Public Reasoning in the Social Contract for Health
Albert Weale

Address for correspondence:
Department of Political Science
School of Public Policy
University College London
29/30 Tavistock Square
London
WC1H 9QU
UK

Tel: 44 (0)20 7679 4993
Email: a.weale@ucl.ac.uk

Lecture delivered in Lenten Lecture Series, Centre for Medical Law and Ethics, King's College London, 1 March 2012. The paper forms part of the work for arising from a Professorial Fellowship awarded by the UK's Economic and Social Research Council for the programme 'Social Contract, Deliberative Democracy and Public Policy' (RES-051-27-0264). This support is warmly acknowledged.
I begin with two sets of histories.

The first of my histories is a social and economic history. Ever since modern health services were developed in post-war democracies, expenditure has steadily risen. Health care is taking up an increasing proportion of average incomes. [Slide] Between 2003 and 2009 across the 21 EU countries for which the OECD collects the data, the share of national income taken by health care expenditure rose on average from 8.5% to 9.5%. [Slide]. This trend was not true of all countries in the sample. Some, including Portugal, had a flat, or even marginally declining, trend in expenditure. Yet, the overall direction was upwards, and placed in a long term perspective the tendency is even more market. As a consequence, health care expenditure has not only to compete with other claims on expenditure, but it competes in an increasingly demanding way. Currently in the EU health care takes up around 10% of national income, which means that each person in employment is working half a day a week just to fund health care. In the United States the growth is even more striking and now stands at nearly 18%. At a level of 18% of national income on average all workers are working nearly one day a week, just to pay for health care. This fact is one of the reasons urged in the Obama reforms of health care and the situation is also an example where we should not equate increased expenditure with improved performance.

Note that the issue is not simply that expenditure is rising – after all as societies become richer one would expect spending on highly valuable goods. Rather the problem is that expenditure is rising faster than income, so that in effect people are having to work a larger proportion of the week to sustain the increase in spending. The trend varies across countries and across time. Nonetheless, with all these variations, the general trend is upwards and though it has shown signs of slowing down at particular points in time, it does not show signs of stopping. In strict economic terms, when there is a tendency for expenditure to grow proportionately faster than income, we have a pattern that is characteristic of luxury or superior goods that are defined as goods the consumption of which rises faster than income. It may seem strange that health care, which we usually think of as meeting basic needs, has patterns of expenditure that resemble luxuries. However, on reflection this is not surprising, since good health enables us to enjoy a
wide range of opportunities, so that as the members of a society become richer, so they will naturally want not only health but increasing health.

My first historical sketch was social and economic and concerned public matters. My second set of histories is personal. In 2008 Colette Mills, a 58 year old patient with breast cancer, was being treated on the NHS with Taxol (paclitaxel), but wished to supplement this treatment with Avastin (bevacizumab) on her consultant’s recommendation that the two medicines might slow the progress of her cancer. Avastin had not been approved by NICE for use in the NHS, and Mills’ Primary Care Trust, South Tees Hospital Trust, has refused to provide it for her. Mills wanted to buy the medicine privately and have it, and related care, administered on the NHS. However, South Tees Hospital Trust would not allow this on the grounds that it would mix public and private provision, and such mixing is prohibited by Department of Health guidance. Mills has estimated that the cost of Avastin alone would be around £4,000 per month, but that if she had to pay for associated NHS services too, this would raise the cost to between £10,000 and £15,000. Along with five other patients, Mills is prepared a legal challenge to the decision of her PCT to disallow concurrent private and NHS treatment, on the grounds that it would be a breach of her human rights.

In another case Linda O’Boyle, a 64 year old patient with bowel cancer, wanted to be treated with Erbitux (cetuximab), due to the failure of the conventional treatment, Irinotecan, to halt the progression of her cancer. Erbitux had not been approved by NICE for use in the NHS. O’Boyle’s consultant recommended to her PCT, Basildon and Southend Hospitals Trust, that the medicine be made available to her but the request was refused. O’Boyle then undertook to pay for Erbitux privately but the PCT would not allow her to have it, or related care, administered on the NHS. Linda O’Boyle purchased an eight week course of Erbitux at a cost of £11,000, but died in March this year before the end of the treatment. It was these cases that led to the setting up of the Richards Review into supplementary payments for pharmaceuticals, so that these personal stories did become political.

