HEALTH CARE PRIORITY SETTING

IMPLICATIONS FOR HEALTH INEQUALITIES
PROCEEDINGS FROM A MEETING OF THE HEALTH EQUITY NETWORK

Edited by Adam Oliver

The Nuffield Trust
FOR RESEARCH AND POLICY
STUDIES IN HEALTH SERVICES

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ISBN 1-902089-81-2

Published by The Nuffield Trust
59 New Cavendish Street
London WIG 7LP

Telephone: 020 7631 8450
Facsimile: 020 7631 8451

E-mail: mail@nuffieldtrust.org.uk
Website: www.nuffieldtrust.org.uk

Charity Number: 209201

Designed by Nicholas Moll Design
Telephone: 020 8879 4080

Printed by The Ludo Press Ltd
Telephone: 020 8879 1881

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INTRODUCTION

Adam Oliver
London School of Economics and Political Science

1. Background

Over recent years, with the establishment of the National Institute for Clinical Excellence (NICE: www.nice.org.uk), the explicit rationing of health care on the grounds of clinical and cost-effectiveness has moved to the very forefront of the UK health policy debate. This has prompted a great deal of criticism and controversy. Much of the criticism has been unjustifiable, in particular from those who do not recognise that health care resources are scarce in every country and that rationing (of one form or another) is an inevitable feature of every health care system. But some of the criticism relates to a genuine concern with whether the methods that are most commonly used in clinical and cost-effectiveness analyses generate results that are consistent with what 'society' values.

One such criticism is that clinical and cost-effectiveness analyses, as traditionally undertaken, are concerned only with the total increase in health gain (if any) generated by a health care intervention, and not with how that health gain is distributed. Essentially, these forms of analyses have been used as neo-utilitarian tools. The current distribution of health outcomes across different groups in society - for example, groups defined by social class, income, gender, race, geography or lifestyle - could be considered unfair. If a generally accepted ethical framework could be put forward which explains *why* certain health inequalities are unfair, and if health care is deemed to be an appropriate conduit through which to redistribute health outcomes, then it may be desirable to modify the health maximisation approach that is currently implicit within most clinical and cost-effectiveness analyses to account for distributional concerns.

Another challenging aspect of NICE's remit that again relates to potential equity considerations is less directly concerned with the distribution of health outcomes and more to do with the geographical distribution of *access* to health care. One of the main reasons why NICE was established was to reduce and eventually remove so-called ‘postcode prescribing’, the phenomenon whereby a person’s public-sector access to a particular intervention is dependent upon their area of residence. Postcode prescribing arose because the different geographically-defined health authorities, until very recently the principal purchasers of health care within the National Health Service (NHS), were free to decide which services to commission. NICE, by providing guidance on which health care interventions ought to be provided (and which ought not) across the whole of England and Wales would, it was hoped, help to remove the differential access to health care services.

There is, however, considerable doubt that the NICE guidance, which is based quite heavily on the results of the particular forms of economic evaluation that NICE recommends, can indeed ameliorate postcode prescribing. For example, most health care interventions that are deemed to be cost-*effective* are also cost-*increasing*, which means that the local purchasers of health care may well have to scale back existing health care services in order to introduce those that NICE decides ought to be provided. Unfortunately, the purchasers of health care receive no guidance on which services they ought to scale back on, which may well mean that (1) different purchasers scale back on different things (and hence implicitly introduce a different form of postcode prescribing), and that (2) some purchasers may scale back on services that are even more cost-effective than those they are recommended to introduce.

However, the media and the general public focus quite strongly on the *national* aspect of the NHS. Allowing the prevailing differentials in service provision across different regions when the remit is the nation is perceived by many as unfair, and it is therefore perhaps politically advantageous for the Government to be *seen* to providing a consistent set of services across the whole country. The highly centralised guidance from NICE relating to which services ought to be provided seemingly runs counter to the greater level of managerial, planning and contracting autonomy that is being handed to local services through the auspices of the recently created Primary Care Trusts but, as is explicit in its name, NICE has been set up as a *national* institute. Potentially, we therefore sacrifice some degree of local health service responsibility and effectiveness by maintaining the notion that people should not be treated differently on the basis of where they live. We are balancing local opportunities against national responsibilities, which, as a contribution towards maintaining a sense of nationhood may be no bad thing.[1]

In terms of the distributional (and other) concerns of the way in which NICE is prioritising health care interventions, I have only touched the very tip of the iceberg. Those I know who work within the NICE organisation are very aware of these concerns, and, as far as I can see, are committed to debating and (if appropriate and feasible) addressing them. In the

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[1] Of course, given that the Government is responsible for the nation, the national character of the NHS is also of the utmost importance for certain conceptions of equity in relation to the *funding* of health care and *allocation* of resources (indeed, in my view, ensuring national equity in funding and resource allocation is far more important than ensuring a national standardised list of available services). For example, the Government may allocate more health care resources per capita to Yorkshire than to Surrey if it judges the population of Yorkshire to be in greater need of health care, even if the people of Surrey contribute more resources per capita to the NHS.

spring of 2001, Tony Culyer, Professor of Economics at the University of York, Vice Chair of NICE and a key source of encouragement when I and others established the Health Equity Network (HEN: www.ukhen.org.uk), approached me with the idea of holding a HEN seminar on the implications for health-related inequalities of prioritising health care services. This seminar was held at the offices of the Health Development Agency (HDA) in London on November 12th 2001.

2. The seminar

We decided to organise the seminar into four main sessions, three of which each represent a relevant disciplinary perspective in the context of priority setting – namely, economics, ethics and politics/public health - and one of which we hoped would provide some insights from countries with a strong tradition of health inequalities research and policy. Moreover, we invited Jack Dowie to open the seminar with his thoughts on the performance of NICE thus far and the direction that he thinks NICE ought to be taking (which he did in collaboration with Karl Claxton, Mark Sulpher and Mike Drummond). At the end of the seminar, Jack also summed up what was said during the course of the day. The programme for the seminar and a list of those in attendance are given in the Appendix.

This publication contains the proceedings of this seminar. Each contribution is presented in the order in which it appears in the programme, though three points ought to be noted. First, a comment from each of the chairpersons on the papers that were delivered in their session is included within these proceedings. Second, Evan Harris unfortunately failed to deliver a written contribution. Third, John Appleby allowed me to comment on the session that he chaired.

3. Acknowledgements

We are, of course, very grateful to all of the contributors to the seminar and to these proceedings, who generously gave their time for no pecuniary benefit. The seminar was sponsored by the Economic and Social Research Council (award number R451265135), the National Institute for Clinical Excellence, and the Health Development Agency. We are particularly grateful to the support of Peter Littlejohns and Andrew Dillon (of NICE) and Julie Bull (of the HDA). We would like to stress that neither NICE nor the HDA had or sought any influence over the choice of speakers and chairpersons or the content of any of the papers.

Adam Oliver
LSE Health and Social Care

April 2002

APPENDIX

Programme

10.00 - 10.05: Peter Littlejohns, NICE: Brief background to meeting and its objectives.

10.05 - 10.25: Chair: Peter Littlejohns
Jack Dowie, London School of Hygiene

10.25 - 11.15: Session 1: Economics
Chair: Alan Williams, University of York
Franco Sassi, London School of Economics
Paul Dolan, University of Sheffield

12.00 – 1.00: Session 2: Ethics
Chair: Albert Weale, University of Essex
Alastair Campbell, University of Bristol

2.00 – 3.00: Session 3: Politics/Public health
Chair: Peter Littlejohns
Evan Harris, Houses of Parliament
Sian Griffiths, Oxford Health Authority

3.30 - 4.30: Session 4: Lessons from abroad
Chair: John Appleby, The King's Fund
Marita Sihto, STAKES, Finland
Finn Diderichsen, Karolinska Institutet, Sweden

4.30 - 4.50: Chair: Alan Williams
Jack Dowie

4.50 – 4.55 Alan Williams
Concluding remarks

Attendees:

John Appleby,
Paul Batchelor,
Evan Bates,
Eric Brunner,
Stirling Bryan,
Julie Bull,
Alastair Campbell,
Richard Cookson,
Tony Culyer,
Elizabeth Davies,
Diane Dawson,
Diane Debell,
Nancy Devlin,
Finn Diderichsen,
Paul Dolan,
Angela Donkin,
Jack Dowie,
Mark Exworthy,
Alastair Fischer,
Sian Griffiths,
Dominic Hardy,
Evan Harris,
John Henderson,
Paula Hensler,
Donald Hill,
Ben Irvine,
Barbara Krimgold,
Peter Littlejohns,
David Lloyd,
David McDaid,
Christine McGuire,
Charles Normand,
Monica Oliveira,
Adam Oliver,
Mark Petticrew,
Sue Povall,
Diana Rodriguez,
Franco Sassi,
Alex Scott-Samuel,
Mike Shepherd,
Marita Sihto,
Rupert Suckling,
Andrew Taylor,
Aki Tsuchiya,
Albert Weale,
Alan Williams and
Maureen Wiskin.

NICE (AND THE NHS) – QUO VADIS?

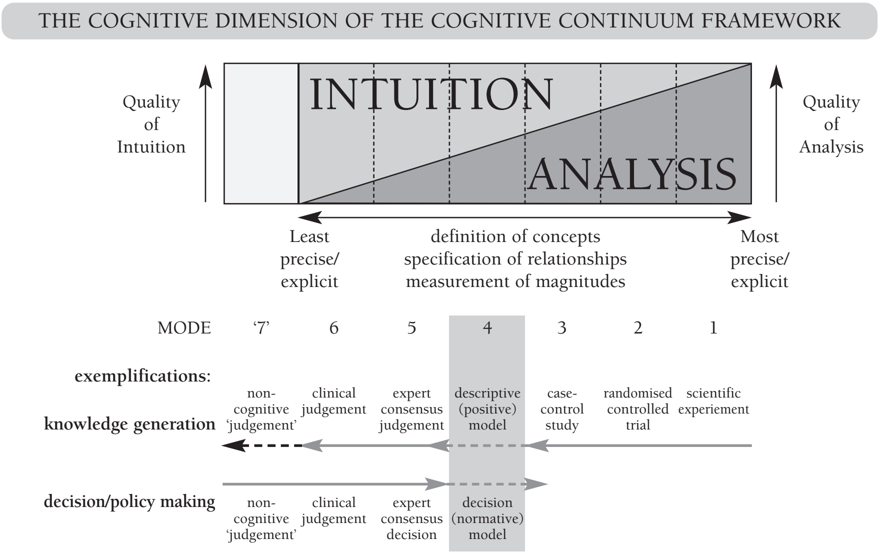
Sections 1, 3 and 4
Jack Dowie
London School of Hygiene and Tropical Medicine

Section 2
Karl Claxton,[1] Mark Sculpher,[2] and Michael Drummond[2]
1. Department of Economics and Related Studies, University of York
2. Centre for Health Economics, University of York

1. Analysis and intuition

It is generally thought that economists are disliked because they raise the nasty question of money and always point out the consequences of allocating resources in different ways. But as I have argued elsewhere (Dowie, 2001), I think this is because economists are analytical consequentialists. Money and resources are simply things that arise when you think analytically about decisions and policies.

Ken Hammond's book *Human Judgment and Social Policy: Irreducible Uncertainty, Inevitable Error and Unavoidable Injustice* (Hammond, 1996) is probably the most important book that most health economists have yet to read, despite having been written by a psychologist. On this occasion I merely note the key aspect of Hammond's argument, which suggests that instead of thinking of analysis and intuition as binary and exclusive modes of enquiry and practice, we can locate ourselves at various places on a 'cognitive continuum' that embodies changing ratios of analysis to intuition. My interpretation of the cognitive continuum is diagrammatically depicted in the figure overleaf.



Confusion of task is one of the fundamental problems with NICE. Science (knowledge generation and evaluation) and decision making (action generation and evaluation) are two distinct activities. There is not a 'gap' between them, any more than there is a gap between farming and cooking. There is an understandable, but futile, desire to have science-based decision making but one can only have value-based, science-informed decision making. Pre-NICE decision making was done at mode 5 ('taking into account and bearing in mind'), officially on the basis of foraging at modes 1 and 2 for knowledge/information/evidence but actually (because of the absence of much of the necessary evidence in those modes) relying heavily on modes 5 and 6. NICE at least draws on modelling at mode 4 as an information technology (though only in relation to cost effectiveness and not clinical effectiveness), but it still rests resolutely on mode 5 as a decision technology. Until it moves to a more analytical decision technology it will simply run into more and more conceptual, political and legal difficulties.

Some of us will find it hard to resist saying 'we told you so'. You cannot be 'transparent' without opening your decision making to examination. Until the distinction between scientific evidence and value judgment is made much more explicit and their integration made much more analytically, transparency will be a mirage.

My conclusion is that we can and need to do (much) better, by moving to mode 4 on the cognitive continuum as a decision technology. While there are many ways of becoming significantly more analytical in our decision making (which is my prime concern), what follows is the particular (more) analytical way that I believe has the best normative arguments going for it as the basis for NICE2.

2. A framework for NICE decision making

Reimbursement authorities face four possible choices regarding technologies: adopt the technology based on existing information; adopt the technology now but demand further information to inform this choice in the future; reject the technology based on existing information; or reject and demand further research to inform this choice in the future. As these policy decisions are being posed, an explicit framework is required which recognises that all decisions are taken in the face of uncertainty about costs and effects, and that health services and research are ultimately funded from the same 'pot' of resources.

2.1. Decision analysis

By providing an explicit method to integrate the decisions to adopt a technology and to demand additional information by conducting further research (Sonnenberg and Beck, 1993; Sculpher *et al.*, 1997; Briggs and Sculpher, 1998; Claxton et al., 2001), decision analysis offers a framework which can achieve some of the key evaluative tasks faced when making these decisions. The tasks include the extrapolation of costs and benefits over relevant time-horizons, and from surrogate endpoints to ultimate health outcomes; the generalisation of cost-effectiveness results across clinical settings and patient populations; and the comparison of the costs and benefits of a range of alternative strategies for patient management. Most importantly, decision modelling requires all the relevant inputs to the decision to be explicitly identified, and facilitates the synthesis of data from a variety of sources.

Decision analytic models have become a fundamental part of the NICE appraisal process. In fact, almost all the Technology Assessment Reviews which include evidence of cost-effectiveness have reviewed both published models and models submitted by sponsors of the technology. The type of models range from relatively simple decision trees to probabilistic models of disease progression.

