# An EQ-5D multilayered measure of health-related quality of life: RWD49 ls there relevance for it?

Rebecca Addo (PhD).

Centre for Health Economics Research and Evaluation, Faculty of Health, University of Technology Sydney, Australia

### INTRODUCTION

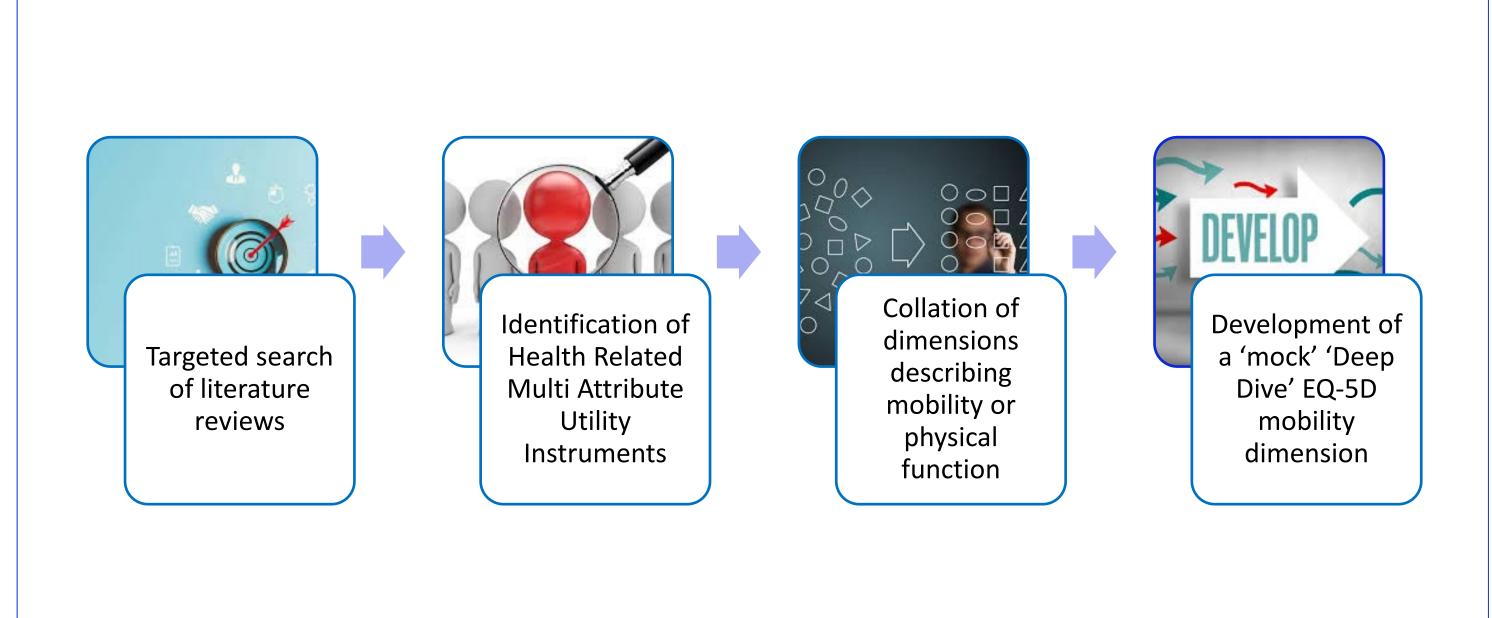
- Multi-attribute utility instrument (MAUI)s are used to collect data on health preferences to inform resource allocation in the health system.
- EQ-5D descriptive system, which is the most widely used generic MAUI is concise, facilitate estimation of quality adjusted life years and allows for comparability of health-related quality of life (HRQoL) across diseases and populations.
- However, its conciseness has resulted in its limitation of not able to capture all relevant aspects of health and disabilities in certain conditions.
- To address these limitations, condition specific 'bolt-on' are being explored with the aim of improving the measurement, sensitivity, content validity and relevance of EQ-5D in specific disease contexts. Challenges with 'bolt-ons' is their valuation due to the possible interaction between the 'bolt-on's and the existing EQ-5D instrument.
- An alternative approach proposed to address these limitations is a concept of taking a 'Deep Dive' into the existing EQ-5D dimensions, providing a more detailed description of each dimension, whilst maintaining the conciseness and preference weighting of the original EQ-5D. Hence under this proposal, a set of items will be explored under the five core dimensions for possible 'nesting' as a module.

