

MEASURING AND VALUING HEALTH FOR CHILDREN: A SERIES OF REVIEWS TO INFORM HEALTH TECHNOLOGY ASSESSMENT

WHAT IS THE PROBLEM?

Measuring and valuing health-related quality of life (HRQoL) in children impose unique methodological and normative challenges. The optimal methods are not known.

WHAT DID WE DO?

We conducted three literature reviews, searching electronic databases and websites of health technology assessment (HTA) agencies/organizations on three distinct but related topics.

WHAT DID WE FIND?

1

Identify generic preference-based instruments and value sets for children

15 generic preference-based instruments were developed for specific age groups apart from the QWB-SA, HUI2, and HUI3, which can be used for children and adults. Several instruments have a proxy version. Multiple value sets were identified for the EQ-5D-Y-3L, CHU-9D, AQoL-6D, HUI3, IQI, HUI2.

2

Identify evidence comparing health state preferences between adults and children

Four studies quantitatively compared children and adults' health state preferences. Children generally had lower utility scores. This may be attributed to the health state description, perspective, method of preference elicitation, or how children consider dimensions of HRQoL.

3

Identify evidence focused on the spillover effects on family HRQoL

Most pediatric cost-utility analyses conducted from a societal perspective included family costs, but few incorporated spillover health effects. There was no consensus on how spillover effects should be measured and quantified.

WHAT DOES THIS MEAN?

There has been significant progress in recent years in the development of instruments and methods for measuring and valuing child health. These advances are vital steps towards supporting the assessment of health technologies targeting pediatric conditions. However, there is a need for additional research to inform HTA.

Based on these findings, we provide recommendations for future research.

RECOMMENDATIONS FOR FUTURE RESEARCH

- Head-to-head comparisons on the psychometric performance of child instruments
- Engaging local stakeholders on the development of value sets
- Methodological exploration on the impact of using child versus adult preferences
- Methodological exploration on how preferences should be handled at age transitions in cost-effectiveness analyses
- Quantifying health spillover effect and the impact of different approaches on cost-effectiveness results

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