

EQ-5D-5L Canadian scoring algorithm - STATA syntax

* Canadian EQ-5D-5L Time Trade-off-derived value set.

* This program computes the Canadian preference-weighted index score using self-reported EQ-5D data.

* It is presumed that the data set includes the following five variables.

* Dimension	Variable Name	Range
* -----		
* Mobility	MO	1-5
* Self-care	SC	1-5
* Usual activities	UA	1-5
* Pain/discomfort	PD	1-5
* Anxiety/depression	AD	1-5
* -----		

/*where 1 indicates no problems, 2 indicates slight problems, 3 indicates moderate problems,

4 indicates severe problems, and 5 indicates unable to perform. The variables containing

responses for the five dimensions must be named as above (in capital letters).

Missing values should be left blank (i.e., a '.' should not be substituted for a missing value).

The index score will not be generated when responses are missing for 1 or more of the five dimensions.*/

*STATA codes begin.

gen MO45=1 if MO>3

replace MO45=0 if MO<=3

replace MO45=. if MO==.

```
gen SC45=1 if SC>3
replace SC45=0 if SC<=3
replace SC45=. if SC==.
```

```
gen UA45=1 if UA>3
replace UA45=0 if UA<=3
replace UA45=. if UA==.
```

```
gen PD45=1 if PD>3
replace PD45=0 if PD<=3
replace PD45=. if PD==.
```

```
gen AD45=1 if AD>3
replace AD45=0 if AD<=3
replace AD45=. if AD==.
```

```
gen count1=1 if MO>3
replace count1=0 if MO<=3
replace count1=. if MO==.
```

```
gen count2=1 if SC>3
replace count2=0 if SC<=3
replace count2=. if SC==.
```

```
gen count3=1 if UA>3
replace count3=0 if UA<=3
replace count3=. if UA==.
```

```

gen count4=1 if PD>3

replace count4=0 if PD<=3

replace count4=. if PD==.

gen count5=1 if AD>3

replace count5=0 if AD<=3

replace count5=. if AD==.

gen Num45=0 if count1+count2+count3+count4+count5<1

replace Num45=count1+count2+count3+count4+count5-1 if
count1+count2+count3+count4+count5>=1

replace Num45=. if count1+count2+count3+count4+count5==.

gen Num45sq=Num45*Num45

gen EQ5D_index = 1.1351 -0.0389*MO -0.0458*SC -0.0195*UA -0.0444*PD - ///
                0.0376*AD -0.0510*(MO45) -0.0584*(SC45) -0.1103*(UA45) ///
                -0.1409*(PD45) -0.1277*(AD45) +0.0085*Num45sq

```

Reference: Xie F, Pullenayegum E, Gaebel K, Bansback N, Bryan S, Ohinmaa A, Poissant L, Johnson JA; Canadian EQ-5D-5L Valuation Study Group. A Time Trade-off-derived Value Set of the EQ-5D-5L for Canada. Med Care. 2016 Jan;54(1):98-105.