The Richard M. Titmuss Memorial Lecture

"HEALTH CARE FOR WHOM?"

Operationalising Public Preferences

Prof. Alan Maynard

Center for Health Economics
University of York

Paul Baerwald School of Social Work
The Hebrew University of Jerusalem
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THE RICHARD M. TITMUSS MEMORIAL LECTURE

Richard M. Titmuss was appointed Professor of Social Administration at the London School of Economics in March 1950, a position which he held for the rest of his life, until 1973. He was one of the outstanding and original social scientists of his generation and in his research, lectures and personal encounters shaped anew the whole concept of social policy in Britain and abroad. For a period of three decades he exerted immense influence in scholarship, politics and government at home and in many countries throughout the world.

Richard Titmuss was a great friend of Israel and his thought and work very much influenced the study of social policy in Israel, and he left a lasting imprint on the social policies of the country. The lecture series in his memory has been made possible by the kind help of his friends in the United Kingdom, and by a generous grant from the National Insurance Institute of Israel.

Alan Maynard is Professor of Economics and Director of the Centre for Health Economics at the University of York, England.

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Introduction

The design of a Welfare State in general or a health care system in particular should reflect public preferences. The discussion of health care policy usually implies some ideological position and, as a consequence, when discussing the reform of a health care system it is essential to be explicit and identify clearly the ideological assumptions inherent in any proposals.

Such an approach does not come easily for politicians because they often have to contend with powerful lobbies and consequently approach reform like a crab, sideways and unpredictably! Often political "progress" is determined by the Marxist approach to life:

> "The secret of life is honesty and fair play. If you can fake that, you've made it."
>
> Groucho Marx

The purposes of this lecture are to examine the characteristics of the competing ideologies, liberal (market) and labour (collectivist), to explore the disjunction between the ideal characteristics of each ideology's health care system and how they work in practice, and to draw some conclusions for the design of health care policy. The analysis seeks to be objective but it will be clear that the author shares the ideological stance of Richard Titmuss even if the interpretation of this position in the 1990s inevitably internalises arguments more consistent with a liberal socialist approach.

Table 1 Attitudes typically associated with the Competing Ideologies

	Viewpoint A	Viewpoint B
Personal Responsibility	Personal responsibility for achievement is very important and this is weakened if people are offered unearned rewards. Moreover, such unearned rewards weaken the motive force that assures economic well-being, and in so doing they also undermine moral well-being, because of the intimate connection between moral well-being and the personal effort to achieve.	Personal incentives to achieve are desirable, but economic failure is not equated with moral depravity or social worthlessness.
Social Concern	Social Darwinism dictates a seemingly cruel indifference to the fate of those who cannot make the grade. A less extreme position is that charity, expressed and effected preferably under private auspices, is the proper vehicle, but it needs to be exercised under carefully prescribed conditions, for example, such that the potential recipient must first mobilise all his own resources and, when helped, must not be in as favourable a position as those who are self-supporting (the principle of 'lesser eligibility').	Private charitable action is not rejected but is seen as potentially dangerous morally (because it is often demeaning to the recipient and corrupting to the donor) and usually inequitable. It seems preferable to establish social mechanisms that create and sustain self-sufficiency and that are accessible according to precise rules concerning entitlement that are applied equitably and explicitly sanctioned by society at large.

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1. What are the Objectives of the Health Care System?

A summary of the characteristics of the market and collectivist ideologies are summarised in Table 1, which is derived from Donabedian (1971) and Maynard and Williams (1985).

The liberal ("right wing" and "Friedmanite" are other terms to describe this approach) wishes to allocate health care on the basis of the individual's willingness and ability to pay. For the minority, without the means to pay, there would be State assistance. The dominant characteristics of the liberal approach are individual responsibility and decentralised decision making. Government intervention in the health care market is seen as a threat to individual freedom as well as the cause of the abandonment of individual responsibility and the attenuation of altruism. For the liberal, freedom is the primary goal which should guide social and individual behaviour.

