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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_2ADDV.sas;
%put NOTE: Purpose : create ADDV dataset;
%put NOTE: ;
%put NOTE: Input Data : STDLIB.ADDV SDTM.DV SDTM.SUPPDV
ADAM.ADSL;
%put NOTE: Output : ADAM.ADDV;
%put NOTE: Macros Called : _MPRINTTO;
%put NOTE: ;
%put NOTE: Programmed by : cvn_smulholl;
%put NOTE: Creation Date : 2013-10-18;
%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: 29Apr2014 KB 1) Removed format from DVSEQ;
%put NOTE: 29Apr2014 KB 2) Amended the dataset label;
%put NOTE: 29Apr2014 KB 3) Amended sorting by key variables;
%put NOTE: 29Apr2014 KB 4) Added DVSIG and EVALCAT to keep
statement;
%put NOTE: 29Apr2014 KB 5) Removed ATPTN;
%put NOTE: 29Apr2014 KB 6) Amended uninitialized message in
log;
%put NOTE: 29Apr2014 KB 7) Amended AVALC to just use DVTERM;
%put NOTE: 29Apr2014 KB 8) Amended AVISITN format;
%put NOTE: 04Jun2014 KB 9) Added proc sort to removed errors in
log;
%put NOTE: 04Jun2014 KB 10) ATPT amended due to change in
variable name;
%put NOTE: 04Jun2014 KB 11) Added AVALC and ASSESS to sort by
key variables;
%put NOTE: 23Jul2014 ZUH 12) Amended key variables to harmonise
with other studies;
%put NOTE: 27Jul2014 KB 13) Added EXNOTRFL;
%put NOTE: 29Jul2014 JM 14) Populated PARAM variable;
%put NOTE: 12Sep2014 KB 15) Added FASFL to keep statment;
%put NOTE: 15Oct2014 SM 16) Include new data from client from
spreadsheet;

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%put NOTE:
=====;
options notes source source2 nofullstimer validvarname=upcase missing='
';
ods _all_ close;
ods listing;

*=====;
* START OF PROGRAM CODE                                     ;
*=====;
/* 14) JM 2014-07-29 Start*/
* BRING IN PARAM AND PARAMCD;
PROC IMPORT
    DATAFILE="/cvn/projects/prj/data/000000106324/source/dv.xlsx"
    OUT=WORK.DVPARM
    REPLACE
    DBMS=XLSX;
    GETNAMES=NO;
RUN;

/* 16) SM 15Oct2014 */
PROC IMPORT
    DATAFILE="/cvn/projects/prj/data/000000106324/source/DVNEW.xlsx"
    OUT=WORK.DVNEW
    REPLACE
    DBMS=XLSX;
    GETNAMES=NO;
RUN;
* SET UP TO MATCH SDTM DATA;
DATA DVNEW2;
    SET DVNEW;
    IF _N_ NE 1;
    ATTRIB STUDYID LENGTH=$15 DOMAIN LENGTH=$2 USUBJID LENGTH=$24 DVSEQ
VISITNUM DVSTDY DVENDY LENGTH=8.
    DVTERM LENGTH=$199 DVDECOD DVCAT EPOCH LENGTH=$23 VISIT
LENGTH=$15 PARAM LENGTH=$100 PARAMCD LENGTH=$8
    DVSTDTC DVENDTC LENGTH=$10 ASSESS COHORT DVREPDTCT DVSIG RESOL
SOURCE DVTIMEPT DVOTH LENGTH=$200;
    FORMAT AVALC $200.;
    STUDYID=STRIP(A);
    DOMAIN=STRIP(B);
    USUBJID=STRIP(C);
    DVSEQ=INPUT(D,?? BEST.);
    DVTERM=STRIP(E);
    DVDECOD=STRIP(F);
    DVCAT=STRIP(G);
    VISITNUM=INPUT(H,1.);
    VISIT=STRIP(I);
    EPOCH=STRIP(J);
    DVSTDTC=STRIP(K);
    DVENDTC=STRIP(L);
    DVSTDY=INPUT(M,3.);
    DVENDY=INPUT(N,3.);
    ASSESS=STRIP(O);

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COHORT=TRIM(COMPRESS(P,, 'kw')) ;
DVREPDTC=STRIP(Q) ;
DVSIG=STRIP(R) ;
RESOL=STRIP(S) ;
SOURCE=TRIM(COMPRESS(T,, 'kw')) ;
DVTIMEPT=STRIP(U) ;
DVOTH=TRIM(COMPRESS(V,, 'kw')) ;
AVALC=STRIP(Z) ;
PARAM=TRIM(compress(W,, 'kw')) ;
PARAMCD=TRIM(X) ;
    PARAMCD=COMPRESS(PARAMCD,, 'kw') ;
DROP A B C D E F G H I J K L M N O P Q R S T U V W X Y Z ;
IF RESOL='Leave blank' THEN RESOL=' ' ;
RUN;
/* 16) SM 15Oct2014 */

*SELECT DATA;
DATA DVPARM2;
    SET DVPARM;
    IF _N_ = 1 THEN DELETE; *DROP COLUMN LABELS;
    FORMAT PARAM $100. PARAMCD $8.;
    USUBJID=TRIM(C) ;
    IF _N_ GT 1 THEN DVSEQ=INPUT(compress(D, '.', 'kd'), 5.);
    PARAM=TRIM(compress(W,, 'kw')) ;
    PARAMCD=TRIM(X) ;
        PARAMCD=COMPRESS(PARAMCD,, 'kw') ;
    KEEP USUBJID DVSEQ PARAM PARAMCD;
RUN;

