

EORTC QLU-C10D value sets for Austria, Italy, and Poland, Quality of Life Research,  
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* Example code for converting EORTC QLQ-C30 data into QLU-C10D utility scores
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* written for SPSS by Eva Gamper, February 2020
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* For further details of the QLU-C10D, see the following papers:
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* King MT, et al Derivation of the health state classification system for the
* QLU-C10D, an internationally-valid cancer-specific multi-attribute utility
* instrument derived from the EORTC core quality of life questionnaire, QLQ-C30.
* Quality of Life Research. 2016; 25(3): 625-636. DOI 10.1007/s11136-015-1217-y
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* Norman R, et al. Using a discrete choice experiment to value the QLU-C10D:
* Feasibility and sensitivity to presentation format. Quality of Life Research.
* 2016; 25(3): 637-649. DOI 10.1007/s11136-015-1115-3
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* The utility algorithms reported in this code are based on the monotonicity
* adjusted
* values as reported by Gamper et al. in "EORTC QLU-C10D value sets for Austria,
* Italy, and Poland"
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* This code is written for SPSS users, and notes are added throughout to allow
* conversion to other software as required.
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* Assumption: For this codes to work, it is assumed that the EORTC QLQ-C30 code
* is set up as thirty columns, labelled qlq1-qlq30 (in the order as given in the
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questionnaire),  
\*each of which can take one of four values 1-4, where 1 = "Not at all", 2 = "A  
little",  
\* 3 = "Quite a bit" and 4 = "Very much". To derive the QLU-C10D, we only need  
13 of these  
\* Seven of QLU\_C10D items are single items from the EORTC QLQ-C30, and three  
\* (pf, sf, bo) are composite which are combined

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\*QLU-C10D scoring algorithm for ITALY  
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IF (qlq2=1) pf = 0 .  
IF (qlq2>1) pf = 0.048 .  
IF (qlq3>1) pf = 0.204 .  
IF (qlq3>2) pf = 0.299 .  
EXECUTE.

IF (qlq6=1) rf = 0 .  
IF (qlq6=2) rf = 0.021 .  
IF (qlq6=3) rf = 0.075 .  
IF (qlq6=4) rf = 0.119 .  
EXECUTE.

IF (qlq26=1 & qlq27=1) sf = 0 .  
IF (qlq26=2 | qlq27=2) sf = 0.004 .  
IF (qlq26=3 | qlq27=3) sf = 0.041 .  
IF (qlq26=4 | qlq27=4) sf = 0.043 .  
EXECUTE.

IF (qlq24=1) ef = 0 .  
IF (qlq24=2) ef = 0 .  
IF (qlq24=3) ef = 0.070 .  
IF (qlq24=4) ef = 0.117 .  
EXECUTE.

IF (qlq9=1) pa = 0 .  
IF (qlq9=2) pa = 0.012 .  
IF (qlq9=3) pa = 0.074 .  
IF (qlq9=4) pa = 0.125 .  
EXECUTE.

IF (qlq18=1) fa = 0 .  
IF (qlq18=2) fa = 0.013 .  
IF (qlq18=3) fa = 0.060 .

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IF (qlq18=4) fa = 0.062 .
EXECUTE.
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IF (qlq11=1) sl = 0 .
IF (qlq11=2) sl = 0.027 .
IF (qlq11=3) sl = 0.046 .
IF (qlq11=4) sl = 0.046 .
EXECUTE.
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IF (qlq13=1) ap = 0 .
IF (qlq13=2) ap = 0.023 .
IF (qlq13=3) ap = 0.023 .
IF (qlq13=4) ap = 0.023 .
EXECUTE.
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IF (qlq14=1) na = 0 .
IF (qlq14=2) na = 0.037 .
IF (qlq14=3) na = 0.080 .
IF (qlq14=4) na = 0.089 .
EXECUTE.
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IF (qlq16=1 & qlq17=1) bo = 0 .
IF (qlq16=2 | qlq17=2) bo = 0.025 .
IF (qlq16=3 | qlq17=3) bo = 0.028 .
IF (qlq16=4 | qlq17=4) bo = 0.052 .
EXECUTE.
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COMPUTE QLUC10D_IT = 1- (pf + rf + sf + ef + pa + fa + sl + ap + na + bo) .
FORMATS QLUC10D_IT (F8.3).
EXECUTE.
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*The new variable QLUC10D_IT is a utility score where full health
*(i.e. level 1 in each of the utility levels) is scored at 1, and the minimum
score
*(i.e. each utility level is at 4) is 0.025. These data can now be used to
*construct quality-adjusted life years (QALYs) for cost-utility analysis.
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