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Health economics critiques of welfarism and their compatibility with Sen's capabilities approach

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Abstract
Extra-welfarism, communitarianism and empirical ethics are presented in health economics as normative bases for assessing social welfare. We compare these approaches with Sen's capabilities approach, showing that, although drawing on Sen's work, each departs from his framework in a significant way. In the capabilities framework, the individual is the source of preferences, although individuals may separate their selfish and their social preferences. The other approaches postulate values that exist independently of individuals' values. If social values depart from individual values, then it is not clear how to implement normative recommendations as there is no reason for individuals to behave the way they "should".

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Introduction

Normative analysis is a prominent feature of health economics, not least because the sub-discipline often aims to produce results to inform policy makers. An underlying theory of welfare is important as it guides the performance of an analysis (e.g., types of measures to use to evaluate the outcome of an intervention) and allows for understanding and interpretation of the results of an analysis. The application of economic evaluation methodology and in particular cost-effectiveness analysis has been institutionalized, for example, through the requirements of the Pharmaceutical Benefits Scheme (Harris 1994) and the Medical Benefits Schedule in Australia and the Ontario Drug Benefit program (Canada) (Ontario Ministry of Health and Long-Term Care 1994), through the operations of the National Institute for Clinical Excellence in the UK (see Birch and Gafni (2002) , and other processes of technology assessment in these and other countries. All of these applications represent applied welfare economics in that they aim at generating recommendations about whether one state of the world is preferable to the alternative, and hence are consistent with the objective of welfare economics. According to Culyer and Newhouse (2000), health economics has not simply drawn on traditional welfare economics but has also made a substantial contribution to the foundations of welfare economics.

The three most developed approaches are extra-welfarism associated with Culyer, communitarianism as developed by Mooney, and the approach formulated by Richardson described as empirical ethics. Each of these approaches rejects neo-classical Paretian welfare economics as relevant and appropriate in determining the social welfare contribution of health and health programs. The authors, in doing so, draw on Sen's critique of welfarism and adopt his development of the concepts of capabilities and functionings as relevant welfare considerations. In this paper we address the extent to which these health economics approaches are consistent with Sen. This is not meant to imply that other contributions should, in some normative sense, remain within a rigid Sen-ite capabilities framework. However, as Sen's framework is used as the basis for developing these specifically health and health program relevant concepts of welfare, it is useful to be clear on how they use the capabilities approach and if and where they depart substantially.

In this paper we aim to answer this question and explore the implications of our findings for use of these alternative approaches as the basis for evaluating alternative health policy interventions. The starting point, for any consideration of social welfare, is the special characteristics of health and health care interventions, as described in the following section. We then describe the key elements of Sen's capabilities approach, paying particular attention to his notions of functionings and capabilities. We go on to consider in turn extra-welfarism, communitarianism and empirical ethics; for each of these approaches we describe the concerns with the traditional welfare economics approach (i.e., welfarism), the extent to which they draw on Sen in developing an alternative approach, the definition adopted of utility and/or well-being, who or what is determined as the valid source of preferences, and the extent of arguments included in the social welfare function. We then discuss the compatibility of these alternative approaches with Sen's capabilities approach. We identify the source of valuations as a key departure of

each of the alternative approaches from the capabilities approach, and in concluding discuss the implications of this departure for policy applications.

The welfare contribution of health and health care

The market for health care is beset with failure. Health care has been postulated to be demanded for its instrumental value in contributing to utility through its impact on health status, and not for its intrinsic utility. Hence the demand for health care is *derived* from (and conditional upon) the demand for health status improvements and an individual's demand for health care will depend on the utility that individual expects to derive from the additional health status generated by health care (Grossman 1972). This is not to say that health gain is the only utility gain from health care. The problem is encapsulated by Evans and Stoddart as "Producing health, consuming health care'. *Add ref.* The information asymmetries that arise from the difficulty in observing health status, the technical nature of the production of health care, and the uncertainty in the link between consuming health care and producing health make it extremely difficult for the consumer to judge adequately the contribution of health care to their health.

Uncertainty around future health and hence the future demand for health care combined with the potentially high cost of treatment leads to widespread insurance. The operation of insurance contracts under conditions of imperfect information add to the difficulty of judging consumer welfare. Cross subsidies within insurance (from the healthy to the sick) may provide non-use or option value to the healthy. Beyond option values, there seem to be widespread externalities in the health care market. While some of these, such as controlling infectious disease, can be explained as selfish externalities (Evans (1984), health seems to also be a case of Tobin's specific egalitarianism. People care about their fellow citizens' health and/or their access to or consumption of health care, even if this does not affect their own health (Culyer and Simpson 1980).

These various sources of market failure make it difficult to rely on the consumer sovereignty and hence to judge social welfare through revealed preference, even for a rigorously traditional welfarist, as individual welfare improvements cannot be easily inferred from revealed willingness to pay for treatment (Evans 1984).

