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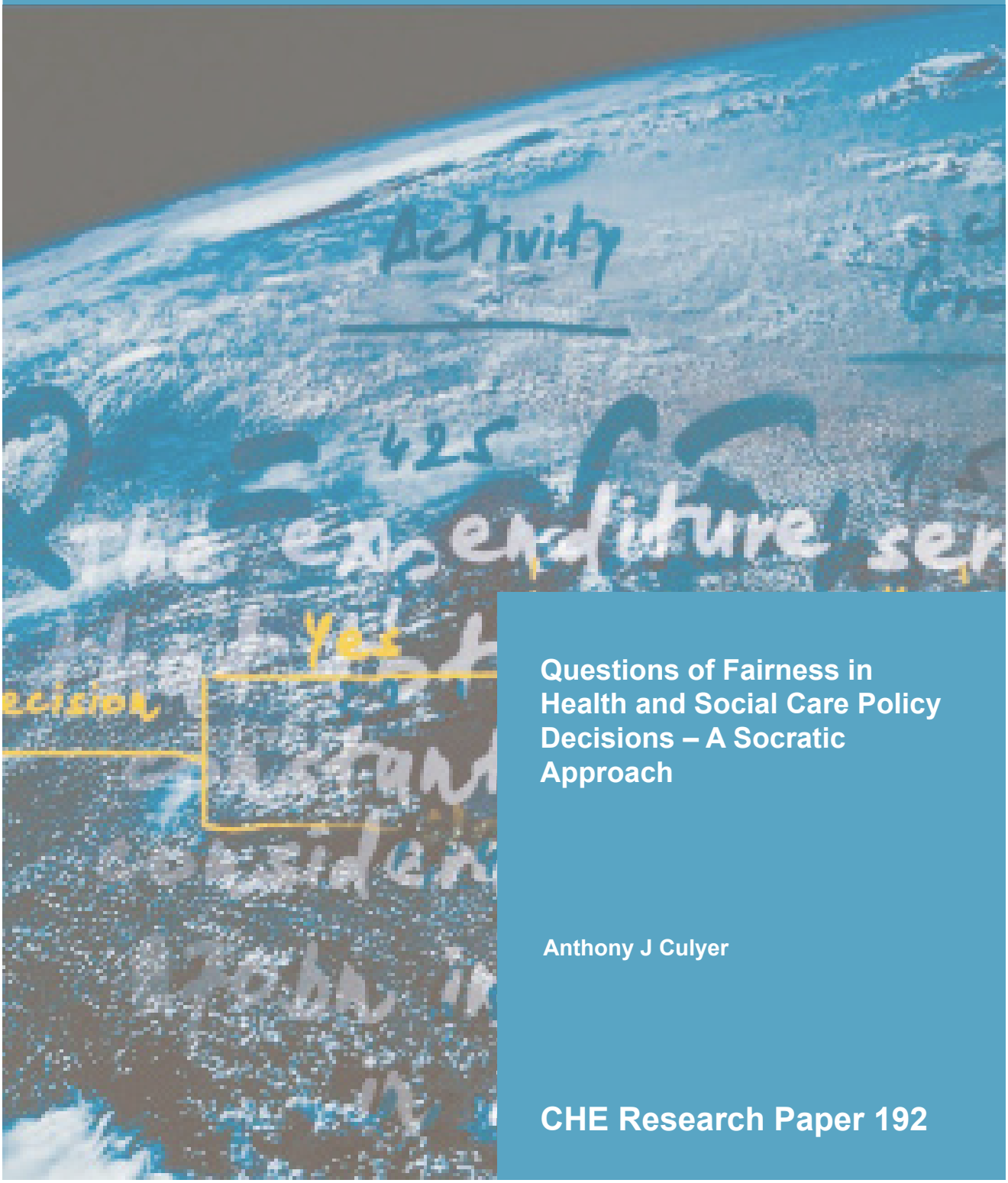

Questions of Fairness in Health and Social Care Policy Decisions – A Socratic Approach

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Centre for Health Economics, University of York

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Centre for Health Economics
Alcuin College
University of York
York
YO10 5DD
UK www.york.ac.uk/che

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Rival visions

There is little agreement amongst those who think about fairness or equity[1] in health and social care. For example, some consider that access to health should be essentially similar, in ethical respects, to access to the other good things of life, like food, shelter and the pursuit of leisure activities, which are part of society's reward system. Through legitimate work or legitimate inheritance, you acquire legitimate income and legitimate wealth which entitle you to purchase a legitimate share of the available marketed good things in society, including health care. So, providing that the starting point was fair, the result, whatever it may be, is also fair (see, e.g., Nozick 1974). Others regard access to health care as a right of citizenship, like access to the ballot box or courts of justice, which should not depend in any way on individual income and wealth, though it will necessarily have to depend on the income and wealth of society in general. Resources are limited and health is not the only good thing, so health care is only ever going to receive a finite share of the total. On this view (e.g., Tobin 1970), health care is a 'primary' good, like rights, liberties, opportunities, income, and wealth.[2]

The Socratic Method

The Socratic method is a way of teaching attributed by Plato to Socrates (c. 470–399 BC). Socrates himself left no written testimony, but Plato was one of his students and so presumably experienced at first hand his teacher's method. It works through teachers asking searching questions of their students, to clarify students' thinking and expose the reasons for thinking as they do. Through further questions and answers, critical skills are enhanced, mutual understanding strengthened, old beliefs possibly cast aside, and deeper agreements or differences made clear. One of my teachers, the American economist Armen Alchian (1914-2013), was a brilliant exponent of the method. Another, the English economist Jack Wiseman (1919-1991), coined the insightful aphorism, "What is the question? That is the answer!"

[1] I shall take these as synonyms.

[2] Rawls (1971) famously did not class health care as a primary good, though health was.

For academic analysts like me, an economist, it is fortunately not necessary to take sides to offer helpful advice to those who make and implement health and social care policies, at whatever level in the NHS[3] (I shall call them decision makers). I propose instead the use of a systematic checklist termed, somewhat grandiosely, Socratic, because it is cast throughout as a series of questions. The questions are designed to elicit from decision makers answers that collectively enable the creation of a coherent structure for designing or reforming health care systems, through deliberation between them and the analyst (i.e., Socrates). The questions are distributed throughout the chapter and brought together in a table at the end.

