subjid: siteid age sex: race height weightb1
bmi ucpdgr1 ucpdgrln nicogr1 nicogrln targr1 targrln cobl
    enrfl scrffl complfl saffl fasfl pprofl randfl trt: trt01:
trt01: lvisdt lvisday
    dthfl enfl EXNOTRFL exfl fupfl; /* 13) KB 27Jul2014 */
run;

*****;
* bring in SUPPFA ;
*****;
/* 11) START KB 30Apr2014 */
/*proc transpose data=sdm.supffa out=tsuppfa(drop = _:);*/
/*    by usubjid idvarval;*/
/*    var qval;*/
/*    id qnam;*/
/*    idlabel qlabel;*/
/*run;*/

/*data suppfa;*/
/*    set tsuppfa;*/
/*    format faseq 8.;*/ /* 5) KB 30Apr2014 */
/*    faseq = input(idvarval,best.);*/
/*run;*/
/**/
/*proc sort data=supffa;*/
/*    by usubjid faseq;*/
/*run;*/
/* 11) END KB 30Apr2014 */

/* 16) START KB 14Sep2014 */
DATA SUPPFA;
    SET SDTM.SUPPFA;
    FASEQ=INPUT(IDVARVAL,BEST.);
RUN;

PROC SORT DATA=SUPPFA;
    BY USUBJID FASEQ;
RUN;

PROC TRANSPOSE DATA=SUPPFA OUT=SUPPFA2(DROP=_NAME_ _LABEL_);

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    BY USUBJID FASEQ;
    VAR QVAL;
    ID QNAM;
    IDLABEL QLABEL;
RUN;
/* 16) END KB 14Sep2014 */

*****;
* bring in FA ;
*****;
proc sort data=sdtm.fa out=fa;
    by usubjid faseq;
run;

data fa2;
    /*merge*/ /*SET fa*/ /*suppfa*/; /* 11) KB 30Apr2014 */
    MERGE FA SUPPFA2; /* 16) KB 14Sep2014 */
    by usubjid faseq;
    format paramcd $8. parcat1 parcat2 avisit $40. paramn 8. aval best.
    avalc param $200. avalu $20. adt date9. AVISITN 8.; /* 9) KB 30Apr2014 */
    * parameter variables ;
    paramcd = fatestdcd;
    if fatestdcd = 'TYIELD' then do;
        paramn = 1;
        param = 'ISO Tar Yield ';
    end;
    else if fatestdcd = 'NYIELD' then do;
        paramn = 2;
        param = 'ISO Nicotine Yield';
    end;
    else if fatestdcd = 'COYIELD' then do;
        paramn = 3;
        param = 'ISO CO Yield';
    end;
    else if fatestdcd = 'QUIT' then do;
        paramn = 4;
        param = 'Does the subject plan to quit smoking during the
next 3 months?';
    end;
    else if fatestdcd = 'CONYR3' then do;
        paramn = 5;
        param = 'Did the subject smoke for at least 3 consecutive
years?';
    end;
    else if fatestdcd = 'SMOKHIST' then do;
        paramn = 6;
        param = 'How many cigarettes per day has the subject smoked
on average during the last 4 weeks?';
    end;
    else if fatestdcd = 'WKMENT4' then do;
        paramn = 7;
        param = 'Did the subject smoke menthol cigarettes in the last
4 weeks?';
    end;

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        else if fatestd = 'NICOTH' then do;
            paramn = 8;
/*          param = 'The subject has used nicotine-containing products
other than commercially available CC (either tobacco-based products or
nicotine-replacement therapy [NRT]), electronic cigarettes and similar
devices, within 4 weeks prior to assessment.';*/
            PARAM = 'The subject has used nicotine-containing products
other than commercially available CC, electronic cigarettes and similar
devices, within 4 weeks prior to assessment.'; /* 14) KB 12Sep2014 */
            end;
        else if fatestd = 'PERFORM' then do;
            paramn = 9;
            param = 'Was the THS 2.2 product trial performed?';
            end;
        else if fatestd = 'WILLABL' then do;
            paramn = 10;
            param = 'Is the subject willing and able to use the product
during the study?';
            end;
/* 8) START KB 30Apr2014 */
/*     else if fatestd = 'REASND' then do;*/
/*         paramn = 11;*/
/*         param = 'If the THS 2.2 product trial was not performed,
please explain';*/
/*     end;*/
        ELSE IF FATESTCD='NUMSTIC' THEN DO;
            PARAMN=16;
            PARAM='How many THS 2.2 tobacco sticks used';
        END;
/* 8) END KB 30Apr2014 */
        if not missing(facat) then parcat1 = trim(facat);
        else put 'USER WARN' 'ING:check missing facat: ' usubjid = param =
;
        if not missing(fascap) then parcat2 = trim(fascap);
        else parcat2 = upcase(faobj);