Sen's critique of welfarism

Neoclassical welfare economics with its emphasis on the non-comparability of individual utility provided the basis for using Paretian efficiency as the means of assessing social welfare. Arrow accepted this non-comparability condition in developing his Impossibility Theorem, which showed that social choice cannot be constructed from individual ordinal preferences (Arrow 1963). Arrow's analysis has been extremely influential, including as the impetus for Sen to pursue the study of social choice. The idea that the only possible social welfare function was imposed dictatorially did not sit well with his more pluralistic, democratic commitment (Nobelprize.org 2005), (see more on this below). Arrow's results left little for welfare economics to do. In contrast more recent developments in the field have dealt with this 'dead-end' by accepting the need for interpersonal comparisons and the focus is on how such comparisons should be made.

Sen's first departure from traditional welfare economics was to drive a wedge between personal utility and individual choice. In neoclassical welfare economics, individuals choose what will maximize their individual utility, which is determined by their underlying tastes. Thus individual preferences are synonymous with utility maximizing behaviour, and with choice. This makes for difficulties in the use of the terminology once this assumption of equivalence is dropped; and there is no consistency among commentators on this point. He argued that individual choice or preference would include how the individual would benefit directly (enlightened self-interest) together with the individual's views on what is good from a social point of view (Sen 1977). Thus he proposed replacing *homo economicus* with an individual aware of their place in a society. From here, we shall use preference to describe what individuals would actually choose. And adopting this terminology, Sen's individuals' preferences can be counter to their individual utility maximization.

Sen went on to criticise what he described as utilitarianism (Sen 1987) defined as comprising welfarism, sum-ranking and consequentialism. Consequentialism requires that only outcomes or end-states are relevant to utilities; sum-ranking requires that utilities are summed across individuals. In this context, welfarism means that only utility information is relevant to judging the goodness of a state. Further, even if utility is defined in its broadest sense, i.e., as a reflection of total wellbeing, the insistence on consequentialism and sum-ranking present substantial problems with traditional welfare economics. The problems are even more severe if the narrower definition of utility, i.e., limiting utility to consumption or endowments, is accepted.

Sen's alternative framework incorporates two other aspects of the wellbeing of an individual's state, that is their functionings and capabilities, which are inherent or inherited characteristics of people:

> "The well-being of a person can be seen in terms of the quality (the well-ness, as it were), of the person's being. Living may be seen as consisting of a set of inter-related 'functionings', consisting of beings and doings. A person's achievement in this respect can be seen as the vector of his or her functionings. The relevant functionings can vary from such elementary things such as being adequately nourished, being in good health, avoiding escapable morbidity and premature mortality etc., to more complex achievements such as being happy, having self-respect, taking part in the life of the community and so on. The claim is that functionings are *constitutive* of a person's being, and an evaluation of well-being has to take the form of an assessment of these constituent elements" (Sen 1992, p39).

In contrast, a person's capabilities represent what is possible in terms of their beings and doings, and can be seen as the opportunities that person faces. So well-being depends not only on what a person achieves (functionings), but also on the opportunities (capabilities) open to that person. The efficiency with which a person can transform inputs into well-being is also relevant; for example, a person with a chronic disease or disability will probably require a higher income to achieve the same level of functionings as some-one healthy or able-bodied. In this way Sen rejects consequentialism, arguing that the opportunity to choose itself, the process of deciding, may affect well-being in addition to

the achievements or functionings. Moreover, individuals may choose not to achieve their capabilities.

A further aspect of Sen's approach is the notion that the individual is socially connected in that his preferences for social states are affected by his view of a social good. This goes beyond the usual concept of altruistic externalities, based on sympathy for others, but relates to the concept of a good society, which Sen describes in terms of agency (Sen 1992). This extends his earlier concept of commitment, where individual choice may be influenced by a person's sense of duty or what is the right thing to do. Agency refers to 'goals and values' other than one's own well-being.

> "If a person aims at say, the independence of her country, or the prosperity of her community, or some such general goal, her agency achievement would involve evaluation of states of affairs in the light of those objects, and not merely in the light of the extent to which those achievements would contribute to her own well-being" (Sen 1992, p56).

Further, the individual may be directly involved in the pursuit of agency goals, or not; but even when the individual is not working for agency achievements, this does not mean that those agency goals are irrelevant to their judgment of the goodness of a social state. Within this notion of agency goals, Sen also develops the duality of achievements and opportunities. So the achievement of agency goals and consideration of agency opportunities (e.g. a free press) are relevant in the individual judging the goodness of social affairs.

