ORGANIZATION NEWS

Highlights From the Rehabilitation Measures Database

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Measurement Characteristics and Clinical Utility of the Urinary Incontinence Quality of Life Scale in People With Incontinence and Multiple Sclerosis

Jordan Keller, MS, RN, Lindsay Long, MS, RN, Kristian Nitsch, MS, Jill Smiley, MPH

Urinary incontinence (UI), which can occur at any age, involves an unintentional loss of bladder control. UI can occur in individuals across a broad range of diagnoses and medical conditions[1-4] and is a frequently encountered problem in people with multiple sclerosis (MS). UI ranges in severity, but even comparatively minor cases can have a significant effect on people's quality of life and well-being.[1] Thus, it is important to assess for, diagnose, and treat UI in people who have MS as soon as possible.[1] The Urinary Incontinence Quality of Life Scale (I-QOL) is a self-report measure designed to assess the effect of UI on patients' health-related quality of life and has been validated in patients with MS.[1-3] The I-QOL, which can be administered in <5 minutes, consists of 22 items and is composed of 3 subdomains: (1) Avoidance and Limiting Behaviors, (2) Psychosocial Impact, and (3) Social Embarrassment.[3] Both a total score and individual subdomain scores can be calculated to help inform clinician decision making and treatment planning.

This abbreviated summary provides a review of the psychometric properties of the I-QOL in people with MS.

A full review of the I-QOL and reviews of ∼350 other instruments for patients with various health conditions can be found at www.rehabilitationmeasures.org. Please address correspondence to rehabmeasures@ric.org.

BIBLIOGRAPHY

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Rehabilitation MEASURES	**Measure Name:** Urinary Incontinence Quality of Life Scale	**Acronym:** I-QOL	**Summary Author(s):** J. Keller; L. Long; K. Nitsch; & J. Smiley

Population (s) Reviewed: Incontinence & Multiple Sclerosis	**Items:** 22	**Score (Min/Max):** 0 /100	**Cost of Measure:** Not Free - http://depts.washington.edu/seaqol/IQOL

Purpose and Administration Instructions:	
The I-QOL was developed as a self-report measure of the impact of urinary incontinence on facets of quality of life (QOL).[3] The I-QOL is divided into three subscales: • 8-Item Domain: Avoidance and Limiting Behavior • 9-Item Domain: Psychosocial Impact • 5-Item Domain: Social Embarrassment A total score, and individual subscale scores are available for interpretation, and scoring can be done by hand or by computer. All raw scores are converted to a scale score ranging from 0 to 100 to facilitate ease of interpretation. Higher scores indicate better quality of life.	**Administration Time:** 5 Minutes **Required Equipment:** Pencil / Response Form **Training Required:** No Training Required

Standard Error of Measurement:[1] (Calculated using published data) • **Total Score:** SEM= 2.43 • **ALB Score:** SEM= 3.07 • **PI Score:** SEM= 3.46 • **SE Score:** SEM= 1.89	**Minimal Detectable Change:[1]** (Calculated using published data) • **Total Score:** MDC= 6.75 • **ALB Score:** MDC= 8.52 • **PI Score:** MDC= 9.61 • **SE Score:** MDC= 5.26	**Normative Data:[1]** Mean (SD) • **Total Score:** 26.32 (8.12) • **ALB Score:** 26.92 (8.87) • **PI Score:** 33.35 (10.45) • **SE Score:** 18.70 (6.00)

Reliability:[1] **Test-Retest Reliability** • **Total:** *Excellent* (ICC= 0.91) • **ALB:** *Excellent* (ICC= 0.88) • **PI:** *Excellent* (ICC= 0.89) • **SE:** *Excellent* (ICC= 0.90) **Internal Consistency[1]** • **Total:** *Excellent* (Alpha= 0.91) • **ALB:** *Excellent* (Alpha= 0.88) • **PI:** *Excellent* (Alpha= 0.88) • **SE:** *Excellent* (Alpha= 0.90)	**Validity:** (Note: Values are from a neurogenic incontinence sample including multiple sclerosis)[2]

Correlations w/ Multiple Sclerosis Quality of Life Scale—54

MQOL-54	ALB	PSI	SE	Total
Physical Health	0.55*	0.59*	0.53*	0.58*
Mental Health	0.34**	0.33*	0.40**	0.38**

Floor & Ceiling Effects: (Note: These values are from a general overactive bladder/incontinence sample not specific to multiple sclerosis)[4]

• No marked floor or ceiling effects across the I-QOL total or subscale scores.
• The SE subscale had the greatest baseline floor (Adequate= 8.9%) and ceiling (Adequate= 1.8%) effects.
• Greater ceiling effects were noted after a 12 week retest period, with the largest ceiling effect being seen on the PI subscale (Adequate= 10.8%) and largest floor effect being seen on the SE subscale (Adequate= 2.8%).

Considerations:
• MS data presented is from the Turkish-language version of the I-QOL.
• Translated into over 15 languages.
• Normative and psychometric data is available for review for most translations.

Abbreviations: • **ALB:** Avoidance & Limiting Behavior • **PI:** Psychosocial Impact • **QOL:** Quality of Life • **SE:** Social Embarrassment • **Alpha:** Cronbach's Alpha • **ICC:** Interclass Correlation • **SD:** Standard Deviations	**Cut-off Criteria:**

	r	ICC
Excellent	≥ 0.6	≥ 0.75
Adequate	0.31-0.59	0.40-0.74
Poor	≤ 0.3	< 0.4