2.2. Handling uncertainty in decision making

All decisions about the cost-effectiveness of interventions are based on uncertain information about variables such as clinical effects, health-related quality of life and resource use. Decision analytic models can be used to combine evidence on each parameter to assess the extent of uncertainty in the decision. The amount and the quality of the evidence available, for each of the inputs, can be reflected in probability distributions assigned to these estimates. Computer simulation can be employed to 'propagate' these distributions through the model so that the cost-effectiveness results indicate the uncertainty surrounding the adoption decision rather than the uncertainty surrounding a single parameter (Critchfield and Willard, 1986; Fenwick *et al.*, 2000; Claxton *et al.*, 2001).

2.3. The decision to adopt a technology

Most would agree that to select a technology which has the lowest chance of being cost-effective would not fulfil NICE's remit, and could be regarded as perverse. To reject a technology because its cost-effectiveness is not 'statistically significant', and to retain current practice, would be to select the technology which has the lowest chance of being cost-effective (Claxton, 1999a). If the objective underlying NICE appraisals is to make decisions that are consistent with maximising health gains from available resources for all patients, then the adoption decision should be based on the expected (mean) cost-effectiveness of the technology given the existing information. However, this does not mean that adoption decisions can simply be based on little or poor quality evidence, as long as the decision to demand further research to support adoption (or rejection) is made simultaneously.

2.4. The decision to demand further research

An adoption decision based on existing information will be uncertain, and there will always be a chance that the wrong decision has been made. If the wrong decision is made, there will be costs in terms of health benefit forgone. Information is valuable because it reduces the chance of making the wrong decision and, therefore, reduces the expected costs of uncertainty surrounding the decision.

The expected costs of uncertainty can be interpreted as the expected value of perfect information (EVPI) since perfect information can eliminate the possibility of making the wrong decision (Claxton and Posnett, 1996; Felli and Hazen, 1998; Claxton, 1999a; Fenwick *et al*., 2000; Claxton *et al*., 2001). This is also the maximum that the health care system should be willing to pay for additional evidence to inform this decision in the future, and it places an upper bound on the value of conducting further research. If the EVPI for the population of current and future patients exceeds the expected costs of additional research, then it is potentially cost-effective to demand more information.

The value of reducing the uncertainty surrounding each of the input parameters in the decision model can also be established. This type of analysis can be used to focus further research by identifying those inputs for which more precise estimates would be most valuable. In some circumstances, this will indicate which endpoints should be included in further experimental research; in others, it may focus research on getting more precise estimates of particular inputs which may not necessarily require experimental design (Fenwick *et al*., 2000; Claxton *et al*, 2001).

This framework can also be used to design new research efficiently. The optimal sample size, patient allocation, follow-up period and which endpoints to include can all be established by considering the marginal benefits and costs of sample information (Claxton *et al*., 1999).

2.5. The implications of adopting this framework

This framework has radical implications (Claxton, 1999b; Neumann *et al*., 2000). The first is that NICE should decide which interventions to fund for particular patient groups on the basis of which one has the highest expected cost-effectiveness, rather than using arbitrary concepts of ‘statistical significance’. However, this does not mean that decisions should be based on poor evidence. In fact, an analysis of the value of information may well lead to demands for much more evidence to inform the adoption of technologies, particularly those where there is substantial uncertainty, the cost-effectiveness is regarded as borderline and/or where there is a large eligible patient population. However, the amount of evidence required before adoption will differ substantially across technologies with different characteristics, and differ for the same technology in different circumstances.

3. Some institutional implications - or what should NICE2 look like

There are institutional as well as intellectual implications of moving to a more analytic decision technology. I find it difficult to see how it makes any conceptual sense to have the licensing of medicines, the NICE Technology Appraisals and NICE Clinical Guidelines all operating independently. Of course it may be useful politically, but for anyone who adheres to the simple old principle that we should do what is best (under uncertainty and in the context of value differences) it makes no sense to rule out a drug for everyone, whatever their condition, on the grounds of its 'safety' (it may well be the optimal treatment for some patients), or for a 'technology' to be appraised independently of the management of the condition for which it is being prescribed.

Once one has accepted that analytical decision modelling of management strategies is the key to NICE2 it will be obvious that it makes no sense to adopt a case-by-case approach and appraise a technology or produce a set of guidelines today and then review it/them in 3/4 years time. All management strategies (including their technologies) should and can be under permanent review and the model will be able to incorporate new evidence and suggest the implied change in guidance within a few minutes of the arrival of new evidence. Models should be thought of as ongoing dynamic processes not static one-off products.

It makes no sense to allow the modelling ('evidence synthesis') to be conducted on any old software platform and by any old method. A common platform and set of modelling principles must be established for all parties so that NICE2 and its helpers do not waste vast amounts of time and public money trying to reconcile the irreconcilable or plain incompetent. The model-based assessment process, even if it is decentralised virtually, must be centralised methodologically and procedurally.

Finally, in NICE2 we will have accepted that since NICE was set up to deal with variation and non-excellence in clinical performance it makes little sense to issue guidance (or guidelines) that assume away this problem and leave practitioners to use their 'clinical judgment' to decide many/most of the key issues in a technology-based management strategy.

4. Equity: subgroups and individual patient preferences

If we have (in section 2) the best analytic solution to the efficiency question, what can we say about distributional issues and equity? For what subgroups should we establish CE ratios? I cannot find the answer to this particular question in the recent literature (Sassi *et al.*, 2001a; Sassi *et al.*, 2001b).

If we start with 4 stages or levels of severity for a condition, each of which can apply to a person of either sex coming from one of seven race/ethnic groups who may be in any one of four age groups and any one of five socio-economic classes, we already have 1,120 subgroups (ignoring all co-morbidities, behavioural (and other) characteristics), all of which will have 'equity' claims.

I suggest this is not a challenge to be avoided by resort to less or non-analytical methods that claim to address the problem, but cannot show (transparently) how it has been addressed. In fact, the great benefit of analysis will be to show that it will be extremely difficult to be ‘equitable’, ‘cost-effective’ and ‘respect individual patient preferences’ when one has even modestly multidimensional concepts of equity. It may even force us to retreat to the position where we accept that we should treat each individual optimally as an individual, irrespective of their subgroup(s) memberships, and hence accept that, if subgroup variations arise as a result, these cannot be interpreted as an indication of unfairness, inequity or injustice. Alternatively, we may need to select just one variable (such as age) as the sole equity dimension. Those who campaign for several will need to produce a coherent procedure.

Let me end with a suggestion that should appeal to all properly brought-up health economists: that economic evaluators (and NICE) should routinely calculate cost effectiveness ratios for all possible sub-groups, ‘legitimated’ and ‘politically correct’ or not and ‘operational’ or not - in order that everyone can be very clear about the opportunity cost (in health terms) of any principle/s of sub-group legitimisation they espouse and implement.

References

Briggs A, Sculpher MJ (1998) An introduction to Markov modelling for economic evaluation. Pharmacoeconomics 13: 397-409.

Claxton K (1999a) The irrelevance of inference: a decision making approach to the stochastic evaluation of health care technologies. Journal of Health Economics 18: 342-64.

Claxton K (1999b) Bayesian approaches to the value of information: implications for the regulation of new health care technologies. Health Economics 3: 269-274.

Claxton K, Posnett J (1996) An economic approach to clinical trial design and research priority-setting. Health Economics 5: 513-524.

Claxton K, Neumann P, Araki S *et al.* (1999) The efficient design of clinical trials: an application to the evaluation of treatment strategies for Alzheimer's disease (abstract). Medical Decision Making 19: 4.

Claxton K, Neuman PJ, Araki SS *et al.* (2001) The value of information: an application to a policy model of Alzheimer’s disease. International Journal of Technology Assessment in Health Care 17: 38-55.

Critchfield GC, Willard KE (1986) Probabilistic analysis of decision trees using Monte Carlo simulation. Medical Decision Making 6: 85-92.

Dowie J (2001) Analysing health outcomes. Journal of Medical Ethics 17: 245-250.

Felli JC, Hazen GB (1998) Sensitivity analysis and the expected value of perfect information. Medical Decision Making 18: 95-109.

Fenwick E, Claxton K, Sculpher M, Briggs A (2000) Improving the efficiency and relevance of health technology assessment: the role of decision analytic modelling. Centre for Health Economics Discussion Paper 179. York, Centre for Health Economics, University of York.

Hammond KR (1996) Human judgment and social policy: irreducible uncertainty, inevitable error, unavoidable injustice. New York, Oxford University Press.

Neumann PJ, Claxton K, Weinstein MC (2000) The FDA's regulation of health economic information. Health Affairs Fall: 129-137.

Sassi F, Archard L, Le Grand J (2001a) Equity and the economic evaluation of health care. Health Technology Assessment 5(3).

Sassi F, Le Grand J, Archard L (2001b) Equity versus efficiency: a dilemma for the NHS. British Medical Journal 323: 762-763.

Sculpher MJ, Drummond MF, Buxton MJ (1997) The iterative use of economic evaluation as part of the process of health technology assessment. Journal of Health Services Research and Policy 2: 26-30.

Sonnenberg FA, Beck JR (1993) Markov models in medical decision making. Medical Decision Making 13: 322-338.

A comment on the contribution by Jack Dowie, Karl Claxton, Mark Sculpher and Michael Drummond

Peter Littlejohns
National Institute for Clinical Excellence

Jack Dowie in his presentation, and the other authors in their written contribution (two of whom are members of NICE's Appraisal Advisory Committee, one a member of NICE's Guideline Advisory Committee and all have contributed to the evidence on which the Institute bases its decisions) emphasise the importance of an analytical framework into which the research data (or the assumptions that fill the gaps in the research evidence) can be inserted. However, in drawing from the field of psychology, Dowie highlights that real world decisions are based on a combination of analysis and intuition. He illustrates this point by describing the work of Ken Hammond who represents both dimensions as a spectrum. Dowie considers that the road to enlightenment is more likely to be found in concentrating on the analytical rather than the intuitive.

In applying a medical paradigm he is a follower of Galen.[1] If only we strive hard enough the answer will be found in the data. None, I think, would deny that there is still much to learn in understanding and standardising relevant analytical frameworks, and how valid and reliable research data can be captured to populate them. Furthermore, this approach is an essential prerequisite to enabling the Appraisal Committee to advise NICE on issues of efficiency and equity. There is, however, a school of thought that argues that science can only take you so far. David Mechanic captured this aspect in his conclusions after assessing the evidence base underpinning American health policy (Mechanic, 1993): 'research is a form of currency as varying interests negotiate a political solution, but research is never definitive to resolve major issues on which strong political interests differ'. This view is currently being articulated through the post 'evidence-based' world of 'value-based' medicine. Put at its simplest, as the evidence base increases, so do the options, so there will always be a subjective component to health care decision making at an individual and population level. Utilising the medical paradigm once again, this is the expression of an Alexandrian approach (see the footnote), which suggests that if the outcome is always uncertain (however good the underlying science) then attention has to be given to ensuring that the process to achieve that outcome is acceptable.

NICE's approach currently tends to lean towards the latter school, but recognises the importance of the former. It attempts this by separating out the 'assessment' of a technology from its 'appraisal' (accepting Dowie's point that both contain analytical and intuitive elements). The former is a formal systematic review and modelling exercise commissioned from an independent university department. The appraisal of all the data, which includes patient, industry and professional submissions, is undertaken by a multidisciplinary committee drawn from all the stakeholders (defined as those likely to be affected by the decision). This is not to say that there should not be a scientifically valid approach to how this latter component is undertaken. However, the evidence base on how groups make decisions is probably even sparser than that underpinning the assessment of clinical and cost effectiveness.

NICE is collaborating with the methodological arm of the NHS Research and Development programme to support a range of projects addressing how group decisions can be better undertaken and described. At present the main approach taken by NICE in seeking to minimise the effects of a lack of consensus on a methodology is to expose the results of the Committee's deliberation to two periods of wide consultation and an appeals process. In seeking to increase understanding of the processes involved, NICE is currently consulting on holding the appeals in public. I expect that it will only be a matter of time before the Appraisal Committees themselves, like the Federal Drug Administration in America, open their doors to public scrutiny

NICE, however, is faced with making decisions now. To increase our understanding of the 'intuitive' component, a Citizens Council has been established to represent the views of the

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1. It was the Greek philosophers who first recognised the variability of an individual patient's response to therapy. They considered medicine to be an art with peculiar properties, and called it a stochastic art (Ierodiakonou and Vandenbrouke, 1993). They knew that a physician might treat according to the best guidelines of the day, yet the patient would die. Another patient might be treated rather carelessly and flourish. Hence they proposed that the aim of healthcare should be seen not as the achievement of the desired end, but as doing everything possible to achieve it. When the Greeks went on to consider the cause of the stochastic nature of medicine, two schools of thought emerged. Alexander of Aphrodisias in the 2nd Century BC considered this variability to be an inherent property of medicine, in that there were no absolutes, a forerunner of 'chaos' theory as applied to medicine. Chaos theory holds that the behaviour of whole systems can become unpredictable, even if the components behave in a simple way. In the same century Galen took an opposing view that medicine was an impeccable science like any other, but that its practical application was fallible because of variation in the individual patient. As clinical science progressed this failure in individuals to respond appropriately would eventually be explained. During the intervening 2000 years, practising clinicians have tended to adopt a Galenic approach, preferring to study individuals in greater and greater detail, explaining disease in terms of pathophysiology, immunology, pharmacology and now genetics and molecular biology. However, Alexander is beginning to make a comeback. The Alexandrian view that healing is ultimately stochastic means that an individual practitioner's experience cannot be relied upon. It follows, therefore, that the evaluation of any intervention can only be assessed by collation of multiple experiences and distilled into good practice. His view has re-emerged in two ways: firstly, with the current interest in large multi-centred clinical trials where chance and bias are minimised, the information collated by techniques such as meta-analysis and distilled into guidelines. Secondly, that a more humanistic approach is required to address illness that includes the physical, social and the spiritual.

‘public’, in which issues such as the appropriate balance between efficiency and equity can be explored.

Finally, let us return to the Greeks. Perhaps paradoxically, it was Alexander’s acceptance of the imperfection and unpredictability of the healing process that led to the realisation that an individual doctor’s experience could never form the basis of sound practice. This was the precursor to today’s renewed scientific impetus encapsulated in the use of large scale trials and the pooling and distillation of information into evidence based guidelines. So perhaps Voltaire (often quoted by NICE’s Vice Chairman, Professor Tony Culyer) was right: ‘never let the perfect be the enemy of the good’.

References

Sculpher MJ, Drummond MF, Buxton MJ (1997) The iterative use of economic evaluation as part of the process of health technology assessment. Journal of Health Services Research and Policy 2: 26-30.

