Computing of CS-Base health-state value

Raw values for health states were first computed in STATA, based on coefficients (weights) of each level of all the CS-Base items (Table A1), using the formula:

Raw Values=

Coef\_A12\*iA12 + Coef\_A13\*iA13 + Coef\_A14\*iA14 +

Coef\_A22\*iA22 + Coef\_A23\*iA23 + Coef\_A24\*iA24 +

Coef\_A32\*iA32 + Coef\_A33\*iA33 + Coef\_A24\*iA34 +

Coef\_A42\*iA42 + Coef\_A43\*iA43 + Coef\_A24\*iA44 +

Coef\_A52\*iA52 + Coef\_A53\*iA53 + Coef\_A24\*iA54 +

Coef\_A62\*iA62 + Coef\_A63\*iA63 + Coef\_A24\*iA64 +

Coef\_A72\*iA72 + Coef\_A73\*iA73 + Coef\_A24\*iA74 +

Coef\_A82\*iA82 + Coef\_A83\*iA83 + Coef\_A24\*iA84 +

Coef\_A92\*iA92 + Coef\_A93\*iA93 + Coef\_A24\*iA94 +

Coef\_A102\*iA102 + Coef\_A103\*iA103 + Coef\_A24\*iA104 +

Coef\_A112\*iA112 + Coef\_A113\*iA113 + Coef\_A24\*iA114 +

Coef\_A122\*iA122 + Coef\_A123\*iA123 + Coef\_A24\*iA124

* Coef\_A12=coefficient of Level 2 of the first item, and so on for other levels of each item
* iA12=dummy of Level 2 of the first item, and so on for other levels of each item

Raw values were rescaled to 0.0 to 1.0 using the formula:

zi=(xi–min(x))/(max(x)–min(x))

* zi indicated the ith rescaled value
* xi indicated the ith raw value,
* min(x) indicates the minimum raw value (=−158.76 in this study, worst health state 444444444444)
* max(x) indicates the maximum raw value (=0.0 in this study, full health state 111111111111)

Table A1 Coefficients of each level of all the CS-Base items

|  |  |
| --- | --- |
| **CS-Base Items levels** | **Coefficient** |
| Mobility (2) | ˗3.22 |
| Mobility (3) | ˗8.95 |
| Mobility (4) | ˗15.40 |
|  |  |
| Pain (2) | ˗3.23 |
| Pain (3) | ˗7.54 |
| Pain (4) | ˗13.14 |
|  |  |
| Anxiety (2) | ˗3.13 |
| Anxiety (3) | ˗7.44 |
| Anxiety (4) | ˗12.94 |
|  |  |
| Daily activity (2) | ˗3.46 |
| Daily activity (3) | ˗7.65 |
| Daily activity (4) | ˗11.72 |
|  |  |
| Cognition (2) | ˗3.28 |
| Cognition (3) | ˗8.19 |
| Cognition (4) | ˗12.87 |
|  |  |
|  |  |
| Mood (2) | ˗3.30 |
| Mood (3) | ˗7.89 |
| Mood (4) | ˗13.19 |
|  |  |
| Fatigue (2) | ˗3.40 |
| Fatigue (3) | ˗7.65 |
| Fatigue (4) | ˗12.55 |
|  |  |
| Vision (2) | ˗3.25 |
| Vision (3) | ˗8.24 |
| Vision (4) | ˗14.55 |
|  |  |
| Hearing (2) | -3.45 |
| Hearing (3) | ˗8.66 |
| Hearing (4) | ˗14.76 |
|  |  |
| Social function (2) | ˗3.44 |
| Social function (3) | ˗7.56 |
| Social function (4) | -12.71 |
|  |  |
| Self-esteem (2) | ˗3.81 |
| Self-esteem (3) | ˗7.54 |
| Self-esteem (4) | ˗12.45 |
|  |  |
| Independence (2)  | -3.83 |
| Independence (3) | ˗8.15 |
| Independence (4) | -12.50 |