It is important to note here, recalling Arrow's conclusion that a reasonable social welfare function based only on individual ordinal preferences does not exist, that Sen's view of what constitutes the social good is a matter of individual preferences. He argues that

> "The goodness of any social state (sometimes called the social welfare) is taken to depend, ultimately, only on the individual utilities or welfares of the people in that state. There is a long tradition in mainstream economics of identifying individual utility or welfare with the fulfillment of individual preferences. The two together make individual preferences between any social state and another, ultimately, the only basis of socially ranking those two states"

But he explicitly rejects the notion that individual preferences are determined by and indeed limited to selfish utility and goes on to say that reasons for preferences can be other than the pursuit of individual welfare; further,

> "It is arguable that preferences – in the sense of reflecting individual choices – may be directly relevant for social judgements of states of affairs, since the goodness of states cannot be evaluated without regard to what people themselves would like to choose" (Sen 1991)

Sen's writings use several health and health care examples to illustrate his points. However, his main exploration of these ideas in the context of health and health care came in a plenary address to the 2001 International Health Economics Conference (Sen 2002). Sen argues that health is relevant to social welfare and its equity aspects in several

ways. He starts with a broad view of social justice and looks at what role health has in an understanding of social justice and equity. First, human capabilities are influenced by the individual's health – at its extreme, once dead, the individual has no capabilities. In turn, health is affected by social arrangements (income, education, living standards) so the distribution of health is clearly a concern of social justice. Access to health care can also contribute to health, though its role is probably limited, but to the extent that it does affect health then access to health care is also relevant to equity. Second, issues of procedural justice and use of resources are also relevant to concerns with social justice. Consequently, access to health care is important, over and above its instrumental value in improving health outcomes, as it is part of a fair distribution of social resources. Third, Sen confronts the fairness of the ways in which a more egalitarian distribution of health states can be achieved. He argues that, while reducing health inequalities is desirable in general, achieving this by denying better health outcomes to those who start with better health but can still benefit from health care is not an advance in equity, and therefore not an improvement in social welfare.

Sen explicitly rejects an approach of pursuing a single maximand, such as health gain. Even equity-weighted QALYs will not suffice, as they are limited to the distribution of health outcomes and ignore factors such as the distribution of access to resources. Consequently, his approach is not consistent with the adoption of standardized approaches to economic evaluation in health care that focus on some form of health maximization as used in policy formulation in several jurisdictions.

Extra-welfarism

Extra-welfarism brings non-utility information, and in particular characteristics of individuals, into the judgement of social welfare associated with different allocations of resources (Culyer 1991). Although in principle, this non-utility information is used to supplement utility information, the application of extra-welfarism has tended to focus on the maximization of health gain.

The extra-welfarist critique of welfarism:

The extra-welfarist approach (Culyer 1991) considers welfarism to be inadequate as a means of measuring social welfare because it bases judgments about different investments entirely on the utilities associated with those investments and overlooks non-utility aspects of those investments (Culyer 1991). Under welfarism, social welfare is simply a function of individual utility that is in turn a function of only goods and services consumed. So standards of living, the efficiency of social arrangements, justice of the distribution and redistribution of resources are all evaluated under welfarism in terms of what they mean, if anything, for individual utilities. Further, individual utility "is concerned too much with mental and emotional responses to commodities and characteristics of commodities, and not enough on what they enable you to do" (Culyer 1990, p15). Individual capabilities and special needs are also relevant in judging the goodness of social arrangements and the distribution of resources. Welfarism fails to capture the non-goods characteristics of individuals and overlooks the distinction between fulfilling individual preferences and acting contrary to those preferences by supporting policies that run counter to those preferences; for example a person might

support the redistribution of income even though that reduces their own capacity to consume commodities.

Under extra-welfarism characteristics of people are relevant in judging social welfare, so that their consumption of certain commodities has inherent value to society independent of any utility consequences of these to individuals. As a result, an individual's utility function does not, and more importantly cannot, incorporate all elements relevant to the measurement of social welfare. Sen's example of a crippled individual is used as an individual who has ". . . special needs independent of his/her total or marginal utility" (Culyer 1991, p 89) that are not considered under a welfare economics approach.

Extra-welfarism draws directly on Sen's concerns that the aggregation of individual utilities ignores relevant information such as the process through which these outcomes were generated (i.e., coercion versus free choice) (Culyer 1991). Similarly extra-welfarism adopts Sen's notion of the basic capabilities of individuals (Sen 1979; Sen 1980) as an important class of non-utility information. But it is extended to a more general notion of the 'characteristics of people' as the focus of the extra-welfarist approach (Culyer 1990). These characteristics of people include, but are not limited to Sen's notion of capabilities. Moreover, not all characteristics will be deemed relevant to the evaluation of states of the world. Culyer , relates the list of relevant characteristics to the concept of need:

> "if the characteristics of people are a way of describing deprivation, desired states, or significant changes in people's characteristics, then commodities and characteristics of commodities are what is often needed to remove the deprivation, or to move towards the desired state, or to help people cope with change. They are necessary means to a desired end. To compare the ill-health of different individuals or groups is not the same as to compare the health care they have received (they could receive the same amounts and still be unhealthy, or different amount and be equally healthy") (Culyer 1991, p90).

Hence extra-welfarism distinguishes between comparing the health 'characteristic' from comparing the consumption of the health care 'commodity'.

