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Economics, QALYs and Medical Ethics
A Health Economist's Perspective

Alan Williams

DISCUSSION PAPER 121

**ECONOMICS, QALYS AND MEDICAL ETHICS:
A HEALTH ECONOMIST'S PERSPECTIVE**

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ABSTRACT

This paper explores how medical practice ought to be conducted, in the face of scarcity, if our objective is to maximise the benefits of health. After explaining briefly what the cost-per-QALY criterion means, a series of ethical objections to it are considered one by one. The objectors fall into four groups:

- (a) those who reject all collective priority-setting as unethical;
- (b) those who accept the need for collective priority-setting, but believe it is contrary to medical ethics;
- (c) those who accept the need for collective priority-setting, and do not believe that it is contrary to medical ethics, but reject the role of QALYs in it;
- (d) those who accept the need for collective priority-setting in principle, but are unwilling to specify how it should be done in practice.

The purpose of this discussion paper is to give each group a hard time!

Economics is about scarcity. Quality Adjusted Life Years (QALYs) are about the benefits of health care. Medical ethics are about the way in which medical practice ought to be conducted. This paper is therefore about how medical practice ought to be conducted, in the face of scarcity, if our objective is to maximise the benefits of health care.

Commonsense tells us that in the face of scarcity we should use our limited resources in such a way that they do as much good as possible. In health care, "doing good" means improving people's life expectancy and the quality of their lives. Since people value both of these fundamental attributes of life, we need a measure of outcome which incorporates both, and which reflects the fact that most people are willing to sacrifice some quality of life in order to gain some additional life expectancy, and vice-versa. This is precisely the role of the Quality-Adjusted Life Year. If some health care activity would give someone an extra year of healthy life expectancy, then that would be counted as 1 QALY. But if the best we can do is provide someone with an additional year in a rather poor state of health, that would count as less than 1 QALY, and would be lower the worse the health state is. Thus the QALY is to be contrasted with measures such as "survival rates", commonly used as the sole success criteria in clinical trials, which implicitly assume that only life expectancy is of any concern to people. The essence of the QALY concept is that effects on life expectancy and effects on quality of life are brought together in a single measure, and the bulk of the empirical work involved in making the concept operational is concerned with eliciting the values that people attach to different health states, and the extent to which they regard them as better or worse than being dead. For the purpose of priority setting in health care, being dead is regarded as of zero value. A QALY measure can in principle embrace any health-related quality-of-life characteristic that is important to people. The particular measure with

which I am most familiar (the Euroqol measure) covers mobility, self-care, usual activities, pain/discomfort, and anxiety/depression. Note that "usual activities" are whatever the individual's usual activities are, and are not restricted to work activities. So although developed primarily by economists, the QALY is not a measure of people's economic worth, but a measure of whatever aspects of life they themselves value.

In the presence of scarcity, resources devoted to the health care of one person will be denied some other person who might have benefitted from them. Clinicians are quite used to this phenomenon with respect to the allocation of their own time, and of any other resources that they control as practice managers. They are trained to discriminate between those who will benefit greatly from treatment and those who won't, and by this means, "clinical priorities" are established, which are based on some broad assessment of risks, benefits and costs. The role of costs here is crucial, because they represent sacrifices made by other potential patients who did not get treated. Thus the economists' argument that medical practice should concentrate on those treatments that are known to be cost-effective, is designed to ensure that the benefits gained by the treatments that are actually provided should be greater than the benefits sacrificed by those who were denied treatment. That is what "doing as much good as possible with our limited resources" means.

OBJECTIONS

I am constantly amazed at how controversial these commonsense propositions seem to be. Priority setting is inevitably painful, and its consequences are bound to be unfortunate for someone or other. It is therefore understandable that many people cling, with childlike

naivety, to the romantic illusion that if only more resources were devoted to health care they can escape from the process altogether. But when more resources are made available, we still have to decide which are the highest priority uses to which they should be put, so this is really no escape route at all.

The more interesting and substantial objections come from those who accept the fact of scarcity, and are willing to face up to its implications, but reject the approach I have outlined. They fall into four groups:

- 1 those who reject all collective priority setting as unethical;
- 2 those who accept the need for collective priority setting but believe that it is contrary to medical ethics;
- 3 those who accept the need for collective priority setting, and do not believe that it is contrary to medical ethics, but reject the role of QALYs in it;
- 4 those who accept the need for collective priority setting in principle, but are unwilling to specify how it should be done in practice.

By "collective priority setting" I mean priority setting intended to guide the use of public resources devoted to health care. I will summarise the key points at issue for each group in turn.

IS ALL COLLECTIVE PRIORITY SETTING UNETHICAL?