I shall also outline some common characteristics of health and health care which bear on fairness. Scientists, especially economists and physicians, invariably exceed their authority on topics where they have none.[4] So do non-scientists, like ethicists. I shall assume that the task of the social scientist is pragmatic rather than a priori. I shall assume that ideas of fairness, being fundamental value judgments that determine both the design and the operation of a health care system, are themselves a product of the system. Specifically, the aims and objectives of health and social care services are authentically and authoritatively set by statutes, precedent, and other conventions of public policy, and by the stated goals of political parties, particularly those, of course, of the governing party. I thus choose to occupy the (unusually) humble position of requiring the economist, ethicist, epidemiologist, etc., to suppress their own value judgments about what is good for society and do their best to infer the "authentic and authoritative" values as revealed by some combination of the aforementioned sources.[5] The task for the health policy analyst thus becomes to examine the context (Culyer 2010) in which issues of fairness are arising and to explore aspects of the world of health and social care that inhibit implementing the "authentic and authoritative" values of policy makers. Thereby, structures and processes that are enabling might be invented and implemented. 'Fairness' attracts the attention of people in many disciplines and may arise as an issue in many empirical situations. Since this chapter is by an economist, I shall begin by clarifying the meanings of some terms that I shall use, which may have disciplinary peculiarities when viewed from other perspectives. I shall also characterise the main features of health and social care which may not be familiar to analysts working in other empirical fields.

[3] I shall refer mostly to the NHS but intend to make the scheme applicable to all systems of health care provision and finance.

[4] The only important questions for economists are: why? what if? and how? The first generates understanding, the second enables prediction and the third separates the feasible from the fanciful.

[5] Keynes (1931) wrote, "If economists could manage to get themselves thought of as humble, competent people, on a level with dentists, that would be splendid," quoted in Cookson and Claxton (2021 p.i).

Clarifying terms and distinctions

The more important terms are as follows:

***Context*.** There is a context for all decisions, defined by the culture, history and traditions of a community, and by the identity of the person doing the deciding, their level of seniority, their degree of discretion, their accountability, the nature of the technologies available, the budget, the interests of multiple stakeholders, and the length of time over which the consequences of the decision will pan out, which affect decision makers' perceptions, their values and professional abilities, and a multitude of other factors which affect outcomes, costs, expectations and achievements (Culyer 2018). Changing any one of these contextual features is likely to change the decisions that are reached, whoever is making them, and their consequences. The context may also dictate what may be considered when a decision is being made and what is not to be considered, which may include fairness, or it may impose a specific concept of fairness. The discretion allowed and the constraints imposed are thus critically important determinants of how issues of fairness and efficiency can be handled.

- ***What is the policy context in which a question of fairness has arisen or might arise?***
- ***Is there anything in the current context that limits or prescribes how fairness is to be handled?***
- ***What types of stakeholder would be useful contributors to a deliberation in the current context?***

Deliberation. By 'deliberation' I mean procedures that engage interested stakeholders in the decision-making process itself. Deliberation is therefore more than mere consultation. It is characterized by the careful, deliberate consideration and discussion of the advantages and disadvantages of various options to assist people who are making the decision. The decision might be constitutional, for example, about the decision-making structure itself, or about a specific decision within the structure, like whether to invest more in children's or old people's services. The debate is informed by evidence, possibly also by expert witnesses, and typically involves all important stakeholders. There are opportunities for participants both to form and to change their opinions (Culyer 2006, 2020, 2022; Culyer and Lomas 2006; (Lomas et al. 2005); Oortwijn et al. 2022).

- ***Are suitable arrangements in place to enable and facilitate deliberation?***
- ***Can you judge the validity and credibility of available evidence, or describe the kind of additional research to be commissioned?***

Efficacy. Efficacy is a measure of the maximum benefit of a medical or social intervention under 'ideal' conditions. It is indicated by the probability of benefit to individuals in a defined population from a technology under 'ideal' conditions of use: typically the conditions that obtain in a research-oriented teaching hospital or primary care practice; or perhaps experimental, as in a clinical trial. More generally, it is the maximum potential effect of a professional intervention in altering the natural history of ill-health for the better (https://www.princeton.edu/~ota/disk3/1978/7805/780504.PDF).

- ***Is there credible evidence that the policy instruments under discussion are efficacious?***
- ***Is the membership of the decision-making group sufficiently competent to evaluate the quality of the evidence?***

Effectiveness. This is a measure like efficacy except that it refers to the effect of a particular technology on outcomes when used in *actual* practice. It thus differs from efficacy in that efficacy concerns only the technical relationship between the procedure and its effects under 'ideal' or experimental conditions, while actual practice is practice as conducted by average professionals working with average resources. Most decisions will require comparisons to be made of the probable consequences of the available options.

- ***Is there credible evidence that the policy instruments under discussion are effective?***
- ***Is the membership of the decision-making group sufficiently competent to evaluate the quality of the evidence?***
- ***Are ineffective interventions and other proposed changed arrangements nonetheless possibly useful from a fairness perspective?***
- ***Is it fair not to provide treatments on the NHS that are cost-ineffective?***
- ***Is it possible to quantify some of the key elements of the foregoing in the current context? How best to proceed if it is not possible?***

Efficiency. The idea of efficiency as commonly understood by economists can be expressed at three different levels:

technical efficiency, where no more resources (doctors, nurses, patients' time, drugs, etc.) are used than are technically necessary to attain a given outcome (there will normally be a wide variety of different combinations of these arising out of the possibility of substitutability, for example of nurses for doctors, or one drug for another).

cost-effectiveness, where a given outcome is generated using the cheapest technically efficient combination of resources or, conversely, outcomes are maximized for a given level of expenditure (the combinations of resources here will be a subset of those deemed technically efficient)

- ***Is there credible evidence that the policy instruments under discussion are cost-effective?***
- ***Is the membership of the decision-making group sufficiently competent to evaluate the quality of the evidence?***

  pareto-efficiency, where the outcome is not only technically efficient and cost-effective but is also set at a rate such that an increase in any one resource is not costlier than the value generated. The value is usually that perceived by consumers as revealed in their willingness to pay. An adapted version is where outcome is conceived directly in terms of health. Options are thus considered in terms of their potential for improving people's health. If option A is predicted to generate health Ha, and option B to produce health Hb, then adoption A entails the forgoing of Hb and adopting B entails the forgoing of Ha. Each is the 'opportunity cost' of the other. Pareto-efficiency exists when neither option dominates the other.
- ***Is there credible evidence that the policy instruments under discussion are efficient?***
- ***Are the policy instruments under discussion likely to promote or harm the total health or welfare of the community?***
- ***Is it fair to give weight to the health gain (opportunity cost) that might have been achieved if a different decision were reached?***
- ***Is rectifying an unfairness likely to reduce efficiency in this context?***

