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Empiricism, ethics and orthodox economic theory: what is the appropriate basis for decision-making in the health sector?

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Abstract

Economics is commonly defined in terms of the relationship between people's unlimited wants and society's scarce resources. The definition implies a central role for an understanding of what people want, i.e. their objectives. This, in turn, suggests an important role for both empirical research into people's objectives and debate about the acceptability of the objectives. In contrast with this expectation, economics has avoided these issues by the adoption of an orthodoxy that imposes objectives. However evidence suggests, at least in the health sector, that people do not have the simple objectives assumed by economic theory. Amartya Sen has advocated a shift from a focus on "utility" to a focus on "capabilities" and "functionings" as a way of overcoming the shortcomings of welfarism. However, the practicality of Sen's account is threatened by the range of possible "functionings", by the lack of guidance about how they should be weighted, and by suspicions that they do not capture the full range of objectives people appear to value. We argue that "empirical ethics", an emerging approach in the health sector, provides important lessons on overcoming these problems. Moreover, it is an ethically defensible methodology, and yields practical results that can assist policy makers in the allocation of resources.

Keywords: Welfarism; Extra-welfarism; Social preferences; Empirical ethics

Introduction

The great economists of the past typically commenced with an observed problem and adopted a set of assumptions suitable for its analysis and solution. Adam Smith sought to explain how unregulated markets could increase income and material wealth. Ricardo sought to explain the redistribution of income. Alfred Marshall sought to explain the efficiency of markets while Karl Marx focused upon the apparent exploitation of the workforce. Keynesianism grew out of the observed unemployment of the great depression, while Keynes's contemporary, Schumpeter, proposed an explanation for the observed dynamism of capitalist economies. More recently, monetarists, post-Keynesian and new classical economists have sought to explain the simultaneous existence of inflation and unemployment. Importantly, the relevance of the theories for the real world was self-evident. They were aimed at the understanding, and possibly the solution, of observed problems.

In contrast, in the last two decades there have been a succession of publications arguing that the preoccupation of modern economics with formal technique—formalism—and the lack of emphasis upon empirical problem-solving and empirical testing has led to a decline in the relevance of theoretical economics. The culmination of this concern throughout the 1980s was an enquiry into graduate education in the USA which, in large part, endorsed these concerns (Report of the Commission on Graduate Education in Economics, 1991). According to Blaug (1998, p. 13): "If we can date the onset of the illness at all, it is the publication in 1954 of the famous paper by Nobel Laureates, Kenneth Arrow and Gerald Debreu. This paper marks the

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beginning of what has since become a cancerous growth in the very center of micro economics''. Blaug's argument is that Arrow and Debreu's paper became a model for what economics ought to be. He continues that the approach was ''then canonized by Debreu in his history of value five years later, probably the most arid and pointless book in the entire literature of economics'' (Blaug, 1998, p. 17). None would doubt the intellectual brilliance of the Nobel winning contribution of Arrow and Debreu. It may, however, have been an illustration of Popper's (1949) recurring theme ''that great men make great mistakes'' and that, therefore, their contributions should be subject to the greatest possible criticism.

The tendency to formalism should not, of course, be overstated. As argued by Solow (1997), ''the past fifty years have, indeed, seen formalistic economics grow and prosper…(but) only a small minority within the profession practices economic theory in this style…generally speaking, formalists write for one another'' (p. 43). In support of this, the majority of applied economists practice a form of robust and eclectic empiricism. Despite this caveat there is a strong ''rationalist'' tradition in economics. Analyses commence with axioms, and conclusions are drawn, often in the form of mathematical proofs, with minimal reference to empirical testing. The important qualification that the axioms may not be universally applicable, or that context-specific constraints may need to be imposed, is sometimes noted but typically ignored. The emphasis is on consistency, elegance, mathematical rigour, and other internal properties of theory construction, with empirical adequacy being given secondary consideration.[1]

One of the legacies of formalism, and the subject matter of this article, is the way in which the assumptions of orthodox theory have censored social objectives. We argue that in the health sector economists have not explored a wide range of plausible social objectives that are inconsistent with the presuppositions of formal economic theory. We suggest that the reason for this is not simply that economists have adopted the wrong set of assumptions. Rather, the problem is with the ''rationalist'' methodology that sanctions the adoption and defense of axioms and assumptions without satisfactory reference to empirical evidence from the relevant context which, in the present case, is the health sector. The consequence is the neglect of theories that may better characterise the social objectives. These include a number of models loosely grouped under the heading of ''extra-welfarism'' and include the influential work of Amartya Sen.