Definition of individual well-being and social welfare and source of preferences:

Under extra-welfarism, non-commodity characteristics are an important source of social welfare, and the effect of these characteristics on social welfare is not determined by, or limited to, the consequences of these characteristics for individuals' utilities. Instead an extra-welfarist approach "admits non-utility information about individuals into the process of comparing social states" (Culyer 1991 p89). Characteristics of individuals are also relevant but these should be seen as supplementing, not replacing, information about individual utilities (Culyer 1991, p 67). In practice health is the most relevant, i.e. important, characteristic. However, factors such as consumer choice, privacy, speed of service and hospital hotel services would be viewed as relevant characteristics though not with the same 'weight' as health (Culyer 1991, p96). Therefore, extra-welfarism does not

mean individual utilities are to be ignored. On the contrary, Culyer argues that "this does not imply the complete ousting of 'welfare' with its usual normative connotations, but the use of both sets of 'data' to evaluate alternatives" (Culyer 1991, p91).

However, a key factor in extra welfarism is that individuals' preferences for and among these different characteristics are insufficient to determine the social welfare associated with alternative programmes.

The extra welfarist approach requires selection and measurement of the relevant characteristics, as well as the weights to be applied to the different characteristics in the measurement of social welfare (Culyer 1991, p93). In practice, extra-welfarism in health economics ". . . has taken 'health' as the proximate maximand" and , "much of the cost-effectiveness literature in health economics is implicitly extra-welfarist in seeking to identify the least cost method of delivering a given health improvement for a given patient group"(Culyer 1991, p91). Individuals are seen as the best judge of the relative value of different dimensions/levels of health in that the values attached to different health states are to be derived from surveys of the preferences of some sample of patients or population. However, the resulting health state or QALY weight is based on some metric (often the mean) of the individuals' values, which is then applied to an entire patient group or population irrespective of the preferences of the person experiencing it. In short, any consideration of heterogeneity in preferences is excluded.

In principle this emphasis on health is not exclusive. The maximand may include characteristics other than health per se, such as consumer choice, privacy, speed of service and hospital hotel services, all factors to which it is "unlikely any extra welfarist would assign zero weights" (Culyer 1991, p96). As the issues of selection, measurement and weighting have not been resolved, the economist ". . . becomes a kind of consultant" (Culyer 1998, p365) in which " . . .the analysis of efficiency may embrace whatever maximand(s) may be given by the customers of research or inferred by diligent enquiry by the analyst to be relevant" (Culyer 1991, p366). Culyer and Evans (1996) argue that under this decision-making approach to evaluation the economist has "a more humble advisory role in policy analysis. The relevant sources of value judgements are those people responsible for policy. They can be held to account for their decisions, directly or indirectly, by those affected" (Culyer and Evans 1996, p245). In this way, if the 'customer' or 'policy maker' is not interested in individual utilities then there would be no place for their consideration in the extra-welfarist approach.

Needs are determined in relation to desires to achieve particular characteristics. The desires do not relate to the aspirations of individuals as expressed through their utility functions. But it is not clear whose desires are to be used as the determining factor in the measurement of needs once individuals' utilities have been proscribed. Once again, the decision-maker would appear to be a strong candidate to play this role (Culyer 1991). Under the decision-making approach to economic evaluation, the decision-maker may have objectives other than making Pareto (potential or otherwise) improvements and hence it would be inappropriate to base the evaluation model on the Pareto criterion. In this case, the decision-maker would be the source of information on objectives and the analysis would rest on explicit value judgments being incorporated into the maximand. So the importance to be given to these factors is to be determined by the decision-maker

or analyst, not the individual on the receiving end, even when this means that individual judgments of value are being over ruled (Culyer 1991, p68).

As an alternative approach to taking social welfare beyond the aggregation of individual's utilities' of commodities, Culyer considers Margolis' identification of separate sets of individual preferences relating to group and selfish interests (Margolis 1982). This he describes as "an interesting possibility that may yet rescue welfarism" (Culyer 1991, p79) but notes that the implications of this approach for the health care sector remain to be developed.

Limitations of extra-welfarism

A key element in both Sen's non-welfarism and Margolis' extension of welfarism is that there are dual objective functions – individual utility and social value - but the source of information for both types is the individual. Hence, what the individual prefers (that is, would choose) is the source of social welfare assessment. The extra-welfarist approach also recognises two sets of preferences, individual utility and non-utility characteristics. No attempt is made to consider how "both sets of 'data'" are to be used in social welfare evaluations and the practical application has focused on health maximization.

The emphasis on health is justified as a proxy for the broader notion of flourishing presented by Sen. If health is not the only source of flourishing, it seems reasonable to introduce other sources of flourishing (e.g., education, literacy etc) as relevant characteristics as well. Further, health programmes targeted at socially disadvantaged groups can be seen as prompted as much by a concern with general equity and social justice as the distribution of health, as Sen implies (Sen 2002). The failure to identify and include other sources of flourishing limits the use of health status as a proxy for (as opposed to one particular source of) flourishing. In addition, it reduces the generalisability of extra-welfarism across the entire scope of economic activity, as acknowledged by Culyer (1998).

