What Do HTA Agencies Across the Globe Need for Generating Health-Related Quality of Life Evidence? Findings From a Global Survey

OP8

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INTRODUCTION & OBJECTIVE

- Health technology assessments (HTA) provide a comprehensive framework for integrating evidence of economic, social, and health consequences and effects into the decision-making process.
- Due to their authority, HTA agencies' approaches and views on evidence generation methods significantly influence practice and therefore are highly valuable to researchers.
- Understanding HTA agencies' views and preferences especially concerning health-related quality of life (HRQoL) measurement and valuation methods through published methods guide is suboptimal:
  - practices and views constantly evolve, guides may be outdated
  - guides for certain methodological aspects may be ambiguous/missing
  - many HTA agencies have not published methods guides
- This study aims to understand the practices, views, and needs of HTA practitioners worldwide regarding the measurement, valuation, and use of HRQoL data.

METHOD

- A Qualtrics online survey of HTA agency personnel was conducted from April 2023 to January 2024.
- A total of 60 target countries with national HTA agencies were identified and invitations with country-specific survey links were sent.
- The sections of questions revolved around experience with and opinions on i) Utility Instruments, ii) Elicitation Methods, iii) Health Preference Data Source, iv) Data Quality and Appropriateness, and v) Research Priorities.
- For Likert-type questions, the mode was used for country response summary, and the median of these subsequent scores was used as the summary of the responses for six regions (Commonwealth - Australia/Canada/New Zealand/United Kingdom, Western Europe, Central/Eastern Europe, Asia, Latin America, and Middle East/Africa).
- For Research Priority questions, a respondent-specific score was first determined by equally weighting the chosen priorities, followed by an average country-specific and a region-specific score.

RESULTS

- 238 individuals from 45 countries completed the survey.
- The mean response number per country was 5.28 (SD: 4.45).
- Overall, most responses came from government employees (71.9%), and 89.5% were involved in QALY-related work.
- The top three most frequently used utility instruments were EQ-5D, SF-6D, and EQ-5D-Y.
- The top three most frequently used utility elicitation methods were time trade-off, visual analogue scale, and standard gamble.
- Health-state preferences of another country's general public was more frequently used than local own-country public preferences.
- The data quality issues that often arose across regions were the poor sample representativeness and small sample size of utility data, poor matching of available health state utility data with those of the CEA models, and the use of utility data from multiple methods/instruments in a same model.
- Top-voted research priority in each region:
  - Asia and Europe: develop utility instruments to capture the health care and social care impact
  - Middle East/Africa and Central/Eastern Europe: make more recent utility data available
  - Commonwealth: develop utility instruments to capture the impact of treatment on carers and caregivers
  - Latin America: develop utility instruments to address inequality in care
  - In four regions, utility instruments for children was the second highest research priority