In the following section, we briefly discuss the assumptions of orthodox welfare theory, concentrating, in particular, on welfarism, individualism, and consequentialism, assumptions that constrain the range of objectives that may be included in economic analyses. In the third section, we examine Sen's critique of welfare economics and the alternative framework he offers. We conclude that while Sen's criticisms are persuasive, his alternative framework confronts unresolved problems of implementation, particularly in the health sector. In the fourth section, we discuss some health-related objectives that appear consistent with public values but which have been largely ignored by economists: the severity of the patient's initial health state (as distinct from the improvement achieved by an intervention); the patient's capacity to improve their health state (non-discrimination against the permanently disabled); the patient's age; the reluctance to discriminate against those with high-cost illnesses; and explicit support for government paternalism. In the fifth section, we consider an alternative analytical framework for approaching this class of problems, which we have labelled ''empirical ethics'' (Richardson, 2002b).

Orthodox welfare economics

Welfarism is the view that social welfare is a function of personal utilities (irrespective of the non-utility features of these states). Consistent with this, traditional welfare economics places prime importance upon the preferences we have about our own lives—our ''self-regarding'' preferences—and places correspondingly less significance on the preferences we have about other people's lives—our ''other-regarding'' preferences.[2] The latter are only important to the extent that they contribute to personal utilities.

Among other things, this rules out ''clear-headed self-sacrifice of one's well-being for moral reasons'' (Sobel, 1998, p. 250), a phenomenon that Sen (1976,

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[1] Rationalism is the view that some claims about the world can be known to be true a priori—purely by the exercise of reason. It is not our claim that any particular economist has explicitly held this philosophical view. Rather, we claim that within orthodox economics, particularly the branch that resulted in modern welfare economics, there is a strong element of rationalism, which manifests itself in a tendency to minimise the role of empirical testing and elevate the role of formal, abstract analysis (reason). We postulate that this tendency has been detrimental to economics (see, Richardson, 2000).

[2] Different authors draw this distinction in different terms. For example, Dworkin (1977, p. 236), using the terminology of orthodox economics, distinguishes between ''personal'' preferences and ''external'' preferences; Barry (1965, p. 65) distinguishes between ''privately-oriented'' and ''publicly-oriented'' judgements and wants; Penz (1986, p. 41) distinguishes between ''private'' wants and ''social'' wants; Brandt (1979, p. 329) distinguishes between ''self-interested'' desires and ''non-self-interested'' desires.

pp. 326–329) calls "commitment". This sort of self-sacrifice involves no pay-off for the self-sacrificing individual; or, if it does, the pay-off is not the reason for the sacrifice. In this sense it is counter-preferential.

A common response of welfarists to this objection is to maintain that all behaviour, including "commitment" or any other form of self-sacrifice, must be the result of utility maximisation, otherwise different behaviour would have occurred. With this argument, revealed preferences cease to be a (possibly fallible) indicator of utility. Rather, they *define* utility maximisation. But this usage of the term "utility" becomes vacuous and encounters a logical tautology. *Question: Why do people select X? Answer: Because this maximises utility. Question: How do we know that this maximises utility? Answer: Because people have selected it and this is what is meant by utility*. However, if the definition in this second answer is substituted into the first answer we are left with the unhelpful restatement: *Question: Why do people select X? Answer: Because they have selected it.* Defined in this way "utility" becomes so general as to lose all explanatory power, and the claim that people act so as to maximise "utility" becomes unfalsifiable and, according to Popper (1949), we will have no information about the real world. Rather, it will tell us about the meanings of words. To understand differences in behaviour and motivations, ostensibly arising from judgements of duty, obligation, rights, and so on, it would be necessary to reintroduce ethical theories appealing to these notions as subsets of utilitarianism. As a minimum we would have to distinguish "self-regarding utility maximisation" from "other-regarding utility maximisation" (Dolan & Edlin, 2002).

The distinction between the self-interested individual and the (same) socially motivated citizen dates back at least to Aristotle, and altruistic motivation was explicitly recognised (and applauded) by Adam Smith. Quite apart from everyday observation, there is now a significant body of experimental evidence which shows that people are prepared to make significant personal sacrifices in order to obtain other social objectives, which often carry no obvious personal pay-off (Krebs, 1982; Kahneman, Knetsch, & Thaler, 1986; Keser, 1996; Andreoni, 1995; Bolton & Ockenfels, 2000). Rabin (1998, p. 17) cites such examples as donations to public television stations, voluntary reductions of water-use during droughts, and the conservation of energy to help solve the energy crisis: "Experimental research makes clear that preferences depart from pure self-interest in non-trivial ways: Subjects contribute to public goods more than can be explained by pure self-interest; they often share money when they could readily grab it for themselves; and they often sacrifice money to retaliate against unfair treatment". Thus, if we are interested in the scientific question, "what motivates people?" it is hard to avoid the conclusion that welfarism, with its narrow focus on personal utility, is not universally applicable—that there might be contexts in which elements described by other ethical theories might be of importance for social welfare. Welfarism may still be widely, if not universally, applicable. Further, empirical research may demonstrate that other elements of social welfare are often unimportant. However, the "inevitability of welfarism" thesis cannot be supported and, consequently, there is a role for the investigation of objectives that might be proscribed by the usual assumptions of orthodox economic theory.