The key element of the extra-welfarist approach appears to be that the effect of the non-utility bearing 'relevant characteristics' on social welfare is to based on something other than individual preferences. Indeed it is determined by 'decision-makers'. There is an implicit assumption that these relevant characteristics do not influence individual utilities either at all, or by the appropriate amount (i.e., they are extra-welfare). If health status appears in the individual's preference function, use of health as a relevant characteristic to *supplement* information on individual choices may involve double counting health, or at least higher weighting. Decision-makers may feel that health is not given an appropriate weight in individuals' assessments of their own utility; or that the health of others is not weighted sufficiently in their perspective of a good society. However, even from the extra-welfarist's perspective, there is no reason to expect the level of inappropriate weighting, and hence the need for over-riding individuals' choices, to be the same for all individuals. Overall, extra-welfarism seems less concerned with individuals' preferences and more with the preferences of decision-making bodies. If decision-makers are not simply to act in a dictatorial manner then they need some justification on the basis of wider welfare considerations, such as individual ignorance, short-sightedness or inter-generational equity.

Communitarianism

Under communitarianism individuals cannot be understood outside of the context of community (Mooney 1996). Health care is a community good, and the health care system a community institution. Communitarian claims are adopted as an alternative basis for health care resource allocation building on an idea originally put forward by Broome that individuals are owed some responsibility by the community of which they are a member (Mooney and Jan 1997). Accordingly a communitarian approach leads to greater emphasis being given to equity in resource allocation.

The communitarian critique of welfarism

The communitarian approach rejects welfarism's assumptions of (1) the individual as a rational self-interested being choosing freely between alternative states of the world, and (2) the source of utility being limited to the consumption of goods and services (Mooney 1996) and consequently the failure to accommodate the notion that " individuals might be interested to contribute to the common good which at the same time might result in a lowering of their own utility" (Mooney and Russell 2003). Mooney rejects both assumptions, following Avineri and De-Shalit (1992), arguing that in order to understand individuals, one needs to understand their community and communal relationship. Individuals have two sources of utility; 'normal' utility derived from 'outcomes' and which is thus 'consequentialist' in nature; and 'participation' utility, derived from 'doing' as part of a community rather than 'getting' as an individual, and hence non-consequentialist. The consequentialism of the traditional welfarist approach does not capture participation utility (Mooney 1996).

The development of the communitarian approach draws on Sen's notions of individual capabilities, functionings, and characteristics as important elements to be considered in matters of social justice (Mooney 1996; Mooney and Jan 1997; Mooney 2001; Mooney 2005) and Sen's capabilities approach as an antecedent (Mooney and Russell 2003; Mooney 2005). Sen's approach is also reflected in the communitarian argument that the value of a health gain will depend on the characteristics of the recipient, as individuals may have different abilities in turning health care into health gains (Mooney and Jan 1997). Health-communitarianism endorses equal opportunity to achieve on the basis that it compensates individuals for disadvantages they face in achieving well-being that lies outside their control (Mooney 2001; Black and Mooney 2002), i.e., difference in capabilities. Sen insists that his 'capability accounting' must focus on the real freedoms people actually have, and not what they might enjoy in principle. Communitarianism draws on this notion of potential inability to desire and identifies a need for its accommodation through some form of procedural justice (Mooney and Jan 1997).

Communitarianism also draws on Sen's notions of instrumental and realized agency success , that is the occurrence of things that one values, and the occurrence of such things brought about by one's own efforts respectively (Mooney 1996). Following Sen, communitarianism adopts Margolis' notion of participation utility, the individual's gain in utility from actively contributing to society or social goods, what Sen calls instrumental agency success. Similarly, both approaches adopt the notion of claims where, according to Sen the claims of individuals on the society are seen in terms of *freedom to achieve* rather than *actual achievements.*

> "If the social arrangements are such that a responsible adult is given no less freedom…than others, but he still wastes the opportunities and ends up worse than others, it is possible that no unjust inequality may be involved. If that view is taken, then the direct relevance of capability (as opposed to achieved functionings) will be easy to assert" (Sen 1992, p 48).

Under communitarianism, claims are interpreted as a duty owed by the community to the individual and the notion of 'rights as goals' is presented as a practical way to incorporate "claims" into the process of resource allocation (Mooney and Jan 1997) where claims are a relative concept (Mooney 1998) in contrast with the usual notion of rights as an absolute concept. Although Sen identifies individual rights as possible agency goals, interpreting rights as communitarian claims is therefore an extension of Sen's In this way the approach has been described as 'Sen-ite and communitarian' (Mooney 2005, p248).

Definition of individual wellbeing and social welfare and source of preferences:

Communitarianism describes a dual level approach to assessing welfare incorporating both individual and community aspects (Mooney 1998). The personal level is concerned with the individual's desires for their own health suggesting the current approaches based on QALYs represent acceptable approaches for weighting of health gains (Mooney 1998, p1173) The community level focuses on the basis on which choices are to be made. Following Broome's notion of claims (Broome 1989), communitarian claims represent the duty of the community to provide the good to the individual as a member of that community. Carrying out this duty is not just instrumental (i.e., the value of the good provided) but also is good in itself (Mooney 1998). This has similarities with both Margolis' participation utility and Sen's instrumental agency success. However, while both of these concepts represent sources of utility *to the individual*. Communitarianism postulates that this duty is a moral good, independent of any utility that flows to individuals.

