#### **OUTCOME MEASUREMENT**

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# An inquiry into the different perspectives that can be used when eliciting preferences in health

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### Summary

There are a number of perspectives that an individual could be asked to adopt in studies designed to elicit preferences for use in informing resource allocation decisions in health care. This paper develops a conceptual framework that clearly distinguishes between six different perspectives. It is argued that the appropriate perspective to use depends on normative considerations and the particular policy context to which it will be applied. We suggest a future research agenda that explicitly addresses these considerations and which involves direct empirical investigation into the effect of perspective on preferences. Copyright © 2002 John Wiley & Sons, Ltd.

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#### Introduction

There appears to be general agreement amongst health economists that people's preferences regarding alternative allocations in health care should play some part in the decision-making process [1]. As a result, health economists have conducted a number of studies that have attempted in various ways to elicit stated preferences that can be used to inform priority setting. Considerable effort has been directed towards measuring the benefits that individuals derive from health care, either in health [2] or in monetary terms [3]. In addition to the measurement of personal preferences about the benefits that an individual derives from health care, there is now increasing interest in eliciting people's social preferences regarding a wide range of distributional considerations [4].

An individual, then, could be asked to consider her own welfare or the welfare of others. This highlights that there is more than one perspective that an individual could be asked to adopt in studies designed to elicit preferences for use in informing resource allocation decisions in health care. Since a person's preferences may depend on the perspective she is asked to adopt; that is, on what she is asked to consider and on whose shoes she is placed in, it is important to consider the range of possible perspectives and to say something about their relative merits.

The purpose of this paper is to address these important issues that have not been addressed in a

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comprehensive and integrated way in the health economics literature to date. The paper develops a conceptual framework that distinguishes the different perspectives and shows where the existing preference elicitation methods fit within it. It is shown that the most appropriate perspective depends on the assumptions that are made about the motivations behind people's stated preferences and upon the policy context in question. Some of the implications for the direction of future empirical studies will then be discussed.

### A framework of different perspectives

The framework has two dimensions. The first concerns whom the respondent is asked to think about. It could be that the question is concerned with: (i) the respondent herself, in which case she is being asked for her *personal* preferences; (ii) people other than the respondent, thus eliciting her social preferences, or (iii) both the respondent and other people, which involves the elicitation of her socially inclusive personal preferences. The second dimension concerns the relative point in time at which the preference is elicited and, as a result, the degree of certainty associated with the need for health care. It could be that there is uncertainty about whether or not health care will be needed in the future (referred to as the ex ante context) or it could be that it is known that health care is needed now (referred to as the ex post context). In total,

then, there are six possible *perspectives* that an individual could be asked to adopt. Table 1 sets these out, together with the type of question that could be used to elicit a response from each perspective.

Perhaps the most obvious perspective that an individual can be asked to adopt is the one about himself; that is, he can be asked for his selfregarding personal preferences. The ex ante context requires an individual to imagine that he faces the possibility of being a patient; that is, his own personal probability of requiring treatment,  $p_p$ , lies between 0 and 1 (cell 1A in Table 1). In the ex post context, an individual is asked about the value he attaches to a particular treatment from a patient's perspective in which  $p_p = 1$  (cell 1B). The difference between the ex ante and ex post personal contexts, then, is simply that in the former case the individual knows only that he *might be* a patient, whereas in the latter case he knows that he is a patient. In both cases, though, the individual is asked to consider *only* himself.

When eliciting personal preferences in an *ex post* context, there has been considerable debate about the relative merits of eliciting values from members of the public who are asked to imagine themselves as patients vis-à-vis using values elicited from real patients [5]. The choice may have implications for resource allocation decisions since it has been shown that real patients often give higher valuations than hypothetical patients [6]. Much of this difference has been attributed to the fact that real patients have adapted to their condition, and so an

Table 1. A framework of perspectives<sup>a</sup>

	A Ex ante		B Ex post	
1. Personal	$ 0 < p_{\rm p} < 1 \\ p_{\rm o} = 0 $	What value do you attach to treatment being available should you need it?	$p_{p} = 1$ $p_{o} = 0$	What value do you attach to your own treatment?
2. Social	$p_{p} = 0$ $0 < p_{o} < 1$	What value do you attach to treatment being available to others should they need it?	$p_{p} = 0$ $p_{o} = 1$	
3. Socially inclusive personal	$0 < p_p < 1$ $0 < p_o < 1$	What value do you attach to treatment being available to a group of people amongst whom you might find yourself?	$p_{p} = 1$ $p_{o} = 1$	What value do you attach to the treatment of yourself and others?

