

Identifying NICE's Methodological Research Priorities: A Survey of Priorities

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Project funding and personnel

- Funding – NIHR-MRC Methodology Research Programme
- Project Team:
 - Louise Longworth and Jon Tosh (ScHARR, University of Sheffield) and Mark Sculpher and Laura Bojke (CHE, University of York)
- Advisory group to project team:
 - Keith Abrams (Leicester), Tony Ades (Bristol), Andrew Booth, Allan Wailoo and John Brazier (Sheffield), Karl Claxton (York), Chris McCabe and Justin Keen (Leeds), Adrian Towse (Office of Health Economics)

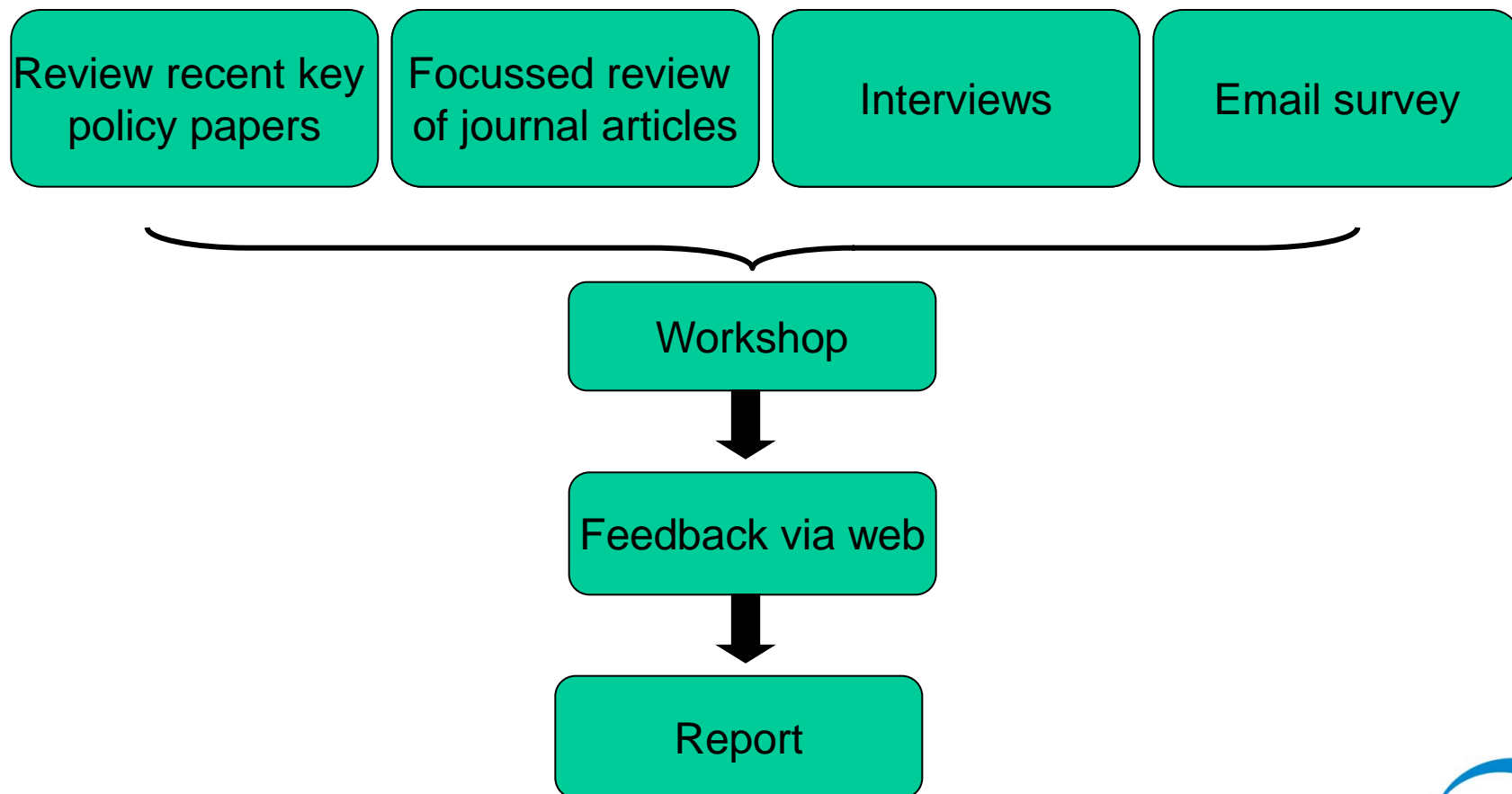
Objectives

1. Describe current processes at NICE to identify and prioritise methodological research topics
2. To undertake a scoping study to provide recommendations for identifying NICE's methodological research priorities
3. To establish an initial set of such priorities

In principle, related to all aspects of NICE activity

- Technology appraisal
- Interventional procedures
- Public health interventions and programmes
- Guidelines