Setting these two histories – the social and economic history of the growth in health care expenditure and the personal history of two patients who found themselves at the margins of treatment provision – illustrates one common theme but also a tension is our ethical vocabulary. The common theme is that treatment, particularly in urgent situations, can be expensive both at the personal and at the public level. The second theme, the theme of difference, is that these two
types of history represent the two principal ways in which many people think about the issue of priority-setting in health care.

On the one hand there is a social and political story. Within certain societies and across all developed societies health care spending is rising and the problem of cost containment informs the policy debate. Whatever one thinks about its merits, the present government’s health care reforms are intended to use the split of purchaser and provider, and competition among providers as a way of securing an improvement in health care more efficiently than before. Nor are they unique. Reforms over a number of years in the German and Dutch social health insurance schemes have enabled citizens to choose among their health insurers in an attempt to improve efficiency through forms of managed competition. As I say, there are a number of views that can be taken about the merits or otherwise of these reforms both in their detail and in their reliance on the ideas associated with managed competition as their driving force. However, for the purposes of this lecture, I am simply going to note these developments as evidence of the salience of health care reform issues in the politics and policy of modern democracies.

On the other hand, these grand policy issues have a human dimension. Colette Mills and Linda O’Boyle were individuals in need. One common thought that many people have is that all individuals have a right to the best care that can be obtained when they are in need. When controversial cases hit the headlines, it is because this right seems to be violated that people are concerned.

In this lecture I want to explore what is involved in thinking about these two levels together, when we are concerned with the provision of health services. I wish to present two claims to you today. The problem is not rising costs as such. All superior goods in the economy by definition take up an increasing share of rising income. The ethical problem stems from the fact that the costs of any individual’s health care are shared with others, either through taxation or through social insurance. Priority setting in health care is ethically important because it is important to establish just terms of cost-sharing among citizens. In particular, the underlying social contract between patients, providers and the public needs to be defined in such a way that costs are fairly shared. The problem of health priorities from an ethical point of view is defining what an ethically health care social contract should be.
This leads on to the second component, namely how we are to think of the public reasoning that goes into defining that health care contract. How we should understand public reasoning in the social contract for health care when setting health care priorities? This way of phrasing an issue that is one of intense public controversy as we have already seen may seem like turning the controversial into the obscure. It is a typical professional deformation of academics to turn political controversy into intellectual disagreement. However, I am convinced that we will not understand the nature of the political controversies until we can understand the logic of the public reasoning that ought to bear upon those controversies, and we will not understand the logic of that public reasoning, and if I have only partly persuaded you of the plausibility of this claim, I shall have done my job today.

The Social Contract for Health

In his book Competing Solutions, still a useful guide to comparative health policy, Joe White suggests that all developed health care systems can be thought of as methods of what he calls ‘shared savings’. The shared savings of which White writes can take various forms, including private insurance, social insurance and tax-based funding. Whatever form they take, the purpose of such shared savings schemes is to enable individuals to deal with the financial risks arising from the costs of medical and social care associated with ill health. As White notes, some people complain that enabling people to share the costs of treating or caring for their illness with others raises the costs of medical care, but of course that is precisely the point. The idea of any shared savings scheme is to enable individuals to consume care that they would not otherwise be able to afford if they had to rely solely on their own resources.