Communitarianism argues that there is no such thing as a rational individual who chooses freely, but rather the only way to understand human behaviour is to refer to individuals in their social, cultural, and historical contexts (Avineri and De-Shalit 1992). In other words, in order to understand individuals one needs to understand their community and communal relationship. Hence communitarianism emphasizes the importance of considering individual preferences measured after individuals have time to reflect, not just on their desires for goods and services, but also on the sorts of persons they want to be, sort of society they want to be part of and the sorts of social institutions they want to see. In this way the community has intrinsic value (Mooney and Jan 1997) and is central to the analysis and value system on which it is based (Mooney 2001).

However the task of deciding what constitute claims, the duty to allocate claims and to decide on the relative strength of different claims falls to the community (Mooney 1998). The individual may or may not recognise the claim; indeed, the feelings of the individual, whether they feel harmed and to what extent, are relevant only insofar as the community deems them to be relevant (Mooney 1998, p1176). The community may appoint agents to

act on its behalf. Under communitarianism citizens may care about the principles or rules that apply to policy-making but will not be well placed to form the judgment about the benefits and costs of different types and forms of health care interventions, health care organizations or social institutions. Such decisions will be left to "decision makers" as informed social agents (Mooney 1998). However, the rules or values on which their decisions are based are to be derived from the community (Mooney 1996; Mooney 1998). Communitarian preferences have to be elicited from the community as a community, which involves bringing together representatives of the community through, for example, the use of citizens' juries (Mooney 2005) charged with determining both the nature of claims and the weightings of claims and (health) outcomes (Mooney and Jan 1997). This leaves two problems to be addressed. However because the citizenry may not grasp the ramifications of the rules they set they must be 'educated' to ensure "that the setting of rules is done on an informed basis" (Mooney 1998, p 1174). Moreover, in a society with population heterogeneity, claims of minority groups must be adequately recognised. In other words, communitarian values are only good if the community is good though the criteria by which the goodness of a community and hence the validity of its communitarian values is to be judged appropriate is not clear. Instead Nazi Germany is presented as an example of a 'wicked' community (Mooney 1998).

Limitations of communitarianism.

Although the importance of non-consequential forms of utility in informing decisions has been recognized (Mooney 1989) this source of utility seems is excluded under the communitarian approach. In particular, it is argued that decision makers should not be allowed to defend inefficient treatment on the basis of non-health outcomes, or process variables (Mooney 1998). This seems to imply QALY maximization as a proximate social welfare goal. However more recently, the notion of health being the sole contributor to the social welfare function has been rejected in favour of more research on what constitutes claims in different settings (Mooney 2005, p253).

Individual preferences are over-ridden where claims are considered. Although welfarism accommodates the issues that are subsumed under claims through the notion of caring externalities, this is insufficient under communitarianism since it simply retains the individualistic framework of neoclassical economics (Mooney 1996). Instead, communitarianism rejects the aggregation of atomistic discrete individuals (Mooney 2001) in favour of claims that are determined by the community irrespective of the individual's perceptions and utility (Mooney 1998).

The practical application of communitarianism involves decision-making bureaucrats allocating resources by applying rules that are set and their applications monitored by the citizenry. This requires decision-makers to collect and process several levels of data that include individual health status (e.g., QALYs), weighted health status incorporating reflective values, the nature and extent of communitarian claims, the weights to be attached to competing claims and the weight to be given to health maximization as against claims. It is not clear how these various levels of preference ordering can or should be combined to satisfy the communitarian objective. Meanwhile citizens are required to monitor the decision-makers to determine if and when the rules are being broken. This seems to be far beyond the capacity of current political processes as well as proposed process of citizens' juries (Mooney 2005). The challenge is not limited to the

elicitation and aggregation values. Citizens must be educated appropriately if they are to contribute to the formation of 'good' community values. Who defines what is good, and what are the appropriate education requirements to ensure that a community produces 'good' community values? This brings the discussion back to communitarian notion of 'the social or community conscience' (Mooney and Jan 1997) that to date remains undefined.

Empirical ethics

Empirical ethics is presented as an approach aimed at overcoming the limitations of both welfarism and extra-welfarism and consists of the empirical study of population values and ethical analysis of the results, in an iterative way, to obtain a set of principles to guide resource allocation.

The empirical ethics critique of welfarism:

Empirical ethics arises from dissatisfaction with the assumptions adopted under traditional welfare economics. First, the underlying assumptions of the approach are not valid, in terms of observed inconsistencies with evidence from population surveys. Second, the assumptions are not subject to ethical scrutiny. (Richardson 2002). In the welfarist approach, social welfare is a function of individual utilities(irrespective of non-utility features of states of the world), utilities are defined as revealed preferences, preferences are assumed to be concerned only with consequences, efficiency is defined by the Pareto criterion which is assumed to be a desirable compensation principle. The only "concession to the existence of ethical preferences…is ….that there will be a social preference for certain distributions of well being" (Richardson 2002). Because the socially-preferred distribution of well-being is typically pursued through the redistribution of wealth, rather than by the provision of services, "it wrongly encourages economists to believe that their advocacy of "economic efficiency" is value free" (Richardson 2002). Following Williams (1998) it is impossible to separate the analysis of efficiency and the analysis of distribution. Hence the major focus of attention of the empirical ethics approach is concerned with the inappropriate exclusion of social motivations from considerations of individual well-being and social welfare. "Ethical analyses should be of pivotal importance in establishing the normative foundation of policy analysis" (Richardson 2002).