Methods – identification of topics



Content of interviews and email survey

	Current NICE process	Changes to NICE process	Current process in other org.	Potential topics
NICE staff	✓	✓		✓
NICE advisory committees	✓	✓		✓
UK Govt bodies		✓	✓	✓
UK research organisations		✓		✓
NICE evidence reviewers				✓
Non-UK bodies		✓	✓	✓

Workshop

- To discuss topic suggestions from review & interviews
- Invitees included NICE staff, reps from advisory bodies and review groups, industry, methodologists
- Format included a series of presentations from methodology experts followed by small group discussions to:
 - Add potential topics
 - Identify some key topics
 - Assess NICE challenge they address
 - Assess potential value to NICE
 - Further elaborate questions

Web-based feedback exercise

- An amended list of potential topics placed on the MRC website
- Website was publicly available and the link was sent to workshop participants
- People were asked to rate topics and to identify priority topics

Topics categorised into five areas (n=125)

- Area 1: Analysis and design of effectiveness studies and their synthesis
- Area 2: Synthesis of evidence from patients, the public and stakeholders
- Area 3: Economic analysis and uncertainty
- Area 4: Measurement and valuation of benefits
- Area 5: Decision-making at NICE

Area 1: Analysis, design and synthesis of effectiveness studies

- A. Systematic reviews
- B. Meta-analysis
- C. Non-experimental data
- D. Interpretation and analysis of RCT data
- E. Clinical heterogeneity
- F. Diagnostics and medical devices
- G. Behavioural research

Area 2: Synthesis of evidence from patients, the public and stakeholders

- A. Evidence from patients
- B. Evidence from the general public
- C. Evidence from other stakeholders

Area 3: Economic analysis and uncertainty

- A. Costing
- B. Perspective for analysis
- C. Time horizon for analysis
- D. Economic modelling
- E. Uncertainty
- F. Other economic issues

Area 4: Measurement and valuation of benefits

- A. Use of the QALY
- B. Standardised measurement tools
- C. Valuation of health
- D. Use of health state utility data in economic models

Area 5: Decision-making at NICE

- A. Threshold for cost-effectiveness
- B. Influences on NICE decision-making
- C. Handling uncertainty in decision-making
- D. Process of decision-making
- E. Developments to the format or type of NICE recommendations

Key topics arising from web feedback (1)

- Analysis of non-experimental data
- Adjusting for bias in meta-analysis
- Systematic reviews of complex interventions
- Evaluation of diagnostic tools and screening
- Efficient methods for systematic reviews (including for diagnostics)
- Extrapolation of costs and benefits beyond observed RCT data
- Assessing whether predictions of models are borne out in practice
- Assessing costs and (dis)benefits outside of the health sector

Key topics arising from web feedback (2)

- Measuring and valuing effects of interventions not captured by the QALY
- Methods for determining whether additional evidence is required (i.e. OIR or CED decisions)
- Methods for producing guidance on disinvestment
- Methods for establishing the threshold (opportunity cost of NICE guidance)

Projects commissioned by MRC in 2009 (1)

- Informing a decision framework for when NICE should recommend the use of health technologies only in the context of an appropriately designed programme of evidence development (2008)
- Widening the spectrum of health outcomes used in health technology assessment: integrated synthesis and mapping to QALYs
- Use of generic and condition-specific measures in NICE decision-making
- Preparatory study for the re-evaluation of the EQ-5D tariff (PRET)

Projects commissioned by MRC in 2009 (2)

- Economic modelling of diagnostic/ treatment pathways in NICE clinical guidelines
- Properties of statistical methods for indirect and mixed treatment comparison - a computer simulation evaluation
- Methodological search filter performance: assessment to improve efficiency of evidence information retrieval
- Methods to estimate the NICE cost-effectiveness threshold
- Methods for the indirect estimation of health state utilities
- Methods for strengthening evaluation and implementation: specifying components of behaviour change interventions
- Total cost £2.3 million (\$3.6 million US)

Reflections on scoping study

- Interesting one-off exercise – can it be maintained?
- Generated NICE methods R&D strategy
- Issues about definition of methods research
- Possible lack of clarity about what research has already be undertaken
- Supposed to cover all areas of NICE activities (in principle)
- Should there have been a focus on NICE's decision makers?
- Fell short of voting process – NICE emphasised main interests
- Only 18 bids – 9 funded

Reading and web-pages

- Longworth et al. MRC-NICE Scoping Project. Final Report to MRC.

<http://www.york.ac.uk/media/che/documents/papers/researchpapers/CHE%20Research%20Paper%2051.pdf>

- NICE Research and Development methodological research strategy.

http://admin.nice.org.uk/media/7A7/4C/NICE_RD_Methods_Strategy_-_2010_2011%282%29.pdf

- MRC MRP Commissioning

<http://www.mrc.ac.uk/Fundingopportunities/Calls/NICEdecisionmaking/MRC006087>