Table 1. Responses by region

	Response Frequency, Median (IQR)						Total
	Common-wealth (n=6)	Western Europe (n=7)	Central/ Eastern Europe (n=9)	Asia (n=11)	Latin America (n=7)	Middle-East/ Africa (n=5)	
Utility instrument use frequency							
Total responses (N)	33	27	22	83	33	13	211
AQOL	1 (0)	1 (0)	1 (1.0)	1 (1.5)	1 (1.5)	1 (0.5)	6.0
EQ-5D	4 (0)	4 (0)	4 (0)	4 (0)	3.5 (1.0)	4 (0.5)	23.5
EQ-5D-Y	1.75 (0.5)	1 (1)	2 (1.5)	2 (1.0)	2 (1.0)	2 (0.5)	10.75
EQ-HWB	1 (0)	1 (0)	1 (0.75)	1 (0)	1 (1.0)	1 (0.5)	6.0
Bolt-ons	1 (0)	1 (0)	1 (0.25)	1 (0)	1 (0)	1 (0)	6.0
HUI	2 (0.5)	1 (1.0)	1 (1)	1.5 (1.0)	1 (0)	2 (0.5)	8.5
PROPR	1 (0)	1 (0)	1 (0)	1 (0)	1 (0)	1 (0.5)	6.0
QWB	1 (0)	1 (0)	1 (0.5)	1 (0)	1 (0)	1 (0)	6.0
SF-6D	2 (0)	2 (1.0)	2 (1.0)	2 (1.0)	3 (1.0)	2.5 (1.0)	13.5
Elicitation method use frequency							
Total responses (N)	33	27	21	78	32	11	202
Best-worst scaling	1 (0)	1 (0)	1.5 (2.0)	1 (1.0)	1.5 (1.0)	2 (0.5)	8.0
Discrete choice experiment	2 (0.5)	1.5 (1.0)	2 (1.0)	2 (1.5)	2 (1.0)	3.5 (1.75)	13.0
Person trade-off	1.25 (1.0)	1 (1.0)	2 (0.5)	2 (2.0)	2 (0.5)	2 (1.0)	10.25
Standard gamble	2.25 (1.0)	2 (1.0)	2.75 (1.5)	3 (1.0)	3 (1.0)	3.5 (1.5)	16.5
Time trade-off	4 (1.0)	3.5 (1.0)	3 (1.0)	3 (1.0)	3 (1.0)	3.5 (1.0)	20.0
Visual analogue scale	2 (1.0)	2 (1.0)	3 (1.5)	3 (1.5)	3 (1.5)	3.5 (1.0)	16.5
Health preference source use frequency							
Total responses (N)	33	27	22	84	34	13	213
General population own	3.25 (2.0)	3 (2.0)	2 (1.0)	3 (1.5)	2 (0.5)	1 (1.0)	14.25
General population other	2.5 (1.0)	2 (2.0)	4 (1.0)	3 (1.0)	3 (1.0)	3 (1.5)	17.5
Patient own	2 (0)	2 (1.0)	1 (1.0)	3 (1.0)	2 (1.0)	1 (1.0)	11.0
Patient other	2 (2.0)	2 (0.5)	3 (1.5)	2 (1.0)	3 (1.0)	3 (1.5)	15.0
Data quality issue frequency							
Total responses (N)	34	31	25	95	38	15	238
Patient samples	3 (2.0)	3 (1.5)	2 (0)	3 (1.0)	3 (2.0)	2.5 (1.0)	16.5
Health states	3 (1.0)	2 (1.5)	2 (1.0)	3 (0)	4 (1.0)	3 (1.0)	17.0
Sample size	3 (0.5)	2 (1.0)	3 (1.0)	3 (0)	3 (1.0)	2 (1.0)	16.0
Old data	2 (0)	2 (0.5)	2 (1.25)	2 (1.0)	2 (2.0)	2.5 (0.5)	12.5
Different methods	2.75 (1.0)	2 (1.0)	3 (1.0)	3 (1.0)	3 (2.0)	3 (1.5)	16.75
Research priority, Mean score							
Social care	0.07	0.33	0.10	0.21	0.16	0.12	0.17
Children	0.21	0.13	0.30	0.18	0.08	0.23	0.19
Caregivers	0.23	0.12	0.09	0.09	0.15	0.14	0.14
Health specificity	0.20	0.10	0.12	0.15	0.16	0.03	0.13
Recent tariff	0.15	0.15	0.31	0.17	0.11	0.33	0.20
Care inequality	0.05	0.17	0.05	0.13	0.22	0.12	0.12
Minority/rural	0.10	0.01	0.03	0.08	0.12	0.03	0.06

Abbreviations: **Responses**: 1: Never/not sure; 2: Occasionally; 3: Often; 4:Very often; **Patient samples:** The patient samples from which HRQoL/utility data was collected were inappropriate (e.g. poor representativeness); **Health states:** The health states (e.g. the vignettes) for which utility data was available do not match the health states in the CEA model; **Sample size:** The population samples from which HRQoL/utility data was collected were too small; **Old data:** The HRQoL/utility data was too old; **Different methods:** The utility values of different health states used in the same model were derived using different methods/instruments; Range of research priority values: 0 (least important)-1 (most important); **Social care:** To develop utility instruments to capture the impact of both health care and social care; **Children:** To develop utility instruments to capture the impact of treatment on children and adolescents; **Caregivers:** To develop utility instruments that capture the impact of a treatment on carers and caregivers; **Health specificity**: To develop utility instruments that capture the impact of treatment on more specific aspects of health (e.g. vision hearing etc.); **Recent tariff:** To make more recent utility data and value sets/tariffs available; **Care inequality:** To develop utility instruments that can address inequality in care; Minority/rural: To develop utility instruments that can reflect the health preferences of minority groups (e.g. indigenous populations) or rural population

CONCLUSIONS

- Our study shed light on the current practices, views, and needs of HTA practitioners globally in measuring and valuing HRQoL.
- While the use of utility instruments and elicitation methods was generally consistent with HTA guidance recommendations, patient preference data is often used in some regions, coupled with the pervasive suboptimal use of HRQoL and health-state utility data.
- Our study underscores the need for increasing data availability and better adherence to guideline recommendations.

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