HEALTH FOR ALL OR WEALTH FOR SOME?
CONFLICTING GOALS IN HEALTH CARE REFORM

Robert G. Evans

HPRU 98:12D October, 1998
HEALTH FOR ALL OR WEALTH FOR SOME?
CONFLICTING GOALS IN HEALTH CARE REFORM

Robert G. Evans

HPRU 98:12D October, 1998

Health Policy Research Unit
Centre for Health Services and Policy Research
429 - 2194 Health Sciences Mall
University of British Columbia
Vancouver, BC
V6T 1Z3
The Centre for Health Services and Policy Research was established by the Board of Governors of the University of British Columbia in December 1990. It was officially opened in July 1991. The Centre's primary objective is to co-ordinate, facilitate, and undertake multidisciplinary research in the areas of health policy, health services research, population health, and health human resources. It brings together researchers in a variety of disciplines who are committed to a multidisciplinary approach to research, and to promoting wide dissemination and discussion of research results, in these areas. The Centre aims to contribute to the improvement of population health by being responsive to the research needs of those responsible for health policy. To this end, it provides a research resource for graduate students; develops and facilitates access to health and health care databases; sponsors seminars, workshops, conferences and policy consultations; and distributes Discussion Papers, Research Reports and publication reprints resulting from the research programs of Centre faculty.

The Centre's Health Policy Research Unit Discussion Paper series provides a vehicle for the circulation of (pre-publication) work of Centre faculty, staff and associates. It is intended to promote discussion and to elicit comments and suggestions that might be incorporated within revised versions of these papers. The analyses and interpretations, and any errors in the papers, are those of the listed authors. The Centre does not review or edit the papers before they are released.

A complete list of available Health Policy Research Unit Discussion Papers and Reprints, along with an address to which requests for copies should be sent, appears at the back of each paper.
Health for All or Wealth for Some?
Conflicting Goals in Health Care Reform

Robert G. Evans

Department of Economics and
Centre for Health Services and Policy Research
University of British Columbia, and

Manulife/Syd Jackson Fellow,
Program in Population Health
Canadian Institute for Advanced Research

August, 1998

This is a revised version of a paper presented at the Forum on Public Health, London School of Hygiene and Tropical Medicine, April 1998, and forthcoming in the Forum proceedings. It draws on my own and others' work supported by the Program in Population Health, Canadian Institute for Advanced Research.
Death of a Steersman: The Myth of Shared Goals

All proponents of health reform seek to improve the health of the populations served. Or so they say. Yet the policies and strategies offered are extraordinarily diverse, and to a considerable degree inconsistent or in direct conflict with each other. And they arise from radically different visions of the “good” -- i.e. healthy -- society. The health promoters’ fit, well fed, socially well adjusted and depressingly well-behaved citizenry are worlds apart from the compliant pill-poppers implicit in the approach of NERA and the PPBHC;¹ the professionally guided, scientifically-tuned health care of the Cochrane Collaboration is not on the same planet as the consumers’ paradise of Friedman-esque fantasy.² If all share a common goal, some at least are holding the map upside down.

A popular reconciliation is offered by the “steersman” metaphor. We are all in the same boat, trying to reach the same destination, but navigation is complex and difficult. We therefore debate how best to advise the steersman in choosing a route – disagreeing over means, not ends. In particular the determinants of health are far from well understood, and there is room for considerable difference of opinion over how “we” should proceed. On this interpretation progress in understanding should lead to convergence of policy recommendations. More research is needed.

This picture, while containing elements of truth, is fundamentally in error. Two features of the current reform debate are of particular significance. First, it is striking that in discussions of reform, so small a role is played by the growing literature on, and understanding of, the determinants of health itself. That dog rarely barks. There is in particular a growing interest in the sources and significance of “inequalities in health” within populations, and in possible policy responses. But these discussions are carried on largely in isolation from those about the reform of the health care system. Indeed some of the more radical proposals for

¹ The PPBHC (Pharmaceutical Partners for Better Health Care) supported the NERA study (Hoffmeyer and McCarthy, 1994) which purported to show that the underfunding of health care is universal and large – outside Switzerland! – and that the only remedy is more private financing (Towse, 1995).
system change would appear on current understanding to pose a significant threat to population health.  