Empirical ethics claims less direct influence of Sen than either extra-welfarism or communitarianism, although like these approaches it starts from a concern that social welfare is not limited to the sum of individual utilities. The influence of Sen through the concepts of capabilities and functionings are clear (Richardson and McKie 2005); but the capabilities approach is rejected as a basis for considering health care resource allocation, because of a lack of specificity in assessing different capabilities (it provides little guidance on how these different 'functionings' are to be weighted in particular contexts" (Richardson and McKie 2005)) , and its lack of comprehensiveness in the range of 'objectives' it encompasses (what people value may extend beyond capabilities (Richardson and McKie 2005)).

Definition of individual wellbeing and social welfare and source of preferences:

There is no clear specification of the individual utility function or what constitutes wellbeing at the individual level, but empirical ethics is concerned with social rather than individual choice. Under empirical ethics social welfare is maximized when resources are allocated in accordance with ethically justified population values (Richardson and McKie 2005) – a clear constrained maximization problem. This choice of maximand is justified by empirical evidence supporting a range of values that includes the severity of the initial health condition, the imperative to do something for identified individuals facing death (the rule of rescue), age and the dependence of others on the person being treated. In contrast empirical evidence does not support taking into account the capacity of the person to reach the state of full health (for example, people do not support discriminating life saving treatment between paraplegics and those not disabled), or the costs of treatment.

Empirical ethics is based on the preferences of the community. This requires careful and considered population surveying, the provision of adequate information, identification of implications for resource allocation and the ethical arguments for and against these implications. In this way, the process aims to determine "…what the community thinks is right, after deliberation, clarification and careful reflection" (Richardson and McKie 2005). The proper conduct of this process will arrive at principles which stand the dual tests of ethical criticism and population support.

Two potential problems arise. Policy-makers should not always accept a majority view as this might express ethically unacceptable preferences. Empirical ethics adopts Broome's approach of 'laundered preferences', that is 'preferences screened by ethical argument (Olsen, Richardson et al. 2003). Further, at the end of even such an iterative process, the community might not be able to agree on the different ethical issues. In this case Empirical Ethics can inform the decision maker about the extent of disagreement and the strength of preferences of the population. Based on this information and their own judgments the decision maker will arrive at a decision. Thus ethicists and policy-makers modify (or interfere with) population preferences.

Limitations of empirical ethics

The justification for empirical ethics is based on the results of population surveys that are inconsistent with either the welfarist (i.e., utility maximization) or extra-welfarist (i.e., health maximization) approaches (Richardson and McKie 2005). However this overlooks questions about the validity of what is measured in such studies as a true assessment of individuals' preferences. As with extra-welfarism and communitarianism, under empirical ethics, the analysis requires weighting information from different sources but no guidance is provided on how this should be done. The decision-maker has a potentially powerful role in judging the ethical acceptability of the majority views within a population, and adjudicating between conflicting values. The accountability associated with such a position, particularly where the position may be determined by the wishes of the majority is clearly problematic. Refuting the values of the majority would potentially require something approaching dictatorial power, and can only be justified if there is a rational and explicit explanation of the broader considerations relevant to social welfare and why individuals are not adequately judging those.

Discussion

Sen's criticism of traditional welfare economics and his capabilities framework has been particularly influential in health economics. The three most developed alternative approaches to assessing social welfare, extra-welfarism, communitarianism and empirical ethics, draw on this critique. The main features of Sen's alternative approach are the importance of individual characteristics and capabilities in determining their well-being and the existence of preferences for social arrangements – agency goals – as well as individual goals. In his consideration of health, Sen argues for the need for multiple objectives; that health is a characteristic that affects people's capabilities, as well as a capability in itself; and that procedural justice concerns the access to health care resources as well as the distribution of health.

Extra-welfarism and communitarianism both draw directly on Sen. Extra-welfarism is based on the argument that both utility and non-utility information is relevant in judging well-being. In particular in this approach, the ability to benefit from health care is an important i.e. relevant, characteristic of individuals, and health is taken to approximate flourishing. From this it follows that health gain is an important objective of health care, although the value of the health gain to any individual is not determined by that individual. Moreover in practical applications, health gain becomes the only objective. In this way, extra-welfarism does not augment utility information; rather it replaces it (Birch and Donaldson 2003). The way around this impasse is to allow the 'decision-maker' to admit non-health state information as they see appropriate.

Communitarianism starts from the premise that there is value in the community and that community is more than an aggregation of individuals. In considering the goodness of a social state, individual characteristics and capabilities are important as they give rise to claims on community resources. However, the community determines which claims are recognised, and the strength of those claims. This community preference takes precedence over the individual's perception of those claims or any harm resulting from them. In communitarianism too, the decision-makers have an influential role as they act as community agents who interpret the rules or principles set by communities for health care resource allocation; in addition they also can determine when majority views hold sway and when other principles take precedence.