The collectivist is primarily concerned with equality of opportunity. If the opportunities for personal achievement are unequally distributed, the pursuit of equality is the means by which freedom enjoyed only by the few is extended to the many. The collectivist wishes to allocate health care on the basis of need. This requires the resource allocator to make a technical judgement which identifies which patients would benefit most from care in terms of enhancements in the duration and quality of life of patients i.e. the collectivists' benefit principle requires that scarce treatment resources are targeted at those patients whose care is likely to create the most quality

Table 1 Continued

	Viewpoint A	Viewpoint B
Freedom	Freedom is to be sought as a supreme good in itself. Compulsion attentuates both personal responsibility and individualistic and voluntary expressions of social concern. Centralized health planning and a large governmental role in health care financing are seen as an unwarranted abridgement of the freedom of clients as well as of health professionals, and private medicine is thereby viewed as a bulwark against totalitarianism.	Freedom is seen as the presence of real opportunities of choice; although economic constraints are less openly coercive than political constraints, they are nonetheless real, and often the effective limits on choice. Freedom is not indivisible but may be sacrified in one respect in order to obtain greater freedom in some other. Government is not an esternal threat to individuals in the society but is the means by which individuals achieve grater scope for action (that is, greater real freedom).
Equality	Equality before the law is the key concept, with clear precedence being given to freedom over equality wherever the two conflict.	Since the only moral justification for using personal achievement as the basis for distributing rewards is that everyone has equal opportunities for such achievement, then the main emphasis is on equality of opportunity; where this cannot be assured, the moral worth of achievement is thereby undermined. Equality is seen as an extension to the many of the freedom actually enjoyed by only the few.

adjusted life years (QALYs) at least cost.

The second step in a needs based system, is that an explicit social judgement is made about whether it is worthwhile to treat patients. The Government will decide, explicitly, how much society will pay to purchase an additional QALY. Thus this type of system rationing will be explicit and some beneficial treatments, which produce few QALYs, will not be funded. A nice example of this approach are the rationing proposals in Oregon (Klein, 1991; Maynard, 1992).

So what should be the objective of the health care system? The liberal, concerned to maximise the freedom of the individual, will want to organise the health care system with private markets which provide care and the insurance cover to buy it, allocating resources (and access to care) primarily on the basis of the individual's willingness and ability to pay.

The collectivist, concerned with the equalisation of the opportunity to be free and to prosper, will want to organise the health care system with the State dominating the finance and, possibly the provision of care, allocating resources on the basis of the patient's ability to benefit from care.

In the heat of the policy debate, the distinction between both ends and the means of the two ideologies become confused as the competing factions seek to enhance their support by blurring the distinction between their positions. Social adherence to the separate goals changes through time in ways which reflect international patterns of

Table 2 The Market: Actual and Ideal

	Ideal	Actual
Demand	1. Individuals are the best judges of their own welfare. 2. Priorities determined by own willingness and ability to pay. 3. Erratic and potentially catastrophic nature of demand mediated by private insurance. 4. Matters of equity to be dealt with elsewhere (e.g. in the tax and social security systems).	1. Doctors act as agents, mediating demand on behalf of consumers. 2. Priorities determined by the reimbursement rules of insurance funds. 3. Because private insurance coverage is itself a profit seeking activity, some risk-rating is inevitable, hence coverage is incomplete and uneven, distorting personal willingness and ability to pay. 4. Attempts to change the distribution of income and wealth independently, are resisted as destroying incentives (one of which is the ability to buy better or more medical care if you are rich).
Supply	1. Profit is the proper and effective way to motivate suppliers to respond to the needs of demanders 2. Priorities determined by people's willingness and ability to pay and by the costs of meeting their wishes at the margin. 3. Suppliers have strong incentive to adopt least-cost methods of provision.	1. What is most profitable to suppliers may not be what is most in the interests of consumers, and since neither consumers nor suppliers may be very clear about what is in the former's interests, this gives suppliers a range of discretion. 2. Priorities determined by the extent to which consumers can be induced to part with their money, and by the costs of satisfying the pattern of 'demand'. 3. Profit motive generates a strong incentive towards market segmentation and price discrimination, and tie-in agreements with other professionals.

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belief. In Israel Labour Zionism was concerned with the creation of a just society, with advocates like Nachman Syrkin (1898) being concerned about "justice, rational planning and social solidarity" (quoted in Doron and Kramer (1991), p 12). As elsewhere in the world, there is now a debate in Israel about the role of Government and the future of the Welfare State. Whilst the 'left' still aspires for a more just and equal society, the ideology informing much public policy throughout the world reflects concerns about individual freedom and responsibility, which produce increased inequalities in access to social support.