In particular, welfarism encourages an almost exclusive focus on consequences. Consequentialism is the view that alternative courses of action are to be evaluated solely in terms of the resulting states of affairs. Sen notes that this disregards the significance of the act of choice itself, such as the identity of the chooser, the menu over which choice is being made, and its divergence from social norms (Sen, 1997b). More generally, the focus on outcomes—states of affairs—in evaluating actions and policies neglects considerations of duty, individual rights, need, desert, and so on, except to the extent that these impinge upon utility. Unfortunately, construing the notions in this way often strips them of their most important characteristics—characteristics that make them serviceable for *criticism* of utilitarian views and policies, and that find a place in the thinking of many ordinary people. A large body of empirical evidence attesting to the importance of need and desert is collected in Miller (1992).

Extra-welfarism and capacity

The failure of orthodox welfarism in one or more contexts implies the need for a (possibly context-specific) alternative theory of social welfare and, in recognition of this, "extra-welfarism" has been proposed to describe and prescribe values and policies in the health sector. The term was first discussed in health economics by Culyer (1989). However, as discussed by Hurley (1998, pp. 378–379), Culyer's (1989, p. 55) use of the term is somewhat ambiguous, even after his own clarifying note. Sometimes the term is used to indicate health per se as an alternative objective to utility. Sometimes health is viewed as a supplementary, but independent, objective in the social welfare function. Whichever usage of the term is adopted it is clearly desirable to integrate "extra-welfarism" into a broader theory and, inter alia, strengthen the justification for "extra-welfarism".

In a number of his articles Culyer seeks to justify "extra-welfarism" by drawing upon Sen's capability approach. In an attempt to overcome the shortcomings of traditional welfare economics Sen proposes that *utility* be replaced by *capability* as the primary criterion for determining the value of alternative social states.

Rawls (1971) had earlier recommended that "primary goods" play this role, but Sen argues, with some plausibility, that this fails to take account of what people can *do* with their bundle of primary goods. People differ in their ability to use primary goods to pursue their own ends. This may be due to variations in personal characteristics (e.g. age, disability, sex, intelligence), or environmental factors (e.g. availability of public goods, level of unemployment, public policies). Fairness may require treating people differently in light of these variations. "For example, a person who is disabled may hold a larger basket of primary goods and yet have less chance to pursue her objectives than an able bodied person with a smaller basket of primary goods" (Sen, 1997a, p. 198). Judging advantage and disadvantage in terms of primary goods is insensitive to relevant features of fairness and justice. But likewise, Sen rejects utility as the proper object of social concern. For example, he notes that individuals with disabilities often adjust their expectations down—they accommodate themselves to their condition—and, since well-being is largely determined by a person's situation relative to their expectations, they may have relatively high utility levels (Sen, 1987). But the fact that a person has learned to live with adversity should not mean that they do not have a legitimate claim for special consideration (Menzel, Dolan, Richardson, & Olsen, 2002). There is, Sen maintains, more to social welfare that the sum of individual utilities.

Rather than concentrate on primary goods or utility, Sen recommends a focus on *functionings* and *capabilities*: "The valued functionings may vary from such elementary ones as being adequately nourished and being free from avoidable disease, to very complex activities or personal states, such as being able to take part in the life of the community and having self-respect" (Sen, 1997a, p. 199). Such "functionings" lie mid-way between goods (or services) and utility. By analogy, food is not the focus of attention (because this "takes too little account of distinguishing facts about individuals", Cohen, 1993, p. 18), nor the satisfaction that a person derives from eating food (because "this takes too much account of just such facts", Cohen, 1993). Rather, the focus is on how much nourishment a person gets from food. The focus is on what goods do for people, or what people get out of them, in abstraction from the utility they confer. *Capabilities* are "the various combinations of functionings that a person can achieve" (Sen, 1992, p. 40). Functioning is something achieved—what a person is or does, whereas capability is the ability to achieve something—what a person could have been or done. The latter is closely associated with the freedom a person has to pursue a particular type of life.

One commonly noted problem with Sen's account as a guide to social policy is that the range of possible "functionings" is very wide. Valued functionings may include "being adequately nourished", "being warm", "being free from avoidable disease", "being happy", "being able to take part in the life of the community", "being able to communicate", and so on. This has lead some commentators to questions whether the capability approach faces significant practical problems—is "un-operationalizable" (Sugden, 1993). The capability approach per se provides little guidance on how these different "functionings" are to be weighted in particular contexts, though work of a practical nature has been done along the lines Sen suggests (Clements, 1995; Gasper, 1997, p. 287).

