**Supplementary Table 1**. Recommendations published by health technology assessment bodies for collecting health state utilities

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| --- | --- | --- | --- | --- |
| **Publication** | **Aim** | **Confounding** | **Selection bias** | **Information bias** |
| Brazier, 2008  NICE DSU Article[1] | Provide guidance on reference case and alternative methods for measuring HSU | - | Selection of respondents | Choice of instrument  Definition of HS |
| Brazier, 2011  NICE DSU TSD[2] | Provide guidance on alternative methods for measuring HSU when EQ-5D is insufficient | - | Selection of respondents | Choice of instrument  Definition of HS |
| Papaioannou, 2011  NICE DSU TSD[3]  & Article[4] | Provide guidance to identify, review and synthesize HSU | - | Selection of respondents  Response rate  Missing data | Choice of instrument  Definition of HS |
| Kearns, 2012  NICE DSU TSD[5]  & Article[6] | Provide guidance on the reporting of statistical regression models in CUA | Analytical techniques | Missing data | - |
| Wolowacz, 2016  ISPOR Report[7] | Provide guidance on the collection of HSU in clinical studies for CUA | Study design  Analytical techniques | Selection of respondents  Method of recruitment  Response rate  Missing data | Choice of instrument  Mode of administration  Frequency of assessment  Timing of assessment  Definition of HS |
| Brazier, 2019  ISPOR Report[8] | Provide guidance to identify, review and use HSU in CUA | - | Selection of respondents  Response rate  Missing data | Choice of instrument  Timing of assessment  Definition of HS |
| Rowen, 2020  NICE DSU Report[9] | Provide guidance on alternative methods for measuring HSU when EQ-5D is insufficient | - | Selection of respondents | Choice of instrument  Definition of HS |

CUA: Cost-utility analysis; DSU: Decision Support Unit; HS: Health state; HSU: Health state utility; ISPOR: International Society for Pharmacoeconomics and Outcomes Research; NICE: National Institute for Health and Care Excellence; TSD: Technical Support Document

1. Brazier J. Valuing health States for use in cost-effectiveness analysis*.* *Pharmacoeconomics* 26(9), 769-779 (2008).

2. Brazier JE, Rowen D. NICE DSU Technical Support Document 11: Alternatives to EQ-5D for generating health state utility values. The National Institute for Health and Care Excellence (2011) <http://www.nicedsu.org.uk>

3. Papaioannou D, Brazier JE, Paisley S. NICE DSU Technical Support Document 9: The identification, review and synthesis of health state utility values from the literature. The National Institute for Health and Care Excellence (2011) <http://www.nicedsu.org.uk>

4. Papaioannou D, Brazier J, Paisley S. Systematic searching and selection of health state utility values from the literature*.* *Value Health* 16(4), 686-695 (2013).

5. Kearns B, Ara R, Wailoo AG. A Review of the Use of Statistical Regression Models to Inform Cost Effectiveness Analyses within the NICE Technology Appraisals Programme: Report by the Decision Support Unit. The National Institute for Health and Care Excellence (2012) <www.nicedsu.org.uk>

6. Kearns B, Ara R, Wailoo A *et al*. Good practice guidelines for the use of statistical regression models in economic evaluations*.* *Pharmacoeconomics* 31(8), 643-652 (2013).

7. Wolowacz SE, Briggs A, Belozeroff V *et al*. Estimating Health-State Utility for Economic Models in Clinical Studies: An ISPOR Good Research Practices Task Force Report*.* *Value Health* 19(6), 704-719 (2016).

8. Brazier J, Ara R, Azzabi I *et al*. Identification, Review, and Use of Health State Utilities in Cost-Effectiveness Models: An ISPOR Good Practices for Outcomes Research Task Force Report*.* *Value Health* 22(3), 267-275 (2019).

9. Rowen D, Brazier JE, Wong R, Wailoo AG. Measuring and valuing health-related quality of life when sufficient EQ-5D data is not available. The National Institute for Health and Care Excellence (2020) <http://nicedsu.org.uk>