Mechanic D (1993) Social Science and Medicine 36: 95-102

Ierodiakonou K, Vandenbrouke JP (1993) Medicine as a stochastic art. Lancet 341: 542-543.

A PRESCRIPTION FOR INJUSTICE: A CASE AGAINST THE USE OF NORMATIVE APPROACHES TO ADDRESS EQUITY VERSUS EFFICIENCY TRADE-OFFS IN HEALTHCARE

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1. Introduction

For more than thirty years, health economists have undertaken evaluations to identify efficient health interventions and prescribe efficient courses of action. Many such evaluations have had no direct impact on healthcare decisions. One of the factors that may explain the limited impact of economic evaluations is that they are often seen to adopt a very narrow perspective. Many healthcare decision makers believe economic evaluation is all about monetary costs, but even those who understand its true nature recognise that economic evaluations fail to address many potentially relevant dimensions of healthcare decisions. In recent years, a selected group of health economists have begun to study approaches to incorporate what is probably the most important missing dimension in economic evaluations; i.e. distributional effects. These approaches, however, have mostly been modelled on the same normative framework adopted for many years to address efficiency questions. The main solution proposed consists of weighting traditional health outcome measures (e.g. QALYs) using sets of equity weights that reflect the importance society places on selected characteristics (e.g. age) of the individuals whose health is improved by specific interventions.

This paper explores a number of arguments against the use of a normative framework to incorporate the equity dimension into healthcare economic evaluations. Conceptual and methodological issues will be analysed, leading to the conclusion that scaling down the normative ambitions of economic evaluations, at least until these can be based on solid evidence about people's preferences and values, will only have beneficial effects on the ability of decision makers to address equity versus efficiency tradeoffs.

Concerns for equity are a result of two distinct but closely related phenomena. First, individuals derive utility from other people's consumption of health care (technically, externality of the interdependent utility type), or simply from the availability of health care (externality of the option value type). Second, the ethics upon which a society and its culture are based involves preferences over alternative distributions of health. There is a complex relationship between these two aspects. They have a strong influence on each other, but they may also lead to conflicting distributional judgements. Disentangling the complex relationship between the two is conceptually and methodologically difficult.

2. Incorporating non-health individual utilities (externalities) in economic evaluation

Interdependent utilities and other forms of externalities like option value are typically non-health effects of health care. These play an important role in determining people's distributional judgements. In a normative framework, these externalities have to be measured. If a direct inclusion in evaluations were not deemed appropriate, on the grounds that non-health individual utilities should not enter into cost-benefit/cost-effectiveness calculations, they would still need to be assessed in order to neutralise their influence on the distributional ethics of the society (or social welfare function). The following questions require an answer.

2.1. Do externalities fit into the conceptual framework of cost-effectiveness analysis?

Cost-effectiveness analysis is the primary form of healthcare economic evaluation, however controversial its theoretical underpinnings may be, and normative solutions for incorporating an equity dimension are mainly based on this technique. While it would appear reasonable to adjust a utility measure (e.g. a measure of willingness to pay) for externalities, the adjustment of non preference-based health outcome measures (widely used in cost-effectiveness analysis) may raise doubts. Externalities are not health outcomes, and externality measures would presumably be preference-based. The nature of the latter does not, by any means, match that of outcome measures used in cost-effectiveness analysis. Moreover, whether adopting 'externality-adjusted quality-adjusted life expectancy' as a maximand in economic evaluation may lead systematically to welfare improvements and to an efficient allocation of health care resources is questionable

2.2. Can we measure externalities?

Labelle and Hurley (1992) have proposed an 'admittedly crude' model for measuring interdependent utilities. They argue that omitting non-user utility from economic evaluation may lead to distorsions in resource allocation, whereas by measuring interdependent utilities economic evaluation can address efficiency questions appropriately, as well as some distributional concerns. However, this appears to be the only empirical study attempting to measure interdependent utilities for healthcare, and does not succeed in providing a valid and generalisable measure.

In addition, incorporating a measure of interdependent utility into an economic evaluation generates a significant potential for double-counting. In fact, interdependent utility measures may partly duplicate measures of the utility perceived by those who actually receive health care and, even more importantly, when societal distributional values are superimposed (e.g. in the form of a social welfare function) these may partly duplicate those reflected by interdependent utilities elicited from individuals. While individual utilities for own consumption of health care are not a satisfactory maximand when distributional concerns have to be addressed, the adoption of a broader concept of individual utility that encompasses interdependent utility requires great caution due to the risk of double-counting.

2.3. Should externalities be included in economic evaluations?

Welfare economics typically assumes that individuals adopt a self-interested behaviour (Sen, 1987), that they derive utility exclusively from own consumption and that no externalities are generated. All these assumptions carry a significant weight in determining the value of alternative distributions, and are clearly violated in health care. Addressing the distribution of utilities perceived by individuals in relation to the outcomes of the health care they receive would not be satisfactory. However, incorporating externalities into economic analysis, particularly interdependent utility, is not in itself sufficient to address distributional concerns. Externalities are components of individual utilities, and the latter are the typical maximand in the pursuit of efficiency, rather than distributional justice. Allocative efficiency remains distinct from an optimal distribution, no matter what components of utility are taken into account. Mishan (1972) argues that ‘efficiency-derived distributions’ are impossible, and even if they were possible they would be undesirable. Mishan's conclusion is that interdependent utilities should be ignored and distributional judgements should be based on the ethics of the society for which they are intended.

3. Addressing societal distributional values within economic evaluations

The ethics and values upon which societies are based involve preferences over alternative distributions of health. In principle, a health-related social welfare function may be devised as a basis for addressing distributional concerns within economic evaluation. This would allow decision makers to resolve equity versus efficiency tradeoffs in line with societal ethics. In practice, however, there are major obstacles to defining and using the concept of social welfare function, particularly with the current level of knowledge about societal values. Some of these obstacles are summarised in the following two questions.

3.1. How do we define healthcare equity?

Health gain is virtually the only maximand considered in the economic evaluation literature. This limits significantly the set of equity principles that can be used as a basis for addressing distributional concerns within economic evaluation. In particular, only principles regarding the distribution of health care according to need (e.g. equal treatment for equal need, or equality of marginal met need), when need is defined as capacity to benefit, can be taken into account. Alternative concepts of need - e.g. initial health or expenditure (on healthcare) required to exhaust capacity to benefit (as reviewed by Culyer and Wagstaff, 1993) - may not provide an adequate basis for distributional judgements when the maximand adopted in economic evaluations is health gain, although there have been attempts to adjust measures of health gain to take into account initial health, or disease severity (e.g. Nord *et al*., 1999). A similar inconsistency occurs with regard to alternative equity principles based on access (Mooney *et al*., 1992) (which may involve the consideration of financial and non financial costs borne by patients and barriers to use of services), or capabilities (Sen and Williams, 1982), rather than need, when health gain is the maximand.

Arguably, health gain is not the only, and probably not the main, concern driving societal distributional judgements. Access, choice and opportunity to achieve equal health outcomes are likely to play a significant role.

3.2. Can we measure societal preferences?

In the existing literature, societal values have been inferred though assessments of preferences expressed by samples of individuals. The evidence shows a rejection of health maximisation as the sole criterion for allocating resources, and indicates that individuals make four types of tradeoffs: i) between health gain and the number of people treated; ii) between the total amount of future health in a population and the degree of equality between groups; iii) between the total amount of health (past and future) in a population and the degree of equality between groups; iv) between severity of illness and health gain. Existing studies provide indications that people may make such trade-offs, but do not provide useable equity weights.

The main methodological issues involved in eliciting societal distributional values are the influence of framing effects and the multi-dimensional nature of equity judgements. The influence of the framing of questions on preference elicitation makes an unbiased assessment of preferences over alternative distributions extremely difficult. It may be argued that an unbiased assessment should not be sought because actual distributional judgements are always influenced by contextual factors, but if this view is accepted study results would not be generalisable in the definition of a social welfare function. There are very few examples of multi-dimensional preference elicitation. Determining how different equity dimensions affect societal preferences over alternative distributions is difficult but necessary if the resulting social welfare function is to have normative strength.

A further methodological issue is related to inferring a social welfare function from preferences expressed by individuals, as many existing studies do. Setting aside the issues of sample size and representativeness, preferences expressed by individuals may arguably reflect interdependent utilities more than societal ethics. The ‘veil of ignorance’ approach might partly bridge the gap between individual and societal values, but to what extent this is true is still far from clear.

4. The alternative to a normative framework

The issues discussed in this paper lead to the conclusion that a normative framework, at present, is not appropriate for addressing distributional questions within economic evaluation. This conclusion may be reversed in the longer term, if major advances are achieved in the following three areas:

i. conceptual analysis of the relationship between individual and societal preferences over alternative distributions, of the relationship between different maximands in health care policy, and of the nature of QALYs and other outcome measures used in cost-effectiveness analysis;

ii. methodological research on ways of obtaining unbiased and multi-dimensional measures of societal values with regard to equity (possibly by means of approaches such as multi-attribute utility theory and conjoint analysis);

iii. empirical research aimed at eliciting such values as a basis for determining appropriate social welfare functions.

If substantial progress is made on these three fronts, answers will become available for many of the questions currently surrounding the use of normative solutions to incorporating an equity dimension into economic evaluation.

An immediate priority for health care economic evaluation is to put an end to the complete neglect of distributional effects that characterises existing studies. This may be achieved by conducting economic evaluations in a positive framework (although it should be recognised that no framework can be completely value-free), accepting that normative judgements pertain to decision makers in view of the political process through which they are made accountable to society.

A positive approach to addressing equity concerns would involve providing decision makers with all the information they need to make a judgement on the desirability of alternative distributions. In particular:

i. information on the characteristics of the population that may potentially benefit from each intervention, along a number of dimensions relevant to equity that could be uniformly pre-determined (e.g. age profile, gender mix, ethnic composition, socio-economic profile);

ii. information on how the effects of interventions (costs and effectiveness) may vary in different sub-groups of the population that may benefit from such interventions, again along a number of dimensions that may be pre-defined for all economic evaluations;

iii. when interventions can be provided selectively to certain sub-groups, information on the cost-effectiveness of providing those interventions in each sub-group should be supplied.

References

Culyer AJ, Wagstaff A (1993) Equity and Equality in Health and Health Care. Journal of Health Economics 12: 431-457.

Labelle RJ, Hurley JM (1992) Implications of basing health care resource allocations on cost-utility analysis in the presence of externalities. Journal of Health Economics 11: 259-277.

Mishan EJ (1972) The futility of Pareto-efficient distributions. American Economic Review 62: 971-976.

Mooney G, Hall J, Donaldson C, Gerard K (1992) Utilisation as a measure of equity: weighing heat? Journal of Health Economics 10: 475-480.

Nord E, Pinto JL, Richardson J, Menzel P, Ubel P (1999) Incorporating societal concerns for fairness in numerical valuations of health programmes. Health Economics 8: 25-40.

Sen AK (1987) On ethics and economics. Oxford, Basil Blackwell.

Sen AK, Williams B (Eds) (1982) Utilitarianism and beyond. New York, Cambridge University Press.

FAIRNESS IN HEALTH: WHAT THE PUBLIC THINKS

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1. Introduction

An important consideration when establishing priorities in the public sector is the amount of benefit generated by alternative allocations. As a result, there has been considerable research effort devoted to developing technologies that allow the benefits from a range of public services to be measured and subsequently valued. If the maximisation of benefits were the only consideration, then the conventional techniques of economic evaluation are well suited to that task. However, policy-makers, as well as the general public, are also likely to be concerned with how benefits are distributed. This is not easy to do within conventional techniques, and so we need to find a way of modifying them so that they take account of both efficiency and equity considerations.

This paper looks at how the stated preferences of a sample of the general public can be used to estimate the trade-off between efficiency and equity in the distribution of health benefits. In this study, we assume that social welfare is a function of: a) the average levels of health of different groups within a given population; and b) the inequalities in health that exist between those groups.

2. Methods

Whilst it is possible to take income from one person and transfer it to another, it is not possible to redistribute health in the same way. Therefore, it seems more appropriate to

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[1] Conducted in collaboration with Aki Tsuchiya of the University of Sheffield, and Rebecca Shaw, Peter Smith and Alan Williams of the University of York.

consider trade-offs relating to the distribution of *gains* in health from an initial position. The most obvious differences in health (which in this study have been defined in terms of life expectancy and rates of limiting long-term illness) exist between the social classes. In the UK, on average, people in the highest social class live five years longer than those in the lowest social class. For males aged 45-64, 12% of those in the highest social class report limiting long-term illness compared to 40% of those in the lowest social class. Differences of the same magnitude in average life expectancy exist between women and men. This means that by presenting other respondents with identical questions but relating them to life expectancy differences by sex instead of by social class, it is possible to test whether the efficiency-equity trade-off is a function of the groups across which the inequalities exist.

For each of the life expectancy and long-term illness questions, respondents were first asked to make a discrete choice between programme A that benefits both groups by the same amount and programme B that targets the same amount of overall benefit to the worse-off group (see the appendix). For those respondents who chose programme A, no further sub-questions were asked. Those respondents who chose programme B were presented with a series of pairwise choices in which the benefits from choosing B were gradually reduced until the benefit to the targeted group was smaller in programme B than in programme A. The aim was to identify the point at which a respondent who initially favoured programme B thought its benefit in terms of reduced inequality was too small to outweigh the benefits from programme A. This point then represents the efficiency-equity trade-off for that respondent. The questionnaire was administered during face-to-face interviews, which were carried out in two rounds. The response categories presented in the two rounds are shown in Tables 1 and 2.

Table 1. Life expectancy response options

The initial situation is one in which G1 (the best-off group) live to be 78 and G2 (the worst-off group) live to be 73. The numbers in the table show average increases in life expectancy per group for each of the pairwise choices.

1st round				**2nd round**			
Programme A		**Programme B**		**Programme A**		**Programme B**	
G1	G2	G1	G2	G1	G2	G1	G2
2	2	0	4	2	2	0	4
2	2	0	3.5	-	-	-	-
2	2	0	3	2	2	0	3
2	2	0	2.5	-	-	-	-
2	2	0	2	2	2	0	2
2	2	0	1.5	-	-	-	-
2	2	0	1	2	2	0	1

"-" indicates where a response category was not offered to respondents.

Table 2. Long-term illness response options

The initial situation is one in which G1 (the best-off group) have a rate of limiting long-term illness of 12% and G2 (the worst-off group) have a corresponding rate of 40%. The numbers in the table show percentage reductions in the absolute rate per group depending on the programme chosen for each of the pairwise choices.