Moreover, it is not clear that shifting from "maximising utility" to "the promotion and expansion of valuable capabilities" will capture the full range of objectives that people value. For example, Gore argues that the capability approach, like welfarism, is fundamentally limited by a focus on private goods. Judgments about the goodness of states of affairs "are based exclusively on properties of individuals" (Gore, 1997, p. 243). This represents a limited perspective, according to Gore (1997, p. 243), because "there are certain objects of value for individuals which are properties of societies rather than of individuals… Individuals cannot by definition possess such goods. Rather they are features of societies". Leaving such features out of consideration means that the capability approach "is inappropriate for assessing social justice" (Gore, 1997, p. 235).[3]

These criticisms are only partly justified, however, for Sen admits that different objectives will assume importance depending on the context (Sen, 1985a, pp. 6–7; Sen, 1993, p. 35). As Alkire and Black (1997, p. 264) point out, "Sen's capability approach is *deliberately* incomplete and requires specification (a further valuation exercise) before it can be operationalized". Nevertheless, this highlights the need for an explanation of how empirically based and ethically defensible social objectives can be arrived at in different contexts. Important insights into this process are available in the

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[3] Nussbaum (2000) attempts to overcome these shortcomings of the capability approach by offering an objective list of universal "capabilities". However, the range of capabilities remains very wide, including "being adequately nourished", "having adequate shelter", "being able to laugh, to play and enjoy recreational activities", "being able to live one's own life", "being able to live with concern for and in relation to animals, plants, and the world of nature", and so on (Alkire & Black, 1997). Moreover, Nussbaum's specification of the (Aristotelian) capabilities essential for human flourishing introduces a paternalistic element into the theory that is unlikely to find general acceptance. "Needs ethics such as Nussbaum's which go beyond basic needs are in special danger of inexplicitly including non-universally relevant norms, and/or not being widely accepted in the foreseeable future." (Gasper, 1997, p. 297)

health sector. However, before looking at "empirical ethics" we finish our critique of welfarism, and that limited form of "extra-welfarism" that posits health as the alternative to utility, by citing some empirical evidence (of varying quality) that conflicts with these two approaches.

Some evidence

Severity

In conventional cost-utility analysis (CUA), where costs are measured in monetary units and the outcome is measured in terms of unweighted QALYs, the initial health state of a patient is only of importance because health improvement depends upon the quality of life before and after treatment. However, when directly questioned and informed of the fact that individual patients find two health improvements to be of identical benefit, survey respondents generally express a strong preference for allocating resources to those with the worst initial health state. This result has been independently derived in Norway, Spain, Australia, and the USA (Nord, 1993a; Nord, Pinto-Prades, Richardson, Menzel, & Ubel, 1999; Pinto-Prades, 1997; Menzel et al., 1999; Ubel, Arnold, & Caplan, 1998a). This conflicts with welfarism and with CUA. Respondents in each of the surveys rejected the welfarist rule that social value is determined by patient utility as measured by willingness to pay or some other form of sacrifice. Patient preferences were systematically re-weighted according to the severity of the initial health state. As these (social) values were based upon abstract, intellectualised considerations and not personal experience the decision did not reflect "utility" in the orthodox sense of an intensity of preferences. Additionally, the results conflict with the "self-interest perspective" inherent in the usual interpretation of welfarism, because the priority accorded to patients with a severe condition does not arise from the magnitude of the utility gain *as perceived by the individuals affected*, but from a social judgment about the distribution of such benefits. It also conflicts with consequentialism, as the initial health state is relevant for the decision but is not a consequence of the health intervention. According to those surveyed, the initial starting point per se is important. Attempts to rationalise these results in terms of external utility benefits by others are unpersuasive as the beneficiaries would generally be unaware of the "benefits" they receive. They would not experience a difference, mentally or emotionally, and thus would not receive a benefit in the welfarist sense—that is, undergo an increase in "utility".

The treatment of severity is not a purely theoretical exercise. In the USA severity is the overriding factor in the allocation of heart and liver transplants (where need exceeds supply). Those with the best prognosis after receipt of an organ are those with the least severe illness, and maximum health gain would be achieved by giving this group priority. The actual policy is to give the highest priority to those with the most severe problem. This results in the "perverse" situation where the relatively healthy must wait until their health state has deteriorated sufficiently for them to satisfy the severity criterion (Ubel et al., 1998a). This policy can only be described as "perverse", however, if health gain is the overriding social objective. In the present case, health gain is explicitly of secondary importance to severity.[4]

The rule of rescue

In 1990 the Oregon Health Services Commission produced a priority list of health services using (essentially) CUA. The initial list was never forwarded to the legislature because of the counterintuitive ordering that resulted, especially concerning lifesaving treatments. For example, dental caps for pulp or near pulp exposure were assigned a higher priority than surgical treatment for ectopic pregnancy (salpingectomy/salpingoophorectomy), and splints for temporomandibular joint disorder were ranked higher than appendectomies for appendicitis (Hadorn, 1991; Dixon & Welch, 1991). Hadorn (1991, p. 2219) argued that this occurred because, "any plan to distribute health care services must take human nature into account if the plan is to be acceptable to society. In this regard there is a fact about the human psyche that will inevitably trump the utilitarian rationality that is implicit in cost-effectiveness analysis: people cannot stand idly by when an identified person's life is visibly threatened if rescue measures are available".