Secondly, although they may be re-phrased in a new and often rather impenetrable language imported from the worlds of insurance and management consulting, most of the ideas are in fact quite old. We are watching re-runs of the debates that took place at the origins of our public funding systems, and before. Old ideas have found their way back onto the agenda, at least for discussion, in complete disregard not only of the evolving evidence on the determinants of health, but of the working experience of health care systems over the last fifty years. That history, and accompanying progress in research, have provided a number of important lessons on the implications and consequences of different ways of organizing and funding care. A number of “reformers” appear, however, to have missed those classes (or dropped the course entirely).

These observations cannot be reconciled with the presumption of a population united in the goal of improving health, and disagreeing only over the best means to achieve it. In fact the most persistent and intractable conflicts over the proper direction for health care reform arise from disagreements over ends, not means. These in turn are rooted in fundamental conflicts of economic interest in every society. “More research” can certainly clarify, but can never resolve, these conflicts. In this context the steersman metaphor serves only to divert attention (sometimes deliberately) from the real forces at work.

“A Wedge for Understanding”: Recognizing Heterogeneity in Populations

A more enlightening perspective arises from the observation and interpretation of “heterogeneity,” through a process that has been basic to understanding the determinants of health of populations. Populations can be partitioned into sub-groups on a variety of different

---

2 Friedman (1962) offered a vision of a health care system organized entirely through private competitive markets. He asked: “Why are there not [private] department stores of medicine?” but has been unable to hear the answers.

3 A particularly retrograde “reform” argument is that governments should concern themselves with improving the broader social and environmental determinants of health......and get out of the business of funding and regulating health care! The second half of the recommendation appears to be the real objective.
measures – age, sex, occupation, income, education, region of residence…. If one finds unambiguous and systematic differences in health status across such partitions, then they presumably contain information about the determinants of health. The direction of causality may not be clear – indeed each may be correlated with some other unobserved variable(s) -- but there is some systematic relationship between the partitioning variable and the health measure.

Particular attention has been given to the universally observed relationship between measures of social class -- income, education, occupational status -- and various measures of health outcome, particularly mortality. The exploration of such “inequalities”, however, easily becomes politically polarized, for obvious reasons. The more general observation is that such heterogeneities, whatever their normative significance, represent a “wedge for greater understanding” of the determinants of health.4

The “Representative Agent” – Representing Whose Interests?

Most economic theory, by contrast, rests on the assumption (normally implicit) that populations consist of identical individuals. Of course “people are different”; and for some purposes – the analysis of insurance markets, for example – these differences become critical. But they can be captured in a probability distribution (of health outcomes, for example) that is identical across individuals. People are different, but in a random way; there will be no systematic differences among sub-populations. (Empirical studies must, of course, take account of some, at least, of the characteristics of their individual observations.)

One can then represent the behaviour of an entire population by that of a single, “representative agent” – typically rational, informed, and self-interested. That agent’s behaviour is predicated upon a particular structure of objectives and constraints, and its responses to changes in that structure become theoretically predictable. The behaviour of the entire population is then predicted by scaling up that of the representative agent. In this

4 …[T]here is a tremendous potential to exploit heterogeneity in populations as a wedge for greater understanding.’ (Sapolsky, 1993).
conceptual framework, conflicts of interest are not merely impossible, but inconceivable. How can identical individuals – much less a single representative individual – have differing objectives?

To the extent that discussions of health care reform are carried on by economists, or more generally in terms of economic concepts and modes of thinking, the representative agent sneaks in with the intellectual baggage. It provides a natural basis for the steersman metaphor -- how do we identify and carry out those reforms that are best for all of us? – and “distributional problems are ignored”. But distributional problems do not disappear just because the analyst ignores them. Important in themselves, they also have significant effects on the economist’s chosen concern of resource allocation.