1st round				2nd round			
Programme A		Programme B		Programme A		Programme B	
G1	G2	G1	G2	G1	G2	G1	G2
7	7	2	12	7	7	2	12
7	7	2	11.5	-	-	-	-
7	7	2	11	-	-	-	
7	7	2	10	-	-	-	-
7	7	2	9	7	7	2	9
7	7	2	8	-	-	-	-
7	7	2	7	7	7	2	7
-	-	-	-	7	7	2	5

"-" indicates where a response category was not offered to respondents.

In order to interview a broadly representative sample of the general population, every eighth person on the electoral register in three wards in York was contacted and invited to participate, for which they were informed that they would receive £15. Out of a total of 1,500 letters of invitation, 467 people (31%) agreed to take part. To ensure representativeness, 140 respondents were selected for interview based on information on a broad range of characteristics obtained from their reply slips. In total, 130 individuals were interviewed. The interviews took place at the University of York and lasted for about 45 minutes, of which the first fifteen minutes was spent on the questions analysed in this paper.

3. Results

The results are shown in Tables 3 and 4. Columns 2 and 3 in Table 3 present the distribution of responses in the context of average life expectancy. The median respondent is indifferent between people in the highest and lowest social classes living on average to be 80 and 75, respectively, and these groups living to be 78 and 75.5, respectively. However, when identical data are presented but the sub-groups are defined by sex, the median preference is to favour no targeting of men at all. Column 2 in Table 4 shows the results from the long-term illness social class-related question. The median respondent is indifferent between a decrease in the rate of long-term illness of 7% for both groups and a 2% and 8% reduction when the groups are defined by social class.

Table 3. Average life expectancy questions

80 and 75 = 78 and ..	Social class N = 66	Sex N = 31	Implied trade-off
77 or more	24	**20**	0.0
76.75	0	1	-0.1
76.50	5	-	-0.3
76.25	0	0	-0.4
75.75	2	1	-0.8
75.50	**11**	-	-1.0
75.25	11	5	-1.4
75 or less	13	4	

Median respondent in bold

"-" indicates where a response category was not offered to respondents.

Table 4. Limiting long-term illness questions

95 and 67 = 90 and ..	Social class N = 66	Implied Trade-off
72 or more	14	0.0
71.75	1	-0.2
71.5	3	-0.5
71.25	0	-0.7
70.5	1	-1.6
70.0	5	-2.3
69.5	6	-3.0
68.5	**7**	-4.9
68.0	13	-6.2
67.5	5	-7.9
67 or less	11	

Figures in column 1 refer to percentage of population free of limiting long-term illness.

Median respondent in bold

"-" indicates where a response category was not offered to respondents.

The final columns of both tables show the implied equity-efficiency trade-offs in terms of health at the initial point. The concept is borrowed from the literature on income inequalities and is calculated here as the difference between average health and the 'equally-distributed equivalent health’. It represents the level of overall population health that, if distributed equally across the population, is as good as a given unequal distribution. The negative values in these columns indicate the losses in efficiency people are willing to forego for equality between the two groups. So, in the case of average life expectancy by social class in Table 3, the median respondent would be indifferent between the initial point (where the highest and lowest social classes live to be 78 and 73, respectively) and the point where both groups live to be 74.5; that is, they would be willing to trade-off up to one year of the average health of these two groups if total health were distributed equally between them.

4. Discussion

The results presented here suggest that people are willing to make trade-offs between efficiency and equity that are sensitive to the type of health inequalities that exist and to the groups across which the inequalities exist. However, it is not clear what part (if any) the initial situation played in generating these results, and so it would be interesting, and policy relevant, to test how sensitive the degree of inequality aversion is to variation in the initial situation. Differences in the average life expectancies of men and women did not seem to matter much at all, perhaps because people consider the longer life expectancy of women to be compensation for other disadvantages they experience in life. Future research might try to get behind some of the reasons for the very different attitudes towards health inequalities by sex as compared to those by social class.

There are, of course, many other questions that a study of this kind raises. In addition to a range of issues concerning the potential biases introduced by the particular framing of the questions, there are questions about how to represent group preferences in a meaningful way. This is particularly important if the results generated from studies of this kind are going to be used to inform policy decisions. The responses in the study were highly skewed and whilst the median, which is considered by many to be the most appropriate measure of central tendency in a policy context, might mitigate some of the problems of a skewed distribution, it certainly does not eliminate them.

It is our intention to take this research agenda forward. We are currently exploring the relationship between an individual’s aversion to health inequalities and the extent to which they consider those inequalities to be caused by factors within people’s control. It is our intention in future empirical studies to consider some of the more policy-relevant multiple deprivations (such as being male in the lowest social class), in case composite weights are something different from what would be obtained from simply adding together the weights for separately occurring deprivations. In the meantime, this study has shown that it is possible to use stated preference to say something about the efficiency-equity trade-off in health. We make no claims to have provided definitive answers but hope to have shown that such data can be used in conjunction with theoretical constructs to provide policy relevant information.

Appendix

Example of the questions - average life expectancy by social class

As you might know, average life expectancy differs by social class.

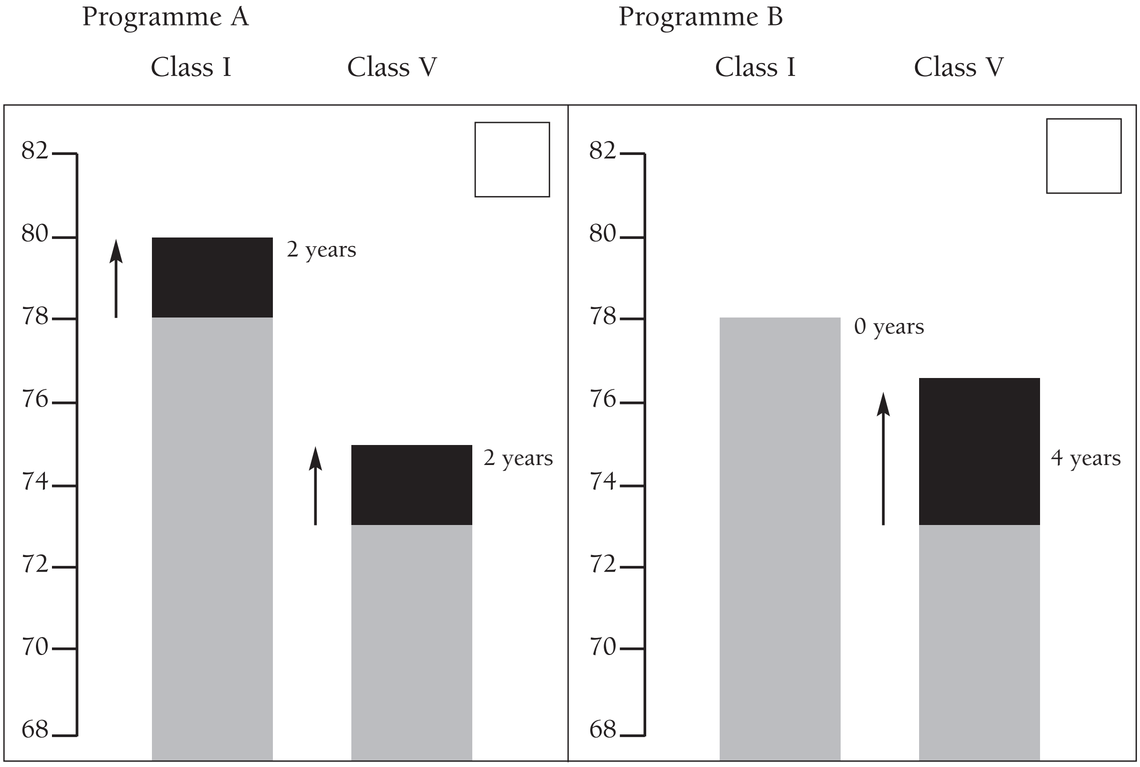
Whilst actual life expectancy varies between individuals, on average, people in social class 1 live to be 78 and in social class 5 they live to be 73.

Imagine that you are asked to choose between two programmes which will increase average life expectancy. Both programmes cost the same.

In the two graphs below the light grey part shows average life expectancy, and the dark grey part shows the increase in life expectancy. There is a separate graph for each of the programmes.

As you can see, programme A is aimed at both social classes equally and programme B is aimed more at social class 5.

Please indicate whether you would choose A or B by ticking one box.



If the respondent chose A, that was the end of the question. If the respondent chose B, she was told:

‘Choosing Programme B might mean that the increase in life expectancy is less overall. For each of the six (or four, depending on the round) choices below, please tick one box to indicate whether you would still choose B, or whether you would now choose A.’

The presentation of the choices was of the same kind as that illustrated above.

A comment on the contributions by Franco Sassi and Paul Dolan

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The essence of Sassi's argument is the economists do not yet have an adequate normative framework to enable them to offer suitably grounded advice to policy-makers in situations where efficiency has to be tempered with equity considerations. Since this is precisely the situation in which NICE finds itself, Sassi argues that the best we economists can do at present is to concentrate on the efficiency issues, where we have a comparative advantage over everyone else, and then leave others to carry out such adjustments as may be called for to take equity into account. He actually goes a little further than this, by suggesting an agenda of issues that economists should work on in order to remedy the weaknesses of their present analytical framework, and suggesting some tasks for NICE itself to undertake in specifying the characteristics of potential beneficiaries that would be relevant to whatever notions of equity NICE might wish to take into account during the decision making process.

The essence of Dolan's argument is that economists already have some analytical tools that would enable them to establish trade-offs between efficiency and equity considerations, and that it is important to apply these to notions of equity that the public regards as relevant to the sorts of decisions that NICE is making. But there are many methodological difficulties involved in doing this, and convincing conclusions are not likely to come quickly or easily.

It seems to me that there are some big strategic issues here that divide researchers generally into rival camps (and by 'researchers' I do not only mean economists). Indeed, I suspect that Sassi and Dolan are more often in the same camp than in a different one.

First of all there is a sharp division between those on the one hand who believe that outcomes are fair if and only if reached by fair processes, and that if the process is fair the outcome must be fair, and those on the other hand who believe that outcomes should be judged as fair or unfair by criteria that have nothing to do with the process by which they are reached, and that processes should then by judged by the likelihood that they will lead to fair outcomes (though there may be additional criteria adduced about the moral acceptability of some processes) (Williams and Cookson, 2000).

Secondly there are those who believe that the drive for quantification squeezes out important attributes which are inherently immeasurable, and crudely dehumanises an intrinsically subtle humane dilemma. On the other side are those who hold that understanding complex situations requires careful measurement, as does clarity of decision making and accountability to others. NICE has made a principled stand in favour of transparency, and so should cleave to the latter position rather than the former.

Thirdly, there are those that fear that going down this latter route will lead to technocratic 'solutions' being offered to moral problems which ought to be discussed more openly and explicitly rather than buried away as assumptions in some complex model which is incomprehensible to lay people. This places a heavy responsibility on the peer review process to ensure that these value-laden assumptions are brought out into the open and discussed and, if necessary, replaced by others and the implications of doing so explored thoroughly. This is essentially what is going on in economics at present amongst those who challenge the conventional 'welfarist' approach and seek to replace it with a non-welfarist one (Tsuchiya and Williams, 2001). But it may be some time before the implications of this distinction between assuming that the objective of health care is to maximise the utility of individuals and assuming that the objective is to maximise, say, their (equity-weighted?) health, seeps through into everybody's consciousness.

Fourthly, there is the general problem of how to aggregate individual-level data in order to reach a group view. For many, this seems to warrant nothing more than a discussion as to whether the arithmetic mean or the median is the most suitable measure of central tendency, with the choice being made on purely technical grounds, namely if the distribution is normal use the mean, and if it is skewed use the median. In a value-laden context this is not good enough, because the fundamental issue is how much weight should be given to each participant's situation. At one extreme, in conventional (least squares) regression analysis most weight goes to outliers. But in our political processes we typically rely on majority voting, which gives a special role to those in the centre of the distribution (the 'median voter'), since only if things change for them do policies change. This clash over aggregation is also one of the divides between clinical perspectives and public health perspectives, but it also arises over the proper role of sub-group analysis when analysing trial results, which bears directly on the kind of distributional issues faced by NICE when weighing equity and efficiency. Unpicking the equity implications of the different aggregation methods, of the different measures of central tendency, and of the different measures of dispersion, is an important clarificatory task (Williams, 1996).

Some electronic exchanges through the HEN website after our meeting posed some additional problems which obviously need further consideration by all concerned. One was whether we are not in danger of generating paralysis by analysis, by allowing these arcane discussions about research methodology to divert attention and resources from actually getting on with the job in hand. From this viewpoint, we should stop worrying about whether all health inequalities are equally inequitable, and concentrate on reducing any inequality that we can get a handle on. It seems to me that an interesting test case would be inequalities in life expectancy at birth between the sexes and inequalities in life expectancy at birth between the social classes. The two inequalities are roughly equal in magnitude. Yet much attention is devoted to the latter and very little to the former. There are plenty of sex-specific health care interventions the balance between which we could change if we wished to do so. There are not so many social-class-specific interventions, so surely pragmatism points to tackling the inequalities between the sexes rather than the inequalities between the social classes, especially when a recent survey of health inequalities along the Jubilee Line in London showed that male babies born into the most favoured group had lower life expectancy at birth than female babies born into the least favoured group (Fitzpatrick and Jacobson, 2001). What should a pragmatist do now?

Which brings us back to NICE, who at present are operating in the pragmatic mode when it comes to taking equity into account in its decisions. Fortunately, however, they are unhappy about this, and this seminar was an attempt to fill the gap by offering some leads as to the best way to proceed. That no consensus emerged is hardly surprising, but both Sassi and Dolan offered some useful suggestions that are clearly worth pursuing. Meanwhile it would be useful if NICE itself could offer us some rival notions of equity to explore that have arisen at one time or another in its own discussions. NICE is amongst the more transparent of the priority-setting bodies that exist in the UK, and thus offers us a little window through which to peer at the role of equity (at the margin) in the NHS. NICE may one day prove to be the pace-setter for the entire system, so it seems well worth a great deal of our attention and assistance.

References

Fitzpatrick J, Jacobson B (2001) Mapping health inequalities across London. London, London Health Observatory.

Tsuchiya A, Williams A (2001) Welfare economics and economic evaluation. In Drummond MF, McGuire A (Eds) Economic evaluation in health care: merging theory with practice. Oxford, Oxford University Press, pp 22-45.