2. Policy Rhetoric: the Distinction Between the Ideal and the Actual

Not only is the ideological debate confused, perhaps deliberately, as political factions seek support for office, but there is also a similar confusion in the rhetoric of the competing ideologies with regard to the working of alternative ways of organising the finance and provision of health care. The liberals criticise the actual workings of the collectivist system and advocate their market ideal. The collectivists criticise the actual workings of the liberal (market) system and advocate their socialist ideas. This dichotomy between the ideal and the actual in competing health care systems is summarised in Tables 2 and 3 (Maynard and Williams, 1985), distinguishing between supply, demand, adjustment mechanisms and success criteria.

Table 3 The NHS: Actual and Ideal

	Ideal	Actual
Demand	1. When ill, individuals are frequently imperfect judges of their own welfare.	1. Doctors act as agents, identifying need on behalf of patients.
	2. Priorities determined by social judgements about need.	2. Priorities determined by the doctor's own professional situation, by his assessment of the patient's condition, and the expected trouble-making proclivities of the patient.
	3. Erratic and potentially catastrophic nature of demand made irrelevant by provision of free services.	3. Freedom from direct financial contributions at the point of service, and absence of risk rating, enables patients to seek treatment for trivial or inappropriate conditions.
	4. Since the distribution of income and wealth unlikely to be equitable in relation to the need for health care, the NHS must be insulated from its influence.	4. Attempts to correct inequities in the social and economic system by differential compensatory access to health services leads to recourse to health care in circumstances where it is unlikely to be a cost-effective solution to the problem.
Supply	1. Professional ethics and dedication to public services are the appropriate motivation, focusing on success in curing or caring.	1. Personal professional dedication and public spirited motivation likely to be corroded and degenerate into cynicism if others, who do not share those feelings, are seen to be doing very well for themselves through blatantly self-seeking behaviour.
	2. Priorities determined by where the greatest improvements in caring or curing can be effected at the margin.	2. Priorities determined by what gives the greatest professional satisfaction.
	3. Pre-determined limit on available resources generates a strong incentive for suppliers to adopt least-cost methods of provision.	3. Since cost-effectiveness is not accepted as a proper medical responsibility, such pressures merely generate tension between the 'professionals' and the 'managers'.

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Table 2 continued...

	Ideal	Actual
Adjustment Mechanism	1. Many competing suppliers ensure that offer prices are kept low, and reflect costs.	1. Professional ethical rules are used to make overt competition difficult.
	2. Well-informed consumers are able to seek out the most cost-effective form of treatment for themselves.	2. Consumers denied information about quality and competence, and, since insured, may collude with doctors (against the insurance carriers) in inflating costs.
	3. If, at the price that clears the market, medical practice is profitable, more people will go into medicine, and hence supply will be demand responsive.	3. Entry into the profession made difficult and numbers restricted to maintain profitability.
	4. If, conversely, medical practice is unremunerative, people will leave it, or stop entering it, until the system returns to equilibrium.	4. If demand for services falls, doctors extend range of activities and push out neighbouring disciplines.
Success Criteria	1. Consumers will judge the system by their ability to get someone to do what they demand, where and how they want it.	1. Consumers will judge the system by their ability to get someone to do what they need done without making them 'medically indigent' and/or changing their risk-rating too adversely.
	2. Producers will judge the system by how good a living they can make out of it.	2. Producers will judge the system by how good a living they can make out of it.

Table 3 continued...