A focus on heterogeneities, by contrast, leads one to look for ways of partitioning the population. Can we identify sub-groups with differing economic interests, for whom alternative reform strategies are likely to lead to very different distributions of both economic and health burdens and benefits? Is there a systematic relationship between the “reforms” advocated by different groups, and their differing economic interests? Such an approach permits one to express the pretty obvious notion that people – not just individuals but rather well-defined and more or less self-aware sub-groups within the population – are pursuing very different objectives in any reform process. The persistence of ancient debates in new language, and the extraordinary resistance to evidence of some of the traditional positions, reflect these persisting conflicts of interest.

Such an observation would be rather banal and obvious in an elementary course in politics or public policy. Conventional economic modes of thinking, however, with the “representative agent” solidly embedded in the foundations, can make the obvious unthinkable. The reality of conflicting goals cannot be grasped by “models” of a society as a single big (rational, informed) individual. (Translating such models into less accessible mathematical language, however, can make the inadequacy less transparent.)

---

5 Arrow (1976) p. 3; see also Reinhardt (1992) and esp. (1998).
The clash of competing interests, however, does not take place in a "zero-sum" world. How a health system is organized and financed has an important influence on the distribution of burdens and benefits in the society it serves; but some systems do "work" better than others, in terms meaningful to an external observer. Some are overall and on average more efficient, effective, humane, and acceptable to their publics, and others less so. It is possible to evaluate reform proposals in terms of their probability of improving the overall functioning of a health care system (so long as one does not insist on too much precision). Some reforms, on the other hand, clearly offer "partial gain for general pain", and their proponents go to some lengths to hide that fact.

More fundamentally, our advancing understanding of the determinants of health of populations suggests that different choices in health care reform may have effects on those determinants, above and beyond their influence on the nature, quantity and distribution of health services themselves. The scale of health care systems in modern economies, as well as their significance at critical and vulnerable points in the lives of individuals, give them an especial salience. Health care reforms may be helpful or hazardous to health, in ways separate from and additional to their effects on the use of health care per se.

Expenditures, Incomes, and Revenues: The Fundamental Accounting Identity in All Health Care Systems

Partitioning a population into relevant categories is an accounting rather than an economic exercise, though the categories are motivated by economic considerations. In any population (society, economy) there are three distinct roles that an individual may play with respect to the health care system. S/he may use health care goods or services; s/he may provide resources for their production (including administration and management); and s/he may contribute to the revenues that finance them. In a modern health care system everyone
contributes to some degree, most will in the course of a year use some services, but only a minority (though more than is usually realized) will provide resources for their production.\(^6\)

Each of these activities can be represented by a financial flow. Individuals contribute revenues, primarily through various forms of taxation and to a lesser extent through direct payments for services or premiums to private insurers. These revenues then become the expenditures on health care that are received by the various forms of provider organizations — hospitals, clinics, professional practices, pharmacies. (Payments may be made as prices or fees per unit of service, or be implicit in budgetary allocations.)

But all the receipts of these provider organizations — the “firms” of economic theory — are then attributable to the various individuals that supply resources to them — those who work there, or own or manage them, or invest capital in them, or sell them various forms of supporting goods and services.\(^7\) All the funds that come from individuals, thus return to individuals. This circular flow is depicted in Figure I.\(^8\)

Summing over all the individuals in the society, the total value of the resources supplied — labour, effort and skills, capital, raw materials — must equal the total value of the services produced, and that in turn must equal the total amount of revenue raised for their reimbursement. There is a fundamental accounting identity (a sub-component of the general national income identity) linking total expenditure on health goods and services, total revenues raised to pay for those services, and total incomes earned from the provision of services.

---

\(^6\) There is an inherently arbitrary element (and some interested controversy) in decisions on where to place the boundaries of a health care system, though the central activities that engage most of the people and account for most of the funding are readily identified. Clearly health care cannot include all activities that have an influence upon health. The three-part identity begins from a list of types of commodities that have, by whatever process, been agreed to be “health care” (the elements of the \(Q\) vector). Their prices can then be observed or estimated, and one can (in principle) identify all the different resources that were used up in producing these — and only these — and the payments made for those resources. These total costs can then be partitioned exhaustively among the three sources of revenue.