Williams A (1996) Interpersonal comparisons of welfare. Discussion Paper 151. York, Centre for Health Economics, University of York.

Williams A, Cookson R (2000) Equity in health. In Culyer AJ, Newhouse JP (Eds) Handbook of health economics, Vol 1B. The Netherlands, Elsevier, pp 1863-1910.

NICE OR NASTY? THREATS TO JUSTICE FROM AN EMPHASIS ON EFFECTIVENESS

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1. Introduction

In this brief - and intentionally provocative - paper I want to raise some doubts about whether the process of assessing the clinical and cost-effectiveness of health technologies, which is the principal task of NICE, could have unintended detrimental effects on justice in health care. Let me at once clear away some possible misconceptions. Firstly, I am not opposing the attempt to ensure that the treatments used in the NHS are clinically effective and good value for money. This would be a perverse view ethically, since it would entail supporting a continued waste of public resources, when better and cheaper treatments could be found. Secondly, I am not implying that NICE, the Department of Health (DoH) or the Government *intends* to promote or increase injustice. My case is, rather, that a failure to be explicit about the gap between demand and resources and the absence of a clear rationale for assessing effectiveness may result in both a skewing of priorities and an inadequately critical discussion of what we mean by 'effectiveness', whether clinical or cost-related.

I draw some evidence that these problems are at least partly perceived by the Board of NICE from its recent response to the Kennedy Report (Bristol Royal Infirmary Enquiry). Kennedy had proposed an 'arms length' relationship between the various bodies responsible for quality of care (NICE and the Commission for Health Improvement (CHI)) and the DoH. The Board's response was to say that it prefers to remain as it is, a Special Health Authority answerable to the DoH, but on the understanding: 1) that its recommendations were about ‘cost-effectiveness within the resources available for health care’ not affordability, which was a responsibility of government; and 2) that there should be a radical change to the process by which its work programme is constructed. Describing the present process as ‘opaque’ and open to the charge that it is driven by political not service needs, NICE has proposed that it is given responsibility for developing its own work programme, with a final selection of topics agreed jointly between NICE and the relevant government bodies (see NICE website for full text of response).

It seems obvious to me that these comments from the Board of NICE demonstrate an awareness of the problems identified by my paper, which can be briefly summed up by the observation that, rightly or wrongly, their recommendations have the effect of defining priorities for expenditure in the NHS and so the work programme assigned to it is in effect a definition of areas of predominant need. It is hard to avoid the imperative: ‘It works at reasonable cost, so it must be done!’

If this is so, why would it be unjust? To answer this I have to enter the minefield of theories of justice in health care allocation. After this theoretical excursus, I shall return to my discussion of whether NICE recommendations have unjust effects.

2. Just health care

The quickest way to perceive the problem of justice in health care provision is by means of Albert Weale’s ‘inconsistent triad’: comprehensive care; high quality care; and care available on the basis of need not the ability to pay (Weale, 1998). If we accept that there are finite resources available to the NHS and an ever-increasing demand, a trade off has to be made in terms of comprehensiveness, quality or free access. Since a basic principle of the NHS is that services must be free at the point of delivery, it follows that compromises must be made in terms of quality or comprehensiveness. It is this inevitability, which creates the need for an account of a just (or at least less unjust) distribution of health care. For an excellent survey of this whole area see Butler (1999).

Theories of distributive justice all stem from the formal definition of Aristotle that ‘equals be treated equally and unequals unequally’. This leads to a theory of distribution which is based not on equal shares, but on equitable shares. Inequitable distribution occurs when morally irrelevant differences are used as the basis for unequal distribution. Thus in health care ‘post code prescribing’ is clearly inequitable, since it cannot be a morally relevant difference that one person lives in Bolton, and another in Bournemouth, if they are suffering from the same condition. Equally, discrimination solely in terms of gender, ethnic origin, or social class is at least *prima facie* unjust (discrimination in terms of age is a more contested question and so I am leaving it out of this brief summary). However, a theory of distributive justice must go further than simply a list of obvious inequities. It must offer some criteria for justified unequal distribution - and here the philosophical debate begins.

If the basic principle of allocation according to need rather than the ability to pay is to be followed, then we have to find some way of distinguishing between need and demand and also between the relative importance (or priority) of different needs. Large quantities of philosophical ink have been expended on this project. How do we prioritise between incontinence pads and heart transplants? Or between medication for Alzheimer's and neonatal intensive care? The debate is highly complex and shows no signs of abating, but in this rapid summary I shall merely point to two competing approaches: the first I shall call the *minimum individual entitlement* approach; the second, the *maximising health gain* approach.

The first approach is well represented by Len Doyal, in various writings, including his major work on the concept of need (Doyal and Gough, 1991). Doyal comes from a philosophical school of moderated liberalism, derived from the writings of John Rawls and Norman Daniels. In this approach there are certain basic human entitlements (or basic human goods) which society must provide to all individuals through its institutions. Central to these entitlements are autonomy and equality of opportunity. When Doyal applies this theory to the provision of health care, he concludes that the goal of just health care must be to provide the means for each sick individual to 'flourish' by the regaining of as much autonomy as possible and by a re-entry into social life (Daniels uses the more difficult phrase of 'restoration of species typical normal functioning'). Since, in Doyal's view, rationing is inevitable, he argues that it should be applied equally across all categories of illness and treatment interventions, to avoid unjust discrimination against the more 'unpopular' illnesses (such a mental disorder). Rationing within categories should be based on the severity of the condition, with the more seriously compromised in terms of autonomy and ability for social interaction being given the higher priority. Reverting to Weale's triad, we can see that Doyal is willing to trade comprehensiveness in favour of quality of care for those with the greatest need (as he defines it).

The 'maximising health gain' theorists represent a very different approach. Although I cannot easily identify one writer here, the view is clearly related to advocacy for the use of quality-adjusted life years (QALYs) in allocation decisions. In this approach, need is equated with ability to benefit, rather than with the severity of the condition, and benefit is defined in terms of the QALY score calculated for the treatment intervention. A further dimension of social benefit is added by calculating the relative cost per QALY both for different treatments for the *same* condition (a relatively uncontentious way of assessing value for money) and for treatments for *different* conditions (a more challenging attempt to determine how much society is willing to pay for any health care intervention). It is obvious that calculating aggregate benefits in terms of total QALYs gained over a wide range of treatment options and medical conditions will bring about a quite different approach to health care rationing. Those groups most likely to make substantial gains in health status with relatively inexpensive interventions will, on this calculus, be given much higher priority. The severely ill and those whose condition can be improved only slightly or for a short time, will not contribute well to the aggregate health gain. Such an approach is thus utilitarian in character, favouring majority benefit over individual marginal gain.

Before concluding this very rapid survey, I must add a further complication. Another aspect of injustice in health care is the 'health gap'. It has long been known that poverty and its associated social deprivations are closely linked to ill health. Despite the overall improvement in health and life expectancy across all social groups in the UK, the health gap remains, and indeed has widened for some subgroups. How would the different philosophical approaches outlined above assess this problem? Paradoxically, an individual entitlement theory like Doyal's is less likely to support positive discrimination to close the gap than is an aggregate health gain theory. For the latter theory, it might be shown that intensive efforts to improve the health status of the worse off are relatively more cost-effective and result in a greater aggregate gain than any further marginal improvements in the health of the better off. But for an entitlement theory, the only criterion should be the severity of the condition. Both the rich and the poor must, under this theory, have equal access to services, and discrimination against the ill rich in order to improve the overall position of the poor would be unjust.

3. Is NICE nasty?

After this philosophical excursus, I return to the real world of the NHS and NICE. In this world, of course, priority decisions are much less clear and consistent than either philosophical approach would imply. Political expediency, a myriad of policy initiatives and just sheer muddling through, characterise rationing or priority setting in the NHS at all levels - and the picture is further muddied by the insistence of many politicians that rationing is not necessary and is not taking place. However, the very existence of NICE with its focus on health technologies and their clinical benefits pushes the debate in the direction of the health gain maximisers. It also creates the impression that priority should be given to technology-related health care interventions, and most particularly to pharmaceuticals and medical devices, since these most obviously lend themselves to the kind of appraisals undertaken by NICE. This latter difficulty was recognised long ago by Archie Cochrane in his groundbreaking book, *Effectiveness and Efficiency* (Cochrane, 1972), when he observed that large areas of health care could never, for ethical or pragmatic reasons, be subjected to rigorous appraisal of RCTs or similar scientific methods.

The work programme of NICE (determined up to now by the Government) illustrates how easily effectiveness in health care is subtly translated into increased technological intervention. The vast majority of appraisals have been on pharmaceuticals and, although there have been one or two much publicised red or amber lights on prescribing, the overall effect has been a re-enforcement of the justifiability of expensive drug therapy. Indeed the force of NICE recommendations is such that Health Authorities have had to find money in already constrained budgets to meet the new demand. I have yet to read of the gratitude of a Health Authority or a Trust to NICE for helping it eliminate the wastage of ineffective technology. We have to ask, therefore, whether the work programme of NICE is not in itself a powerful influence in the setting of priorities in the NHS.

I would draw further evidence from the NICE *Guide to the Technology Appraisal Process*, which describes the guiding principles for the selection of technologies for appraisal. The first criterion is: 'Is the technology likely to result in a significant health benefit, taken across the NHS as a whole, if given to all patients for whom it is indicated?' (see NICE website). This criterion puts NICE firmly in the health maximisation camp, committing it to looking for major gains in the whole system, rather than finding areas of NHS care where patients with severe deficits can have their situation modestly improved. 'Health benefit' in this criterion is clearly an aggregated measure: it is not referring to individual entitlement.

A second criterion refers to 'other health related government policies (e.g. reduction in health inequalities)', but it is not at all evident how this criterion has been applied in drawing up the work programme. Certainly there is no radical appeal to health equality behind this particular list. Consider, for example, this clarion call in Tony Culyer's article, published in the *Journal of Medical Ethics*:

An equitable health policy should seek to reduce the inequality in health (life expectation, self-reported morbidity, quality of life in terms of personal and social functioning) at every stage of the life-cycle. Such a policy must meet needs, but in proportion to the 'distance' each individual is from the population average (Culyer, 2001).

If this were the Government's policy, then the work programme of NICE could look entirely different, since it would be based on appraising those interventions most likely to reduce the health gap. As it is, it is not at all evident that the least advantaged in health prospects will benefit differentially from NICE recommendations.

So is NICE nasty? Well, obviously not - that is just my fondness for a provocative title. But NICE cannot exempt itself from the justice debate. I have argued that by implication it is committed to a health maximisation view of justice, with the consequent risk that the needs of the most disadvantaged and the most ill could be overlooked in our love affair with technology. Moreover, although health maximisation *could* be consistent with health equalisation, this will not happen without a very focussed programme of research and technology assessment targeted to the worst examples of inequality.

One might call NICE nice or nasty depending on whether it conformed to one's favoured view of justice in health care, but I have refrained from doing that. We are better with the debate between two central and competing concepts of justice, than a dogmatic defence of either.

References

Butler J (1999) The ethics of health care rationing. London, Cassell.

Cochrane AL (1972) Effectiveness and efficiency: random reflections on health services. London, Nuffield Provincial Hospitals Trust.

Culyer A (2001) Equity - some theory and its policy implications. Journal of Medical Ethics 27: 275-283.

Doyal L, Gough L (1991) A theory of human need. Basinstoke, Macmillan.

NICE (National Institute for Clinical Excellence) website: www.nice.org.uk

Weale A (1998) Rationing health care: a logical solution to an inconsistent triad. British Medical Journal 316: 410.

From equity to equality? A comment on the contribution by Alastair Campbell

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1. Introduction

In his paper Alastair Campbell contrasts two principles of equity in the allocation of health care resources. One is a principle that directs decision makers to allocate health care resources according to clinical need. The other is a principle that directs decision makers to allocate resources in the most productive way. The relationship between these principles is not straightforward, and Campbell shows, counter-intuitively perhaps, that the principle of productivity may seem more equitable than the principle of need.

Campbell conducts his analysis in the framework of a triadic conflict of demands between equity, comprehensiveness and quality, which at one time I set out as being fundamental for modern health care systems (Weale, 1998). Particularly given this starting point, I do not want to dispute Campbell's analysis, which seems to me to be accurate. Rather I wish to supplement it by asking what sort of values might lie behind a concern with the equity prong of the triad. My strategy will be to take a seemingly mild version of the equity principle and scrutinise it for its ethical basis. In this way I hope to show that the simultaneous concern with equity, comprehensiveness and quality can be seen to follow from a single source of value. Unfortunately, this conclusion does not make the practical task of reconciling action in accordance with these demands easy. Indeed, once you see this coherence of moral base, the demands become more difficult.

2. A mild equity principle

The suggestion I start from is that there is a generally accepted principle of health care equity which says that in the allocation of health care there should be no financial barriers to access. This seems to be a mild principle. Why? The obvious reason is that it is phrased in such a way that it rules out one ground for the allocation of health care, without indicating positively what goal is to be aimed at. It states, merely, that one consideration that might otherwise operate should not be allowed to operate.

Note that in this form, it still seems possible to have an equitable health care system in which there are considerable inequalities of health status. After all, the principle merely says that there should be no financial barriers to access. It does not say, for example, that environmental sources of ill health should be reduced or equalised. Nor does it offer any principle of compensation for unequal genetic disadvantages. To be sure, removing financial barriers to access may not be easy, particularly when we bear in mind how complex such barriers can be in practice. However, as a principle of equity, it seems to be about as mild as one can get.

This appearance is deceptive, however, once we start to think what it is that should be allocated equitably. If we say that it is access to high quality, comprehensive health care, then the strength of the principle becomes evident. Consider, as an alternative, a principle that directs decision makers to allocate only a decent minimum of health care without financial barriers to access. That principle seems to have the same form as our earlier principle, in the sense that it states a prohibition on finance operating as a ground of care, but it does so in a context in which the benefit being allocated is of considerably less value. Even a decent minimum of care will fall short in various respects of the best that can be offered.

Why might one favour a principle that prohibits ability to pay as a ground for access to high quality, comprehensive care? One reason that is sometimes offered in the literature is that such a principle is implicit in the practice of medicine itself. Thus, in an influential analysis, Michael Walzer once wrote that ‘the distributive logic of the practice of medicine seems to be this: that care should be proportionate to illness and not to wealth’ (Walzer, 1983, p.86). The idea behind such a claim is this. Within society there are various practices that have their own logic associated with their own criteria of allocation. Thus, health care is related to the degree of ill health by the logic of the practice of medicine, just as education is related to the ability of pupils to benefit by its own logic, or earnings are allocated according to marginal productivity within a free market. On this conception, problems arise when the distributive criteria appropriate to one sphere of activity spill over to another sphere of activity.