 $<sup>^{</sup>a}p_{p}$  – the probability of one's own need for treatment.  $P_{o}$  – the probability that others in society will need treatment. Note: The term treatment is used here in the widest possible sense to refer to any health-related intervention.

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important question when choosing whose preferences to use is whether or not it is appropriate to take account of this adaptation [7].

In the elicitation of social preferences, a respondent does not focus on how her own treatment will be affected because  $p_p = 0$ . In this sense, she is detached from any self-interest. An individual's social preferences are about other people, and will reflect her concerns about the utility or welfare of other people as well as the distribution of utility or welfare among others. In an ex ante context, other people face some probability of needing treatment in the future (i.e.  $0 < p_0 < 1$  in cell 2A) and, in the ex post context, the individual could be asked for his preferences regarding the treatment of clearly identified patients who are known to require treatment now (i.e.  $p_0 = 1$  in cell 2B). The difference between these two cells is exemplified by the distinction in the ethical and empirical literature between statistical lives  $(0 < p_0 < 1)$  and identifiable lives ( $p_0 = 1$ ) [8].

The elicitation of socially inclusive personal preferences represents a combination of the personal and social perspectives. Here, an individual is asked to consider her own self-interest as well as the interests of others. As she is now only one of many possible beneficiaries, this perspective could alternatively be called the 'personally inclusive social' perspective. In the ex ante context, the individual together with other people face some probability of requiring treatment in the future and this fact is relevant to the individual's decision i.e. the relevant probabilities are  $0 < p_p < 1$ and  $0 < p_o < 1$  (cell 3A). Of course,  $p_p$  might differ from  $p_0$ . In the ex post context, the individual together with other people faces the certainty of needing treatment now i.e.  $p_p = 1$  and  $p_o = 1$  (cell 3B). In this context, the individual could belong to the same patient group as other people or she might require a different treatment for a different condition.

# The perspective of different valuation methods

The framework in Table 1 is complete and allinclusive – knowing what question is being asked means being able to find the appropriate cell. Health state valuation studies have sought to elicit preferences about health outcomes in order to determine the allocation of resources that maximises health gain [9]. Willingness to pay (WTP) and conjoint analysis studies have sought to elicit preferences in order to determine the allocation which maximises the wider (health and non-health) benefits that an individual may derive from her health care [10,11]. These kinds of studies, then, have focused on the elicitation of people's *personal* preferences. WTP-studies, in particular, have usually adopted the *ex post* perspective of an actual or hypothetical patient as shown in cell 1B in Table 1 [11].

Because distributional issues are central to how people believe health care resources ought to be allocated, a number of health economists have attempted to elicit social preferences. A large number of these studies have used the person trade-off (PTO) method which asks respondents to trade off one the treatment of one group of patients with one set of characteristics against the treatment of another group of patients with another set of characteristics [12]. Most PTO studies have adopted an ex post context (cell 2B) rather than an ex ante decision context (cell 2A) [13]. To date, there have been very few empirical studies that have elicited socially inclusive personal preferences. However, there is one PTO study that has investigated this kind of preference under the label 'PTO-self' [14], and the operational device of a veil of ignorance (which fits into cell 3A) appears to be viewed as an appropriate way in which to elicit preferences over different distributions of health benefits [15,16].

All of the perspectives, then, have been used in one way or another in empirical studies. But do the shoes an individual is placed in have a significant effect on his stated preferences, and is there any relationship between preferences elicited from different perspectives? These are difficult questions to answer since there are many more differences between studies than simply the different perspectives that people are asked to adopt and, since there is now a great deal of evidence to suggest that a whole range of 'framing' effects may influence preferences [17], it is almost impossible to compare the results across different studies.

Given all of this, the only meaningful comparisons are those from studies that have explicitly tested for the effect of perspective on preferences. Very few such studies have been conducted and the evidence currently available is somewhat mixed. Richardson and Nord [14] suggest that people

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focus more on the number of people being treated and less on the size of the benefit that each person receives when personally placed behind a veil of ignorance (cell 3A) and vice versa when asked to adopt a social decision-maker perspective (cell 2A). This may be consistent with the belief that individuals tend to be risk averse and will therefore maximise the likelihood of their own treatment. In contrast, Dolan and Cookson [18] suggest that whether people were behind a veil of ignorance or in the role of a social decision-maker had no discernible effect on their views. Instead, all subjects in their study appeared to adopt a simple and rather detached decision-making perspective.