Empirical ethics takes a somewhat different line of argument, by requiring the ethical scrutiny of preferences or rules for allocating health care resources. Here again the values that provide guidance are the values of the community. But as in communitarianism and extra-welfarism, decision-makers have a powerful position as they can determine the weightings to be given to different values expressed, or even over-ride majority views on ethical stands. Both empirical ethics and communitarianism agree that the solution is to ask the community. However, in both approaches those individuals who are selected to be surveyed as community representatives must be adequately educated.

In these three health economics approaches, extra-welfarism, communitarianism and empirical ethics, it is postulated that there are values which exist independently of and separate to the individuals' values. This seems to be the distinguishing feature of the non-

welfarist approaches adopted in health economics (as previously argued by Hall (2001)). Here is a very distinct and significant difference compared with Sen's approach; Sen proposes a duality of preference functions, one as a selfish individualist and the other as a socially minded community member. However, the source of preferences in both cases is the individual; there is no community independent of the individuals which comprise it. Unlike the three approaches presented in the health economics literature, Sen's concern does not extend to the ultimate source of preferences but to the nature and content of those preferences.

Sen's critique has three aspects to it: the exclusive focus on consequentialism; individual selfish-utility maximising behaviour; and the sum-ranking of utilitarianism. Notwithstanding Sen's position, conceptually consequentialism can be separated from welfarism; if process matters to individuals then it can be considered utility bearing, and this may be particularly significant in health care (Birch and Donaldson 2003). Welfarism does not exclude concern with others, which is traditionally accommodated through externalities. Concern with the relative standing or health status of others can be seen as broader, and the admission of even altruistic externalities may not go far enough to meet all the criticisms of individualism. However, following Ng, this can be viewed as an information problem, rather than that of fundamental values (Ng 1981). What appears to be an inclusion of non-utility arguments through reliance on objective indicators of equality/inequality is actually a use of indicators as a proxy for individual welfare, given that the latter is not directly observable. Indeed, as Ng goes on to argue, many apparent principles of social justice and moral rights can be derived from a view that other human beings feel pleasure and pain and have the same entitlement to maximize the former and minimize the latter (Ng 2000). Taking this perspective makes the issue of ultimate source of preferences more stark.

Why is a welfare theory an important basis for economic analysis? First, without a theory, there is no means of determining which measures of preference are valid measures of social welfare. There are many different ways of obtaining measures of the benefit of health programs and it is now well established that different methods give different answers. In addition, different types of respondents (eg doctors, patients, non-patients) give different answers. It is only by recourse to theory that the proper measure can be determined. From this it follows that the theoretic base is what ensures consistency in decision-making.

Second, there is an inextricable connection between the positive and the normative. Normative analysis determines that the provision of a particular treatment will maximize social welfare. However, if individuals, when offered that treatment, refuse it and follow some other course of action, because that is in their own best interests, then the outcome on which the normative recommendation was based is not achieved. And there is no way of knowing how sub-optimal the achieved outcome is As Shubik (1987) noted "…practice without theory can quickly become a dull and dangerous occupation".

Third, there is an issue in dealing with preference heterogeneity. Individuals have different preferences. Where a treatment provides an unambiguous improvement in health status, and all individuals prefer more health to less but vary in their strength of that preference, this is a relatively straightforward issue of variation. But individuals may have very different preferences for various dimensions of health state, or for health as

against other factors. Where alternative treatments offer different consequences in terms different health state dimensions, such as symptom relief and side effects, this is not so easily resolved. In this case, one person's health gain could be another's deterioration.

Attitudes to risk represent a particular case of preference heterogeneity. Generally expected utility approach adopted by economic evaluation ignores any value attached to risk per se. In population health terms, risk can be ignored as it translates into, for example, the proportion of treatments that are successful. But for the individual risk is not irrelevant. The equivalent expected QALY gain may be varied quite differently by an individual facing treatment with a substantial risk of death as against a treatment which is less effective.

Welfare theory is an important component of health economics. As the sector is beset with market failure, much analysis is driven by policy imperatives and therefore focused on the development of policy recommendations. . If traditional welfare economics is found wanting as a base for these analyses, then the development of coherent alternatives is required. Significant contributions have been made by the proponents of extra-welfarism, communitarianism, and empirical ethics, but as alternative analytical base, any approach should provide a useful guide or benchmark for practical applications. Extra-welfarism comes closest to this when equated with the maximization of health; but that seems to be a practical short-cut rather than a theoretical stance. And so all three alternatives rely on the benevolence and wisdom of decision-makers in allocating resources.

While welfarism could be rescued by sufficiently broadening what is considered allowable in individual preferences, this is not pursued by extra-welfarism, communitarianism or empirical ethics. For Sen, more than welfarism is required to address the duality of preference functions, and basis of well-being. However, Sen remains committed to the individual as the source of values and to tolerance of heterogeneity in preferences. In contrast, extra-welfarism, communitarianism and empirical ethics, derive from other sources for values.

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