There is, I think, something in this approach but I do not think that it can form an adequate basis for thinking about equity within a health care system. It seems both to show too little and to presume too much. It shows too little in that it relates the health of populations to the practice of medicine. But the sources of ill health are various, including poor housing, low education and environmental and occupational factors. Indeed, in terms of social policy we often think that criteria from one sphere of activity should spill over into others, for example that employers have an obligation to care for the health of their employees or that transport policy should be made with an eye to its health implications. Sealing off one sphere of allocation from others looks too narrow a preoccupation. On the other hand, Walzer's approach seems to presume too much. Why should we assume that there is some common and shared understanding about the practice of medicine? The person who favours a decent minimum for all and allows commercial medicine for those who can afford to pay may not hold to a position that is highly aspirational, but it does not seem to be a position that can be rebutted simply by invoking a specific understanding of the practice of medicine.

3. The concern for equality

If we cannot get a valid argument going from considering the practice of medicine, how else might we justify, or at least render plausible, the equity principle that I have set out? I suggest that the thought behind such a principle can be expressed as follows. A good society is one in which its members enjoy, so far as public policy can make this practicable, an equal chance of a long and healthy life. The ethical source of the equity principle is, on this interpretation, the view that people should not be old, injured or infirm before their time by virtue of their economic position. Stated in this form, the principle is of course too general. For example, it makes no allowance for freedom of choice. Some people may choose to engage in risky sports or other activities, which will have the effect of reducing their chances of a long and healthy life. But the view is intended to capture the reason why one might want there to be no financial barriers to access for highly quality, comprehensive care.

If there is any merit in the claim that this is the underlying reason why one would hold to an equity principle, then it becomes possible to see how the claim that financial barriers should not play a role in allocating high quality care generalises to include other potential barriers, for example place of residence (postcode rationing is out), social status, ethnic group and gender. Interestingly, however, it does not generalise to age. It is perfectly compatible with holding to the view that all members of society are entitled to the same chance of a long and healthy life also to hold to the 'fair innings' test of rationing. So long as the fair innings criterion is not used in such a way as to favour some groups systematically at the expense of others, then someone who holds to the view I have set out could say that their ambitions are satisfied.

How does this view relate to the two approaches that Campbell identifies? Let us look first at the need principle. If that principle is interpreted to mean that there should be no 'irrelevant' barriers to access to care, then it provides one rationale for that principle, so long as the needs are understood to be the standard range of needs that define an equal chance of a long and healthy life. The argument is that there should be no unjustifiable barriers to anyone having that chance. However, if the principle of need is interpreted to mean that those who have most needs should always receive priority in the allocation of resources, then that view is not licensed by the claim I have set out. We can see this most clearly in the case of the fair innings argument. The application of a fair innings test may well cut across the application of a needs test. From this point of view, the emphasis upon giving priority to those in greatest need who can benefit is an invalid application of a principle derived from a triage situation.

What about the principle of productivity? I think we can also see how our old friend the equity/efficiency trade-off can arise in this context. It is perfectly possible to adopt health care measures that have the effect of increasing QALYs and yet be in breach of the principle that everyone is entitled to the same chance of a long and healthy life. Rudolf Klein pointed out many years ago that preventive health measures could have the effect of widening the gap in length of life by social class. However, this is in many ways what we should expect. If we say that a good society is one in which all members enjoy an equal chance of a long and healthy life, then this view, to the extent to which it has any substance, will be at odds with other values, not least the value of securing the maximum health gain across a population at least cost.

Alastair Campbell started with the inconsistent triad of equity, quality and comprehensiveness. What does the present approach have to say about that triad? The problems of satisfying all three principles are essentially practical problems of institutional design. It is difficult to design a structure of health care organisation that simultaneously satisfies all three of these requirements. That would not matter if we could forget one of the three, but I have tried to show that the reason why linking the equity principle to comprehensiveness and quality is justified is by its link to a particular conception of a good society. Whether that conception really is a conception of a good society is, of course, a larger and more imponderable question.

References

Walzer M (1983) Spheres of justice. Oxford, Blackwell.

Weale A (1998) Rationing health care: a logical solution to an inconsistent triad. British Medical Journal 316: 410.

IMPLICATIONS OF PRIORITY SETTING ON HEALTH INEQUALITIES: DOES NICE HELP AT A LOCAL LEVEL?

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1. Introduction

This paper is based on my experience as a Director of Public Health for a health authority. Its objectives are:

(i) to reflect on how priorities are set in practice;

(ii) to review the contribution of NICE to addressing post code prescribing;

(iii) to highlight some of the issues which surround the potential contribution to NICE.

2. Setting priorities in practice

As Director of Public Health for a health authority I have played a part in the management of implementing health policy, particularly prioritisation and implementation of new treatments in the continually changing structures of the NHS. My experience in Oxfordshire started in the days of the internal market. The contract culture was one that had a clear dynamic. There was a certain amount of money, contracts were set and deals struck for which patients were treated where. Efficiency was the by word. With the contracting culture came the need to agree what was in and what was out of the contracts - and when something was out of a contract whether extra contractual arrangements should be made. These decisions were made by each health authority and fundholding GPs.

In Oxfordshire our experiences led us to systematise the decision making process and to the creation of the Priorities Forum. The purpose of the Forum was to bring together partners from all aspects of the health care economy for roundtable discussions, rather than the confrontational stance of the other side of the negotiating table. Our objective was to bring together clinical opinions, ethical principles, managerial interests and public opinions. The Priorities Forum became the monthly discussion forum for dealing with extracontractual referrals, over time moving on to consider innovations and contentious issues.

Discussions took place within a framework based on ethical values associated with equity, effectiveness and patient choice. This ethical framework allowed us to structure our discussions, which helped to promote consistent decisions. The framework was used to structure discussions and to help ensure consistency in decision making. It also allowed us to articulate reasons for refusal to fund treatments and underpinned the appeals process.

The processes of decision making were built around some basic criteria: openness, involvement and partnership. However, although we would aim to be fair and consistent within the county we had no way of knowing whether our neighbouring counties agreed with us, because despite the common process, decisions inevitably carry values with them. The values we used to underpin the process were effectiveness (both clinical and cost); equity and patient choice.

3. Contribution of NICE to reducing post code prescribing

With the election of the Labour Government came the introduction of NICE. This was seen as an explicit attempt to reduce the anathema of post code prescribing. The stated political intention was to avoid, within the NHS, the situation where potential lifesaving treatments are available in one part of the country, but not to those living over a bureaucratic boundary several streets or counties away. Thus, it could be said that NICE would reduce inequalities in health care provision. The stated intention of NICE is:

To provide patients, health professionals and the public with authoritative, robust and reliable guidance on current 'best practice'….To offer the NHS and its patients a new service, which we intend shall earn, and retain, the confidence and respect of the Community as a whole (Sir Michael Rawlins, NICE website).

So, in theory, as long as the review of evidence by NICE gives a clear-cut answer it can rationally be assumed that national guidance will be uniformly implemented and avoid inequalities in the provision of a given treatment. In this scenario, it is questionable whether the Priorities Forum needs to exist. In the event, the Priorities Forum has been alive and well, and still needed despite the existence of NICE. It has changed the way it works, no longer needing to do as much empirical analysis, but now requiring a more complex system to implement guidance and put NICE decisions in the context of all the other policy directives.

4. Does NICE reduce inequalities?

This question is considered by looking at five related issues and the role of NICE guidance in each.

4.1. Population needs and local priorities

The structure of populations will determine their health and health care needs, and therefore local health care needs may vary. Different populations will, due to a variety of complex social, economic and environmental factors, not only have different health needs but also different priorities. A population of older people living in leafy shires may have access problems, which make transport for physiotherapy after a stroke more important to them than receiving the latest cancer chemotherapeutic treatment. Young single mothers on an inner city estate may be more concerned with getting rehoused than seeking help to stop smoking.

The production of guidelines from NICE can only address part of the dilemma of choice in this situation. In fact, one of the impacts of NICE has been the assumption that its guidance will be accepted. Managers are told by the Government that the money is already available in base line budgets. But what if the guidance is not about something that is a priority for local people? The assumption that guidance will be implemented can, because there is no local mechanism for making the choice between NICE and other priorities, reduce the opportunity to address the needs of the population to produce greater health gain.

4.2. Existing local provision

Another factor which distorts the impact of NICE is that all health economies start from the different baselines of resource and can therefore build on existing inequalities. NICE decisions are given universally but historic patterns of provision of health care are of themselves inequitable. The NHS is not a level playing field but the result of developments over time, with some areas better or overprovided for.

In addition, research may play a role at the local level in increasing expectations. Take the introduction of Aricept for Alzheimer's disease. Clinicians in the county were involved in research trials, but they were anxious not to rely on trials to fund the drug. The case they made was persuasive when we heard them at the Priorities Forum, but we refused funding until NICE guidance was available. This was a local choice and put us at odds with neighbouring counties who had already made some resources available. Once the NICE guidance was available we considered it in the Priorities Forum.

Moreover, though the new service may be valuable, the analysis of NICE addresses the effectiveness of a specific condition. The question one comes back to is: Are the resources for the NICE intervention more or less important than the need for capital development in an MRI scanner or for a paediatric community liaison nurse given the local variation that exists?

4.3. Clinical freedom

It is important that NICE produces guidance - not dictat. One of the key elements of NICE is that it is guidance, and clinicians need to be able to treat the individual patient in front of them in the way they believe most appropriate. One example where the implementation will be particularly dependent on the clinician is the new anti-obesity drugs. The guidance says:

Orlestat must be viewed as only one of a number of approaches in tackling the growing problem of obesity. In order to facilitate the appropriate use of pharmacological management of obesity, training of a sufficient number of primary care staff (mostly practice nurses) supported by community dieticians will be necessary to carry out initial patient assessments and to provide continuing advice and support for patients, before, during and after drug treatments (NICE, 2001).

This will mean an assessment on the potential impact. Therefore, although an obese patient may know that appetite suppressant drugs are available and recommended, clinicians may decide not to prescribe; and different clinicians might make different decisions for the same patient as in any other area of care. In fact this has always been the case. In the Priorities Forum we have had a long battle with the plastic surgeons over the aesthetic treatments, and the question has been when should we say no? We went through the process of agreeing a list, but had to accept there might be exceptions. In the case of bat ears, for example, we said surgery for children only, but what if you are just 18 when referred? And even worse what if you were 16 when referred but 18 by the time you got anywhere near surgery? In such situations we have always said clinicians must make the decisions based on their judgements and that they knew the level of budget they worked within and needed to substitute within that budget. This also applied to a discussion about a new and more effective technique which was available for collapsed vertebrae. The procedure could be done as long as the clinicians thought there was greater benefit for the same cost. It is not possible for guidance, be it from the Priorities Forum or from NICE, to decide if asymmetric breasts cause too high a morbidity and the patient would benefit from the operation to a greater extent than using resources elsewhere.

4.4. Public involvement

There is of course another factor to be taken into account: what the public knows and what patients want. It is the Government's philosophy to emphasise that patient choice is a key driver. For example, with the current position on beta interferon, evidence suggests that it is expensive and not effective overall. But the MS (multiple sclerosis) society is a well organised and articulate group, and they have been lobbying to make beta interferon available. There is an argument that says that when you are young and faced with a slow deterioration in your quality of life then the extra cost is worth it, because of the value to the individuals rather than the clinical effectiveness to the population of patients. RCTs do not tend to give you the answers expressed like this.

4.5. The questions asked

A further aspect which limits NICE advice has been the initial questions asked. The new service may be valuable, but the analysis of NICE may only address one aspect of the effectiveness of a specified treatment modality. NICE tends to look at individual modalities and to focus on drug treatments rather than prevention or improving quality of care. The terms of reference will determine which question is answered. For example, new antipsychotics were assessed for serious mental illness not for their use in confused older people where they are increasingly being prescribed to reduce confusion. Once available how is their use confined to one group of patients only?

5. Conclusion

I have tried to point out that to expect that NICE will reduce variations in health care between different areas of the country is to expect too much. It was not set up to address the totality of inequalities, nor will it remove the need to prioritise within the myriad of policy directives constantly received from the Government. What it has done has helped to streamline the introduction of some treatments. The timetable enables more sensible discussions with clinicians who recognise the value of a full appraisal of the effectiveness of the drug. It does not, however, help to make decisions between care groups: should resources go to children or older people, to mental health or to neurosurgery, or to meet other health needs of the more disadvantaged groups, rather than to the cancer drug which gives another few months of life? NICE has contributed to the universal introduction of certain treatments. Its contribution to reducing health inequalities in the population is of greater doubt.

References

NICE (National Institute for Clinical Excellence) website: www.nice.org.uk

NICE (2001) Technology appraisal: Orlestat. No 22. London, National Institute for Clinical Excellence.

A comment on the contribution by Sian Griffiths

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Sian Griffiths, as a practising Director of Public Health, had the responsibility of advising a health authority facing the day to day reality of making choices between investments in different technologies, patient groups and health sectors. Surprisingly, though public health regularly encounters serious ethical issues (e.g. rationing scarce resources, influencing individuals to change their behaviour and limiting freedom to diminish disease transmission), there is no agreed framework for analysing these difficulties (Roberts and Reich, 2002). Griffiths describes how Oxford Health Authority established an ethics forum to guide decisions on prioritisation. But, as she concludes, local committees produce local decisions. It was the resulting variability in access to treatment created by different health authorities across the country and the unacceptability of this for patients, professionals and politicians, that led to the creation of NICE.

Griffiths' concerns are mirrored by the majority of Public Health Directors in England and Wales (Davies and Littlejohns, 2002). I have recently undertaken a survey of their views on the impact of NICE, which attracted a 92% response rate. While confirming NICE's success in its role as a provider of valid and reliable guidance on the clinical and cost-effectiveness of new interventions, the Directors of Public Health are concerned about the effects that the Institute's technology appraisal guidance could have on their ability to invest in other priorities defined by local methods. This apparent paradox between balancing national priorities and standards with local managerial and professional freedom is likely to remain a challenge despite record sums of new money entering the service.