Outcome. There is an immense variety of measures or indicators of health outcome, some of which are biological and clinical, often specific to a disease or group of diseases (like the presence of cholesterol or sugar in blood) and others related to longevity and quality of life, such as the Quality-Adjusted Life-Year. The latter are most relevant to measurement of fairness, but their construction also raises important ethical questions about, for example, how expectation of life is measured, the importance of age and nearness to death, the dimensions in which quality of life is measured (pain, mobility, etc.) and the degree to which the measures are perceived as adequate measures of 'health' (Brazier et al. 2007).

- ***Is fairness in the current context to do with outcomes and for whom? What kinds of outcome?***
- ***Does the practical measurement of outcomes, for example, as changes in longevity and quality of life, raise issues of fairness?***

- ***Are the various components of an outcome measure (relief of pain, increased mobility, reduced confusion, etc.) given fair weights?***

Equity vs equality. Equality is not synonymous with equity. The words sound alike but are not synonyms and can lead to wrong conclusions. All assertions about equality need to answer the question "equality of what?", answering which will usually unearth obvious exceptions to the idea that equality is fair, when it turns out that it is inequality that is fair. As written above, I treat equity and fairness as synonyms, so what is equitable is also fair and what inequitable, unfair.

- ***Is the question at hand to do with equality? If so, equality of what?***
- ***Are there issues of fairness in the statistical measures of inequality used to measure distributions?***
- ***Are there issues of multiple deprivation, i.e., inequalities in many dimensions of the quality of life?***

Horizontal and vertical fairness. Horizontal fairness requires the like treatment of people having the same ethically relevant characteristics. Vertical fairness requires the appropriately different treatment of people with different ethically relevant characteristics. By ethically relevant characteristics I mean features such as desert, need, or ability to pay, so that those of equal desert, or need, or ability to pay, are treated the same. Those with greater desert or need receive greater appropriate treatment; those with greater ability are charged more. Vertical fairness is fair inequality. Horizontal fairness, or fair equality, requires people with the same ability to pay (and who are the same in other relevant respects) to pay the same. The Thatcherite Community Charge (a poll tax) required an equal payment from all regardless of ability to pay. It was widely regarded as an unfair equality.[6]

- ***Is the distinction between vertical and horizontal fairness likely to be relevant in this context?***
- ***Are some combinations of tax finance, private insurance and direct payments fairer than others in the current context?***

[6] Margaret Thatcher was Conservative prime minister from 1979 to 1990. The Community Charge was a tax introduced by her government in 1989 (Scotland) and 1990 (England and Wales), replacing domestic rates in funding local authorities. It was a flat-rate, per-capita tax on every adult, at a rate set by the local authority. The charge was replaced by Council Tax in 1993, two years after its abolition was announced.

Stakeholder. In principle, a stakeholder is anyone with a substantive interest in the outcome of a decision or of the process through which it was reached; in practice, anyone so designated by a legitimate authority. In health and social care, types of stakeholder commonly include, depending on context, patients, informal (often family) caregivers, advocacy groups, clinical and other professional caregivers, pharmacists, care volunteers, health care managers, other community or hospital-based health care workers, manufacturers, researchers, politicians and their advisers, taxpayers, and the public. The categories obviously frequently overlap. Stakeholders may also have conflicting personal and institutional interests. For example, advocates on behalf of specific patient groups tend to emphasize their needs above those of other patient groups, especially if not represented amongst the participants; the interests of manufacturers and other commercial stakeholders may conflict with those of health care commissioners. Potential conflicts of interest ought always to be declared but need not debar those declaring them from participation. To be useful in consultations and deliberation, participants need appropriate training to understand the procedures in which they are participating and to respect those with whom they may disagree. Competent chairing is also helpful.

- ***Have those involved in the decision-making procedures been fairly chosen and competently trained/briefed?***

System design. By system design, I mean the context and structure for policy decisions in national systems of public health and social care services. By the phrase "context and structure" I mean the mechanisms (laws, regulations and suchlike), institutions (care delivery organisations, public and private agencies and suchlike) and opportunities available for ordinary people to make choices and express their opinions about the health and care policies that may exist at any of the various levels, national or local, of the system with which they interact. By "ordinary people" I mean to exclude anyone with privileged positions within the system. Such positions may be entirely fairly occupied; indeed, the processes through which appointments to, for example, NHS Integrated Care Boards or NHS trusts and foundation trusts, are made themselves constitute aspects of the system whose fairness or unfairness needs to be judged, but even if judged to be fair they might bias opinions and muddy the distinction between those who are served by the system and those who, in one way or another, operate it.

- ***Are there issues to do with opportunities and who has them? Opportunities for what?***
- ***Are there fairness issues with processes, for example, to access services or to participate in decision making? Are some processes more fair or unfair than others?***
- ***What role, if any, exists for ordinary people in planning or operating the system in this context?***

Technology. By this I mean any form of professional intervention intended to improve health or prevent ill-health. It includes medicines, use of diagnostic equipment, surgery, life-style advice, public health measures, physical adaptation of living conditions. Not all technology is 'high'. Some technologies, like robotics, may be applied in ways that seem inhuman. Others, like visiting the lonely, may be open to hidden abuse. Yet others, like some diagnostic scanning procedures, may scare patients. Each raises the possibility of unfairness depending, for example, on the sophistication of the patients and the empathy of the professionals. This might lead to inadequate diagnoses of needs, failure by patients to seek help, or failure to comply with treatment regimens.

