

## OP07 Towards Better Outcomes: New Standard For Placing A Value On Health

### AUTHORS:

Paul Krabbe ([p.f.m.krabbe@umcg.nl](mailto:p.f.m.krabbe@umcg.nl))

### INTRODUCTION:

Cost-effectiveness analysis is probably the most often applied analysis in the field of Health Technology Assessment. Yet, there are major issues related to this analytical approach. Apart from the discussions about discounting, and which type of costs should be included in the analysis, there is discussion about the measurement of the health effects. The dominant economic and decision-making research paradigm that underpins present protocols to value health show flaws and limitations.

### METHODS:

All existing generic health instruments (for example, EuroQol five dimensions questionnaire, EQ-5D; Health Utilities Index, HUI; Short Form, SF-6D) used to collect values for health states use a small, fixed set of health domains. Descriptions of health states are created based on these domains and their levels. Subsequently, these descriptions are valued with special preference-based methods (measuring the quality or importance of something). When developing those instruments, patients' opinions were not actively incorporated in the choice of domains, nor have patients' preferences been considered in assessing weights to the domains and their levels.

### RESULTS:

We developed a novel preference-based health measurement methodology that combines the strength of two existing measurement models for subjective phenomena: the discrete choice model and Rasch item response theory (1-3). This new approach is referred to as the multi-attribute preference response (MAPR) model. This is the first generic health preference-based model that is fully based on the perception and reporting from patients (experienced based) and is

insensitive to adaptation mechanisms. Apart from being grounded on measurement theory, the valuation tasks are easy and attractive to perform in a self-completion setting. A first application based on this novel model has been worked out in a mobile app to measure the overall health condition of infants (reported by mothers).

### CONCLUSIONS:

Our recently introduced and informative health measurement model overcomes many problems associated with the conventional methods.

### REFERENCES:

1. Krabbe PFM. The Measurement of Health and Health Status: Concepts, Methods and Applications from a Multidisciplinary Perspective. San Diego: Elsevier/Academic Press, 2016.
2. Krabbe PFM. Measurement Properties of Valuation Techniques. In: Anthony J. Culyer (ed.), Encyclopedia of Health Economics, Vol 2. San Diego: Elsevier; 2014. pp. 228–233.
3. Krabbe PFM. A generalized measurement model to quantify health: the multi-attribute preference response model. *PLoS One* 2013, 8(11) e79494.

---

## OP08 National Institute for Health Research Health Technology Assessment Programme Research Funding And United Kingdom Burden Of Disease

### AUTHORS:

Fay Chinnery, Gemma Bashevoy, Amanda Blatch-Jones, Lisa Douet, Sarah Puddicombe, James Raftery ([J.P.Raftery@soton.ac.uk](mailto:J.P.Raftery@soton.ac.uk))