For reasons that I do not have time to go into in this lecture, there are good reasons for thinking that private insurance alone will not be able to deliver a system of shared savings that is fit for purpose. If only private schemes are available, some members of society will not be able to afford the premiums that are charged. The imbalance of information between providers and consumers makes it impossible for individuals to behave rationally in the market, choosing what is best for them. Providers may compete on frills rather than on the core services of medical care. And risk-rating will lead to moral hazard, by which people disguise their true medical condition, and adverse selection, by which poor risks are denied cover. These problems of private insurance are well known and there is no need to discuss them here.
There are also interesting questions to be discussed about the relative merits and demerits of social insurance versus tax-based schemes of shared savings. There is some tendency for these schemes to converge, with the continental social insurance schemes receiving injections from general taxation, and some commentators now believe that the distinction is a barrier to understanding. Without going that far, I am going to treat the similarities as more important than the differences. In particular, any system of shared savings, whether on the social insurance, tax or hybrid model, has the following features.

Firstly, when individuals benefit from a system of a shared savings for health, they are typically not spending their own money beyond any out of pocket payments that the scheme requires. In the National Health Service, this is the principle that services should be free at point of use, except for designated services, like prescription charges, where some payment is required. A helpful way of thinking about this feature of consumption without cost at point of use is to say that two features that are normally conjoined in any consumption decision – what is my individual benefit and how much do I have to pay to secure that benefit – are unbundled through systems of shared savings, at least at point of use. When they consume care, individuals are freed from the anxiety of the financial concerns that a normal purchase involves.

Secondly, and as a result of this feature, a system of shared savings becomes what economists call a club good. A club good has the twin characteristics that it is available to a limited set of people but that the benefits that it provides are open to all in the club. For example, the National Health Service is available only to those who are citizens of or resident in the UK. That is its exclusive feature. To gain the benefits of the club good you have to be a member of the club. However, once you are a member of the club, you secure access to its full range of services as a condition of membership. In one sense the benefits are private. With the exception of infectious diseases, the cure of my illness does not contribute to the cure of your illness. From another point of view, however, the service is public: together with others any one person entitled to the benefits knows that they share those facilities with others.

Thirdly, membership of the club is not made to depend upon prior conditions or circumstance. In a public system of shared savings there is no risk-rating of individuals upon which access to services is made conditional. All stand or fall together in the system. In some European social health insurance systems this principle may be technically breached in respect of high income
earners who may be precluded from participating in the general social insurance arrangements. Nevertheless, the assumption is that the totality of arrangements should include all on the same terms.

When there is a club good provided to members of society on terms that include everyone, then we can think about the club as a form of social contract. To speak of a social contract is to speak of the principles that inform the basis upon with the members of society cooperate with one another in a shared social order. Social contracts do not necessarily have to be benign. In practice they may end up embodying domination or objectionable inequalities. However, when they are negotiated under certain conditions, we can say that they embody fair terms of cooperation.

The combination of these elements means that there are at least three social values that inform the design and functioning of developed health care systems. They are that health care should be comprehensive in coverage, of high quality and without financial barriers to access. I want to suggest to you that these three conditions define the terms of a minimum just social contract for health care. In talking of a social contract, I am referring to the norms that govern the relations among members of society considered not in their specific roles as parents, relatives, employees, employers, consumers and so on, but instead in terms of the civic relations that citizens have towards one another.

How is it helpful to use the language of social contract in characterising the systems of shared savings that underlie modern health care systems? In answer to this question, one reason is that it brings out the fact that we are not simply talking about a set of organisations or institutions, but also about the values and virtues upon which those organisations and institutions rest. A system of shared savings considered by itself is a tool, or a set of administrative instruments, likely to be of interest only to those of a collector's turn of mind who collect data on comparative public administrations rather as other people collect stamps or tea pots. But the point of the institutions is to secure socially valuable ends, and to help us think about what those socially valuable ends might be, it is useful to think in terms of the principles of a social contract.

A social contract defines the ethical relations among its participants, including their rights, liberties and powers under the social contract. In what is now nearly sixty years of work, beginning with theorists like John Harsanyi and John Rawls in the 1950s to David Gauthier,
Brian Barry and Ken Binmore more recently, a great deal of work has gone into thinking about how the terms of a justifiable social contract might be written. One attraction of social contract theory is that it provides a link between individual prudence and reasoning on the one hand and social union on the other. The principal way in which it does this is by constraining the reasons for public policy that people can entertain to ones that display some degree of reciprocity and generalisability. Participants in a social contract do not ask the question ‘what is in my interest?’ but rather the question ‘what social contract would it be in my interests to sign?’ As Rabbi Hillel said, ‘If I am not for myself, who will be for me? If I am only for myself, what am I?’ It is this union of prudent individual self-interest and social reciprocity that social contract theory captures so well.

