

Executive summary

**Eliciting public preferences for
healthcare: a systematic review
of techniques**

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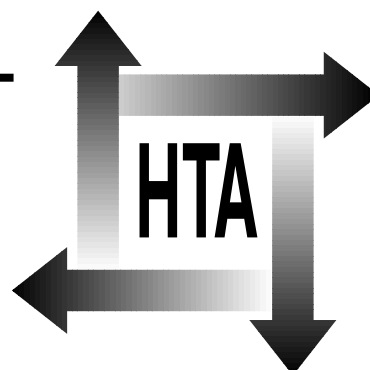
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Executive summary

Background

Limited resources coupled with unlimited demand for healthcare mean that decisions have to be made regarding the allocation of scarce resources across competing interventions. Policy documents have advocated the importance of public views as one such criterion. In principle, the elicitation of public values represents a big step forward. However, for the exercise to be worthwhile, useful information must be obtained that is scientifically defensible, whilst decision-makers must be able and willing to use it.

Aims and objectives

The aim was to identify techniques that could be reasonably used to elicit public views on the provision of healthcare. Hence, the objectives were:

- to identify research methods with the potential to take account of public views on the delivery of healthcare
- to identify criteria for assessing these methods
- to assess the methods identified according to the predefined criteria
- to assess the importance of public views *vis-à-vis* other criteria for setting priorities, as judged by a sample of decision-makers
- to make recommendations regarding the use of methods and future research.

Methods

A systematic literature review was carried out to identify methods for eliciting public views. Criteria currently used to evaluate such methods were identified. The methods identified were then evaluated according to predefined criteria.

A questionnaire-based survey assessed the relative importance of public views *vis-à-vis* five other criteria for setting priorities: potential health gain; evidence of clinical effectiveness; budgetary impact; equity of access and health status inequalities; and quality of service. Two techniques were used: choice-based conjoint analysis and allocation of points technique. The questionnaire was sent to 143 participants. A subsample was followed up with a telephone interview.

Results

The methods identified were classified as quantitative or qualitative.

Quantitative techniques

Quantitative techniques, classified as ranking, rating or choice-based approaches, were evaluated according to eight criteria: validity; reproducibility; internal consistency; acceptability to respondents; cost (financial and administrative); theoretical basis; whether the technique offered a constrained choice; and whether the technique provided a strength of preference measure.

Regarding ranking exercises, simple ranking exercises have proved popular, but their results are of limited use. The qualitative discriminant process has not been used to date in healthcare, but may be useful. Conjoint analysis ranking exercises did well against the above criteria.

A number of rating scales were identified. The visual analogue scale has proved popular within the quality-adjusted life-year paradigm, but lacks constrained choice and may not measure strength of preference. However, conjoint analysis rating scales performed well. Methods identified for eliciting attitudes include Likert scales, the semantic differential technique, and the Guttman scale. These methods provide useful information, but do not consider strength of preference or the importance of different components within a total score. Satisfaction surveys have been frequently used to elicit public opinion. Researchers should ensure that they construct sensitive techniques, despite their limited use, or else use generic techniques where validity has already been established. Service quality (SERVQUAL) appears to be a potentially useful technique and its application should be researched.

Three choice-based techniques with a limited application in healthcare are measure of value, the analytical hierarchical process and the allocation of points technique, while those more widely used, and which did well against the predefined criteria, include standard gamble, time trade-off, discrete choice conjoint analysis and willingness to pay. Little methodological work is currently available on the person trade-off.

Qualitative techniques

Qualitative techniques were classified as either individual or group-based approaches. Individual approaches included one-to-one interviews, dyadic interviews, case study analyses, the Delphi technique and complaints procedures. Group-based methods included focus groups, concept mapping, citizens' juries, consensus panels, public meetings and nominal group techniques.

Six assessment criteria were identified: validity; reliability; generalisability; objectivity; acceptability to respondents; and cost.

Whilst all the methods have distinct strengths and weaknesses, there is a lot of ambiguity in the literature. Whether to use individual or group methods depends on the specific topic being discussed and the people being asked, but for both it is crucial that the interviewer/moderator remains as objective as possible. The most popular and widely used such methods were one-to-one interviews and focus groups. Both methods have potential problems with validity and reliability, and the researcher must minimise these problems at all stages of data collection, analysis and dissemination. The Delphi technique was widely used, but participants were only occasionally patients. It is proposed that the Delphi technique could be more widely used to gain patients' opinions. Citizens' juries were found to be very useful, especially with complex subject matter; the final decisions and opinions of participants are particularly valid and reliable because of the opportunity for deliberation. However, there are problems with generalisability as only very small numbers of people can be involved; they are also very time-consuming and therefore costly. Consensus panels are similar to citizens' juries but do not allow sufficient time for decision-making. They are less costly so cannot be dismissed. Public meetings, which are frequently used and are a quick and inexpensive way of gaining public opinion, are unrepresentative. Finally, complaints procedures only consider negative viewpoints, and therefore have limited value. Further work is needed to establish the appropriateness of case study analyses, concept mapping and nominal group techniques.

The importance of public views in priority setting

Both the choice-based conjoint analysis technique and the allocation of points method found the public's views to be important in the priority-setting exercise, although the relative rankings differed across the two techniques. In the follow-up telephone interviews, whilst the majority of respondents stated that the community had a role to play in decision-making, and that this role was (very)

important in the context of priority setting, they ranked it as the least important of the six criteria.

Conclusions

Recommended techniques

There is no single, best method to gain public opinion. The method must be carefully chosen and rigorously carried out in order to accommodate the question being asked. Conjoint-based methods (including ranking, rating and choice-based), willingness to pay, standard gamble and time trade-off of the quantitative techniques and one-to-one interviews, focus groups, Delphi technique and citizens' juries of the qualitative methods are recommended. Likert scales, the semantic differential technique and Guttman scales are useful quantitative techniques for eliciting attitudes and knowledge.

Recommendations for future research

Researching techniques:

- the techniques recommended above should continue to be researched
- research to investigate analytical hierarchical process, measure of value, allocation of points, the qualitative discriminant process, SERVQUAL and person trade-off as quantitative methods with telephone, email and dyadic interview techniques, consensus panels, case study analyses, concept mapping and nominal group techniques as qualitative methods
- when addressing the above points, a priority area of research is to address the extent to which preferences for healthcare exist, as well as the cognitive strategies and decision-making heuristics respondents adopt when completing quantitative surveys. This should involve extensive qualitative work to inform the design and interpretation of quantitative studies.

General issues raised in the review:

- do the public want to be involved in healthcare decision-making?
- potential problems encountered with a preference for the *status quo*
- ethical issues in involving the public
- developments of frameworks to ensure public preferences are incorporated into priority setting.

Publication

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NHS R&D HTA Programme

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Initially, six HTA panels (pharmaceuticals, acute sector, primary and community care, diagnostics and imaging, population screening, methodology) helped to set the research priorities for the HTA Programme. However, during the past few years there have been a number of changes in and around NHS R&D, such as the establishment of the National Institute for Clinical Excellence (NICE) and the creation of three new research programmes: Service Delivery and Organisation (SDO); New and Emerging Applications of Technology (NEAT); and the Methodology Programme.

Although the National Coordinating Centre for Health Technology Assessment (NCCHTA) commissions research on behalf of the Methodology Programme, it is the Methodology Group that now considers and advises the Methodology Programme Director on the best research projects to pursue.

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