### AIM

This study explores the feasibility, relevance and appropriateness of the proposed 'Deep Dive' approach into the existing EQ-5D dimensions, using mobility dimension as a case study.

### **METHODS**

A targeted literature search was conducted to identify existing items from other validated HRQoL MAUI instruments measuring mobility or overlapping constructs such as ambulation and physical ability.



### RESULTS

- Health related (HR) MAUI Instruments identified includes; Health Utilities Index (HUI) 2 and 3, AQOL-8D, Functional Limitations Profile, Nottingham health profile. AQOL-8D, 15 dimension, WHODAS2.0, QWB and SF6D.
- Mobility dimensions had items assessing either the physical or functional mobility of an individual. These dimensions were described as 'mobility', 'physical activity', 'ambulation', 'physical functioning', 'movement', 'getting around', 'physical ability', 'independent living'
- Physical mobility describes the capacity of an individual to move their body effectively. This was described in the identified instruments with walking, standing, changing position in bed
- Functioning mobility describes a person's ability to perform movements necessary for daily living; were described with bending knees, climbing stairs, getting out of bed. Majority of the HR MAIU's assessed a person's physical mobility, with few focusing on functional mobility (Fig 1).
- A sample 'mock' 'deep dive' EQ-5D mobility dimension will consider two nested modules: physical mobility and functioning mobility (Fig 2)
- Sample 'mock' items under the two proposed nested modules is presented in Tables 1 and 2.

Mobility

**Physical mobility** 

(items describing a person's capacity

to move such as walking, standing,

changing position)

**Functional mobility** 

(items describing a person's ability to

perform movements necessary for

daily living such as bending, climbing

stairs, getting out of bed

Fig 2. A sample 'mock' 'deep dive' EQ-5D

mobility dimension



Fig 1: Word cloud of items describing mobility

Table 1: 'Mock' Physical mobility items

### 'Mock' Physical mobility items

### Walking

- I have no problems in walking about
  I have slight problems in walking about
  I have moderate problems in walking
  about
- I have severe problems in walking about I am unable to walk about

### Climbing

I have no problems standing
I have slight problems with standing
I have moderate problems with standing
I have severe problems with standing
I am unable to stand

## Table 2: 'Mock' functional mobility items

### 'Mock' Functional mobility items

### Bending

I have no problems with bending
I have slight problems with bending
I have moderate problems with bending
I have severe problems with bending
I am unable to bend

### Climbing

I have no problems climbing
I have slight problems with climbing
I have moderate problems with climbing
I have severe problems with climbing
I am unable to climb.

DISCUSSION

- Many items were identified measuring physical and functional mobility, some of which had overlapping construct with independent living.
- These items had different response levels and scoring algorithms.
- An EQ-5D mobility 'deep dive' will ensure that items measuring different aspects of mobility are captured and measured with one instrument.
- This is especially important for conditions with mobility as key measure of health-related-quality-of-life.

### **CONCLUSIONS**

- There is relevance for deep dive' EQ-5D dimensions instruments. Input from key stakeholders will ensure that it is fit for purpose
- The next step of the project is to get stakeholders input to establish the relevance of investing in its development and likely usage of a 'deep dive' EQ5D dimensions instrument.

### References

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Views expressed are those of the author and do not necessarily reflect the views of the EuroQol Group.

Contact: Rebecca.Addo@uts.edu.au

https://profiles.uts.edu.au/Rebecca.Addo

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