The "Rule of Rescue"—the imperative people feel to rescue identifiable individuals facing avoidable death (Jonsen, 1986)—is closely related to the preference for helping the more severely ill, except that it applies to identifiable individuals rather than an entire category of anonymous individuals (those who are worst off), and the context is typically dramatic and unexpected. It is because an individual is identifiable, and in dire circumstances, that there is a powerful urge to rescue. The "Rule of Rescue" conflicts with conventional welfarism and with CUA. The priority accorded to identifiable patients in immediate peril is not based on the magnitude of the (health-related) utility gains expected to result. In contrast with orthodox theory, a state with less utility will be preferred to one with greater utility because of the contextual factors which do not

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[4] Kidney transplantation is not included in this policy since dialysis is available as an alternative—that is, the condition without transplantation is not sufficiently severe for inclusion in the policy.

affect the patient's utility. The "Rule of Rescue" conflicts with the "self-interest perspective", and likewise it conflicts with consequentialism, as being identifiable and in immediate peril is not a consequence of the health intervention.[5] Ethical issues associated with the "Rule of Rescue" are discussed further and examples given in McKie and Richardson (2003).

Potential

Similarly, conventional CUA places no value upon patients realising their potential for health improvement per se. In particular, no special consideration is given to the permanently disabled or chronically ill. Saving the life of a paraplegic, for example, will count for less than saving the life of a non-paraplegic, other things being equal, due to the lesser utility obtained from life years with paraplegia. This conflicts with the evidence that people do not want to discriminate against those with a lesser potential for health to the extent that CUA would indicate (Nord, 1993b; Nord, Richardson, Street, Kuhse, & Singer, 1995a; Menzel et al., 1999). Ubel, Richardson, and Pinto-Prades (1999), for example, found that interviewees would assign a lower weight to the health state paraplegia, but would not discriminate between saving the life of a paraplegic and a non-paraplegic. This also conflicts with welfarism and with CUA. The reluctance to discriminate against patients with a lower potential for improvement is not based on the magnitude of the QALY gains, but upon social attitudes towards the rights of the disabled. Once again, it also conflicts with the "self-interest perspective" underlying welfarism and with consequentialism. Health potential per se is relevant to the decision but is not a consequence of the health intervention.

Age

There is ample evidence to suggest that people wish certain age groups to be given higher priority than others when health care is scarce. According to the authors of the *World Development Report*, for example: "[m]ost societies attach more importance to a year of life lived by a young or middle-aged adult than to a year of life lived by a child or an elderly person" (World Bank, 1993, p. 213). This may be due to the social and emotional dependence of the young and the elderly upon other members of society. Studies in the USA, the UK, Australia and Japan have all found that the health of people in some age groups is considered to be of greater importance than the health of others (see, Busschbach, Hessing, & de Charro, 1993; Tsuchiya, 1999; Nord et al., 1995a).

This may reflect *utilitarianism ageism*—that is, some people may prefer the treatment of younger patients to older because they are expected to live longer after treatment and will thus gain more benefit. But there is also evidence for *egalitarian ageism*—that is, some people prefer younger patients to older because of an aversion to inequality in the age of death (see, Nord et al., 1995a). This position and the evidence supporting it are clearly inconsistent with conventional welfarism and with CUA. The priority accorded to younger patients in the case of egalitarian ageism does not arise from the magnitude of the QALY gains expected but from impersonal values relating to considerations of fairness. The determinant of relative values—age per se—is not a consequence of a health intervention; it is a personal characteristic of the recipients.

Direct cost

Studies in Spain, the USA and Australia suggest that the populations in those countries reject the proposition that health services to be *provided to others* should be selected on the basis of their cost (Abellan-Perpinan & Pinto-Prades, 1999; Ubel, Spranca, DeKay, Hershey, & Asch, 1998b; Nord, Richardson, Street, Kuhse, & Singer, 1995b). Respondents persisted with this view even when the opportunity costs were made clear to them.[6] As discussed by Nord et al. (1995b), this result is not necessarily perverse. Selecting services *that have least cost per unit of health outcome* (allocative efficiency) is distinct from *providing services at least cost* (productive efficiency). The former, but not the latter, has distributive effects between patients. The evidence suggests that the public is unwilling to discriminate against patients

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[5] Common examples concern the rescue of trapped miners at great expense or the rescue of sailors lost at sea when there is little chance of finding those who are missing (Creadon, 1997). There is also some evidence for the "identifiable victim effect", which plays an important role in the "Rule of Rescue" (Jenni & Loewenstein, 1997). In the health area, critically ill patients are offered intensive care when the likelihood of it being effective is negligible (Osborne & Evans, 1994, p. 779), and some patients receive a second or third heart or liver transplant, when first time recipients have a higher 1 year survival rate (Ubel et al., 1998a, pp. 276–279).