		Ideal	Actual
Adjustment Mechanisms	1.	Central review of activities generates efficiency audit of service provision and management pressures keep the system cost-effective.	1. Because it does not need elaborate cost data for billing purposes, it does not routinely generate much useful information on costs.
	2.	Well-informed clinicians are able to prescribe the most cost-effective form of treatment for each patient.	2. Clinicians know little about costs, and have no direct incentive to act on such information as they have, and sometimes even quite perverse incentives (i.e. cutting costs may make life more difficult, or less rewarding for them).
	3.	If there is resulting pressure on some facilities or specialities, resources will be directed towards extending them.	3. Very little is known about the relative cost-effectiveness of different treatments, and even where it is, doctors are wary of acting on such information until a general professional consensus emerges.
	4.	Facilities or specialities on which pressure is slack will be slimmed down to release resources for other uses.	4. The phasing out of facilities which have become redundant is difficult because it often threatens the livelihood of some concentrated specialised group and has identifiable people dependent on it, whereas the beneficiaries are dispersed and can only be identified as 'statistics'.
Success	1.	Electorate judges the system by the extent to which it improves the health status of the population at large in relation to the resources allocated to it.	1. Since the easiest aspect of health status to measure is life expectancy, the discussion is dominated by mortality data and mortality risks to the detriment of treatments concerned with non-life threatening situations.
	2.	Producers judge the system by its ability to enable to provide the treatments they believe to be cost-effective.	2. In the absence of accurate data on cost-effectiveness producers judge the system by the extent to which it enables them to carry out the treatments which they find the most exciting and satisfying.

The latter are of particular interest. The ideal outcome in a private market is that the consumer gets what she wants at a time and place she demands and in a way that satisfies her expectations and medical needs. The producer will judge the market's success in terms of how good a living he makes out of it in both the ideal and actual systems. However the consumer will judge the system in relation to its capacity to produce the care she wants without affecting her risk rating or making her medically indigent.

In the ideal outcome in the NHS system of the collectivist, the consumer judges the success of the system by its efficiency in increasing the health status (QALYs) of the population by the maximum amount from the limited available budget. Ideally providers should define the system's success in relation to their capacity to provide cost-effective treatments for the population which is funding their work from the taxes they pay.

However, the actual NHS fails to meet this ideal. The mortality data are poor and most health care systems have few morbidity data. As a consequence, decision makers, clinical and managerial, focus on life saving interventions (e.g. transplants) rather than those which improve the quality of life (e.g. the identification and treatment of depression). Producers have little idea whether their treatments are cost-effective, and as a consequence of this ignorance and poorly designed incentive (remuneration) systems, tend to provide these therapies which are exciting and satisfying to them.

In Britain there is a policy debate about the NHS every four or five years. This

is characterised by the market advocates using their ideal stereotypes and decrying the ways in which the actual (NHS) system works. The response of the collectivist to this assault is to criticise the ways in which the actual market works and to advocate the NHS ideal. Such debates waste scarce resources but are grist for the political mill in Britain and all other democratic states (McLachlan and Maynard, 1982).

3. The Implications for Policy Making

3.1 Market "failure"

Whither the liberal or collectivist ideology is adopted, the health care market place exhibits ubiquitous characteristics of "market failure" which circumscribe policy making everywhere and require resolution.

All health care markets are characterised by large variations in the nature (type of procedure) and volume of therapies. For instance some surgeons treat breast cancer with mastectomy whilst others do lumpectomy. This difference persists despite evidence that survival rates are similar and the quality of survival after lumpectomy (which is much less dis-figuring) is superior. There are large geographical variations in surgical rates for hernias, haemorrhoids, gall bladder removal, prostectomy and hysterectomy even after adjusting for age and other factors (see e.g. McPherson in Anderson and Mooney, 1990). Similar variations exist in the USA where Wennberg has, for instance, shown major variations in surgical rates in the adjacent geographical areas of New Haven and Boston (Wennberg, 1989). In all these studies the practitioners argue that

their treatments are "appropriate", thus demonstrating the imprecision of the art of medicine.

This imprecision is a reflection of the fact that most therapies in use today are unproven in terms of outcome (health benefits to the patient) (Cochrane, 1972; and Black, 1986). Most medical practice is experimental with uncertain outcomes, even though Medical Schools train practitioners to act as if outcomes were certain and established.

The problems of ignorance of outcomes and variation in practice is compounded by monopoly power both within the medical profession and within other provider sectors, for instance the hospitals and the pharmaceutical industry. Often these monopolies are created and sustained by the State, which is usually reluctant to monitor the behaviour of the monopolies it creates until their malfunctioning is acute.