        * analysis variables ;
        aval = fastresn;
        IF PARAMCD IN ('SMOKHIST' 'CONYR3' 'NICOTH' 'PERFORM' 'QUIT'
'WILLABL' 'WKMENT4') THEN DO; /* 12) KB 06Jun2014 */
            avalc = left(trim(/*fastresc*/FAORRES)); /* 7) KB 30Apr2014 */ /*
12) KB 06Jun2014 */
/* 12) START KB 06Jun2014 */
            END;
            ELSE DO;
                AVALC=LEFT(TRIM(FASTRESC));
            END;
/* 12) END KB 06Jun2014 */
            * numeric values do not match character ;
/*     if not missing(fastresn) and fastresc ne put(fastresn,best.) then
avalc=strip(put(fastresn,best.));*/ /* 7) KB 30Apr2014 */
            avalu = trim(faorresu);
            * code categorical values in aval ;
            if missing(aval) then do;

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        if avalc = 'Yes' then aval = 1; /* 2) SM 03Dec2013 */
        else if avalc = 'No' then aval = 2; /* 2) SM 03Dec2013 */
        else if avalc = '<10' then aval = 3;
        else if avalc = '10 to 19' then aval = 4;
        else if avalc = '>19' then aval = 5;
    end;

    * visit details ;
    avisit = propcase(visit);
    avisitn = visitnum;

    * dates;
    adt = input(fadtc, yymmdd10.);
    adtm = .; * set blank for period macro below;

    keep usubjid /*scrnbran*/ faseq paramcd param paramn parcat: aval:
    visit visitnum avisit: fadtc fady adt adtm EPOCH FAOBJ FAREASND FASTAT
    BRAND; /* 3) KB 30Apr2014 */ /* 4) KB 30Apr2014 */ /* 10) KB 30Apr2014
    */ /* 16) KB 14Sep2014 */
run;

*****;
* Combine ADSL and FA data *;
*****;
* treatment period;
%_mtotper;

data slfa(drop = trt01: tr01: adtm VISIT:); /* 1) SM 02Dec2013 */
    merge adsl fa2(in = a);
    by usubjid;
    if a; * only include subjects with DX data ;
    format aperiod trtan trtpn aday 8. trta trtp $40. aperiodc $10.;
    aday = adt - trtsdt + 1;
    * allocate tretament and period;
    %_mperall(dvar1 = adtm, dvar2 = adt);
    aperiodc = 'Period ' || put(aperiod,1.);
run;

/* 10) START KB 30Apr2014 */
DATA SVDATES;
    SET SDTM.SV(WHERE=(VISIT IN ('SCREENING' 'DAY -2')));
    FORMAT ADT2 DATE9.;

    ADT2=INPUT(SVSTDTC, YMMDD10.);

    AVISIT=PROPCASE(VISIT);

    KEEP USUBJID AVISIT ADT2;
RUN;

PROC SORT DATA=SLFA;
    BY USUBJID AVISIT;
RUN;

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PROC SORT DATA=SVDATES;
  BY USUBJID AVISIT;
RUN;

DATA SLFA2 (DROP=/*FASTAT*/ ADT2); /* 15) KB 12Sep2014 */
  MERGE SLFA (IN=A) SVDATES;
  BY USUBJID AVISIT;
  IF A;

  IF ADT=. AND FASTAT NE 'NOT DONE' AND FADTC='' THEN ADT=ADT2;
RUN;
/* 10) END KB 30Apr2014 */

*****;
* create output dataset ;
*****;

options replace;

data adfa;
  set stdlib.adfa /*slfa*/SLFA2; /* 10) KB 30Apr2014 */
  label aperiodc = 'Period (C)';
run;

proc sort data = adfa out = adam.adfa(label= 'Findings About Events or
Interventions Analysis Dataset');
/* by usubjid paramcd;*/
  BY USUBJID AVISITN PARAMCD; /* 6) KB 30Apr2014 */
run;

options noreplace;
proc printto; run;
*=====;
* END OF PROGRAM CODE ;
*=====;

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