- ***Is it understood by stakeholders and decision makers that 'technology' is a way of describing health care interventions of many varied kinds, not just 'high tech'?***
- ***Are there any ways in which use of the technology in question could ameliorate unfairness of any kind, or possibly worsen it?***

***Unfairness vs misfortune*.** A misfortune is not necessarily unfair. To be borne with a harelip is a misfortune but not an unfairness. To have access to surgical closure of harelip only if you are white and middle class is, however, likely to be seen as unfair. Unfairness arises from the actions or inactions of people. A misfortune arises from an act or inaction of God. Unfairness is thus a social phenomenon, commonly arising inside families, workplaces, and the state. In this chapter, the focus is on the state. Empirically, unfairness and misfortune may sometimes be hard to separate but what motivates responses to each will usually differ, with responses to unfairness motivated by the violation of an ethical principle and responses to misfortune motivated by sympathy and compassion.

- ***Does the current issue concern unfairness or misfortune? Does the distinction matter in the current context?***

What makes health and social care different?

The arrangements made for the financing and delivery of health and social care are typically responses to a set of characteristics that, collectively, raise many more questions of efficiency and fairness than are to be found in other sectors. To design, reform or operate a health care system requires some understanding by decision makers of the more important of these characteristics.

Agency

In health and social care, the classic role of a physician or other professional lies in determining the patient's (or other client's) best interest and acting in a fashion consistent with it. There is potential

for unfairness arising from the imperfections in this agency relationship between principal and agent, where the principal is the patient or client and the agent is the professional (McGuire 2000). Agency arises usually because of asymmetry of information: the professional having knowledge about diseases, their prevention and treatment, and the patient knowledge of their own personal circumstances, attitudes to risk, preferences, and the like. Other health and social care examples of agency include health and social care managers acting as agents for their principals, such as owners of firms or politically accountable ministers; regulators as agents for ministers; ministers as agents for the electorate. In health and social care, the situation is further complicated by virtue of the fact that the professional thereby has an important role in determining the demand for a service as well as its supply. This makes the standard application of 'demand and supply' analysis invalid since supply and demand are no longer stable and independent of one another.

- ***In the current context, do professionals face a possible conflict by both advising appropriate procedures for patients and providing them?***
- ***Is the advice given by professionals to decision makers impartial as well as competent?***
- ***Are there improvements in the agency relationship that would improve fairness in the current context?***

One possible consequence of imperfect agency is *supplier-induced demand*: the effect that professionals, as providers of services, may have in creating more patient demand than there would be if they acted as perfect agents for their patients, particularly if the professional were rewarded by fees, and were a provider as well as an adviser, a dispenser as well as a prescriber. Unambiguous evidence is hard to pin down in the UK, though historically quackery has been widespread and fraud continues even in the UK. The asymmetry of information relates not only to judging the amount and type of care but also the competence of the agent. Inevitably, better educated and better-informed citizens are more able to detect and avoid false professional claims and incompetent service, which implies again that the principal victims of weak agency are again the less well-off members of society. Policy measures that seek to minimise poor agency include rigorous university training of clinicians, setting standards of care by the royal societies of medicine and agencies like NICE, monitoring and routine inspection of performance by the Quality Care Commission. Absence of fee paying at the point of service also removes a potent source of unfair practices, such as extra-billing, whereby providers collect from patients the difference between the claim allowed by an insurer and the fee preferred by the provider (McKnight 2007).

- ***Does fairness in the current context require formal guidance for professionals or adjustments in contracts of employment?***

The gradient

The evidence in the UK and elsewhere is that mortality and morbidity systematically rise as socio-economic status falls (Marmot et al. 1991; Evans et al. 1994; Case et al. 2002; Deaton 2002, 2003; Marmot 2008, 2010, 2015). This implies that not only do the rich live longer and better than the poor, as on average they do, but that at every level those in the income bracket immediately above live longer and better than those in the bracket below. The differences in both length and quality of life in the UK today are staggering.[7] This phenomenon arises partly or even wholly from in-built unfair determinants of a much wider kind – poverty, quality of early parenting, discrimination, poor education, bad housing and a host of others, many of which are beyond the ability of disadvantaged individuals to change for the better, though evidently some are able to overcome what blights the lives of others, and many of which are not directly the business of health care services as usually considered. Tackling the gradient is, on the face of it, the single most important strategy for health in the UK, though not mostly for the NHS. In health and health care specifically, the major consequence of the gradient is its implication for health insurance (public or private) and for the fair evaluation of the services to be made available in a system like the NHS.

- ***How widely across the many determinants of health is the issue likely to range?***
- ***Will the policy flatten the gradient in health?***

The gradient implies that the need for health care is inversely related to income and wealth. Thus, actuarially-calculated insurance premiums will reflect a person's (or that type of person's) historical usage and will be inversely related to ability to pay – the poorer will face higher premiums than the richer. This is likely to be regarded as unfair on several grounds, conventional and philosophical, and can be remedied through regulation, for example by requiring insurance companies to use community risk rating rather than individual experience rating, whereby premiums are set according to employer, industry or regional characteristics. If the resultant premium levels are still regarded as unfair, a subsidy system could be introduced. An ultimate policy solution is to remove health care financing altogether from a premium basis to a tax basis, so that with a broadly proportional tax structure (by which each pays the same fraction of income) or one that is progressive (by which each pays an increasing fraction as income rises) 'premiums' are absorbed into a presumptively fairer tax structure. The state then becomes the effective insurer and will take on the responsibility for funding service providers, which may be through transfers to and contracts with private sector care providers, through public ownership or, as in the UK, a combination of the two.

[7] In 2017–19, people living in the least deprived areas could expect to live almost two decades longer in good health than those in the most deprived areas. People in the most deprived areas spend around a third of their lives in poor health, twice the proportion spent by those in the least deprived areas. This means that people in more deprived areas spend, on average, a far greater part of their already far shorter lives in poor health (Williams et al. 2022).