However, the Government has made its policy clear. Clinical and service configuration standards will be set by NICE and the National Service Frameworks. The NHS will be monitored in its response through the new Commission for Health Audit and Information created by a merger of the Commission for Health Improvement and The Audit Commission. In this context the role of NICE's Health Technology Programme is not one of prioritisation but of setting standards that should be achieved throughout the NHS. While clinical freedom remains at the professional/patient interface the service is expected to ensure that there are no financial impediments to the availability of the therapy. This system for assessing health technologies was not designed to be a means of prioritising health care services. However, whilst not being the intention, the results of NICE's guidance could as a bi-product have unexpected effects. There are two aspects that will determine whether or to what extent this occurs.

The first relates to the choice of technologies that NICE is invited to assess. This is currently the responsibility of the Government, which chooses the work programme. It is imperative that this is generated in a way that reflects the needs of the NHS as a whole. A number of concerns have been expressed over the current method and the Department of Health is consulting on how this should be undertaken in the future. NICE feels that there should be an open and transparent NHS-wide process of mapping priorities that includes identifying existing interventions for possible disinvestment as well as new technologies. The current emphasis on new drugs probably reflects the nature of the sub-department within the Department of Health that has lead responsibility for NICE. If NICE was to have a broader remit, it may encourage a more balanced view of the varying contribution that the differing elements of health care (prevention, life style change, diagnosis and therapy) can have to personal and public health.

Second is the issue of how and at what level the ‘standard’ is set. This will need to be sufficiently generic to be used between as well as within disease groups, and across different types of health interventions. It is whether this can be achieved in a way that commands acceptance across the public, patients, professionals, academics and politicians that will ultimately determine the success or otherwise of NICE.

Though Evan Harris did not offer a written contribution to these proceedings, his presentation reflected his experiences of being a public health doctor, as well as those gained after he entered the political arena as a Member of Parliament. He understands perhaps more than most the relative roles and responsibilities of government and NICE, and expressed frustration that the often critical press that NICE has received over its first two years should have been more appropriately addressed at the Government.

References

Roberts MJ, Reich MR (2002) Ethical analysis in public health. Lancet 359:1055-1059.

Davies E, Littlejohns P (2002) Views of Directors of Public Health about NICE Appraisal Guidance: results of a survey. Submitted for publication.

FINNISH NATIONAL STRATEGIES TO REDUCE SOCIO-ECONOMIC INEQUALITIES IN HEALTH

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STAKES

1. Introduction

Finland has a long tradition of egalitarian social and health policy dating back to the 1950s and 1960s. Finland also has a well-established Nordic-style welfare state, with relatively generous social benefits and a service system operating on the principle of universal coverage. Moreover, income inequality in Finland is among the narrowest in the OECD countries.

Public health in Finland has improved considerably during the past couple of decades. Life expectancy is now 73.5 years for males and 80.8 for females. However, Finland has not succeeded in levelling health differences between socio-economic groups. Exceptionally large socio-economic disparities in health were recognised in Finland in the early 1980s. Studies on socio-economic mortality differences showed steep gradients across occupational groups. In Nordic comparisons the socio-economic differences in the prevalence of long-standing illnesses were found to be wider in Finland than in Sweden, Norway and Denmark. According to a recent study, mortality differences among Finnish middle-aged men by occupational class were the second widest in Western Europe in the late 1980s. Policy has therefore promoted the level of health but has maintained or even increased the disparities in health.

Reducing the socio-economic differences in health has been one of the main goals of Finnish health policy in the 1980s and 1990s. Equity in health is also emphasised in the

2001 public health programme. Despite these programmes the goal has not been attained. One explanation could be that there is not enough knowledge on how to diminish differences in health. In Finland there is enough research data on the current size and recent trends in inequalities in health, including evaluations of their causes. What is lacking is information on why these inequalities persist and how to diminish them.

The aim of this paper is to present Finnish national health policy from the equity perspective. The paper also aims to explore the Finnish health policy paradox: why has Finland not succeeded in diminishing health differences between socio-economic groups in spite of its long tradition of social equality?

2. Social equity in health policy in Finland

There are many features in the history of Finnish health and social policy that can be considered to have supported equity targets before the contemporary welfare state started to develop. For instance, legislation adopted in the 1940s on municipal maternity and child care and other preventive measures required that these services should be free of charge for users. In the 1960s, health policy equity objectives materialised mainly in the development of the welfare system; the foundation of National Sickness Insurance in 1964 and the Primary Health Care Reform in 1972 were mainly motivated by the will to promote equity in health care.

In the health policy field, two essential principles have been set forth; that is, the level target and the distribution target. The aim is to achieve the best possible level of health for the population and the reduction and elimination of differences in health between population groups. Instead of being disease oriented or focusing on the service system, the expression ‘Health for All’ emphasises the best possible level of health and functional capacities (the level target). On the other hand the expression emphasises the goal of social equity and the reduction of inequality: the most even distribution of health possible (the distribution target).

In the formulation of national health policy and health policy programmes in 1986, 1993 and 2001, equity has been one of the main goals. In the 1986 programme an ‘equity challenge’ emerged in two policy statements which concerned the use of health services and health education. The statement concerning health services reads as follows: ‘The aim of health policy is to add years to life, health to life and life to years. To achieve this, health promotion and health impact will have to be given more emphasis in public policies in general. It also means the promotion of healthy lifestyles, the reduction or elimination of preventable health risks and the further development of health services. Priority must be given to the needs of the most disadvantaged, appropriate use of health services by individuals and groups, and to ensuring social equity so that economic factors do not prevent the appropriate use of health services. The statement on health education and promotion of ‘healthy lifestyles’ was written as follows: ‘Recommendations for the promotion of healthy lifestyles will be made at regular intervals by a broadly-based advisory board. Particular attention will be paid to analysing the special measures required to reduce health problems arising from lifestyles, health education will be improved both in hospitals and in health centres and the basic and continuing education of various professional groups improved. Collaboration with the school system and voluntary organisations will be increased and healthy lifestyles in homes encouraged in every possible way'.

One obvious reason for the health care focus was that policy makers wanted to assure that the principle of equitable access to health services, which was a central objective in the earlier established health policy, would also keep this objective on the agenda in the future. The lifestyle argument has been heavily criticised because a lifestyle focus does not consider the societal conditions under which lifestyle differences occur. It has also been assessed that health education has a more positive effect on better-off well-educated people than on disadvantaged groups. Overall, the 1986 health programme could be characterised as an unaccomplished policy. This is partly because those who drafted the programme did not have any adequate prior examples for policies contributing to equity in health in an industrialised country.

The health policy programme was revised in 1993. The revision of the goals and strategy was restricted to areas where a special need was recognised. One of these needs was the goal of reducing differences in health between population groups. The revised programme proposed 12 health policy measures, of which six were action-oriented by nature. Two measures were targeted at health care. These measures were based on the principle that primary health care units should take part in policy making on issues such as improving the worst living conditions and that health education should be developed in such a way that it will especially have an effect on those population groups where the problems caused by unhealthy lifestyles are the biggest. The other measures were more intersectoral by nature. They contained a wide range of tasks, such as: addressing the quality of residential areas (noise, air pollution, and opportunities for physical exercise) with respect to health, especially regarding children, the elderly and disabled people, and creating programmes to develop the worst-off regions; improving the quality of high risk working environments; addressing occupational health care; and improving the living conditions of the elderly and their opportunities for independence. These equity measures presented in the 1993 programme did not stem from a coherent analysis of how to tackle inequality in health. They were isolated initiatives rather than a comprehensive policy.

The problem of realising equity objectives in these 1986 and 1993 programmes relates not only to the content and formulation of the policy but also to the implementation of the chosen policy measures. The implementation of the Finnish health policy programmes was not understood to be an essential part of the policy process. It was assumed that the health care administration at the governmental and municipal levels would put policy into practice in a fairly straightforward manner, and thus no special implementation plan was needed. In the 1993 programme, many measures were intersectoral by nature. The responsibility for implementation was also divided among different sectors and actors. However, it seems that the different actors were not clearly aware that they were expected to implement the equity goals presented in the programme. It ought to have been ensured that the different actors were willing and interested in putting the policy measures into practice and, moreover, that these actors understood what equity in health means in terms of practical measures.

The new Government resolution on the public health programme, ‘Health 2015’, also emphasises the reduction of socio-economic differences in health. It states that ‘..the aim will be to reduce inequality and increase the welfare and relative status of population groups in the weakest position. The objective will then be to reduce mortality differences between genders, groups with different educational backgrounds, and different vocational groupings by a fifth’. The means or measures for achieving and implementing this goal are not at all clear in this programme. However, a working group has been set up by the Ministry of Social Affairs and Health to specify measures for the implementation of Health 2015.

The challenge in Finnish equity policy is to move beyond documenting and measuring inequalities in health (important though they are) to the development of strategy and implementation at the policy level. There are not many convincing policies at the European level that successfully address these differences. These Finnish experiences indicate that there is a need for care in both formulating equity policy and planning implementation.

References

Ministry of Social Affairs and Health (2001) Government resolution on the health 2015 public health programme. Publication 2001:6. Helsinki, MSAH.

Sihto M, Keskimäki I (2000) Does a policy matter? Assessing the Finnish health policy in relation to its equity goals. Critical Public Health 10.

POLICIES FOR HEALTH EQUITY: AN ETHICAL AND EPIDEMIOLOGICAL FRAMEWORK AND TARGETS FOR A NEW NATIONAL HEALTH POLICY IN SWEDEN

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1. Health goals: wellbeing or capability?

Amartya Sen (1999) has in his book, *Development as Freedom*, argued that an overriding goal of the development of societies is to enhance the substantive individual freedoms - or 'capabilities' - of persons to live the lives they value and have reason to value. This is distinct from setting income or mental satisfaction as overriding evaluative outcomes. As Sen points out, there is certainly a strong relationship between income on the one side and basic capabilities on the other, but it is a contingent relationship and social (and other) policies have a deep impact on how wealth is translated into capabilities. Two of the main reflections of deprivation of the substantive freedoms to do things that a person has reason to value is premature mortality and the functional components of persistent morbidity in terms of functioning and disability (using the terminology of the International Classification of Functioning and Disability (WHO, 2001). Therefore, a health policy that reduces the impact of health on freedom and capability can be seen as a major instrument in enhancing the development of society.

2. Which inequalities are unfair?

John Rawls' principle of justice tells us that inequalities in society are justifiable as long as society's main economic, social and political institutions do not require sacrifices from the worse-off groups purely to the benefit of the better off (Rawls 1971). It therefore identifies as unjust those social inequalities in health or other spaces that originate in the basic structure of society and are the result of a division of labor that are to benefit the better-off at the (health) expense of the worse-off groups. Research on the underlying causal mechanisms of social inequalities in health should therefore tell us about the achievements of different institutional arrangements and health inequalities can therefore, as the World Health Assembly stated in 1986, be a very sensitive indicator of the fairness of the underlying social order. Our evaluation of the social order of a society will thus depend on the social distribution of health in that society and vice versa: our evaluation of health equity (as distinct from health variation) depends on how we evaluate the fairness of the causally related social arrangements (Peters, 2001).

3. Equality of what?

Amartya Sen has pointed out that every plausibly defendable ethical theory of social arrangements tends to demand equality in some respect: liberties, rights, opportunities or wealth (Sen, 1992). It is important in what space equality is demanded since human diversity means that equality in one space will result in inequality in another. If for example only liberties are equal, wealth will certainly not be. And experience from Scandinavia has taught us that relative equality in wealth does not necessarily translate into equality in health. That goes for different aspects in the health space too. Equality in the exposure to causes of disease will not guarantee equality in risk and equality in risk will not guarantee equality in the consequences of disease. The epidemiological theory of sufficient and component causes distinguishes when two causes are part of the same or different pathways and makes it possible to estimate the joint (interacting) effects of multiple exposures. How strongly one determinant translates into disease in a population is not a property of that cause, but depends on the prevalence of other causes in the same pathway. In the same way as the conversion of certain health determinants into disease depends on the presence of other causes, the conversion of disease into capabilities will depend on other factors such as social context and position of the individual. Mechanisms generating social inequalities in health are therefore not only about differential exposure but also about differential vulnerability and differential consequences.

These are the ethical starting points for the proposal of a new health policy formulated by the National Public Health Commission (NPHC) set down by the Swedish Government in 1997, which delivered its final proposal in 2000 (SOU, 2000:91).

4. Targets on determinants

The ethical starting points thus make it clear that health policy is about influencing both occurrence, distribution and consequences of ill health. The NPHC decided at an early stage to set targets in terms of the determinants of health. The arguments for that were primarily that it would facilitate the co-operation between different sectors of society who clearly feel more co-responsibility in relation to determinants compared to targets set in terms of different diseases. The targets were set with specification of certain target groups among which the exposure to these determinants are particularly important to reduce. The determinants have been chosen among both upstream and downstream exposures that are well documented as contributing causes to major disease and injury groups. The priority between them has been influenced by present knowledge on how much of the present burden of disease that can attributed to them (Diderichsen *et al.*, 1998), as well as our knowledge about their role in generating social inequalities in health, and their potential impact on consequences of diseases and injuries. An epidemiological framework developed by Diderichsen and colleagues has been used for this and is depicted in Figure 1 (Diderichsen *et al.*, 2000; Whitehead *et al.*, 2000).

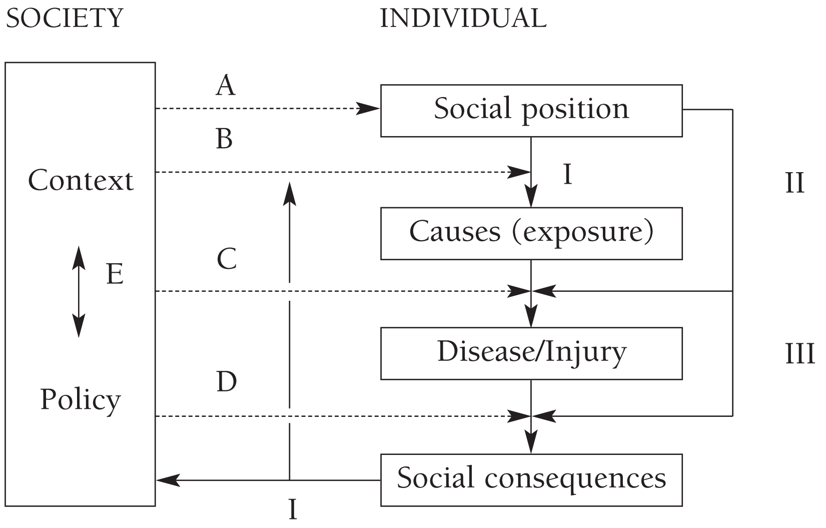

Figure 1: A conceptual model for studying the health impact of social position and social context and entrypoints for policies to tackle inequalities in health.