The Scottish eighteenth century classical economist, Adam Smith, argued that

> "People of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public, or some contrivance to raise prices ....."

and that the only solution to such problems was competition

> ".... The pretence that corporations are necessary for the better government of the trade, is without foundation. The real and effectual discipline which is exercised over a workman, is not that of his corporation, but that of his customers. It is the fear of losing their employment which restrains his frauds and corrects his negligence. An exclusive corporation necessarily weakens the force of this discipline."
>
> Adam Smith (1776, 1976, vol 1, p 145-46)

The monopoly power of the profession is augmented by the asymmetry of knowledge in the health care market. Typically the patient delegates decision making to her 'agent' the doctor because he is regarded as an 'expert' in terms of diagnosis, treatment and prognosis. The doctor, who, as gatekeeper, controls access to the supply of health care, thus becomes the demander. The doctor may exploit this agency relationship and induce demand for his own services. The control of this supplier induced demand is a major problem if professionals pursue monetary rather than patient-therapeutic goals.

This pursuit of monetary rewards by doctors is facilitated by the moral hazard created by public and private insurance for health care. Eligibility for care resources the price barrier to consumption and, as a consequence, neither the patient nor her agent, the doctor, has an incentive to economise. The financial consequences are met by third parties to the health care doctor-patient interactions. Such "third party" pay problems have contributed to rapid cost inflation, for instance in the USA where this year 14 per cent of GNP will be spent on health care.

3.2 Competition: is it a solution to market failure?

Despite articulate advocacy of competition in health care markets, it has failed to either control costs or improve the efficiency of resource allocation in a measurable way (see e.g. Enthoven, 1991; and Miller and Luft, 1991). Why is this so?

In the United States, competition has failed for a variety of reasons. Employers

generated "cost unconscious demand" because they failed to demand insurance plans which created price competition. They tended to ask insurers and health maintenance organisations to tender for contracts and set the premium tariff (at which employees could select their cover) at the average of these bids. This meant that higher than average cost insurers got no business. However, it also meant that lower than average cost insurers raised their premiums (because they had no incentive to economise), and, by so doing, raised the average cover of cover, creating cost inflation in the next contracting round.

Another factor which undermined competition in the US health care market was the tax code which subsidies the purchase of insurance. Thus, if contributors economised, for every $1 they saved only 60 cents net, because they lost 40 cents Federal subsidy. This subsidy, together with Federal expenditure on Medicare, Medicaid and the Veterans, results in over 50 cents in the health care dollar being funded by Government and is a major element in the Federal Government's deficit.

The absence of standardised comparative information which would facilitate the choices of insurers, employers and employees choices has also undermined competition. Insurers cannot assess technologies in a way which can be sustained with the media, the courts and the public. Furthermore, collaborative action by insurers is illegal because it breaches anti-trust law.

The enhanced regulation of the US health care market, paradoxically the characteristic of the attempt to create competition in this market place, has undermined

the professional codes of the medical profession. Whilst Adam Smith admitted the need to destroy price fixing with competition, he also admitted the need to maintain professional standards (see Maynard, 1991).

> "The wages of labour vary according to the great or small trust which must be reposed in the workman .... We trust our health to the physician; our fortune and sometimes our life and reputation to the lawyer and the attorney. Such confidence could not be safely reposed in people of a very mean or low condition. Their reward must be such, therefore, as may give them that rank in the society which so important a trust requires. The long time and the great expense which must be laid out in their education, when combined with this curcumstance, necessarily enhance further the price of their labour."
>
> Adam Smith (1776)

Often the codes of professional conduct appear to regulate the medical profession quite efficiently. Competition can undermine these codes and produce, via self interest, over utilisation and cost inflation. Relman (1992), the former editor of the New England Journal of Medicine, has argued that doctors who are investor owners of health care facilities may be induced to behave unethically and augment cost inflation. Attempts to curb such excesses with professional rules have not been successful in the competitive environment of the US health care market (Fuchs, 1987; American Medical Association, 1992).

Thus competition is difficult to create and sustain. Yet its advocates continue to set out how it can be implemented (Enthoven and Kronick, 1989). The purpose of these reforms is to create managed competition i.e. competition both amongst insurers (on the demand side) and providers (on the supply side).