In health care to define a just system of shared savings, individuals must ask themselves not what they would want from a health care system, but what terms of a health care contract it would be in their long-term interest to sign. For example, in thinking about the allocation of resources to health care, it is clear that individuals would prudently wish to ensure that not all their income was spent on health, since there are many other good things in life that we should want to consume. Equally, however, just because people are well now does not mean that they will not be ill in the future. Indeed, as well as death and taxes, virtually all of us can be sure that illness, disability and disease and will strike us all at some point, possibly with catastrophic financial consequences. Writing about decisions on the allocation of health care resources, Thomas Schelling caught this aspect of our lives perfectly when he pointed out in the title of one of his papers on the ethics of rescue that ‘the life you save may be your own’.

**Public Practical Reasoning**

So far I have discussed the basic logic of sharing within developed modern health care systems. I have said that this logic is that of a club good and the public ethic of a just society is one that finds fair terms of association for the members of the club, that is to say defines a fair social contract. One must belong to the club in order to secure the benefits of the good, but once you are a member the full facilities of the club are available to you. But no club can afford all the facilities that its members would like, and so there has to be some way of those members reasoning their way to a list of available services. Since the club is public, the reasoning involved has to be a form of public reasoning.
At this point I need to offer a foot-note for those familiar with discussions in contemporary political theory. My reference to public reasoning will have echoes of many extended discussions about 'public reason', an idea that is associated with the thought of John Rawls. However, in this context, I should like the political theorists among you to strip away all specific associations with the concept of public reason when I refer to public reasoning. By public reasoning I am simply referring to practices involving the giving of reasons in structure forms of political argument in the policy process. As a simple descriptive matter, the policy process involves agents with different points of view seeking to persuade one another of the relative merits of their point of view.

However, even in this descriptive sense of public reasoning, in which we are thinking of policy actors arguing and debating with one another for the purposes of persuasion, we still have to think what it means to say that people are engaged in reasoning. Policy reasoning is more than the political equivalent of the supporters of two football teams seeing who can out-chant or out-shout one another. For it to be reasoning, there has to be a practical inference from a set of considerations to a government policy. Policy reasoning is more than a push or prod in a certain direction verbally expressed. It is instead intended to supply a chain of inference between decision premisses and action, pre-supposing evidence. Of course, both the decision premisses and the evidence may be contested. But this is compatible with the claim that what is in principle at issue is reasoning involving what John Stuart Mill refereed to as ‘considerations capable of determining the intellect’. We can always ask of any particular piece of reasoning in relation to public policy what it is about that reasoning that warrants its assertion.

When proponents or advocates of a particular point of view advance the claim for the merits of their policies, they are making a claim to their policies being supported by reasons and reasoning. So what forms of public reasoning are currently available to us as ways of defining the terms of the social contract for health? The answer in institutional terms is complex, but at the centre of those conducting the reasoning stands the National Institute for Health and Clinical Excellence.

The National Institute for Health and Clinical Excellence – or NICE as it is usually known – was established in 1999 by the then Labour government. Its task is to identify what are and what are not cost-effective interventions in health care. The scope of its work is wide, covering not only
the assessment of pharmaceutical products, around which there have been a number of controversies, but also public health measures, and issues of medical practice such as the treatment of wisdom teeth or the circumstances under which GPs should surgically remove a malignant melanoma. The force of NICE’s cost-effectiveness analysis was shown in its early years when it determined that Relenza, a flu treatment developed by Glaxo Wellcome (now GSK), did not offer value for money and so it should not be reimbursed by the NHS. It was not good value for money, because it was expensive and only reduced symptoms by one day. In the more formal language of NICE, the incremental cost-effectiveness ratio of Relenza was above any reasonable threshold failing to deliver enough quality-adjusted life-years for the cost of the product. The reasoning of NICE has been challenged by patients, clinicians and the pharmaceutical industry, the latter most recently by Sir Andrew Whitty who has alleged that the NICE appraisal procedure means that patients in the NHS cannot get beneficial pharmaceutical products that a high quality system of care would deliver.