- ***What insurance and financial issues, if any, are likely to be of concern?***
- ***Are there other issues of fairness regarding system funding?***
- ***Is the fairest policy likely to require collaboration between different sectors and ministries?***

Externality

Common to concerns about both fairness and efficiency is the impact of what economists call externalities (Buchanan and Stubblebine 1962). These relate to the consequences of an action by one individual or group as they have an impact on others. They include the impact of the policies of non-health government ministries on health and health care, and vice versa, as when ineffective monitoring of bad housing by one department increases ill-health or when children's health checks are performed in schools during school hours. There may be external costs and external benefits. Some are pecuniary, affecting only the value of other resources (as when a new drug makes a previously one obsolete and damages its manufacturer) ; some are technological, physically affecting other people (communicable disease is a classic example of this type of – negative – externality; antimicrobial resistance is another; herd immunity from vaccination is a positive example); some are utility effects that impinge on the subjective values of others (as when, for example, one person feels sympathy and distress at the sickness of another, or relief at their recovery). This latter is sometimes known as a caring externality (Culyer 1971a, 1971b). When there are non-pecuniary effects of these kinds, standard economics predicts the possibility that the usual (utility maximizing) behaviour assumed for individuals will not result in a Pareto optimum. This inefficiency can be addressed by policy interventions, such as subsidies to pharmaceutical firms to encourage innovation, and to the public to reduce prices and encourage use of (cost-effective) health and social care services. The caring externality, whereby the utility of a person depends in part on the perceived positive utility of others, can be seen as a utilitarian description of empathy. It can also be captured by some notions of fairness, particularly if the positive externality is generated by greater ease of access to health care for all. 'Caringness' is probably best evidenced through qualitative research into public opinion (Jacobsson et al. 2005).

- ***Are there any externalities that raise matters of fairness?***
- ***Which stakeholders might be especially important in finding a solution?***
- ***Are some ways of 'internalising' externalities fairer than others in the current context?***

Health insurance

The basic economics of insurance concerns risk and uncertainty. The incidence of disease and accidents is uncertain and can, without intervention, have catastrophic personal costs in addition to

any direct harms from the illness episode. This effect on personal finances is quite likely to be deemed unfair, especially if it is seen to arise from other predisposing unfairness (poverty, illiteracy, environmental squalor, etc.) and was a fundamental political driver for the establishment of the NHS (Webster, 1998).

- ***Are there issues to do with costs and who bears them?***

Insurance is a market response to this uncertainty about costs. It consists of a contract between the client and the insurer so that, when a specified adverse health event occurs, the insurer will pay certain sums of money either to the insured person or directly to the health service provider. Private health insurance policies are sold either indirectly to consumers in the form of employer-sponsored health insurance (common in the USA) or are directly purchased by consumers. By pooling risks the insurer can select premiums that, after allowances for other expenses, make it worthwhile for the purchaser as well as profitable for the insurance provider. For the insured person, the advantage of insurance is that the probability of a large financial loss through lost earnings or expenses of medical care is exchanged for the certainty of smaller loss (the payment of a premium). The kinds of benefit provided by insurance policies, public or private, for-profit or non-profit, are hugely variable and a major topic for health technology assessment (Glassman et al. 2017).

- ***Are there issues to do with risks and who bears them?***

All insurance involves a reduction or elimination of charges to the insured individual at the point of use of health care. Libertarian critics of the NHS have for many years regarded the absence of prices at the point of use as a self-evident[8] source of inefficiency (Lees 1960, 1962, 1964; Jewkes and Jewkes 1962; Buchanan 1964; Goodman 1980). In both private and public systems, as well as mixed systems, low or zero prices may generate moral hazard. There are two main types. Ex ante moral hazard refers to increases in the probability that the event insured against will occur, for example by insured people taking less care to avoid behaviour hazardous for health. Ex post moral hazard derives from the fact that being insured reduces the price of care to the patient, and hence leads to an increase in demand by insured persons when an event against which one is insured occurs. While financial incentives or disincentives, like co-payments, can play a role in reducing moral hazard, they tend to offset some of the advantages of being insured in the first place, which limits their effectiveness. Alternatively, direct rationing and quality control measures can be employed, for example by insurance contracts that specify a limited set of procedures for which compensation will be paid, with approved providers contracted to adhere to specific standards of care. There is plainly much scope for unfairness of many kinds to arise in market systems as different providers offer a

[8] An example of what the famous Canadian health economist and wit, RG Evans, would call "the deception that rules the proof" (n.d.).

variety of insurance packages. While these have the advantage of offering choice, the inequalities in cover and access which arise are highly likely to be seen as unfair. In the UK, moral hazard is controlled partly through charges (usually with exceptions[9]), partly through managing the types of intervention covered by the NHS, and partly through clinical and other good-practice guidelines for health and social care professionals. The latter two processes form the principal tasks of NICE, the National Institute for Health and Social Care, in England.

- ***Are there fairness issues arising from moral hazard?***
- ***Are there issues of 'rationing' and the possible consequences of different schemes for allocating health care to regions or individuals?***
- ***Are pricing solutions always unfair?***

A potent source of possible unfairness occurs in health care systems in which there are many insurers or a variety of insurance policies offering differing benefits and various premiums. Unless premiums are regulated, the gradient makes it almost certain that the poorest people in the community will be under-insured or face premiums that are higher than wealthier people will pay. Even in middle- to high-income countries a tiered system often exists. For example, in South Africa, there is a private scheme attractive to the relatively well-to-do, a public scheme that is oversubscribed, alongside traditional medicine mainly practised in rural areas. In other countries, like the UK, private insurance schemes operate alongside public schemes such as the NHS, enabling wealthier patients to access care faster (Zwarenstein 1994). In some countries (Canada is one), a public insurance scheme covering workplace-related causes of illness operates alongside a mainstream public scheme, which again affords faster access to care, earlier return to work, but only for conditions attributable to the working environment (Hurley et al. 2008). Parallel systems frequently facilitate 'gaming' strategies through which patients use the main public system for the most expensive procedures, thereby facing lower premiums in a private scheme for lesser interventions such as elective surgery, in what is commonly called 'queue jumping' – jumps that are not available for the relatively deprived and who are likely to have greater need for care.

- ***Is there 'parallelism' in the current or proposed arrangements that enables some to have privileged access to health care?***
- ***Should some groups (workers, the elderly, children, those with 'orphan' diseases?) have faster or cheaper access to care than others?***
- ***Is it fair for privileged groups to have favoured treatment even though their health gain may be less than the health losses to others arising from their use of limited resource?***

[9] For example, prescribed medicines are free for over 60s, under 16s, 16 to 18s in full-time education, being pregnant, holding various exemption certificates (maternity, disease specific, disability), being an NHS hospital inpatient, being in receipt of specific social benefits.

Efficiency vs. fairness

Efficiency and fairness in the allocation of resources are sometimes regarded as rival and mutually unsatisfiable criteria for assessing the goodness of social arrangements for health and social care. As we shall see, there is some truth in this belief, but it is easily overdone.