\(^7\) Provider organizations will typically buy goods and services from other firms — the pharmacist, for example buys drugs from a wholesaler, who buys from a manufacturer. But all of these payments in turn flow through to individuals working or investing in those firms. Revenues remaining in a particular firm can all be attributed either to the firm’s creditors, or to its owners — “no land without a lord.”
A number of simplifications have been imposed for the sake of clarity, without loss of generality. More detail is provided in Evans et al. (1994b).
TOTAL REVENUE = TOTAL EXPENDITURE = TOTAL INCOME

This identity, however, is a relation among financial magnitudes, and money per se produces neither health care nor health. At best it provides access to the things that do. So we expand the relationship:

\[ T + C + R = P \times Q = W \times Z \]

Revenues are raised via taxation (T), direct charges (C), and private insurance premiums (R). Total expenditure can be factored into the unit prices of the various health care commodities, and the quantities of each. \( P \) and \( Q \) are thus vectors whose elements list all the different types of commodities provided/used. These in turn are produced by combining various inputs or resources, \( Z \), that are paid at a rate per unit, \( W \). An element of the vector \( W \) might be a wage rate, for example; the corresponding element of \( Z \) would be a type of labour input measured in hours.

This framework makes obvious the distinction between the levels of health expenditure in a system, \( P \times Q \), and the levels and types of services actually provided – \( Q \). It is the latter that contribute to health. Their production requires not money but the use of real resources \( Z \). An increase (decrease) in \( W \), the rate of remuneration of resource suppliers, will pass through in higher (lower) prices and require the assembly of greater (lesser) financial contributions through \( T \), \( C \), and/or \( R \). But it will have no necessary direct effect on service provision or on health.\(^9\)

Gainers and Losers: Who Sits (and Stands) Where in the Flow of Funds?

Such a change will, however, very definitely re-distribute incomes among the different individuals in the society. An increase in nurses’ wages \( W \), for example, paid from government revenues, will (if the elements of \( Z \) and \( Q \) do not change) shift money from the pockets of

\[^9\text{It may affect the willingness of resource owners to offer them for the production of health care, e.g. the supply of workers, but that is another story.}\]
taxpayers to those of nurses. $P$, the implicit price of hospital care, and $T$, the amount of tax revenue needed to pay for it, both increase.\(^{10}\) Alternatively an increase in drug prices $P$, funded by an increase in user charges $C$, flows into higher rates of return on capital invested in drug companies (a component of $Z$). $W$ rises, and money is transferred from patients to shareholders.

Although the three-part identity above holds for the entire society, it does not hold for each individual, and probably not for any.\(^{11}\) The total amount of money paid out by individuals, returns to individuals, as noted above, but the amount each receives will not be equal to the amount s/he contributed, and the discrepancies may be very large. We can partition the population on the basis of the relationship between their contributions to, use of, and income from the health care system.

The first partition isolates those individuals for whom $W \times Z$, their total income from supplying resources, exceeds either the amount they contribute, or the total cost of the services they use. (This will typically be true of doctors, nurses, and others who are clearly health care workers, but will also include suppliers of specialized supporting goods and services – drug or equipment sellers, but also health insurers and benefits managers.) For this group, health expenditures are (primarily) income, and their perspectives on proposals for reform are shaped accordingly.

The rest of us are primarily users of, and payers for, health care services (though we may also, for example, belong to a pension plan that invests in a mutual fund that holds shares in a drug company or private laboratory). But we can be further partitioned according to

---

\(^{10}\) Governments could, of course, borrow or cut other spending instead of raising taxes. But borrowing implies a cost to future taxpayers, while cuts in other spending still constitute an increase in $T$, the amount of tax revenue spent on health. The losers will be, not taxpayers in general, but those who would have received that other spending as income.

\(^{11}\) In order to “ignore distributional considerations” Arrow (ibid., p.4) did assume that the identity holds for every individual, with the addition of an expectations operator on $C$ and $Q$. This is empirical nonsense, however convenient theoretically.
whether our contributions to the system, T+C+R, exceed or fall short of the expenditures generated on our behalf, P x Q.