Those who reject all collective priority setting as unethical typically assert that it is immoral for one person to sit in judgement on the worth of other people's lives, which is what collective priority setting requires us to do. However, since they accept the fact of scarcity, they acknowledge that some people must be denied the benefits of health care, but they want that done in a manner which is free of any interpersonal judgements of relative worth. They believe that this can be done by recourse to a lottery. The trouble with this supposed solution is that lotteries do not fall like manna from heaven, but have to be devised and run by people, who have to determine who shall be eligible, when, and under what conditions, for each and every treatment that is on offer. So recourse to a lottery simply brings us back to the very same priority-setting issues that it was supposed to avoid. They simply appear in a different context i.e. determining who is eligible to enter the lottery, and with what probability they may win each prize.

Instead of seeking to avoid the making of interpersonal judgements of life's value, it seems more fruitful to seek as much detachment as possible when making them. An entirely different sort of lottery could have an important role to play in that process. What I have in mind is the thought experiment involved in approaching collective priority setting from behind the "veil of ignorance". We have to imagine ourselves outside the society of which we are members, and then choose that set of rules for collective priority setting which would be most likely to achieve the distribution of health benefits that we think best for our society. Then, and only then, will we be assigned, by lottery, an actual place in that society. We may find ourselves favoured by our rules, or we may be one of the unfortunate people who are

disadvantaged by them, but we would have achieved a set of rules which we would have to accept as fair. The question which I would ask the reader to consider is whether, under these conditions, you would choose a set of rules which would maximise the health of the community as a whole, as measured in QALY terms, and, if not, why not?

IS COLLECTIVE PRIORITY-SETTING CONTRARY TO MEDICAL ETHICS?

My second group of objectors are those who accept the need for collective priority setting, but believe that it is contrary to medical ethics. In the extreme, such people believe that it is the doctor's duty to do everything possible for the patient in front of him or her, no matter what the costs. But in a resource-constrained system "cost" means "sacrifice" (in this case the value of benefits foregone by the person who did not get treated). Thus "no matter what the costs" means "no matter what the sacrifices borne by others". This does not sound to me like a very ethical position to be in. Indeed, people who behave regardless of the costs of their actions are usually described as "fanatical", not as "ethical". Moreover, if medical ethics include an injunction to deal justly with patients, then there has to be some weighing of the benefits to one person against the sacrifices of another. So I think that this supposed ethical conflict between the economists' argument that costs (i.e. sacrifices) must be taken into account in every treatment decision, and the precepts of medical ethics, is non-existent, because medical ethics does not require everything possible to be done for one patient no matter what the consequences for any of the others.

WHY MIGHT QALYs BE UNETHICAL?

My third group consists of those who accept the need for collective priority setting, and do not believe that it is contrary to medical ethics, but cannot accept the QALY approach to it. There seem to be 4 distinct ethical issues raised here. Firstly, whose values should count? Secondly, how should we move from individual values to group values? Thirdly, should we not be concerned with the distribution of the benefits of health care across different people, as well as with the total amount of such benefits? Fourthly, are there other benefits from health care which QALYs do not pick up? I will tackle each of these in turn.

Whose Values Should Count?

Whose values should count? As a health economist it is really not for me to say. Nor, as a health economist, do I have to say, because the QALY concept is extremely accommodating in this respect. In principle it can accept anybody's views about what is important in health-related quality of life, and anybody's views about the trade-off between length and quality of life. In practice, the early empirical work was based on professional judgements (mostly those of doctors). More recent work has been based on the views of patients and of the general public, and my own work has concentrated on the latter, because I am anxious to find out whether the values of the practitioners, their patients, and the general public coincide. What the QALY concept does, quite properly, is bring this question to the fore, and point up the difficulties that are likely to arise if the priorities of a particular group of patients differ from those of their doctors or of the wider society of which they are part. In principle, since every treatment decision entails benefits to some and disbenefits to others,

in a democratic society the views of all affected parties should count. Since the sacrifices involved in treating particular groups of patients will be widely spread and difficult to identify with any precision, this points inexorably to the general public as the most appropriate reference group. Some people have advocated using the values of a particular reference group as the collective view (e.g. the views of the most disadvantaged, or of people with particular moral, legal or political authority). At a personal level I feel distinctly uncomfortable about such proposals, preferring a simple populist stance. But, as I said earlier, adoption of the QALY approach does not require you to adopt this particular stance, although I must confess that it is one that I personally find very compelling.

Individual Values or Group Values?

