

QOL-PCD Adult General Hand Scoring Instructions

Step 1: Item-by-Item Responses

Copy the subjects' responses on the QOL-PCD Version in the spaces designated for each numbered question. The values assigned to participants' responses are listed below.

- **For questions 1 – 4:** A lot of difficulty = 1, Moderate difficulty = 2, A little difficulty = 3, No difficulty = 4.
- **For questions 5 – 10:** Always = 1, Often = 2, Sometimes = 3, Never = 4.
- **For question 11:** A lot = 1, A moderate amount = 2, A little = 3, Almost none = 4.
- **For questions 12 – 14:** Not at all = 1, A little = 2, Moderately = 3, Very = 4.
- **For questions 15 – 18:** Very true = 1, Mostly true = 2, Somewhat true = 3, Not at all true = 4.
- **For question 19:** Very true = 1, Mostly true = 2, Somewhat true = 3, Not at all true = 4, Doesn't apply = 4.
- **For question 20:** You had no trouble keeping up = 1, You have managed to keep up but it's been difficult = 2, You have been behind = 3, You have not been able to do these activities at all = 4.
- **For question 21:** A lot = 1, A moderate amount = 2, A little = 3, Almost none = 4.
- **For questions 22 - 26:** Very true = 1, Mostly true = 2, Somewhat true = 3, Not at all true = 4.
- **For question 27:** Excellent = 1, Good = 2, Fair = 3, Poor = 4.
- **For questions 28 – 33:** A great deal = 1, Somewhat = 2, A little = 3, Not at all = 4.

- **For question 34:** Clear = 1, Clear to yellow = 2, Yellowish-green = 3, Greenish = 4, Green with traces of blood = 4, Don't know = "missing".
- **For questions 35 – 40:** Always = 1, Often = 2, Sometimes = 3, Never = 4.

Note: If participants choose multiple response choices for the same question or they skip a question, do not assign the question a response value (i.e., leave it blank).

Step 2: Reverse Coding

Items that are reversed coded are marked with an asterisk on the Item-by-Item Worksheet.

Please reference the Reversed Keyed Responses box (1 = 4 etc.). Enter the reverse codes in the space provided on the right side of the equal sign for the corresponding numbered questions on the Item-by-Item Worksheet.

Step 3: Missing Values (If the participant has answered every question, this step may be skipped.)

If participants skipped questions or there are missing responses, copy the responses from the Item-by-Item Worksheet (with reverse coded and missing values) on the Missing Values Worksheet. See the example below for how to insert median values for missing responses.

Lower Respiratory Symptoms

#28 = 1

#32 = 2

#33 = 2

#34 = 2

#36 = 3

#38 = ? [missing response]

Example: #38 was not answered or is missing in the Lower Respiratory Symptoms domain, therefore examine the median (middle) value of participant's responses for that specific domain (e.g., {1, 2, **2**, 2, 3} = 2) and input it for the missing value. When all missing values have been accounted for, insert the median values into the blanks on the Item-by-Item Worksheet.

* If the responses for the specific domain were {2, **2**, **3**, 4} the median would equal 2.5; however, for scoring purposes the median must equal a whole number. In this instance, the investigator can flip a coin to decide on replacing the missing value with the lower (2) or higher (3) response choice.

Note: If more than half of the answers are missing for a specific scale, **DO NOT CALCULATE THE SCALED SCORE.**

Step 4: Scaled Scoring

Scaled scores are obtained for each domain by following the steps below.

- a. Copy the responses from the Item-by-Item Worksheet (reversed and replaced scores that apply) into the appropriate box for each scale on the Scaled Scores Worksheet.

Note: On the Scaled Scores Worksheet, the numbers under each scale correspond to the question number of the item on the QOL-PCD Adult Version.

