Quadriplegia Index of Function (QIF)

- Developed in 1980 to provide a functional assessment that would be useful in documenting the small but clinically significant gains made by quadriplegics throughout in-patient rehabilitation.

- Assesses 10 ADLs:
  1) transfers
  2) grooming
  3) bathing
  4) feeding
  5) dressing
  6) wheelchair mobility
  7) bed activities
  8) bowel program
  9) bladder program
  10) understanding of personal care.

  These represent functional performance activities.

- The final area is a questionnaire - designed to assess the client’s understanding of skin care, nutrition, equipment medications and infections.

ICF Domain:

Activity – subcategory: Self-Care.

Number of Items:

37

Instructions for Administration and Scoring:

Administration:

- Clinician-administered; interview format.

- Scores are provided to give credit for being able to complete a portion of the task rather than the entire task.

- Administration takes less than 30 minutes when the assessor is familiar with the measure.

Equipment: None.

Scoring:

- The functional performance categories are scored on a 5 point scale from 0 (dependent) to 4 (independent).

- Each category of functional performance is calculated according to weighted scores - Functional performance categories: /180; Understanding of personal care: /20;

- Total score of 200 can be divided by 2 to yield a score out of 100.

Interpretability:
MCID: not established
SEM: not established
MDC: not established

• Higher scores indicate greater independence in key activities of daily living.
• No cut scores or normative data have been established for the SCI population.
• However, published data for the SCI population is available for comparison (see the Interpretability section of the Study Details sheet).

Languages:

English.

Training Required:

None formally required.

Availability:

Contact Dr. Glen E Gresham at Erie County Medical Centre.

Clinical Considerations:

• The QIF was designed for individuals with tetraplegia due to SCI.

Measurement Property Summary:

# of studies reporting psychometric properties: 2

Reliability:

• Inter-rater reliability ranges from adequate to excellent (r=0.55-0.95).
  [Gresham et al. 1986]

Validity:

• Correlation of the QIF is excellent with the:
  o Functional Independence Measure (Spearman's $\rho=0.97$)
  o American Spinal Injury Association (ASIA) - Motor subscale (Spearman's $\rho=0.91$)
  o ASIA – light touch (Spearman's $\rho=0.64$)
  o ASIA – pinprick (Spearman's $\rho=0.65$).
  [Gresham et al. 1986, Yavuz et al. 1998]

Responsiveness:

• QIF is sensitive in documenting functional improvements in quadriplegics – average improvements detected by QIF was 46%, while Barthel Index detected 20%.
  [Gresham et al. 1986]

Floor/ceiling effect:

No values were reported for the presence of floor/ceiling effects in the QIF for the SCI population.