5. Targets on social stratification

The framework distinguishes four mechanisms on the individual generating social inequalities in health (I-IV) and five entry points for policies to tackle inequalities in health (A-E).

A basic mechanism in society generating social inequalities is the social stratification (A). It actually consists of two mechanisms - one that generates and distributes wealth and power to different social positions in society and one that stratifies individuals into the social positions. Education is of course a major determinant of the position an individual can achieve, but even age, gender, race - as well as health - are important determinants of the social stratification. The actual health patterns across social positions are a result of the interactions between the characteristics of the positions and of the individuals occupying them.

The Swedish health plan has set up two targets on determinants of social stratification based on an analysis indicating that equal opportunities to get an optimal school education are crucial, as are possibilities for individuals in later life to re-educate themselves for new jobs and individual development.

Target 1.3: Allocating resources to local schools to compensate the effects of segregation, and creating equal opportunities for children.

Target 4.1: Ensuring possibilities for life long learning, adult education and vocational training.

6. Targets on differential exposure

Social inequalities in health are about the relationship between social position and health. What we normally call 'causes' of health inequalities are those specific contributing causes that mediate the effect of social position on health (I). Modifying the effect of social position on the occurrence of the specific causes (B) has been the goal of many policies for health equity throughout history. Protecting certain occupations against the risks at the workplace, protecting children for the effects of poverty and unhealthy housing have been typical goals of policy initiatives over many years. In the context of today's Sweden several other causes, both behavioural and psychosocial, are of relevance in terms of how much they contribute to the burden and the distribution of diseases. Two examples of causes of particularly high priority are: (1) The economic changes in Sweden during the 1990s that have primarily affected the economic situation for young families, and in particular those of single mothers. (2) Tobacco smoking, which has been shown to play a major role on the social gradient of the burden of disease due to cardiovascular diseases, cancer and lung diseases.

Target 1.1: Reduced poverty for families with children.

Target 1.2: Reduced tobacco smoking among low income groups.

7. Targets on differential susceptibility

As mentioned above, the size of the effect of a specific cause on disease occurrence is not a biological property of that cause but depends on the occurrence of other causes in the pathway in that population. It is therefore not surprising that the effect of the specific causes often depends on social position (II). Individuals have different susceptibility throughout their life course - certain exposures, for example, have much stronger effect during foetal stages or in childhood than later in life, and individuals have different susceptibility due to genetic factors. The differential susceptibility across social positions is, however, mostly a question of clustering to lower socio-economic groups of causes in the same pathway.

Infants early emotional attachment to the mother or other adults is crucial for mental susceptibility later in life. Family policies related to parental leave, nurseries etc. have a strong impact on this (C). Another contributing cause of several health problems and which is strongly related to social position is control over work - decision latitude. As (mental) demands at work increase the protective role of control is increasingly important (Hallqvist *et al.*, 1998).

Target 5.2: Increase the control over work in the face of growing demands.

Target 3.1: Family policies that enhance close emotional attachment between infants and parents.

8. Targets on differential social consequences of illness

If, in accordance with Sen's argument mentioned above, we are concerned with how ill health actually hinders individuals to live the life they have reason to value we should be interested in the consequences of ill health in terms of premature mortality and disability, and particularly what consequences disability has for the individual in a specific social position (III). The growing demands on the labour force in modern industry and service jobs is of basic importance, but labour markets and social policies can strongly modify (D) how chronically ill people fare in the labour market and can even modify the social gradient of these consequences (Burström *et al.*, 2000)

Target 5.1: Adapting mental and physical demands at work to individual capacity.

Target 4.3: No discrimination against the disabled in the labour market.

9. Targets for a health promoting social context

The importance of the social context has been brought into focus by the studies indicating a relationship between income inequalities on the contextual level and individual mortality. Even if the Swedish Public Health Commission evaluated the empirical data for Europe as too weak to set up targets in terms income distribution, there was a strong consensus that a strong integration in society is health promoting (E). One of the institutional arrangements enhancing such an integration of society might be the universal welfare policies - typical for Scandinavia - where everybody contributes and everybody benefits. There was no consensus in the Commission on the role of universal welfare policies.

Target 1: Reduced poverty through universal social policies.

Target 1.2: Reducing socio-economic and ethnic segregation in housing and labour markets.

10. Is it going to work?

Setting targets in terms of determinants has some advantages as mentioned above, but it creates a need for a strong co-ordinating function that on both the national and local levels creates links between different sectors with responsibilities for different determinants. It also creates a need for a much better monitoring system of all the relevant exposures. Sweden has a tradition of many sectors being active in health policy (including schools, work-places, unions etc.), but also a tradition of strong local independence from nationally decided policies. The targets for a multi-sectoral policy for health equity are now in place, but the mechanisms to handle it efficiently are not yet there.

References

Burström B, Whitehead M, Lindholm C, Diderichsen F (2000) Inequalities in the social consequence of illness: how well do people with long-term illness fare in the British and Swedish labour markets? International Journal of Health Services Research 30: 435-451.

Diderichsen F, Vågerö, Dahlgren G (1998) The determinants of burden of disease in the European Community. Stockholm, National Institute of Public Health.

Diderichsen F, Evans T, Whitehead M (2001) The social basis of disparities in health. In Evans T, Whitehead M, Diderichsen F, Bhuia A (Eds) Challenging inequities in health: from ethics to action. New York, Oxford University Press.

Hallqvist J, Diderichsen F, Theorell T, Reuterwall C, Ahlbom A (1998) Is the effect of job strain due to interaction between high psychological demand and low decision latitude? Social Science and Medicine 46: 1405-1415.

Peters F, Evans T (2001) Ethical dimensions of health equity. In Evans T, Whitehead M, Diderichsen F, Bhuia A (Eds) Challenging inequities in health: from ethics to action. New York, Oxford University Press.

Rawls J (1971) A theory of justice. Cambridge MA, Harvard University Press.

Sen A (1992) Inequality reconsidered. Cambridge MA, Harvard University Press.

Sen A (1999) Development as freedom. New York, Oxford University Press.

SOU (2000) Health in equal terms: national goals for public health. Stockholm, Swedish National Committee for Public Health.

Whitehead M, Diderichsen F, Burström B (2000) Researching the impact of public policy on inequalities in health. In Graham H (Ed) Understanding inequalities in health. Buckingham, Open Universtiy Press.

WHO (2001) International classification of functioning and disability (ICF). Geneva, WHO.

Ethics, economics and health inequalities: a comment on the contributions by Marita Sihto and Finn Diderichsen

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On reading the contributions offered by Marita Sihto and Finn Diderichsen it is apparent that disparities in health status are a significant concern at the level of health policy in both Finland and Sweden. In Sweden, there has clearly been some consideration as to *why* these disparities *ought* to be a concern. Diderichsen briefly describes that Sen's notion of capabilities and Rawls' theory of justice served as ethical starting points for the recent proposal for a new Swedish health policy. This reference to an ethical framework in formulating health policy is somewhat conspicuous, because coherent justifications for why health disparities ought to be addressed are often absent in the health inequalities policy debate.

For example, if I can be forgiven for drawing on my own personal experiences in the context of the UK health inequalities community, it has been my observation that many people perceive all health *inequalities* as *inequitable*. However, if analysed in depth, we may conclude that addressing health inequalities has to be traded off against (or is even superseded by) addressing inequalities in other spaces. As Diderichsen also notes, the pursuit of equality in opportunity, liberty or choice may also be worthy objectives, but all can conflict with equality in health outcomes. For example, opportunities and choice are likely to be repressed to a level beyond which most people would be willing to bear in any society that pursues equality of health outcome as the ultimate policy objective. The process by which perfect equality in health could perhaps be achieved may therefore generally be perceived as inequitable, and thus a certain amount of health inequality may well be synonymous with the pursuit of equity objectives. A coherent ethical framework (which will possibly be country-specific) is required in order to inform us as to when a health inequality *becomes* an inequity.

The second point I would like to note concerns health inequalities targets. Sihto states that the objective of the Health 2015 programme in Finland is to reduce the mortality differences between groups defined by gender, education, and vocation by one-fifth. Given that there is no clearly presented ethical justification for why the prevailing health inequalities are inequitable, and that, as Sihto informs us, the interventions for achieving the targeted reductions in health disparities are absent from the programme (perhaps because there is no evidence that any interventions can achieve this target), this is a ludicrous policy objective. The Finnish Government ought to be aware that should they spend too much effort in attempting to achieve a target that has seemingly been plucked from the air, they will run the risk of incurring potentially significant opportunity costs by paying too little attention to other socially beneficial policies.

Target mania has also afflicted Sweden. However, the targets outlined by Diderichsen (e.g. Reduced poverty for families with children; Reduced poverty through universal social policies) are too sweeping to be of much practical use. Lists of aspirations without a clear indication of how these aspirations are to be achieved, or the costs and opportunity costs of achieving them, do not seem to be a very sound basis on which to base policy. Diderichsen states that the ‘targets for a multi-sectoral policy for health equity are now in place, but the mechanisms to handle it efficiently are not yet there’. Surely, even for the proponents of target setting, it would be more appropriate to set targets *after* the effectiveness of relevant interventions has been ascertained.

As a final comment I would like to emphasise the importance of assessing health inequalities policy interventions for their relative value for money. Interventions that will have a significant effect on narrowing the distribution of health in all societies may well involve substantial resources and opportunity costs, and an extensive time frame. Ultimately, even assuming that we have a strong ethical justification for reducing the prevailing health disparities across a particular social, economic or demographic group, the costs of some interventions may be so huge that their introduction, even if they *effectively* address *inequitable* health inequalities, would not represent a worthwhile use of scarce societal resources.

Sihto concluded her paper by writing that the ‘challenge in Finnish equity policy is to move beyond documenting and measuring inequalities in health…to the development of strategy and implementation at the policy level’. I have argued that in most countries where health inequalities are an issue, there is a more pressing need to develop coherent ethical frameworks that demonstrate why prevailing health disparities are inequitable. Also, assuming that we ever reach the stage were we have identified interventions that effectively address inequities, these interventions ought to be assessed for their value for money. In my view of the world, ethicists and economists therefore have a central role to play in the health inequalities research and policy debate.

PERSONAL REFLECTIONS

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As can be seen from the wide variety of papers presented in this proceedings, the HEN meeting held on November 12th 2001 provided a useful introduction to a number of differing perspectives on equity, including those of health economics and public health in particular. But it quickly emerged that views within such disciplines are far from homogeneous and a multidisciplinary forum is often a very efficient way of bringing these intra-discipline issues out into the open. However, almost by definition, such a forum does not provide the ideal setting for resolving them and attempts to do so can clearly alienate sections of the audience.

The day confirmed to many of us that the one unquestioned indirect benefit arising from the existence and activities of NICE has been the way it has opened up for discussion things that were almost undiscussible two or three years ago, except between consenting health economists. The question remains as to whether it has, optimistically, opened Pandora's box (which contained hope as well as all the problems) or, pessimistically, simply a (hopeless) can of worms.

There was a clear division in the meeting. The 'optimists' want to push on to an ever more analytically transparent process of allocating health care resources and evaluating of health care technologies, inevitably involving increased emphasis on formal modelling and quantification as a way of tackling 'inequities' (plural) among other things. The 'pessimists' want to return/retreat into 'normal political processes' which are, in their shibboleths, 'non-reductionist' and 'non-technocratic', 'engaging' and 'participatory'. It is very hard to find exactly what the latter mean by 'normal political processes' and how 'transparency' in budget allocation and technology evaluation can be assured. As a clear advocate of the former approach the irritating thing about the pessimists, which always add spice to meetings like these, is finding that they assume that we cannot be as interested in people and their health, or committed to reducing inequities, as they are. A completely non-evidence based position.

Within those of us who wish to push on to greater analytical transparency (while rejecting the technocratic and reductionist accusations) there is a further split. Many (like Sassi) see the task as the traditional one of handing over high quality information - e.g. on cost-effectiveness by sub-group - to decision makers. The rest of us (us?, all right me then) believe that the conventional decision making technology (TIABIM = ‘taking into account and bearing in mind’) used in NICE and other public decision making bodies is not up to the task and that policy makers need massive aiding in tackling it - not by being provided with better information/evidence, but by being helped to better process whatever evidence is available into a decision.

There seemed to be fairly general agreement that non health sectors are a much more important source of health (however defined) than health care services, but that raises the question of the extent to which the public wishes the health care budget to be spent on in a way which does not maximise health gain in any conventional sense. If this is the case the massive resources put into trying to ensure that health-gaining technologies are improved may be misplaced.

Finally, for me the two visiting papers from Scandinavia confirmed that the ‘BoP-SoT’ syndrome is alive and well there, as well as the UK - and that it is now afflicting equity as well as efficiency. In this condition, a vast amount of effort is put into establishing the Burden of a Problem (Disease/Deprivation/Disadvantage) by estimating the amount of it (by number of attributable cases by cause or risk factor, Gini coefficients etc.). This is followed by the Setting of Targets, phrased in terms of this estimated burden and without reference to the availability of techniques or resources to achieve these burden-reducing targets.

As Alan Williams has said, the problem with the BoP approach is that ‘knowing the height of a mountain does not tell us anything about the best route to take when climbing it and there is no reason to suppose that we shall gain altitude more quickly by tackling a big mountain rather than a smaller one. What we need to know are the gradients that face us where we happen to be standing, and whether we have the strength and skill to tackle them.’ Analogously, the problem with the SoT approach is that setting a target of getting to within x% of the summit (or of reducing the gap between where we are and the summit by y%) is misguided unless this is the best we can achieve with our skills/resources. If we do work out what is the best we can achieve with our resources then there is no need to set this as a ‘target’. We merely have to implement the policy that does it; i.e. maximises our (quality-adjusted) altitude gain per unit of resource.

Targets are rarely set analytically by undertaking a comprehensive prospective evaluation of alternative policies, identifying the most cost-effective and thereby deriving the (actually un-needed) target. They are usually set intuitively/politically in a way which, from the outside, seems often to consist of thinking of a ‘reasonable’ number (half way between one that would appear absurd and one that would be unimpressive) and then choosing a comparator (country, region, parameter) which matches and ‘legitimises’ this number. Of course BoP and SoT share a great advantage in that they do not require any knowledge of the effectiveness of anything we might do. They can therefore produce the appearance of great advances in knowledge and great activity in policy making/implementation without any engagement with the task of establishing what we need to know to achieve change, i.e. what marginal effect any of the things we might do will have, and at what marginal costs.