The first two ideas of efficiency described above concern the allocation of inputs to outcomes; the third concerns the allocation of outcomes to consumers, clients, or users. It is at the third level that the conflict between efficiency and fairness is most likely to occur.

While it is obvious that unfairness of many kinds could coexist with efficient and cost-effective resource allocations,[10] rectifying such unfairness does not necessarily imply any reduction of technical efficiency or cost-effectiveness, so the oft-claimed conflict may not arise (Culyer and Wagstaff 1993). It nonetheless can appear as an unintended consequence. For example, effective public health education to reduce smoking has a smaller impact on less educated sections of the community with less impact on behaviour, thereby widening disparities in exposure to smoking risks and widening mortality from lung diseases. Digital health technologies could increase or decrease fairness in access to health depending on other factors like digital access and digital literacy.
It is, however, at the inter-personal level that major conflict can arise. In principle, many distributions of health and social care could be Pareto optimal but fail most tests of fairness. A Pareto optimum can be consistent with the most appalling inequality (Sen 1970) while another Pareto optimum might be decently fair. The point is that a Pareto optimum takes no account of the fairness of the distribution of outcomes. The fairness or unfairness of arrangements requires criteria other than asking whether they are effective or efficient arrangements. The price mechanism might, in principle, approach a Pareto optimum by accident. Unfortunately, willingness to pay for outcomes is correlated with ability to pay and that, in turn, depends upon the distribution of purchasing power (income and wealth) which is highly likely to be judged unfair, so the unfairness of purchasing power creates unfairness in the outcomes.

- ***Are there fairness issues in NHS staff pay differentials, recruitment and retention that may arise in this context?***
- ***Creating greater fairness for some can involve a sacrifice of health and health care for others – is that likely to be the case here?***

[10] As, for example, if wages were determined through processes that were themselves unfair or below an acceptable standard of fairness.

- ***What, if any, are the acceptable limits to sacrifices of this sort in this context?***
- ***Would enhancing fairness in the current context necessarily involve a reduction in efficiency?***
- ***Should some types of unfairness have a higher priority for rectification than others in this context?***

More fundamentally, the individualistic assumptions underlying most 'free' market[11] advocacy may be judged inappropriate in the case of health and health and social care, even if judged to be acceptable in other sectors of the economy. It is common practice for economists and other academicians to judge the effectiveness, cost-effectiveness and fairness of mechanisms for resource allocation such as markets, market regulation, public planning and various mixtures of each of these, by making explicit value judgments relating to some fundamental points of departure. For example, it may be assumed that the individual user/consumer and worker is the ultimate arbiter of what actually is good, at least for them individually. This forms the basis for most claims in favour of a 'free' market.

- ***Is there a role for the market to improve fairness in the current context?***
- ***Is it fair for people to be able to buy the treatment in question if not available on the NHS?***

An alternative way of thinking about system design can emerge from early brainstorming with policy makers and their advisers. Suppose that the answer to the question "what do they consider the health care system to be for?" is "to maximise the impact of available resources on the nation's health". This will immediately raise the issue of the appropriateness of the market to deliver such an objective and of the fairness of the alternatives.

- ***The health and social care systems have many purposes; are some more important than others in the current context?***
- ***Would it be fair, for those willing to pay, to 'top up' their tax contributions by direct payment to gain access to services deemed insufficiently cost-effective to be offered by the NHS?***

Deliberation

Eliciting the policy values of policy makers and system designers whom the analyst seeks to help, including intermediate and grassroots levels of management and decision making, will usually be facilitated by deliberation (Chalkidou and Culyer 2019). The policy makers could be high level members of a government and its advisers, members of its opposition and their advisers, or members of sectors of the health economy like care providers, pharmaceutical and supplies

[11] We pause to remark that markets are very far from free – they require a detailed system of private and exchangeable property rights, enforceable at law in the courts, and with elaborate subsystems of payments, payment collection and monitoring to deter or prevent fraud.

industries, professionals in the (UK royal) medical colleges, local paid or unpaid members of NHS bodies like commissioning groups or boards of trusts. Each brings their own culture, knowledge and experience. What is regarded as fair may differ according to each sphere of culture and experience (Walzer 1983). The aim for the student of health and social care is, I assert, not to advertise one's own values but to elicit as concretely as is feasible the principals' understanding of critical underlying value-laden components of policy. For, example, what do they consider the health care system to be for?[12] What do they understand by 'health', by fairness and unfairness, efficacy and effectiveness, efficiency and cost-effectiveness? What do they think of some commonly used notions of fairness and unfairness, and some of the conventional measures or indicators of these critical components? What are their views as to how such "understandings" could be effectively disseminated widely throughout the NHS and "owned" not only by the principal decision makers but also by the public whom they serve?

To answer such questions implies some form of dialogue and deliberation which, if carefully done, might usefully yield a better basis for creating or adapting existing system characteristics as well as actually operating it. It is a framework which decision makers could use to interrogate "experts" such as demographers, economists, epidemiologists, ethicists and statisticians, create and use an information base for measuring and linking inputs (initiatives, resources) to relevant outcomes, and yield ideas about possible mechanisms for utilising the information to enhance the system's performance. My substantive task has been to create a reasonably comprehensive checklist of fairness-related points to consider. These are now drawn together as a table.

[12] Obviously to restore and maintain health, but also to diagnose, prescribe, inform, advise, comfort and reassure, validate, liaise and guide, authorise time off work…

Socrates' Questions

Broad contextual questions

- *What is the policy context in which a question of fairness has arisen or might arise?*
- *Is there anything in the current context that limits or prescribes how fairness is to be handled?*
- *Are suitable arrangements in place to enable and facilitate deliberation?*
- *Is it understood by stakeholders and decision makers that 'technology' is a way of describing health care interventions of many varied kinds, not just 'high tech'?*
- *Are there any ways in which use of the technology in question could ameliorate unfairness of any kind, or possibly worsen it?*
- *What types of stakeholder would be useful contributors to a deliberation in the current context?*
- *Have those involved in the decision-making procedures been fairly chosen and competently trained/briefed?*