What are we to make of these criticisms? To answer this question we have to consider how NICE in practice does conduct its reasoning. The fundamental question that NICE seeks to ask of any intervention is whether that intervention represents value for money and so can be judged cost-effective. Suppose for example that a new anti-cancer product is invented that delivers on average to a group of patients an additional five years of perfectly healthy life at a total cost of £100,000 per patient. In that case, the drug is delivering an additional five years of life at a cost of £20,000 per year per person. At this level of cost, NICE would regard the drug as being cost-effective since the general indicative threshold that NICE uses in its decisions is around £20,000 per perfectly healthy life-year gained. Such an intervention is thought to represent a good collective buy for the National Health Service. More generally, the key idea is that any intervention that is value for money should provide an increase in benefit, over and above any alternative regime, and that this incremental benefit should only be paid for provided it can be supplied below a certain threshold of cost. This relationship between costs and benefits at the margins of existing therapies is therefore an 'incremental cost-effectiveness ratio', that is to say the increase in costs and benefits considered together as a ratio, over and above what would otherwise be done.

As is well known, an important complication arises when considering variations in the quality of life associated with different interventions. Interventions may deliver improvements in the quality of life as well as increases in the length of life, and a sound cost-effectiveness analysis
should make allowance for the quality, as well as the length, of life delivered by an intervention. Without doing so, one could not meaningfully evaluate two interventions with the same costs but with different effects upon the quality of life. Indeed, since quality of life is valuable in itself, it makes sense from a cost-effectiveness point of view for the National Health Service to pay more for interventions the effect of which is to raise the quality of life even if there is no effect on length. Thus, an agency like NICE needs a measure of the benefit provided by an intervention, a measure that needs to take into account both added years of life and any gain in the quality of life. So is born the idea of a 'quality-adjusted life-year' as a measure of benefit. Over the last thirty years, originally under the inspiration of the late Alan Williams of the University of York, much work has been done by economists and other in working out how to move from the concept of a quality-adjusted life-year to a way of measuring, in the case of any particular intervention, what its likely benefits are.

Much writing and discussion has taken place around this concept of the quality-adjusted life-year, and I confess that I have been a serial offender over the years in adding to this body of talk and writing. However, today, I wish to focus not on the idea of a quality-adjusted life-year, but on the broader framework of ideas embodied in the NICE policy paradigm.

The NICE approach takes over the intellectual framework of project appraisal in relation to public expenditure. When a government is faced with a choice of building a road either from Much Binding in the Marsh to St Mary Mead or alternatively from Poppleton to Deaver, it is possible to phrase the choice in terms of which alternative provides better value for money. Are the savings in journey times for those going from Much Binding to St Mary Mead more valuable that the savings in journey times for the alternative route, will the savings in noise and congestion brought about by the Poppleton route off-set some of the costs of construction and so on? To answer these sorts of questions governments make appraisals of the costs and benefits of each alternative, and give priority to that alternative that yield the highest ratio of benefit to cost.

It is possible to apply the same set of techniques to health care, provided we can find a metric that provides a measure of return on our investment, which is what the idea of the quality-adjusted-life-year is supposed to do. If we think that the problem of allocating health care resources is one of finding the most effective and efficient uses for any given quantity of resources, then the framework of practical cost-benefit analysis has some claim on our attention. Moreover, in the form in which NICE uses the approach, it is egalitarian in Bentham's sense that
'everyone counts for one and no one for more than one', solely on the ground that a quality-adjusted life-year for any one person is of the same value as that of anyone else.

