How Would the Choice of the Multi-Attribute Utility Instrument Affect the Cost-Effectiveness of Cancer Interventions? A Comparison of the FACT-8D and the AQoL.

Authors: Haitham Tuffaha[1], Shiksha Arora[1], Linda Denehy[2,3] and Lara Edbrooke[2,3]

1. Centre for the Business and Economics of Health, The University of Queensland
2. Department of Physiotherapy, The University of Melbourne
3. Department of Health Services Research, The Peter MacCallum Cancer Centre, Melbourne

OBJECTIVES

- To compare the performance of the Functional Assessment of Cancer Therapy-Eight Dimension (FACT-8D), a cancer-specific multi-attribute utility instrument derived from the FACT-General (FACT-G) questionnaire, with the Assessment of Quality of Life (AQoL) as a generic instrument.

METHODS

- HRQoL data were drawn from a previously published RCT of a home-based rehabilitation program compared to usual care in lung cancer[1].
- Both the AQoL and the FACT-Lung (FACT-L) were administered at baseline, 9 weeks and 6 months.
- The FACT-8D utility values were derived from FACT-L using the algorithm developed by King et al. (2021).
- The utility values from the two instruments were compared and assessed for correlation and agreement at baseline.
- A cost-utility analysis from an Australian health system perspective was conducted.

CONCLUSIONS

- ✓ This is the first study to compare the FACT-8D and the AQoL.
- ✓ Deriving the FACT-8D from FACIT questionnaire may offer an alternative and efficient method to measure HRQL in cancer trials.
- ✓ Further testing of the instrument in practice is required.

RESULTS

Mean utility scores ⇨ At baseline, mean utility scores for FACT-8D were **slightly higher** compared to AQoL (0.68 vs 0.66).

Correlation ⇨ The correlation between the two instruments was **moderate** (Pearson's correlation = 0.69).

Agreement ⇨ The agreement between the two instruments was **low** (Lin's CCC = 0.69).

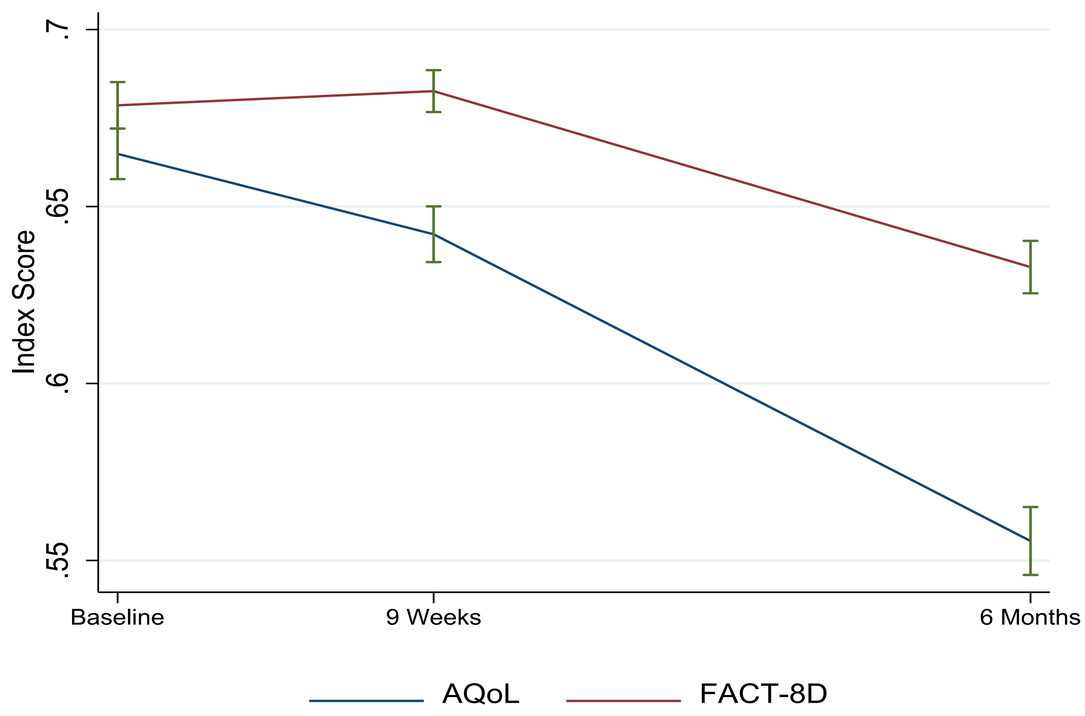

Figure 1. Change in mean utility scores derived from FACT-8D and AQoL

A slight difference was observed in the QALYs gained when using the FACT-8D compared to AQoL (-0.009 vs -0.011).

A higher incremental net monetary benefit was observed with the FACT-8D compared to the AQoL ($1,476 vs $1,388).

REFERENCES

1. Edbrooke, L., Aranda, S. et al. (2019). Multidisciplinary home-based rehabilitation in inoperable lung cancer: a randomised controlled trial. *Thorax*, *74*(8), 787.
2. Edbrooke, L. Aranda, S. et al. (2017). Benefits of home-based multidisciplinary exercise and supportive care in inoperable non-small cell lung cancer – protocol for a phase II randomised controlled trial. *BMC Cancer*, *17*(1), 663.
3. Edbrooke, L., Denehy, L., Cameron, P., & Tuffaha, H. (2021). Cost-effectiveness analysis of home-based rehabilitation compared to usual care for people with inoperable lung cancer. *European Journal of Cancer Care*, *30*(6), e13501.

For more information

SCAN ME