# The debate about perspective – and the relevance of context

Since economists have largely concentrated on efficiency rather than equity considerations, it is not surprising that most of their efforts have been directed towards the measurement of personal preferences. Indeed, the entire basis of welfare economics has been formed on one particular definition of efficiency – Pareto-optimality – that regards individuals as the best judges of their own welfare. Even those economists who extend Paretian welfare economics to allow for interpersonal comparisons of utility will typically consider social welfare to be some aggregated function of individual utilities. (These individual utilities could include concerns for the well being of others in which case altruism would be viewed simply as one of a number of arguments in an individualistic utility function.) As a result, they would recommend using the socially inclusive personal perspective (where  $p_p > 0$ ) rather than the social perspective that ignores self-interest (and where  $p_{\rm p} = 0$ ) [19].

However, although self-interest exists, it does not necessarily follow that it must – or should – be the basis for social welfare. Society can adopt any objective or set of objectives that it desires. If an ethically defensible set of society-regarding preferences or social principles can be derived from forms of ethical reasoning that are clearly distinguished from mere self-interest and its aggregation, then the social perspective should, as a minimum, be considered a being legitimate one and worthy of serious discussion [20].

The distinction between a person's self-regarding and society regarding preferences, which has been commonly made by ethicists and, in particular, by Rousseau [21], is of great relevance here. According to Rousseau, an individual is motivated as a private individual and as a citizen. As a private individual, he is motivated (in the language of economics) by personal utility, and as a citizen, he is motivated by the utility of the collective. Two functions representative of social good can be derived from these two sets of preferences; the 'will of all' and the 'general will', respectively. The difference between them stems directly from the difference in the motivation behind individual preferences. More controversially, perhaps, Rousseau went onto claim that "the general will is always right ... always constant, unalterable and pure [22]. The idea of a dual preference function has since received attention from economists and political scientists [23,24].

A prominent reason for eliciting socially inclusive personal preferences is to establish a type of social contract whereby the competing claims of all the members of a society are reconciled so as to reflect agreement between everybody in that society [25]. Such agreement can be thought to produce principles of justice if it is reached through a process of impartial consideration. An ex ante context, such as when an individual choose the principles for his society from behind a veil of ignorance, serves to separate an individual's personal preferences from his ethical ones [26], and helps to ensure that his decisions are at least relatively impartial [27]. It is claimed that using a veil of ignorance bridges the gap between personal and ethical preferences because the preferences are elicited in a procedurally fair way – the individual does not know his own specific situation and therefore his specific self-interest. Moreover, they are preferences about societal arrangements that the individual is prepared to live by.

A very different contractarian model is one in which known individuals, with known preference functions, reach agreement through a bargaining solution [28]. The *ex ante* context could also be used to establish this solution, in that individuals who each *might* require treatment would be asked to reach agreement on the type and range of collective insurance contracts they would be willing to enter into. The *ex post* context, in which individuals who each know that they require treatment bargain with one another, may also be suitable here.

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Ultimately, the appropriateness of a particular perspective will depend on the nature of the *policy* issue in question. This might be reflected in the prevailing financing arrangements, which might reflect societal norms and could direct us towards one – or at least not just any – perspective. For example, in situations where there is a direct link between contribution and use at the individual level that is deemed to be desirable (as with some out of pocket payments or private insurance schemes), the personal perspective in cells 1A and 1B would seem to be the most appropriate. When this relationship is different, as with a taxbased health care system, it would seem entirely reasonable to ask a citizen to express her WTP for the provision of treatment for other people (e.g. asking a middle-aged person who has had her preferred number of children to express her WTP for in vitro fertilisation (IVF) treatment), i.e. the social perspectives in cells 2A and 2B will be more appropriate. The perspectives in cells 3A and 3B would seem useful in social insurance contexts, particularly if social insurance itself is seen as having the dual role of being an insurance agent for each individual and a social institution that facilitates redistribution. It is worth emphasising that this merely illustrates the type of argument that might influence the choice of perspective, but it is only an illustration. There is certainly no immutable nexus between financing arrangements and perspective, and the final choice of perspective cannot avoid a normative judgement about whether personal preferences, for example, should be considered as sovereign or not.

