

## OCTH 6260-Spring- Assessment Rating Form

### I. General Information

**Title of the test:** Brain Injury Community Rehabilitation Outcome Scales (BICRO-39)

**Author:** Jane H. Powell, Karen Beckers, Richard J. Greenwood

**Publisher:** Contact J. Powell, Department of Psychology, Goldsmith College, New Cross, London SE14 6NW, United Kingdom

**Time required to administer:** Brief/Quick

**Cost of the Test:** unknown

### II. Description of Test

**Type/Purpose of Test:** This questionnaire is a multidimensional, quantitative assessment designed to measure community functioning in areas of activity, social participation, and psychological components. This assessment requires patients and/or caregivers to evaluate level of functioning on each item pre and post injury. It can also be used to track changes in performance across time. Functional areas assessed include personal care, psychological, socializing, self-organization, mobility, productive employment, and family contact. The information gleaned from this questionnaire can be used to facilitate treatment goal and outcome planning. Developed in the UK.

**Population:** Acquired Brain Injury (ABI) living in the community

**Focus of measurement**

Organic systems  Abilities  Participation/life habits  Environmental Factors

### III. Practical Administration

**Ease of Administration:** Easy.

**Clarity of Directions:**

3 Questionnaire Forms:

- Patient preinjury (P-PRE)
- Patient postinjury (P-POST)
- Carer postinjury (C-POST)

Assign appropriate questionnaire to patient or caregiver. Explain directions and purpose of questionnaire to patient and/or caregiver. Ensure understanding of score scale (0 to 5) to assign to each item. Ask patient/caregiver to fill out questionnaire on own if appropriate, or walk through questionnaire with individual if needed.

**Scoring Procedures:** Each item is scored on 6-point (0 to 5) scale. Response descriptors vary as relevant for the questions (e.g. frequency of events, 0= several hours a day, 3= once a week, 5= don't do this; degree of independence, 0=no help/prompts, 3= with a lot of help, 5= can't do this at all).

High scores indicate either dependency on others, infrequent engagement in activity, or subjective distress.

Note: A cumulative high score across similar items is more likely to indicate an adverse outcome than a high score on any single item.

**Examiner Qualification & Training:** No training required, but it could be helpful to read the assessment article (Powell, Beckers, & Greenwood, 1998).

**IV. Technical Considerations**

**Standardization:** \_\_\_ Norms \_\_\_ Criterion Referenced \_\_\_X\_\_\_ Other \_\_\_\_\_

**Reliability:**

*Alpha coefficients* (indicates items within scales are correlated with one another): Very high

Very high	Moderate	Very low
Personal Care (.94) Mobility (.88) Self-Organization (.94) Psychology (.95)	Socializing (.67) Parent/Sibling contact (.70) Parent/Child contact (.55)	Productive Employment (.30)

*Intercorrelations between scales* (reflect problems in one domain are likely to associated with problems in other domains): Significant

- Personal care, Mobility, & Self-Organization: High
- Indicates if a person is unable to complete basic care activities, then its likely higher level activities are also difficult
- Association between scales: Weak

*Test-retest reliability:* Good (exceed .75)

- P-PRE form: 3 of 8 scales did not highly correlate

*Patient/Carer agreement:* overall good agreement

**Validity:**

*Construct:* significant (Tested against FIM+FAM, HADS, & CIQ)

Criterion (discriminate between preinjury and postinjury functioning): Highly significant except Parent/Sibling or Parent/Child contact domains

Criterion (sensitivity to recovery over time/rehabilitation):

- Significant improvements on Personal Care, Mobility, & Psychological scales were found in first analysis while Self-Organization showed a trend towards improvement.
- Upon second analysis all groups except Parent/Sibling Contact showed a shift towards improvement.

Manual: \_\_\_ Excellent      \_\_\_ Adequate      \_\_\_ Poor      \_\_\_X\_\_\_ See article

**What is (are) the setting/s that you would anticipate using this assessment?**

Community Based Rehabilitation clinic/program  
Outpatient Rehabilitation

**Summary of strengths and weaknesses-**

**Weakness:**

- 0 to 5 scale can be confusing- Need to read the question and scale closely to ensure accuracy with scoring.
- Some items may not apply to respondent and may skew the scores. Consider this when interpreting the scores.

**Strength:**

- Concerned with patient engagement & level of independence in activities
- Questions & responses have been deliberately made simple & concrete for greater understanding by individuals with brain injury
- Easy to administer
- Helpful in establishing goals and establishing desired outcomes

**Reference**

Powell, J. H., Beckers, K., & Greenwood, R. J. (1998). Measuring progress and outcome in community rehabilitation after brain injury with a new assessment instrument- The BICRO-39 scales. *Archive of Physical and Medical Rehabilitation, 79*, 1213-1225.