How should we move from individual values to group values? Once again, as a health economist, who am I to say? Once again, I don't have to say, because there is nothing in the QALY approach which requires aggregation to be accomplished in any particular way. But collective priority setting does require a collective view, so some method of aggregation has to be adopted, and whatever method is used, it will have strong ethical implications. The simplest method is to postulate that everybody's views count equally, and a simple average is then taken to represent the collective view. A somewhat more complicated position is involved in taking the median view as the collective view. The median view is the one that would command a simple majority in a voting system. With a skewed distribution of values (which is what is commonly found) it gives less weight to extreme views than would the taking of a simple average. But whichever position is taken on this issue, the QALY approach has the great advantage that it is not possible to hide what you have done, so it is

quite easy for others to tease out the ethical implication and help ensure that you are held accountable!

Is the Distribution of QALYs Important?

The next set of objections to the QALY approach concentrates on whether simple maximisation of health (with all its utilitarian overtones) is really an adequate representation of social objectives in the health care field, or whether we are not also concerned with how the benefits of health care are distributed within the population. My theme here is the same as before there is nothing in the QALY approach which requires QALYs to be used only in a maximising context, although it was QALY maximisation that I asked you to think about earlier as a collective prioritising rule. The use of QALYs in more complex rules is perfectly possible, and almost certainly needed if collective priority setting is to reflect the views of the general public. The simplest and commonest use of QALY calculations at present is based on the assumption that a year of healthy life expectancy is to be regarded as of equal value to everybody. Note that this does not say that it is of equal value to everybody, because that is unknowable. What it says is that if that social judgement is appropriate, then what follows from it will be appropriate. If it is not, then what follows will be irrelevant. A strong egalitarian case could be made for that assumption, since it implies that it does not matter at all who the beneficiary is. Like Justice, it is Blind. There is no discrimination on grounds of race, sex, occupation, family circumstances, wealth or influence. In this respect it follows precisely the assumptions underlying the use of the more conventional outcome measures used in clinical trials, which just count the number of people with the specified outcome characteristic. But following hallowed tradition may not carry much weight if a sizeable

majority of the general public would prefer some discrimination between potential beneficiaries according to their personal characteristics or circumstances. For instance, there is ample evidence that most people (including the elderly) would give extra weight to benefits accruing to young people over the same benefits accruing to old people. There is a similarly widespread view that people with young children should have some priority over their childless contemporaries. It is quite possible to build these differential weightings into QALY calculations, the implication being that instead of maximising unweighted QALYs, we would need to weigh them according to the relative priority assigned to the particular characteristics of the beneficiary. There are some especially interesting issues concerning the preferential treatment of the poor. The general principle, which is widely assented to, is that access to health care should not depend on people's wealth. This implies that it should not depend on people's lack of wealth either! So discrimination in favour of the poor seems inconsistent. But if it is desired to use the health care system as a way of compensating people for other deprivations they suffer, then again, QALYs can be weighted accordingly.

Are there Benefits Other than Health Improvements?

Last in this group of objectors are those who assert that there are other benefits from health care than improvements in health. There obviously are. For instance, the provision of health care generates a livelihood for millions of people. Moreover, some people get satisfaction from health care in ways which do not show up as improved health. But the question is, how relevant are these other benefits for priority setting in health care? To the extent that health improvements are the dominant consideration, then QALYs, in some form or other, must be the dominant concept, on the benefit side, in collective priority setting. If

the improvement of health plays only a subsidiary role, then QALYs will play only a subsidiary role. There seems little more to be said, except possibly to challenge those who reject QALYs to say what they believe the main benefits of health care are, if they are not improvements in the length and quality of people lives.

FINE IN THEORY - BUT UNACCEPTABLE IN PRACTICE?

This brings me to my final set of people, those who accept the need for collective priority setting in principle, but are unwilling to specify how it should be done in practice. At a personal level they have my sympathy, because of all the difficulties I have outlined. But at a professional level I feel somewhat aggrieved by their behaviour, because a typical stance is to point out all the difficulties involved with some particular approach, and then to sit on the fence waiting for the next candidate to come by, and then do the same again. This would be fine if the implied ideal method were available to us, or if we could suspend all health care decision making until it were. But there is no perfect system on offer, and we can't wait. As with a well-conducted clinical trial, the new has to be compared systematically, according to preselected criteria, with what already exists. This is what needs to happen in the field of priority setting. If the same criteria as are used to criticise the QALY approach, were used IN AN EVEN-HANDED WAY to criticise current practice, or any feasible alternative to it, how would these other methods make out?

So let me end with my favourite Maurice Chevalier story. When he was getting quite old he was asked by a reporter how he viewed the ageing process. "Well" he said "there is quite a lot I don't like about it, but it's not so bad when you consider the alternative!"

Perhaps the same is true of the QALY approach to collective priority setting in health care.

If so, we should beware of rejecting potential improvements simply because they fall short of perfection!

SOME FURTHER READING FOR THE ENTHUSIASTS

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