Program 9.3

/\* This section of code runs the final analysis model using a weighted repeated measures approach. The results are presented graphically using PROC GPLOT.\*/

/\*final analysis model\*/

**PROC** **GENMOD** DATA = WEIGHTS;

CLASS VIS PATSC GENDER ORIGIN2 INVSC TRT;

WEIGHT STABWT;

MODEL CAVAR = INVSC BAVAR VIS AGEYRS GENDER ORIGIN2 TRT VIS\*TRT

/ DIST=NORMAL LINK=ID TYPE3;

REPEATED SUBJECT = PATSC / TYPE=EXCH;

LSMEANS TRT VIS\*TRT / PDIFF;

TITLE 'MSM FINAL ANALYSIS MODEL';

ESTIMATE 'A+B VS C'

TRT **0** **.5** **.5** -**1** **0**;

ESTIMATE 'A+B VS C AT VIS 3'

TRT **0** **.5** **.5** -**1** **0**

VIS\*TRT **0** **.5** **.5** -**1** **0** **0** **0** **0** **0** **0** **0** **0** **0** **0** **0**

**0** **0** **0** **0** **0** **0** **0** **0** **0** **0**;

ESTIMATE 'A+B VS C AT VIS 4'

TRT **0** **.5** **.5** -**1** **0**

VIS\*TRT **0** **0** **0** **0** **0** **0** **.5** **.5** -**1** **0** **0** **0** **0** **0** **0**

**0** **0** **0** **0** **0** **0** **0** **0** **0** **0**;

ESTIMATE 'A+B VS C AT VIS 5'

TRT **0** **.5** **.5** -**1** **0**

VIS\*TRT **0** **0** **0** **0** **0** **0** **0** **0** **0** **0** **0** **.5** **.5** -**1** **0**

**0** **0** **0** **0** **0** **0** **0** **0** **0** **0**;

ESTIMATE 'A+B VS C AT VIS 6'

TRT **0** **.5** **.5** -**1** **0**

VIS\*TRT **0** **0** **0** **0** **0** **0** **0** **0** **0** **0** **0** **0** **0** **0** **0**

**0** **.5** **.5** -**1** **0** **0** **0** **0** **0** **0**;

ESTIMATE 'A+B VS C AT VIS 7'

TRT **0** **.5** **.5** -**1** **0**

VIS\*TRT **0** **0** **0** **0** **0** **0** **0** **0** **0** **0** **0** **0** **0** **0** **0**

**0** **0** **0** **0** **0** **0** **.5** **.5** -**1** **0**;

ODS OUTPUT LSMEANS=LSMEANS;

**RUN**;

/\*LS means plot for the final model\*/

**DATA** LSMEANS2;

SET LSMEANS;

WHERE TRT IN ('A\_\_','\_B\_','\_\_C');

IF TRT IN ('A\_\_','\_B\_') THEN TRT2='A+B';

ELSE TRT2='C ';

**RUN**;

**PROC** **SQL**;

CREATE TABLE LSMEANS3 AS

SELECT TRT2 AS TRT, VIS, MEAN(ESTIMATE) AS ESTIMATE

FROM LSMEANS2

GROUP TRT2, VIS

;

**QUIT**;

ODS RTF FILE="%SYSFUNC(PATHNAME(WORK))\FIG2.RTF";

FILENAME FIGURE "%SYSFUNC(PATHNAME(WORK))\SASGRAPH.EMF";

GOPTIONS RESET=ALL TARGET=SASEMF DEVICE=SASEMF FTEXT=DUPLEX HTEXT=**.75** CBACK=WHITE

XMAX=**6**IN XPIXELS=**1200** YMAX=**5**IN YPIXELS=**1000** GSFNAME=FIGURE GSFMODE=REPLACE;

AXIS1 MINOR = NONE COLOR = BLACK LABEL=(ANGLE=**90** ROTATE=**0** "CHANGE IN BPRS TOTAL SCORE");

SYMBOL1 I=JOIN W=**2** L=**1** C=RED V=SQUARE;

SYMBOL2 I=JOIN W=**2** L=**2** C=BLACK V=CIRCLE;

**PROC** **GPLOT** DATA=LSMEANS3;

PLOT ESTIMATE\*VIS=TRT/VAXIS=AXIS1;

TITLE "MSM ESTIMATED MEAN CHANGE FROM BASELINE BPRS SCORES";

LABEL VIS="VISIT";

LABEL TRT="TREATMENT";

**RUN**;

GOPTIONS RESET=ALL;

ODS RTF CLOSE;