[6] Nord et al. (1995b) report that 81 per cent and 87 per cent of a sample of 551 Australians would disregard direct costs and indirect production benefits respectively in prioritising health services. In face-to-face interviews with 119 of these respondents a statistically significant majority continued to reject cost-minimisation despite a cross-examination that included frequent repetition of the adverse consequences with respect to health outcome. During the third phase of the study 63 respondents were asked to allocate a budget across diseases with the same outcome but with different costs. The total number cured was clearly shown to increase as costs decreased. Only 6 per cent selected the health-maximising/cost-minimising strategy recommended by orthodox economic theory.

who are unfortunate enough to have high-cost illnesses. This interpretation was elicited directly by Nord et al. (1995b), and indirectly by Abellan-Perpinan and Pinto-Prades (1999), who found that the public would allocate funds in proportion to cost in a clear attempt to offset the cost disadvantage.

It may or may not be appropriate to take these results about costs into account in health policy. However, the important point is that the issue has not been considered in the literature as it is excluded, by assumption, from the orthodox framework. Note that this also reveals the context-dependence of the potential compensation principle, another pillar of economic orthodoxy. In other markets beneficiaries of an intervention may or may not be capable of compensating losers. However, health benefits cannot be redistributed and, consequently, every intervention necessarily has a distributional effect, and it is this—not utility maximisation or health maximisation—which clearly drives the survey results. Without compensation it is not possible to assert that low-cost benefits are *more efficient* than high-cost benefits.

Other values

The issues discussed above do not exhaust the non-welfarist values and objectives investigated in the literature. Other values include the maintenance of hope (Ubel & Loewenstein, 1995; Menzel et al., 1999); universality of population coverage to remove uncertainty (Ubel, DeKay, Baron, & Asch, 1996); parent/non-parent, carer/non-carer status (Nord et al., 1995a); the number of patients sharing a benefit (Nord, Street, Richardson, Kuhse, & Singer, 1996); and the social class of recipients (Williams, 1997).

An additional issue that has received some attention is whether or not the public believes that welfarist values should be the basis for public policy. Olsen and Richardson (1999) cite survey evidence that in the context of life and death decisions, life saving, and not preference maximisation is considered to be the appropriate criterion for decision-making. In the context of time discounting Richardson (2002a) found ambivalence, with about the same number supporting discounting on the basis of public time preferences. In the same survey he also found ambivalence about the "meta-question" of who should make such decisions, the public or the government. Dolan, Cookson, and Ferguson (1999) similarly found that, after discussion, participants in small groups often became more reticent about the importance of their role in determining priorities and more sympathetic to the role that health care managers play. These three studies indicate that agreement or disagreement with welfarism may vary with the context and with the information available.

The evidence cited above conflicts with that specific form of "extra-welfarism" where "utility" is limited to "health-related utility". It does not conflict with Sen's version of "extra-welfarism" because the capability approach allows wider social objectives than (health-related) utility maximisation. In the next section, we suggest that community consultation, and the ethical evaluation of its deliverances, can provide guidance about the relative importance of different "functionings" in different contexts, but can also provide evidence of social objectives that go beyond "the promotion and expansion of valuable capabilities". In this way it overcomes some of the criticism leveled at the capability approach.

Empirical ethics: practical lessons

The evidence of the last section was cited in support of a methodological argument. This is that there are a surprisingly large number of unsurprising responses from the public that conflict with welfarism and health maximisation, and that these issues have not been systematically investigated or even widely discussed. The primary reason, we suggest, is that in each case the unsurprising public response conflicts with economic orthodoxy and with the assumptions that are made by many or most economists. In effect, the orthodox model selectively filters out a range of objectives and policies that appear to have public support.

A legitimate response to this evidence is to suggest that ethically important decisions, such as the bases for determining the allocation of health care resources, should not be determined by something as fickle as a population survey. This response raises the fundamental and difficult problem of how to determine the appropriate social/ethical values to incorporate in social policy. The superiority of one theory over another—ethical or otherwise—cannot be determined by logic alone, and yet there must be some agreement about what constitutes a better theory. Neither the discipline of economics nor ethics provides a satisfactory answer to this question. The "solution" of orthodox economics is to assume a set of values. We have argued above, like others, that these assumptions are not universally applicable and fail in the health sector. Historically, the theories proposed in ethics have been derived and supported by introspection. However, there is something unsatisfactory about a process for evaluating social options that has no reference to population values either in its formation or its validation.