PROC SORT DATA=DVPARM2;
    BY USUBJID DVSEQ;
RUN;

/* 14) JM 2014-07-29 End*/

*****;
* bring in ADSL ;
*****;

data adsl;
    set adam.adsl;
    keep studyid usubjid subjid: siteid age sex: race height weightbl
bmi ucpdgr: nicogr: targr: cobl
        enrfl scrfl complfl fupfl saffl pprotfl randfl tr01: trt:
enfl EXNOTRFL exfl dthfl FASFL; /* 13) KB 27Jul2014 */ /* 15) KB
12Sep2014 */
run;

*****;
* bring in SUPPDV ;
*****;

proc transpose data = sdtm.suppdv out=suppdv(drop = _:);
    var qval;

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        by usubjid idvarval;
        id qnam;
        idlabel qlabel;
run;

data suppdv2(drop = idvarval);
    set suppdv;
/*    format dvseq 8.;*/ /* 1) KB 29Apr2014 */
    dvseq = input(idvarval , best.);
run;

/* 9) START KB 04Jun2014 */
PROC SORT DATA=SUPPDV2;
    BY USUBJID DVSEQ;
RUN;
/* 9) END KB 04Jun2014 */

*****;
* bring in DV    ;
*****;

data dv;
    merge sdtm.dv suppdv2 DVPARM2; /* 14) JM 2014-07-29 */
    by usubjid dvseq;
RUN; /* 16) SM 15Oct2014 */

DATA DVA; /* 16) SM 15Oct2014 */
    SET DV DVNEW2(IN=A); /* 16) SM 15Oct2014 */
    BY USUBJID; /* 16) SM 15Oct2014 */
    format avisit atpt /*avalc*/ $200. param $100. avisitn /*atptn*/
/*8.*/BEST. asdtm aendtm date9. asdtm aendtm datetime13.; /* 5) KB
29Apr2014 */ /* 8) KB 29Apr2014 */
    * visit details ;
    avisit = propcase(visit);
    avisitn = visitnum;
    atpt = propcase(/*dvtpt*/DVTIMEPT); /* 10) KB 04Jun2014 */
/*    atptn = dvtptnum;*/ /* 5) KB 29Apr2014 */

    * values;
    IF /*MISSING(AVALC)*/NOT A THEN avalc =
/*propcase(dvterm,'.')*/DVTERM; /* 7) KB 29Apr2014 */ /* 16) SM
15Oct2014 */

    * dates;
    IF NOT A THEN DO; /* 16) SM 15Oct2014 */
        if length(dvstdtc) gt 10 then asdtm = input(dvstdtc,e8601dt.);
        if not missing(asdtm) then asdt = datepart(asdtm);
        else if length(dvstdtc) = 10 then asdt = input(dvstdtc,ymmdd10.);

        if length(dvendtc) gt 10 then aendtm = input(dvendtc,e8601dt.);
        if not missing(aendtm) then aendtm = datepart(aendtm);
        else if length(dvendtc) = 10 then aendtm = input(dvendtc,ymmdd10.);
    END;
ELSE DO; /* 16) SM 15Oct2014 */

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        ASTDT=INPUT(DVSTDTC,DATE9.);
        AENDT=INPUT(DVENDTC,DATE9.);
    END;

    keep usubjid dvseq avalc dvdecod dvcat assess cohort dvrepdtc dvoth
    source resol visit: avisit: /*dvtpt*/ dvstdtc astdt: /* 10) KB 04Jun2014
    */
        dvendtc aendt: atpt: param paramcd DVSIG /*EVALCAT*/; /* 4)
    KB 29Apr2014 */
    run;

    *****;
    * Combine ADSL and DV data *;
    *****;
    * find number of periods ;
    %_mtotper;

    data sldv(drop = tr01: trt01: visit: /*dvtpt*/); /* 10) KB 04Jun2014 */
        merge adsl dvA(in = a); /* 16) SM 15Oct2014 */
        by usubjid;
        if a;          * only include subjects with DX data ;
        format astday aenday aperiod trtan trtpn 8. trta trtp $40. aperiodc
    $10.;
        astday = astdt - trtsdt + 1;
        aenday = aendt - trtsdt + 1;
        * allocate period and treatment and full and partial dates;
        %_mperall(dvar1 = astdtm, dvar2 = astdt);
        aperiodc = 'Period ' || put (aperiod,1.);
    run;

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

    options replace;

    data addv;
        set stdlib.addv sldv;
        label aperiodc = 'Period (C)';
    run;

    proc sort data = addv out = adam.addv(label= /*'THS Product Exposure
    Analysis Dataset'*/'Protocol Deviation Analysis Dataset'); /* 2) KB
    29Apr2014 */
        /* by usubjid avisitn astdtm;*/
        /* BY USUBJID DVSTDTC AVISITN ATPT DVDECOD AVALC ASSESS;*/ /* 3) KB
    29Apr2014 */ /* 11) KB 04Jun2014 */
        BY USUBJID DVSTDTC AVISITN ATPT ASSESS AVALC; /* 12) ZUH 2014-07-
    23 */
    run;

    options noreplace;
    proc printto; run;

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*=====;  
*  END OF PROGRAM CODE      ;  
*=====;
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