# Future empirical research on perspective

Distinguishing between an individual's self- and society-regarding preferences has a long history. An important empirical question here would seem to be whether people are able to detach their own interests as private individuals from the wider interests of society in the ways implied by Rousseau [23], and whether they are able to separate out their personal preferences from their ethical ones as Harsanyi [27] and Rawls [28] require in order to operationalise the veil of ignorance. Therefore, it is necessary to understand the motivation behind both an individual's social

preferences and her socially inclusive personal preferences. This is likely to require the collection of qualitative data about *why* she would make particular decisions. If we are to use people's preferences as the basis for allocating resources, then we must be confident that their preferences are founded upon rational and ethically acceptable motivations.

There is the undoubted danger here that people may conform to cultural or social norms and may articulate reasons that they think they ought to give rather than the real reasons for their preferences [29]. However, there is an argument that only those preferences and social values that people are prepared to air publicly should be used to inform policies which are designed to incorporate citizen's views on social justice [30]. And, besides, if we are to trust people's preferences, then we must at some level trust the reasons that underlie them.

With regards to personal preferences, important differences between the ex ante and ex post contexts might be expected, particularly in a publicly funded health care system. For example, it has been observed that, from the ex post perspective of a patient, an individual will place a relatively high value on attributes of health care which do not directly contribute towards his health, such as process attributes associated with the treatment itself [12]. This may be because he feels he has already contributed towards these attributes through taxation or because someone else is subsidising his treatment at the point of use. From the ex ante perspective of a potential patient who does not have the 'luxury' of such crosssubsidisation and who might be faced with higher taxes or higher insurance premiums, the individual might be expected to focus more on the healthrelated attributes of treatment and less on the process attributes [31]. At the present time, we do not have good data on the nature and extent of the differences generated by ex ante and ex post personal perspectives.

When eliciting social preferences, the individual is typically placed directly in the shoes of a social decision maker and asked to think about the priority she would give to different individuals or groups who require treatment. A more detached version of this perspective would be to ask her how she would like to see *real* decision makers choose. In both these cases, the consequences of the decisions for the individual concerned are likely to play little or no part, but an individual might

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experience a utility loss from being directly asked to make a difficult decision about how to prioritise different patients and, as a result, may feel uneasy about discriminating between them [32]. If instead she was asked to give advice to someone else about how that decision ought to be made, or if she was asked how they would like to see someone else make the decision, then she might be more prepared to discriminate between the patients. The relevance of this more detached version, then, depends on the extent to which people are averse to making 'tragic choices'.

The increasing interest in the socially inclusive personal perspective in the context of eliciting preferences that relate to equity as well as to efficiency considerations also raises questions about whether or not there will be a significant difference between the ex ante and ex post contexts. Much will depend on the nature of preferences in a bargaining game as compared to preferences expressed from behind a veil of ignorance. If an individual is able to fully empathise with others when faced with a bargaining situation; that is, if he is able to say how much better or worse he feels when he is identifying with someone else as compared to himself, then, through reciprocity, the outcome envisaged by Rawls from behind the veil of ignorance might emerge [33]. Again, qualitative data about the reasons for particular preferences will provide useful information here. There are also important questions about how preferences might differ within the ex ante context, where  $p_p$  and  $p_0$  can differ in the range [0,1].

## **Concluding remarks**

This paper has developed a complete – and logically consistent – framework in order to classify the different perspectives that an individual could be asked to adopt in studies designed to elicit preferences for use in the context of priority setting in the health sector. In empirical studies to date people have been asked to adopt a range of different perspectives in order to provide a wide range of information, but it is fair to say that the personal perspective has been most widely used. This might reflect the implicit assumption that a personal perspective is appropriate in all contexts, but it is generally not made because of an explicit consideration of the ethical model and the context of the model. One of the chief benefits of an

explicit framework such as we present here is that it will challenge researchers to consider, explicitly, the appropriate normative model which, in turn, encourages an explicit consideration of social objectives.

Since the shoes that people are placed in are likely to have an effect on their stated preferences, it is surprising that there has not been more debate about the usefulness and appropriateness of the various perspectives. In addition, there has been relatively little empirical investigation into the relationship between preferences elicited from different perspectives and into the extent to which different perspectives imply different resource allocation decisions. Therefore, we believe that more research be conducted into which type of preferences are required for which type of policy decisions and that more extensive and refined empirical investigation be conducted into the difference that perspective makes.

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