We suggest that defensible principles for allocating health care should be derived in an iterative way, involving both an empirical study of population values and ethical analysis of the results, similar to the approach described as "empirical ethics" (Richardson, 2002b). Empirical results such as the ones cited earlier (under the headings "severity", "the Rule of Rescue", "potential", "age", "direct cost") provide a valuable starting point. To arrive at defensible policies for allocating health care, researchers should postulate principles based on such information and then embark upon a series of further empirical studies both qualitative and quantitative. During these, the implications of population responses should be clarified, and subjected to ethical scrutiny. For example, when a health state is rated as having a utility score of 0.8 it may be inferred that curing five people in this health state and returning them to normal health for the rest of their lives is equivalent to saving the life of a single person.[7] This and other implications should be drawn out and placed before the population, as well as ethical arguments for and against the implications. The general principles should then be re-formulated in light of population reactions, and re-submitted to empirical testing. This process should continue until relatively stable principles are derived. If this process is conducted properly, the principles arrived at (at any point in time) should be able to withstand (tolerably well) both ethical criticism and the test of population support.

As part of the process of eliciting social preferences, techniques should be used that will achieve reflection and deliberation, and a precise statement and specification of values. These might include re-interviewing, different forms of information feedback (including Delphi techniques), the triangulation of issues (eliciting responses using different techniques and comparing results), focus groups and various discussion techniques, and so on.[8] In terms of a distinction due to Sen (1985b), the hope is that both "correspondence irrationality" and "reflection irrationality" will, in this way, be minimised. "Correspondence irrationality" occurs when a person's actual choices do not correspond with his/her reasoned reflection. "Reflection irrationality" characterises a failure of careful reflection itself. This is particularly important for health services, since the opportunities people have to reflect upon the worth of these, in comparison with other conventional goods and services, are limited. As noted earlier, Dolan et al. (1999) found that participants in small groups often changed their mind after discussion and reflection.

It may, legitimately, be argued that a problem arises if different techniques produce different results. However, this is a common problem with empirical enquiry in the social sciences, and does not indicate a defect of "empirical ethics" as such. For example, welfarism in the health sector is confronted with such questions as: Which instrument should be used to measure "utility"? Should patient or public preferences be elicited? Macroeconomists must decide which definition of the money supply to incorporate in explanatory theories. The embryonic state of the economics literature on questions such as the elicitation of ethical preferences is a reflection of their neglect, not their intransigence, and the neglect is partially attributable to the methodology that assumes welfarist values and objectives.

It is, of course, possible that at the end of a careful process of preference elicitation the population remains divided about an ethical issue. This problem is not unique to decision-making in the health sector. Decision makers are continually and routinely expected to make judgments about issues where the community is divided. In these circumstances there is no mechanistic formula for determining the "correct" answer. Empirical ethics can inform decision makers about the extent of the disagreement and the strength of preferences of the population. On many occasions this evidence may be sufficiently persuasive for decision makers to base their conclusions upon the empirical results. On other occasions they may use their constitutional power to override or modify the preferences of the population.

The process of community consultation confronts a familiar problem. Encouraging subjects to adopt the "caring-for-others perspective" paves the way for judgments based on "fairness" and "justice". But it also paves the way for biased, intolerant, and dogmatic preferences. "Empirical research may simply turn up a distorted set of ideas, based on individual or class interests, cognitive failures of one kind or another, etc." (Miller, 1992, p. 556). One way of excluding such preferences is to forestall (or try to forestall) their expression by never giving people the opportunity to express preferences based on race, religion, sexual orientation, etc. This represents an unacceptable form of paternalism. An alternative approach is to rely on the iterative process of community consultation and ethical analysis to generate principles of health care allocation, but to include the "laundering" of preferences, described by Goodin (1995), to exclude those preferences that have nothing to contribute to social welfare. Relying on the process of community consultation to initially filter out biased, intolerant, and dogmatic preferences, with the laundering of preferences as a stop-gap measure in

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[7] Curing one person results in the utility gain of $1.00-0.8=0.2$. Five people receiving this cure will therefore increase utility by $0.2\times5=1.00$, which is also the utility obtained by saving one person's life.

[8] Note Black and Mooney (2002, pp. 199–200): "The issue that communitarianism must then address is one of establishing processes which inform public judgement and encourage deliberative civic engagement instead of authoritative expert knowledge. Approaches are needed which allow participants time to deliberate, ask questions of experts and spend time formulating considered responses. There is a risk that minority groups or individuals within a community will not have their voices heard by the majority. In these instances, social autonomy will recognise that the community has a responsibility to the weaker".

exceptional circumstances, overcomes the danger that overly regulated consultation may fail to detect legitimate social values and their rationale.

