

```
* Encoding: UTF-8.  
COMMENT This calculates the Desirability Functions for each variable in  
the core set
```

```
COMMENT For HAQ (score range 0 - 3)
```

```
IF (HAQ <= 0.5) HAQ_DF=(HAQ * -.4) + 1.  
EXECUTE.
```

```
IF (HAQ > 0.5 & HAQ <= 1) HAQ_DF=((HAQ-0.5) * -.34) + .8.  
EXECUTE.
```

```
IF (HAQ > 1 & HAQ <= 2) HAQ_DF=((HAQ - 1) * -.23) + .63.  
EXECUTE.
```

```
IF (HAQ > 2 & HAQ <= 3) HAQ_DF=((HAQ - 2) * -.4) + .4.  
EXECUTE.
```

```
COMMENT For tender joint count (TJC)
```

```
IF (TJC <=2) TJC_DF=(TJC * -.1) + 1.  
EXECUTE.
```

```
IF (TJC > 2 & TJC <= 5) TJC_DF=((TJC - 2) * -.057) + .8.  
EXECUTE.
```

```
IF (TJC > 5 & TJC <= 8) TJC_DF = ((TJC - 5) * -.077) + .63.  
EXECUTE.
```

```
IF (TJC > 8 & TJC <= 68) TJC_DF=((TJC - 8) * -.0067) + .4.  
EXECUTE.
```

```
COMMENT For Swollen joint count (SJC)
```

```
IF (SJC <=1) SJC_DF=(SJC * -.2) + 1.  
EXECUTE.
```

```
IF (SJC > 1 & SJC <= 3) SJC_DF=((SJC - 1) * -.085) + .8.  
EXECUTE.
```

```
IF (SJC > 3 & SJC <= 5) SJC_DF = ((SJC - 3) * -.11) + .63.  
EXECUTE.
```

```
IF (SJC > 5 & SJC <= 66) SJC_DF=((SJC - 5) * -.0067) + .4.  
EXECUTE.
```

```
COMMENT For patient skin VAS
```

```
IF (SKIN_VAS <=10) SKIN_VAS_DF=(SKIN_VAS * -.02) + 1.  
EXECUTE.
```

```
IF (SKIN_VAS > 10 & SKIN_VAS <= 30) SKIN_VAS_DF=((SKIN_VAS - 10) * -.0085) + .8.  
EXECUTE.
```

```
IF  (SKIN_VAS    >  30 & SKIN_VAS    <= 50) SKIN_VAS_DF = ((SKIN_VAS - 30) *  
-.011) + .63.  
EXECUTE.
```

```
IF  (SKIN_VAS    >  50 & SKIN_VAS    <= 100) SKIN_VAS_DF=( (SKIN_VAS - 50) *  
-.008) + .4.  
EXECUTE.
```

COMMENT For patient joint VAS

```
IF  (JOINT_VAS   <=10) JOINT_VAS_DF=(JOINT_VAS * -.02) + 1.  
EXECUTE.
```

```
IF  (JOINT_VAS   > 10 & JOINT_VAS   <= 30) JOINT_VAS_DF=( (JOINT_VAS - 10)  
* -.0085) + .8.  
EXECUTE.
```

```
IF  (JOINT_VAS   > 30 & JOINT_VAS   <= 50) JOINT_VAS_DF = ((JOINT_VAS -  
30) * -.011) + .63.  
EXECUTE.
```

```
IF  (JOINT_VAS   > 50 & JOINT_VAS   <= 100) JOINT_VAS_DF=( (JOINT_VAS -  
50) * -.008) + .4.  
EXECUTE.
```

COMMENT For patient global VAS

```
IF  (GLOBAL_VAS  <=15) GLOBAL_VAS_DF=(GLOBAL_VAS * -.0133) + 1.  
EXECUTE.
```

```
IF  (GLOBAL_VAS  > 15 & GLOBAL_VAS  <= 30) GLOBAL_VAS_DF=( (GLOBAL_VAS -  
15) * -.0113) + .8.  
EXECUTE.
```

```
IF  (GLOBAL_VAS  > 30 & GLOBAL_VAS  <= 50) GLOBAL_VAS_DF = ((GLOBAL_VAS -  
30) * -.011) + .63.  
EXECUTE.
```

```
IF  (GLOBAL_VAS  > 50 & GLOBAL_VAS  <= 100) GLOBAL_VAS_DF=( (GLOBAL_VAS -  
50) * -.008) + .4.  
EXECUTE.
```

COMMENT For PsAQoL

```
IF  (PSAQOLscore  <=3) PSAQOLscore_DF=(PSAQOLscore * -.0667) + 1.  
EXECUTE.
```

```
IF  (PSAQOLscore  > 3 & PSAQOLscore  <= 7) PSAQOLscore_DF=( (PSAQOLscore -  
3) * -.0425) + .8.  
EXECUTE.
```

```
IF  (PSAQOLscore    >  7 & PSAQOLscore    <= 11) PSAQOLscore_DF =  
((PSAQOLscore - 7) * -.055) + .63.  
EXECUTE.
```

```
IF  (PSAQOLscore    >  11 & PSAQOLscore    <= 20)  
PSAQOLscore_DF=(PSAQOLscore - 11) * -.044) + .4.  
EXECUTE.
```

COMMENT For PASI

```
IF  (PASI    <=2.5) PASI_DF=(PASI * -.08) + 1.  
EXECUTE.
```

```
IF  (PASI    > 2.5 & PASI    <= 7) PASI_DF=((PASI - 2.5) * -.0378) + .8.  
EXECUTE.
```

```
IF  (PASI    > 7 & PASI    <= 10) PASI_DF = ((PASI - 7) * -.0733) + .63.  
EXECUTE.
```

```
IF  (PASI    > 10 & PASI    <= 72) PASI_DF=((PASI - 10) * -.0065) + .4.  
EXECUTE.
```

COMMENT This calculates the desirability function

```
COMPUTE DF = (TJC_DF + SJC_DF + SKIN_VAS_DF + GLOBAL_VAS_DF +  
JOINT_VAS_DF  
+ PSAQOLscore_DF + HAQ_DF + PASI_DF)/8.
```

```
EXECUTE.
```

COMMENT This calculates the GRACE index

```
COMPUTE GRACE = (1 - DF) * 10.  
EXECUTE.
```