- b. After all responses have been recorded, calculate scaled scores using the formula below.

$$\text{SCALED SCORES} = \frac{\text{Sum of responses} - \text{Minimal Possible sum (n} \times 1\text{)}}{\text{Maximum possible sum (n} \times 4\text{)} - \text{Minimum possible sum (n} \times 1\text{)}} \times 100$$

Example: For a scale comprising four items, such as the Treatment Burden scale on the QOL-PCD Adult Version, and on the basis of the four-point Likert scale used, the calculation method is:

- Minimum possible sum: 4 items $\times$ 1 point = 4
- Maximum possible sum: 4 items $\times$ 4 points = 16

If the adult who completed the questionnaire obtains 7 points (e.g., 2 points for #11 + 2 points for #12 + 2 points for #13 + 1 point for #14), the result is:

$$\text{SCALED SCORE} = \frac{7 - 4}{16 - 4} \times 100 = \frac{3}{12} \times 100 = 25.0 \text{ points for the Treatment Burden Scale}$$

- c. Simplified equations for each scale are included on the Scaled Scores Worksheet (page 7 & 8). Follow the mathematical equations to obtain the scaled scores.

PLEASE CHECK YOUR WORK!

Hand Scoring: Adult ≥ 18 years

Item by-Item Worksheet

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. * _____ = _____
8. _____
9. _____
10. _____
11. _____
12. * _____ = _____
13. * _____ = _____
14. * _____ = _____
15. * _____ = _____
16. _____
17. _____
18. * _____ = _____
19. * _____ = _____
20. * _____ = _____
21. _____
22. _____
23. * _____ = _____
24. _____
25. * _____ = _____
26. * _____ = _____
27. * _____ = _____
28. _____
29. _____
30. _____

31. _____
32. _____
33. _____
34. * _____ = _____
35. _____
36. _____
37. _____
38. _____
39. _____
40. _____

*** Reverse Keyed Responses ***

1 = 4

2 = 3

3 = 2

4 = 1

Missing Values Worksheet

Physical Functioning

#1 ____
#2 ____
#3 ____
#4 ____
#35 ____

Emotional Functioning

#6 ____
#9 ____
#10 ____
#17 ____
#26 ____

Treatment Burden

#11 ____
#12 ____
#13 ____
#14 ____

Role

#16 ____
#20 ____
#21 ____
#22 ____

Social Functioning

#15 ____
#18 ____
#19 ____

Vitality

#5 ____
#7 ____
#8 ____

Health Perception

#23 ____
#24 ____
#25 ____
#27 ____

Upper Respiratory Symptoms

#30 ____
#31 ____
#37 ____
#40 ____

Lower Respiratory Symptoms

#28 ____
#32 ____
#33 ____
#34 ____
#36 ____
#38 ____

Hearing Symptoms

#29 ____
#39 ____

Scaled Scores Worksheet

Physical Functioning

#1 ____

#2 ____

#3 ____

#4 ____

#35 ____

TOTAL = (____ - 5)/15 = ____ × 100 = _____

Vitality

#5 ____

#7 ____

#8 ____

TOTAL = (____ - 3)/9 = ____ × 100 = _____

Emotional Functioning

#6 ____

#9 ____

#10 ____

#17 ____

#26 ____

TOTAL = (____ - 5)/15 = ____ × 100 = _____

Health Perception

#23 ____

#24 ____

#25 ____

#27 ____

TOTAL = (____ - 4)/12 = ____ × 100 = _____

Treatment Burden

#11 ____

#12 ____

#13 ____

#14 ____

TOTAL = (____ - 4)/12 = ____ × 100 = _____

Upper Respiratory Symptoms

#30 ____

#31 ____

#37 ____

#40 ____

TOTAL = (____ - 4)/12 = ____ × 100 = _____

Role

#16 ____

#20 ____

#21 ____

#22 ____

TOTAL = (____ - 4)/12 = ____ × 100 = _____

Lower Respiratory Symptoms

#28 ____

#32 ____

#33 ____

#34 ____

#36 ____

#38 ____

TOTAL = (____ - 6)/18 = ____ × 100 = _____

Social Functioning

#15 ____

#18 ____

#19 ____

TOTAL = (____ - 3)/9 = ____ × 100 = ____

Hearing Symptoms

#29 ____

#39 ____

TOTAL = (____ - 2)/6 = ____ × 100 = ____
