### Qualiveen Questionnaire

### **Assessment Overview**

#### Assessment Area

#### **ICF Domain:**

Quality of Life

### **Subscales (domains):**

Limitations/Inconvenience Constraints/Restrictions Fears

Feelings/Impact on Daily Life

### You Will Need

#### Length:

Qualiveen-30: 30 minutes, 30 items

### **Scoring:**

The questionnaire is based on a 5-point Likert scale (0 = "not at all", 4 = "extremely"). Each domain score is calculated as an average of the scores for the domain items. An overall (averaged) score can also be calculated.

Lower scores on this questionnaire indicate higher quality of life.

### Summary

The Qualiveen Questionnaire is a self-report or interview-based measure developed as a condition-specific quality of life measure that could be used in international multi-centre trials, for individuals with SCI who have urinary disorders.

It contains 4 domains: Limitations/Inconvenience, Constraints/Restrictions, Fears, Feelings/Impact on Daily Life. The Questionnaire has three versions (in order of development): Qualiveen (40 items), Qualiveen-30, SF-Qualiveen (8 items).

### Availability

Worksheet: Available for purchase at <a href="https://eprovide.mapi-trust.org/">https://eprovide.mapi-trust.org/</a>

**Languages:** English, French, Spanish, Portuguese, Dutch, German, Italian, Arabic, Persian, Greek, Polish, and Turkish

### **Assessment Interpretability**

# Minimal Clinically Important Difference

Not established in SCI

### Statistical Error

Not established in SCI

### Typical Values

Overall index (0-4):

• Men: 1.51 (0.77)

• Women: 1.64 (0.87)

• Paraplegia: 1.55 (0.76)

• Tetraplegia: 1.59 (0.73)

• Cauda Equina Syndrome:

1.60 (0.97)

(Qualiveen manual)

### Validity - Low to High

### High Correlation with QoL item of the Neurogenic Bladder Symptom Score, short form (NBSS-SF):

r = 0.82, p = 0.003

### Moderate Correlation with overall scores on the NBSS-SF:

r = 0.53, p = 0.02

(Arabic SF-Qualiveen; Khadour et al. 2024; N=108; 77 males, 31 females; mean (SD) age: 39.54 (11.34) years; ASIA: 20A, 54B, 34C; injury level: cervical-lumbar; chronic SCI)

### Low to Moderate correlation with Short Form 12 (SF-12):

Physical Component = -0.32 Mental Component = -0.29

### Moderate correlation with Incontinence Questionnaire-Urinary Incontinence Short Form (ICIQ-UI SF):

r = 0.36 - 0.57

(Persian Qualiveen-30; Nikfallah et al. 2015; N=154; 89 males; 80 SCI, 74 multiple sclerosis; outpatient)

## High Correlation with the Urinary Distress Inventory, short form (UDI-6):

r = 0.632, p < 0.001

(Dutch SF-Qualiveen; Reuvers et al. 2017; N=57; 37 males; mean (SD) age: 53.2 (14.6) years; ASIA: 23A, 5B, 7C, 20D; injury level: cervical-lumbar)

### High Correlation with QoL of the NBSS-SF:

r = 0.72, p < 0.001

(Arabic NBSS-SF; Khadour et al. 2023; N=136; 97 SCI, 39 multiple sclerosis; ASIA: 18A, 49B, 30C; injury level: cervical-lumbar/sacral; mean time since injury: 29.7 months)

### High Correlation with question 2 of the NBSS-SF:

r = 0.71, p = 0.001

(Arabic NBSS-SF; Khadour et al. 2023; N=101; 73 males, 28 females; ASIA 19A, 51B, 31C; injury level: cervical-lumbar/sacral; mean time since injury: 30.4 months)

### High Criterion validity for the overall score:

0.91 and 0.93

Number of studies reporting validity data: 11

### Reliability - Moderate to High

### High Test-retest Reliability (3-week interval):

ICC = 0.97

(Persian Qualiveen-30; Nikfallah et al. 2015; N=154; 89 males; 80 SCI, 74 multiple sclerosis; outpatient)

### **High Test-retest Reliability:**

ICC = 0.91 - 0.94

(German SF-Qualiveen; Krebs et al. 2021; N=50; 35 males, 15 females; mean age: 53 years; injury level: cervical-lumbar/sacral; 28 motor complete, 22 motor incomplete; chronic SCI)

(Dutch SF-Qualiveen; Reuvers et al. 2017; N=57; 37 males; mean (SD) age: 53.2 (14.6) years; ASIA: 23A, 5B, 7C, 20D; injury level: cervical-lumbar)

#### **Moderate to High Test-retest Reliability:**

ICC = 0.62 - 0.86

(D'Ancona et al. 2009; N=51; N=33 SCI; 40 males, 11 females; mean age: 36.33 years)

### **High Internal Consistency:**

 $\alpha = 0.70 - 0.95$ 

(Persian Qualiveen-30; Nikfallah et al. 2015; N=154; 89 males; 80 SCI, 74 multiple sclerosis; outpatient)

(D'Ancona et al. 2001; N=51; 33 SCI; 40 males; mean (SD) age: 36.33 (12.2) years)

(Arabic SF-Qualiveen; Khadour et al. 2024; N=108; 77 males, 31 females; mean (SD) age: 39.54 (11.34) years; ASIA: 20A, 54B, 34C; injury level: cervical-lumbar; chronic SCI)

### **High Internal Consistency:**

 $\alpha$  = 0.89 (test) and 0.92 (re-test)

(Dutch SF-Qualiveen; Reuvers et al. 2017; N=57; 37 males; mean (SD) age: 53.2 (14.6) years; ASIA: 23A, 5B, 7C, 20D; injury level: cervical-lumbar)

### Number of studies reporting reliability data: 7

### Floor/Ceiling Effect:

Total Score: 0% ceiling & floor For 5 items: 0.7-10.5% floor & 0.7-

3.5% ceiling

(Persian Qualiveen-30; Nikfallah et al., 2015; N=154, 89 male, 80 SCI, 74 MS, outpatient, no information on injury types)

No floor or ceiling effects were identified

(Polish SF-Qualiveen; Przydacz et al. 2021; N=126; 87 males, 39 females; median time since injury: 10 years: ASIA: 55A, 6B, 16C,49D; injury level: cervical-lumbar)

**Effect Size:** 

Not established in SCI

Number of studies reporting responsiveness data: 2