

Recently updated methods guidelines: Discussion

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Purpose

- Comparing and contrasting guidelines
- Reflections on NICE's methods and 2007 update

Nature of the decision making organisation and its decisions

- Which technologies
 - Pharmaceuticals only
 - Includes others (e.g. devices, procedures)
- Is there clarity about the system's objective function?
- Where does the budget constraint fall
 - Is there one in the system?
 - Does the decision maker hold the budget?
 - Is the decision maker an agent for the system?
 - How is the budget constraint reflected in decisions?
- How limited is a pharmaceutical's license?

Key differences between methods guidelines

Definition of the decision problem

- Licensed indication vs routine use
- Specifying comparators
 - 'Standard practice' (many)
 - All feasible options
 - Big analytical implications
- Definition of relevant sub-groups – at what stage?

Variability in methods guidelines

Choice of comparator (n=27)

Most commonly used	8
Existing, most effective or minimum practice	2
Existing or most effective	1
Justify	1
Existing and no treatment	2
Most common, least costly, no treatment	1
Most common, least costly, no treatment, most effective	2
Most common, least costly, most effective	1
Most likely to be displaced	1
Most efficient, most effective, do nothing	2
All relevant comparators	2
Most effective and no treatment	1
Not clear/specific	3

Key differences between methods guidelines

Role of modelling

- Prominent view: models necessary when trial data inadequate
- Alternative view: models always needed for decision making:
 - Include all appropriate comparators
 - Synthesise all relevant evidence
 - Appropriate time horizon (often lifetime)
 - Fully quantify decision uncertainty

Key differences between methods guidelines

Role of QALYs

- Emerging consistency
- Reflects needs of decision making
- Limitations clear – are there any feasible alternatives
- Quest for increasing consistency in QALYs
- Are other outcomes ever appropriate?

Key differences between methods guidelines

Importance of uncertainty

- Analysis of uncertainty has always featured in guidelines (albeit with variation)
- Increasing prominence of probabilistic sensitivity analysis
- Experience of NICE – how should uncertainty be used in making decisions?
 - Role of conventional inference
 - Concept of decision uncertainty
 - Irreversibilities and sunk costs
 - Linking decisions to the needs of future research

Variability in methods guidelines

Methods for sensitivity analysis (n=27)

Need to state and justify	3
Not stated/not specific	10
Probabilistic sensitivity analysis (PSA)	3
One-way, multi-way	1
One-way, two-way	2
Multi-way (of most important)	1
One-way, multi-way and PSA	5
One-way, multi-way and worst-best scenario	1
One-way with tornado diagram	1

NICE methods update 2007

Methods workshops

- Indirect and mixed treatment comparisons
- Heterogeneity and sub-groups
- Costs
- Utilities
- Uncertainty
- Diagnostics

Thank you!

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www.york.ac.uk/inst/che/research/teehta.htm