Even within the health sector, there is a wide range of ethical principles which, according to members of the general public, might be relevant in different circumstances (maximising health, respecting rights, satisfying need, and so on). Likewise, there are a number of attributes/contexts that are potentially relevant for decision-making (age, severity, emotional context, personal characteristics, past behaviours, future prospects, and so on). Over a very wide range of these there is a general ethical ambivalence: fulfilling one principle violates another. In economic jargon there is the need for a "trade-off", but in this case the trade-off is between different ethical objectives/principles. In these circumstances it is reasonable to consult with a well-informed public to determine the nature of the trade-off. The status of the final outcome may be described as "best tentative hypothesis with respect to social preferences and trade-offs". This is one practical solution to the problem of determining acceptable social preferences. It is the social counterpart to the "best present theory" in the physical sciences.

Note that the outcome of this process is not our best hypothesis about what is right. It is our best hypothesis about what the community *thinks* is right, after deliberation, clarification and careful reflection. If the process used to incorporate the community's view is inclusive, uncoercive and transparent, then there are grounds for accepting the outcomes as "legitimate" (Daniels, 1998; Daniels & Sabin, 1998), and, prima facie, the basis for public policy, even if there remain disagreements about whether it is just.[9]

Discussion and conclusion

Our criticism of orthodox welfarism and its application in the health sector has been two-fold. First, a number of the assumptions of welfare theory are seriously flawed. We have concentrated on individualism, welfarism, and consequentialism. Secondly, and more fundamentally, the adoption of the rationalist methodology has seriously limited the scope and nature of the analysis of social objectives. At best the orthodox assumptions impose a limited view of the values that may be included in the "social welfare function". At worst, they represent a tautological set of conditions that blur or eliminate a number of the concepts, and the language, that are necessary for considering alternative theories of social justice.

One of the defining characteristics of rationalism is the reliance on a priorism—pure reason—and the downgrading or elimination of empirical evidence. But empirical evidence about social objectives is important. If a theory purports to represent community values then these values must be elicited. An over-reverential belief in the universal applicability of initial assumptions will result in the likely failure to detect social values that are context-specific and counter to the orthodoxy. In the health sector there are numerous "contexts" defined by the different dimensions of the sector: objectives may vary by disease, by outcome, by recipient or (potential) patient, by provider, by location, or by source of finance. Community values may, in principle, vary along each of these dimensions and if policies and decisions are to represent community values they must be sensitive to these differences. The empirical evidence cited earlier under the headings "severity", "the Rule of Rescue", "potential", "age", and "direct cost" indicates that the normative theory embodied in welfarism does not satisfactorily explain population values in a number of the contexts encountered in the health sector. Nor does the switch from maximising "utility" to maximising health overcome this problem.

In contrast with the rationalist methodology we have proposed and defended an approach labelled "empirical ethics". The proposal seeks to satisfy three criteria. First, policy makers require specific, and preferably quantitative, results concerning options or the trade-off between options. Abstract statements of ethical principles are an insufficient basis for public policy. Secondly, representative members of the society should be involved in social decision-making, not only the experts. Thirdly, policies that have important ethical consequences should be subject to vigorous ethical debate and criticism. We have suggested that "empirical ethics" satisfies these criteria. The proposal has much in common with deliberative democracy. In particular, a number of the considerations commonly used to support deliberative democracy also support empirical ethics.

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[9] Thompson takes a more extreme view. She holds that community consultation is not merely a way of reaching pragmatic decisions given the diversity of ethical views in the community—it is not a way of reaching acceptable compromises on ethical issues. Rather, a collective agreement "is what an individual is justified in believing is right—whatever his or her own intuitions, reasoning, conscience or experience tell her" (Thompson, 1998, p. 1). However, this is too strong. One advantage of seeing the outcomes of collective decision-making (appropriately conducted) as legitimate, rather than as delivering the "truth" about what is morally right, is that we retain a dimension of moral autonomy for the individual—individuals are not constrained to endorse collective decisions as just. Individuals must be able to criticise on moral grounds decisions arrived at by democratic means, and they could not do this if collective agreement "is what an individual is justified in believing is right". The purpose of moral language—of having words like "right", "just", "ought", and their opposites—is to allow criticism of social policies and practices, no matter how widely supported they are—that is, even if they are democratic, representative, and explicit.

For example, deliberative democracy is often defended on the ground that deliberation on principles of social organisation leads to more rational and informed decisions. The idea is that open discussion allows the exchange of relevant information, increases the likelihood that confused thinking will be exposed and corrected, and allows consideration of all sides of an issue. Deliberation also challenges citizens to defend their views. In this way it tempers self-interest, facilitates insight into the merits of competing moral claims, and increases respect for alternative points of view (Freeman, 2000).

In sum, we have argued that the analysis of social objectives in the health sector (and elsewhere) is seriously under-developed. Issues of social choice have been eliminated by the adoption of assumptions that vary from the questionable to the self-evidently wrong. The result of this has been the usurping of social decision-making, as ethical questions are (mis)represented as technical issues of economic efficiency. The conclusion we draw is that much greater attention should be given to the empirical and ethical evaluation of social objectives. Attention should also be given to the prior issue of the various rules or criteria for the acceptance, modification or rejection of the social values elicited by empirical research.

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