However, the paradigm when applied strictly generates a number of implications that many people have found ethically controversial. One such case is where a small benefit to a large number of people will outweigh a large benefit to a small number of people, so that people are left untreated for life-threatening conditions, because the money not spent on them produces greater benefit elsewhere - hardly an example of equality it is claimed. Similarly it is argued that the framework of evaluation, when originally formulated did not incorporate a special concern for rare conditions, treatment for such conditions being expensive because those producing medicines could not secure economies of scale. But of course our sense of justice is that each person is owed an entitlement.

Most recently, an interesting question has been raised in the NICE approach about how to think about the flow of health benefits and economic costs over time, and in particular whether to apply the standard time discount rates that are usually used in the appraisal of public sector projects. When government conduct the project appraisal, they are faced with the problem of how to assess costs and benefits that differ in their incidence over time. Perhaps the road from Much Binding in the Marsh to St Mary Mead will take longer to build than the alternative, but it will also be expected to yield its benefits over a longer period of time as well. How is its value to be compared with an alternative that will be faster to construct but whose length of useful life is shorter? The answer is that the flow of costs and benefits over time are presented in terms of net present values. Moreover, since the future is uncertain and national income can be expected to grow over time, the costs and benefits have to be discounted to allow for uncertainty and the lower relative value of a good in twenty years’ time to a good now. You would not sensibly pay as much for a good to be delivered next year as you would for a good delivered now, and neither does the government.

As a government agency, NICE has been used to applying the standard discount formula to the appraisal of interventions, but in a recent case an interesting and challenging implication arose. The childhood anti-cancer product mifamurtide was judged to produce an increase in benefit, equivalent to something like two quality-adjusted life-years. However, that benefit was added to the benefit of the existing regimen, and so had to be discounted, since already some forty years of benefit was being delivered by that regimen. However, the costs of the product occur early in
the treatment period, by definition, and so they were not discounted as much as the benefits. The effect of applying the standard discount formula was to shift the incremental cost-benefit ratio from a product that met the NICE threshold to a product that did not.

There is much to be said about the ethics of discounting, and together with Sarah Clark I have argued that there are good reasons for discounting costs in such cases, but not benefits. However, the specifics of this case in the present context is less important than what it says about the framework of reasoning in which we currently approach such matters. For the framework of practical cost-benefit analysis is one that when strictly applied does not allow for exceptions and exemptions – otherwise one would end up with biased estimates. In practice NICE has responded to the challenging ethical cases by modifying the standard application of its framework. It has done this in the case of end of life considerations and rare conditions, but it has been heavily criticised for doing this. What has happened here? Has the framework of reasoning been unjustly abandoned in the face of popular opposition to particular decisions, or is there something deeper going on? Is NICE right or wrong? To answer this question, I submit, we need to understand something about the logic of practical reasoning.

**The Reasoning of Exceptions**

In order to see what the problems are with the NICE approach, think about what sort of social contract it presupposes. Suppose you knew that you were to be a member of the health care club, but you did not know which member you were to be or what characteristics you thought that member possessed. For example, you did not know whether you were male or female, and therefore you did not know whether you would have a need for cervical cancers services or prostate cancer services. You did not know your susceptibility to different diseases or illness. You did not know whether you had the prospect of a long life or were prone to illness that struck one in youth or middle age. In short you knew that you would be somebody but you did not know who that somebody might be. In such a situation you are, to use the famous phrase of John Rawls behind a ‘veil of ignorance’ – ignorant of the basic details of your person and your circumstances though you knew you would occupy some position in society. In this situation what sort of club social contract would you have reason to sign?
Those who have looked at the general theory of such situations – and I can assure you that if you are not a social choice theorists there are whole sub-disciplines devoted to studying such choices under uncertainty – argue that a rational decision maker would take a particular stance towards this sort of problem, namely that you would rationally wish to make the maximum use of resources. In short you would end up endorsing what I have called the orthodox NICE approach to health care resource allocation. Your social contract would be a maximising social contract.