Questions about fairness as a concept

- *Does the current issue concern unfairness or misfortune? Does the distinction matter in the current context?*
- *Is the question at hand to do with equality? If so, equality of what?*
- *Is fairness in the current context to do with outcomes and for whom? What kinds of outcome?*
- *Are there issues to do with opportunities and who has them? Opportunities for what?*
- *Are there issues of multiple deprivation, i.e., inequalities in many dimensions of the quality of life?*
- *Are there issues to do with costs and who bears them?*
- *Are there issues to do with risks and who bears them?*
- *Are there fairness issues with processes, for example to access services or to participate in decision making? Are some processes more fair or unfair than others?*
- *Are there issues of fairness regarding system funding?*
- *Are some combinations of tax finance, private insurance and direct payments fairer than others in the current context?*
- *Are there issues of 'rationing' and the possible consequences of different schemes for allocating health care to regions or individuals?*
- *Are there fairness issues arising from moral hazard?*
- *Is there 'parallelism' in the current or proposed arrangements that enables some to have privileged access to health care?*
- *Should some groups (workers, the elderly, children, those with 'orphan' diseases?) have faster or cheaper access to care than others?*

Epidemiological and public health questions

- *How widely across the many determinants of health is the issue likely to range?*
- *Is there credible evidence that the policy instruments under discussion are efficacious?*
- *Is the membership of the decision-making group sufficiently competent to evaluate the quality of the evidence?*
- *Is there credible evidence that the policy instruments under discussion are effective?*
- *Is there credible evidence that the policy instruments under discussion are efficient?*
- *Are the policy instruments under discussion likely to promote or harm the total health or welfare of the community?*
- *Is there credible evidence that the policy instruments under discussion are cost-effective?*
- *Will the policy flatten the gradient in health?*
- *The health and social care systems have many purposes, are some more important than others in the current context?*
- *Is it possible to quantify some of the key elements of the foregoing in the current context? How best to proceed if it is not possible?*

Some technical questions

- *Is the distinction between vertical and horizontal fairness likely to be relevant in this context?*
- *Does the practical measurement of outcomes, for example, as changes in longevity and quality of life, raise issues of fairness?*
- *Are the various components of an outcome measure (relief of pain, increased mobility, reduced confusion, etc.) given fair weights?*
- *Can you judge the validity and credibility of available evidence, or describe the kind of additional research to be commissioned?*
- *Are there issues of fairness in the statistical measures of inequality used to measure distributions?*

Questions about conflicts and trade-offs

- *Creating greater fairness for some can involve a sacrifice of health and health care for others – is that likely to be the case here?*
- *What, if any, are the acceptable limits to sacrifices of this sort in this context?*
- *Would enhancing fairness in the current context necessarily involve a reduction in efficiency?*
- *Is it fair to give weight to the health gain (opportunity cost) that might have been achieved if a different decision were reached?*
- *Are ineffective interventions and other proposed changed arrangements nonetheless possibly useful from a fairness perspective?*
- *Is it fair not to provide treatments on the NHS that are cost-ineffective?*
- *Is it fair for people to be able to buy the treatment in question if it's not available on the NHS?*
- *Would it be fair, for those willing to pay, to 'top up' their tax contributions by direct payment to gain access to services deemed insufficiently cost-effective to be offered by the NHS?*
- *Is rectifying an unfairness likely to reduce efficiency in this context?*
- *Is the advice given by professionals to decision makers impartial as well as competent?*
- *In the current context, do professionals face a possible conflict by both advising appropriate procedures for patients and providing them?*
- *Are there any externalities that raise matters of fairness?*
- *Which stakeholders might be especially important in finding a solution?*
- *Are some ways of 'internalising' externalities fairer than others in the current context?*
- *Is the fairest policy likely to require collaboration between different sectors and ministries?*
- *Should some types of unfairness have a higher priority for rectification than others in this context?*
- *Is it fair for privileged groups to have favoured treatment even though their health gain may be less than the health losses to others arising from their use of limited resource?*
- *Is it possible to quantify some of the key elements of all the foregoing in the current context? How best to proceed if it is not possible?*

Questions about implementation

- *What insurance and financial issues, if any, are likely to be of concern?*
- *Is there a role for the market to improve fairness in the current context?*
- *Are pricing solutions always unfair?*
- *Are there improvements in the agency relationship that would improve fairness in the current context?*
- *What role, if any, exists for ordinary people in planning or operating the system in this context?*
- *Are there fairness issues in NHS staff pay differentials, recruitment and retention that may arise in this context?*
- *Does fairness in the current context require formal guidance for professionals or adjustments in contracts of employment?*
- *Have you some communications strategies for sharing the results of the deliberation with the various stakeholder groups?*
- *Would it be wise to plan a review at a future date of what has happened following the decision?*

Great precision and intricacy of detail are probably not required of analysts in helping decision makers to structure their thinking about efficiency and fairness. As indicated at the start of this chapter, it may be a useful beginning to ask a few searching questions, provide some potentially useful concepts, and arm decision makers with sufficient weaponry to be able to interrogate experts from the multidisciplinary and multi-professional health-related world inhabited by physicians, social workers, economists, epidemiologists, statisticians, managers, and ethicists. The Socratic questions I have posed are a collective template for others to develop further in the light of what is found to be useful, and what not useful, always through deliberation by relevant stakeholders. Although not a topic for this chapter, decision-making will usually be helped if the important elements of a choice in which fairness features can be quantified, though this is rarely to be found outside the economic literature (but see Cookson et al. 2021).

- ***Have you some communications strategies for sharing the results of the deliberation with the various stakeholder groups?***
- ***Would it be wise to plan a review at a future date of what has happened following the decision?***

So, let the deliberation begin!

REFERENCES

Brazier, J.E., Ratcliffe, J., Tsuchiya, A., Salomon, J. (2007). *Measuring and Valuing Health Benefits for Economic Evaluation*, Oxford: Oxford University Press.

Buchanan, J. (1964). *The Inconsistencies of the NHS*, London: Institute of Economic Affairs.

Buchanan, J.M. and Stubblebine, W.C. (1962). "Externality", *Economica*, 29, 371–84.

Case, A., Lubotsky, D. and Paxson C. (2002). "Economic status and health in childhood: the origins of the gradient", *American Economic Review*, 92, 1308–34.

Chalkidou, K. Culyer, A.J. (2019). "Deliberative processes in decisions about best buys, wasted buys and contestable buys: uncertainty and credibility", in Isaranuwatchai, W., Archer, R.A., Teerawattananon, Y. and Culyer, A.J. (eds.)*, Non-Communicable Disease Prevention: Best Buys, Wasted Buys, and Contestable Buys*, Cambridge: Open Book Publishers, 147-169.