Such a partition could not be made in a health care system that was fully funded by out-of-pocket payments. User charges C would equal P x Q, in total and for each individual. But no such system exists. In all developed societies, revenues for health care are primarily raised from (various forms of) taxation. Since these are more or less proportionate to income, and use of care is more or less proportionate to illness, the relatively healthy and/or wealthy contribute more than they spend, and the unhealthy and/or unwealthy contribute less. Public financing for health care transfers income from the former to the latter. Any reform that affects the proportion of revenues flowing through the different channels will redistribute income between (and of course within) these groups.

The differing economic interests of these three sets of individuals – providers, the healthy and wealthy payers, and the unhealthy and unwealthy users – go far to explain the pattern of intellectual debate and political conflict over health care reform. They distort, and sometimes crowd out entirely, what one might naively hope would be a collective search for “the best” – or at least better -- ways of organizing, providing and funding care.

Disagreements over how to advise the steersman are not randomly distributed across the population, a result of incomplete information and imperfect reasoning power. Rather they are rooted in clear conflicts of economic interest, in which those who disagree may, and often do, have very similar (albeit unacknowledged) understandings of the likely impacts of different policies. It is the goals that are in dispute.

Reform Proposals and Their Implications: Tracing the Links to Health and Wealth

Interested advocates of particular “reforms” may of course make claims of general health benefits (among others) as part of their attempt to recruit wider public support. The

---

12 Assuming also that the unit prices of all services equalled their costs, so that no buyer/user was subsidized by any other.
actual impact of any change in policy may be more difficult to predict, and is likely to be conditional on a number of particular factors – God and the devil are both in the details. Nonetheless the rapidly accumulating understanding of the determinants of health, and the considerable international experience with the behaviour of health care systems, should make possible at least a rough assessment of the probable impacts of particular policies.\textsuperscript{13}

Changes to health care systems may influence the health of populations through three broad channels. They may affect:

1. The level, mix, and allocation of the services provided by that system: Who gets how much of what kind of care?
2. The balance of resources between health care and other public or private goods: How much does the production of health care draw away from other economic activities, with potential effects on health? and
3. The distribution of income among the members of society: What (relative) incomes do providers earn, and how is the bill for their services divided up?

The probable impact of any given proposal can then be assessed under each of these heads.

To impose some order on a “zoo” of reform proposals, note that the three-part identity offers a classification. Some focus primarily on the levels and patterns of expenditure, the $P \times Q$, others on the use and payment of resources, or the incomes generated by the health care system. Still others would change the sources of revenue for health care – the endless “public-private” wrangles, for example. But as the identity reminds us, all will have effects across the whole equation. And all will have (more or less) identifiable patterns of winners and losers.

\textbf{Evidence-Based Medicine: Toward Effectiveness and Efficiency in Health Care?}

Consider first the movement for evidence-based medicine, which seeks to influence directly the mix and volume of services provided. It is hard to disagree in principle with

\textsuperscript{13} It must be recognized however that any such attempt, if it receives wider attention, will itself become part of the advocacy process.
proposals to reform health care by generating more reliable evidence on “what works – for whom – and what does not”, and then using this evidence to modify patterns of service. The classic description in the Book of Common Prayer still holds good today, and it is clear that by changing the values of the elements of the vector Q, stopping things that do more harm than good (or do nothing in particular, whether or not they do it very well) and doing more of the rest, we could either save money, or be healthier, or both.

It is not so much the totally useless services that are at issue – though those exist -- but the services that are ineffective or harmful for some or most of the patients to whom, or in the amounts that, they are currently provided. No one questions the value of antibiotics. But if one third of all antibiotic prescriptions written in the United States, or 50 million scrips a year, are unnecessary, this is both an economic absurdity and a major public health hazard (Levy, 1998 pp. 46-53). Nor are the Americans unique.

So is the Cochrane Collaboration a clear contributor to improved population health? Probably, but there are several sources of potential slippage. All are traceable to the link between service provision and incomes – \( P \times Q = W \times Z \). Users of services may have an unambiguous interest in more effective health care, but providers do not.

The determination that a particular product or service has no value, either at all or in a significant proportion of its current uses, is a direct threat to the incomes of those who supply (and are paid for) it. If an element of Q falls, the associated Z falls too.\(^ {14} \) “Money is saved” because the owners of certain resources are now paid less – perhaps not at all. Conversely the finding that an intervention is of value in a wider range of applications is in effect a call to increase its use – and associated incomes.