At one stage I was attracted to this line of argument myself, and I argued such in relation to the so called ‘statistical lives’ paradox. The so called statistical lives paradox highlight our collective willingness to spend a great deal of money on known lives in present danger – for example the yachting crew lost at sea or miners trapped in a shaft, as with the Chilean miners a few years back – whereas we are unwilling to spend the same amount of money on so called statistical lives, that is to say unknown individuals who face the risk of death or injury and where we can predict the frequency, though not the incidence, of an adverse event occurring. I now think that a maximising approach is the correct one in particular situations, most importantly in allocating resources between competing statistical uses. For example, suppose you had only enough money for one of two possible vaccines against different illnesses, and you had to choose which illness to treat. Then there would be some logic behind a veil of ignorance in simply counting the relative frequencies of those affected by each condition, and choosing to spend money on the condition that is most prevalent. But this sort of problem is not typical, and we cannot generalise from this case.

**Defeasible Reasoning**

I now wish to introduce a rather strange word, but one that is at the core of my understanding. That word is 'defeasible' and my claim is that practical reasoning is defeasible. The word 'defeasible' and its associated terms such as 'defeasibility' or 'defeasibly' is not in wide use. (My spell-checker in Word insists on underlining it in red for example.) However, its core meaning is simply that of being open in principle to revision, although it has a more technical legal meaning in respect of forfeitures or annulments, and its etymological roots in the Norman French, 'desfesant' meaning 'undoing' captures the key element of the term. The on-line *Oxford English Dictionary* says that it is chiefly legal or philosophical, and so it is. However, the practical of thinking defeasibly is a common experience that we have all had.
Suppose that you are in a restaurant and the waiter brings you the menu. You are one of those people who scrutinises a menu carefully and you choose what you think is the best set of dishes, in the belief that the menu states all there is to know about the meals on offer. You have consulted your tastes, weighed up the options and chosen with full reflection and information. Just as you are about to order, the waiter tells you that there is cauliflower cheese as one of today's specials but they forgot to put it on the menu. Now as it happens there is no dish in the world that you like better than cauliflower cheese. You immediately change your order. When you change your order, you have reasoned defeasibly. You have revised your original choice in the light of the new information that has come along.

There is a view of ethical reasoning that makes it non-defeasible. This is the view that says that to reason ethically is to apply a general principle to particular cases and to infer what should be done in the particular case by bringing it under a general principle. This is to think of moral reasoning as a form of deduction. Strictly understood, deductive reasoning is not defeasible. If it really is the case that all men are mortal, then I have no choice but to believe that the man Socrates is mortal, even if I see him perform feats more usually associated with Bruce Willis. In a valid deduction, the conclusion is contained in the premiss, in the same way that a yolk is contained in an egg. To apply the principles of practical cost-benefit analysis without modification to any practical decision is to treat that framework of cost-benefit analysis as the basis of a deductive scheme of reasoning that can never be modified. But this is to exhibit irrationality not rationality. It is to be in the grip of a system not to advance a justifiable principle.

There are two common responses to the claim that practical reasoning is defeasible, both of which are mistaken in my view. The first is to suppose that we can fix the problem simply by building the exceptions into the specification of the relevant principle. On this account we should always maximise QALYs except in cases where the potential beneficiaries suffer rare conditions, are children, have a recognised end of life condition and so on. The mistake here is to think that one can know in advance all the circumstances in which a general principle will apply and modify the principle accordingly. But this is to ignore all human imperfections of understanding and knowledge. The second mistaken inference that is sometimes drawn is that there are no general principles and that all our reasoning is conducted on a case-by-case basis. On this view our individual judgements of right or wrong are necessarily stronger than any
general principle that we might formulate in order to cover those judgements. In fact, there is a
happy middle course between these two responses, and that is to use some form of default
reasoning. Workers in the Artificial Intelligence community have been looking at these
problems for some thirty years, and there are plenty of formal systems available to show how a
default logic would work.

However, there is in my view a more profound explanation of why we should take the logic of
defeasibility seriously in health policy, and indeed in public policy more generally, namely that it
is the only way of acknowledging that decision making in the allocation of health care resources
should be democratic. Defeasible reasoning is the reasoning of the democratic intellect. An
important component of democracy is that only the wearer of the shoe knows where the shoe
pinches.