Cookson, R., Claxton, K. (2012). *The Humble Economist: Tony Culyer on Health, Health Care and Social Decision Making*, London: Office of Health Economics and York: University of York.

Cookson, R., Griffin, S., Norheim, O. F., Culyer, A.J. (2021). *Distributional Cost-Effectiveness Analysis: Quantifying Health Equity Impacts and Trade-Offs*, Oxford: Oxford University Press.

Culyer, A.J. (1971a). "Medical care and the economics of giving", *Economica*, 38, 295–303.

Culyer, A.J. (1971b). "The nature of the commodity 'health care' and its efficient allocation", *Oxford Economic Papers*, 23, 189–211.

Culyer, A.J. (2006). "NICE's use of cost-effectiveness as an exemplar of a deliberative process", Health Economics, Policy and Law, 1: 299-318.

Culyer, A.J. (2010). "Perspective and desire in comparative effectiveness research - the relative unimportance of mere preferences, the central importance of context", *Pharmacoeconomics*, 28: 889-897.

Culyer, A.J. (2018). "Cost, context and decisions in health economics and cost-effectiveness analysis", *International Journal of Technology Assessment in Health Care*, 34: 434-441.

Culyer, A.J. (2020). "Use of evidence-informed deliberative processes – learning by doing: Comment on 'Use of Evidence-informed Deliberative Processes by Health Technology: Assessment Agencies Around the Globe'", *International Journal of Health Policy and Management*, 9: 263-265.

Culyer, A.J. (2022). "Reinforcing science and policy, with suggestions for future research; Comment on 'Evidence-Informed Deliberative Processes for Health Benefit Package Design – Part II: A Practical Guide'", *International Journal of Health Policy and Management*, doi: 10.34172/ijhpm.2022.7398.

Culyer, A.J., Lomas, J. (2006). "Deliberative processes and evidence-informed decision-making in health care – do they work and how might we know?" *Evidence and Policy*, 2: 357-371.

Culyer, A.J., Wagstaff, A. (1993). "Equity and equality in health and health care", *Journal of Health Economics*, 12: 431–57.

Deaton, A. (2002). "Policy implications of the gradient of health and wealth", *Health Affairs*, 21: 13–30.

Deaton, A. (2003). "Health, inequality, and economic development", *Journal of Economic Literature,* 41: 113–58.

Evans, R.G., Barer, M.L., Marmor, T.R. (eds) (1994). *Why are Some People Healthy and Others Not? The Determinants of Health of Populations*, New York: Aldine De Gruyter.

Glassman, A., Giedion, U., Smith P.C. (2017). *What's In, What's Out. Designing Benefits for Universal Health Coverage,* Washington DC: Center for Global Development.

Goodman, J.C. (1980). *National Health Care in Great Britain: Lessons for the USA*, Dallas: Fisher Institute.

J Hurley, J., Pasic, D., Lavis, J., Mustard, C., Culyer, A.J., Gnam, W. "Parallel lines do intersect: interactions between the workers' compensation and provincial publicly financed health care systems in Canada", *HealthCare Policy*, 2008, 3: 100-112.

Jacobsson, F., Carstensen, J. and Borgquist, L. (2005). "Caring externalities in health economic evaluation: how are they related to severity of illness?", *Health Policy*, 73: 172–82.

Jewkes, J. and Jewkes, S. (1962). *The Genesis of the British National Health Service*, London: Basil Blackwell.

Keynes, J.M. (1931). *Essays in Persuasion*, London: Macmillan.

Lees, D.S. (1960). "The economics of health services", *Lloyds Bank Review*, 56: 26-40.

Lees, D.S. (1962). "The logic of the British National Health Service", *Journal of Law and Economics*, 5: 111-118.

Lees, D.S. (1964). *Monopoly or Choice in Health Services?* London: Institute of Economic Affairs.

Lomas, J., Culyer, A.J., McCutcheon, C. et al. (2005). *Conceptualizing and Combining Evidence for Health System Guidance*. Ottawa: Canadian Health Services Research Foundation.

Marmot, M.G. (2008). *Closing the Gap in a Generation: Health Equity through Action on the Social Determinants of Health*, Final Report of the Commission on Social Determinants of Health, Geneva: World Health Organization.

Marmot, M.G. (2010). *Fair society, healthy lives: the Marmot Review: strategic review of health inequalities in England post-2010.* Department for International Development, London, ISBN 9780956487001.

Marmot, M.G. (2015). *The Status Syndrome: How Your Place on the Social Gradient Directly Affects Your Health*, London: Bloomsbury.

Marmot, M.G., Smith, G.D., Stansfeld, S. et al. (1991). "Health inequalities among British civil servants: the Whitehall II study", *The Lancet*, 337, 1387–93.

McGuire, T.G. (2000). "Physician agency", in Culyer, A.J. and Newhouse J.P. (eds), *Handbook of Health Economics*, Amsterdam: Elsevier, 461–536.

McKnight, R. (2007). "Medicare balance billing restrictions: impacts on physicians and beneficiaries", *Journal of Health Economics*, 26, 326–41.

Nozick, R. (1974). *Anarchy, State, and Utopia*, Oxford: Basil Blackwell.

Oortwijn, W., Husereau, D. Abelson, J. et al. (2022). "Designing and implementing deliberative processes for Health Technology Assessment: A good practices report of a Joint HTAi/ISPOR task force", *Value in Health*, 25: 480-1.

Rawls, J. (1971). *A Theory of Justice*, Cambridge, MA: Harvard University Press.

Sen, A.K. (1970). "The impossibility of a Paretian liberal", *Journal of Political Economy*, 78, 152–7.

Tobin, J. (1970). "On limiting the domain of inequality", *Journal of Law and Economics*, 13: 263-278.

Walzer M. (1983). *Spheres of Justice: a defence of pluralism and equality*, Oxford: Martin Roberson.

Webster, C. (1998). *The National Health Service: A Political History*, Oxford: Oxford University Press.

Williams, E., Buck, D., Babalola, G., Mcguire, D. (2022). *What are Health Inequalities?* London: King's Fund.

Zwarenstein, M. (1994). "The structure of South Africa's health service", *Africa Health*, March: 3–4.