\(^ {14} \) If payment continues to be made for idle resources, there is an implicit increase in W. More likely, resource owners (typically professional workers) will attempt to introduce or expand some other element of Q – “to meet new needs” – and so keep themselves employed and paid. If they are successful, expenditures do not fall.
Recall also that the Z represent not only the services of clinicians and others "at the coal face." They include (owners of and workers in) commercial firms supplying products and services to be used under their direction, or directly to the public -- drug and equipment manufacturers, for example. Their advertising -- a normal commercial practice -- produces a continual barrage of combined information and "dis-information"-- partial truths, deceptive implications, and outright mis-representations -- with the sole purpose (as with any commercial advertising) of expanding sales. Such advertising includes but goes far beyond the use of the traditional media, to include very sophisticated approaches to clinicians disguised as various forms of "scientific" communications (Mintzes, 1998).

This leads to an obvious bias in the uptake of evidence. Clinicians have always been much more reluctant to give up an activity than to take on a new one. They appear to operate on the principle of "When in doubt, do", requiring a higher standard of proof before accepting that something should not be done (e.g. Banta et al., 1981; Wennberg, 1990). If the evidence is clear that a procedure is unambiguously harmful, it is pretty certain to be stopped. But if, as is more common, there is no evidence of harm, only lack of clear evidence of benefit, clinical practice will change much more slowly if at all.

Commercial advertisers powerfully strengthen this bias. Findings of effectiveness, real or apparent, become part of marketing campaigns. Findings of lack of effect, or of risk, are given much less prominence, distorted, or simply ignored.¹⁵ Nor could it be otherwise, given the incredibly powerful economic incentives bearing on the commercial sector—there is just too much money at stake. Regulatory agencies try to offset this inevitable bias, but are always overloaded, under-resourced, and out-gunned.

In this context the generation of better evidence alone may simply provide more arguments for system expansion. Indeed, since research resources are scarce, clinical epidemiologists who want their work to have impact might be well advised preferentially to

¹⁵ In a few notorious cases, (unsuccessful) attempts have been made to suppress negative findings. The incidence of successful suppression is, of course, unknown.
investigate those interventions they suspect will turn out to be of (possibly wider) benefit. Who needs the hassle?

In what way, however, would this be a bad thing? Such a selection bias would disappoint those who hope that better evidence will, by reducing ineffective care, lead to lower cost (Wennberg, 1990). But if the effectiveness of the health services is on average improving, even though their cost is rising, then surely this is a contribution to the health of the population. It would be even better if one could phase out ineffective (and particularly harmful) care with equal speed. But even if this were possible, it is not obvious a priori that a system that provided all and only effective health care would be less expensive, even in the United States.\(^{16}\)

And that, of course, is the problem. It may well be that there is a virtually infinite supply of services with very low but non-zero benefit. To the extent that better evidence identifies these services more precisely, it provides support for expanding the scope of care. Explicit rationing is tougher than implicit. But resources, as economists repeat by rote, are scarce and have opportunity costs. If any service with a positive health pay-off -- no matter how small -- is to be provided, this must eventually divert resources from other activities, public or private, that also have positive effects on health. “Partial strength produces general weakness.” (Sir Robert Seppings, quoted in Gordon, 1978:69). It is possible to have too much of a good thing (Lavis and Stoddart, 1994); too much (low-value) health care can be hazardous to population health.

Reforms that improve the evidence base underlying health care practice seem unambiguously to advance population health through channel one above. But they carry a risk through channel two, hypertrophy of the health care system itself. Moreover the considerable methodological advances that have supported the evidence-based care movement impart their own biases to the choice of routes to health. It is quite simple – in principle anyway – to conduct a randomized controlled trial (RCT) of a drug or well-defined clinical manoeuvre.

\(^{16}\) There is certainly some expert opinion that it would be, at least in the United States, but no one really knows.
Many of the other factors that appear to contribute to health cannot be tested in this way. How does one conduct an RCT of more versus less egalitarian income distributions?