In the UK the health care reforms are to create regulated competition i.e. competition amongst providers (on the supply side) but no competition amongst financial agencies. Prime Minister Thatcher argued against the liberal ideal of access to care being determined by willingness and ability to pay:

> "The principle that adequate health care should be provided for all, regardless of ability to pay, must be a foundation of any arrangements for financing health care"
>
> Margaret Thatcher, 1982

Subsequent reforms of the NHS have required politicians to confront the harsh issues associated with the "winners and losers" created by competition. Politicians find resource improvements and great efficiency, "winners", attractive. However, they find rationalisation and the closure of facilities in marginal constituencies, losers, more difficult to countenance. Few politicians are as "brave" as Roy Kroc, founder of McDonalds, who when asked what he would do if he saw a rival drowning, was alleged to have answered "put a hose in his mouth"!

However, whether competition can be created and sustained in the USA or in a collectivist system such as the UK-NHS is an empirical question for which there is as yet no support. The reforms needed to make the market "work" are very similar to those required to make the collectivist system of health care succeed. Perhaps until these reforms are implemented successfully, the issue of ideological conflict may be noted but held back for future political debate?

Conclusion

The health care debate, like that about the Welfare State, is heated and, all too often, rhetoric diverts attention from the need to reform the provision of health care so that it reflects more efficiently the preferences of patients and their agents, be they public or private insurance purchasers. Such an objective will not be met by conservative providers who all too often design and operate health care systems to keep them "in the style to which they are accustomed". The need to challenge existing medical methods and compare performance with "best practices" supported by the results of good research is acute: what is needed is informed, continuous revolution! If this dynamic, questioning outcome is not achieved, we can be certain that waves of ideological rhetoric will continue to misinform both the policy debate and reform. This will produce outcomes of little fundamental improvement in the health care system, ensuring that public preferences for good quality health care at a low cost are not operationalised. Such a result all too familiar to managers and reformers in the past:

> "We trained very hard, but it seemed that every time we were beginning to form up into teams, we would be reorganised. I was to learn later in life that we tend to meet any new situation by reorganising, and a wonderful method it can be for creating the illusion of progress, while producing confusion, inefficiency and demoralisation."
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> Caius Petronius (AD 66)

References

American Medical Association (1992), Conflicts of interest: physician ownership of medical facilities, Journal of the American Medical Association, 267, 17, 2366-69.

Anderson T F and Mooney G (eds) (1990), The Challenge of Medical Practice Variations, Macmillan, London.

Black A D (1986). An Anthology of False Antitheses, Rock Carling 1984 Fellowship, Nuffield Provincial Hospitals Trust, London.

Cochrane A L (1972). Effectiveness and Efficiency, Nuffield Provincial Hospitals Trust.

Donabedian A (1971). Social responsibility for personal health services: an examination of basic values, Inquiry, 8, 2, 3-19.

Doron A and Kramer R M (1991), The Welfare State in Israel: the evolution of social security policy and practice, Westview Press, Boulder, San Francisco and Oxford.

Enthoven A C and Kronick R A (1989). Consumer choice health plan for the 1990s: universal health insurance in a system designed to promote quality and economy, New England Journal of Medicine, 320, 29-37, 94-101.

Enthoven A C (1991). Market Forces and Health Care Costs, Journal of the American Medical Association, 266, 19, 2751-2.

Fuchs V (1987). The Counter Revolution in Health Care Financing, New England Journal of Medicine, 316, 18, 1154-6.

Klein R (1991). On the Oregon trail: rationing health care, British Medical Journal, 302, 1, 1-2.

Maynard A (1991). Competition in Health Care: the British experience, paper given to a conference at the Brookdale Institute, Jerusalem, December.

Maynard A (1992). Priorities: follow the Oregon Trail?, Medical Audit News, 2, Part 2, p 20-22.

Maynard A, Williams A (1985). Privatisation and Health Care, in J Le Grand and R Robinson (eds), Privatisation and the Welfare State, Allen and Unwin, London, 1985.

McLachlan G and Maynard A (eds) (1982). The Public Private Mix for Health, Nuffield Provincial Hospitals Trust, London.

Miller R H and Luft H S (1991). Perspective, Diversity and Transition in Health Insurance Plans, Health Affairs, Vol 1, No 4, 37-44.

Relman A (1992). What Market Values are doing to Medicine, Atlantic Monthly, 269, 98.

Smith A (1776, 1976), An Inquiry into the Nature and Causes of the Wealth of Nations, Oxford University Press.

Wennberg J E et al (1989). Hospital use and mortality among Medicare beneficiaries in Boston and New Haven, New England Journal of Medicine, 321 (7): 1168-1173.