That is not an argument for “justification by faith alone”, as one might infer from some of the more woolly-minded (or economically motivated) proponents of “alternative medicine”. But if the RCT is treated not only as a “gold standard” – which for some purposes (not all) it clearly is – but as the only mode of evaluation with any validity, all evaluations will be rigged in advance. Only health care interventions (and those paid for providing them) will be demonstrably effective. Other supposed contributors to health, however plausible, will not be supported by “valid scientific evidence”.¹⁷

Finally, the evidence-based approach to reform can be diverted into quite different channels by the advocates of “core services” or “basic benefits.” Implicit in the efforts to evaluate effectiveness is the understanding that ineffective (and a fortiori harmful) services should not be provided at all. And certainly no one should pay for them. But if no one pays, then no one is paid. An obvious alternative for suppliers of such services, if they are removed from public payment programs, is to sell them in the private marketplace.

By shifting attention from what is done (and why) to who pays, the core services “reformers” blunt the threat to jobs and incomes, to W × Z. Any cost containment potential can be converted into cost shifting – lowering T while raising C and possibly R. Indeed total incomes can actually be raised, not merely maintained. Once a health service has been moved into the private sector the absence of public controls permits higher prices, while the opportunities for advertising (overt and covert) and more liberal case selection lead to higher volumes as well.¹⁸ (This of course requires an appropriate match of service and clientele; no one wants to offer expensive services for low-income people in a private market.)

¹⁷ This is a slight over-statement; there are well-known RCTs of non-medical interventions. But they tend to be very expensive, very long term, and very few.
¹⁸ The pharmaceutical industry’s growing interest in and commitment to “Direct To Consumer Advertising” (DTCA) reflects their understanding of the profit potential in private markets with weaker restrictions on communications strategies.
This particular application appears to be far from the intent of the advocates of evidence-based medicine. But steady improvement in the science base underlying medical practice could lead to the identification of an ever-increasing range of low-benefit, high-cost services that no universal public system ever could, let alone should, cover. If so, this is certain to feed into arguments for private markets in health care, and may thus influence population health through channel three (see below). The advocates of “reform” will be those who hope to sell these services, unencumbered by evidence of minimal effect.

Who Pays, and How Much? Rearranging the Sources of Revenue

They will, moreover, have allies. Shifting attention to the sources of revenue for health care, from the level and mix of the Q to the balance among the T, C, and R, opens up another whole class of reform proposals, and their associated interests. Here the focus is not on what is done, but on who pays. “Reform” is primarily about getting someone else to pay.

Imposing (or raising) direct charges on users of care, with or without supplementary private insurance, lowers the proportion of revenue from taxes. There are many variants on this theme. Traditional approaches charge each user so much per visit, hospital day, or prescription, or a proportion of total expenditures, or for all expenditures up to some fixed amount per time period. More complex schemes involve integration of patient liability with the income tax: a currently fashionable version, medical savings accounts, adds a longitudinal dimension. Introducing or expanding a “private tier” of care alongside a public system has similar effects.19

The Sheriff of Nottingham Rides Again

Such proposals link financial liability more closely with health care use, and less with ability to pay. More complex forms may make the linkage less transparent; but all, at the end

19 A private tier of care for the better-off may appear to link financial liability with ability to pay. But those who pay for care privately would also have to pay a higher proportion of the taxes necessary to support such a standard of care for themselves — and everyone else. What is lost on the roundabouts is made up on the swings.
of the day, raise C and lower T. They may also raise R; increased user charges provide something for private insurance to cover. Since, as noted above, tax funding transfers income from the healthy and wealthy to the unhealthy and unwealthy, all these policies shift it back again. They are regressive income transfers, in Lomas’ words the policies not of Robin Hood but of the Sheriff of Nottingham (Lomas and Contandriopoulos, 1994). The more heavily a national system relies on private financing, the larger the proportion of overall health care costs that will be borne by those with lower incomes. The international evidence is most comprehensively assembled and analysed by van Doorslaer et al. (1993). But the central point emerges most strikingly from the United States data in Figure II, drawn from Rasell et al. (1993, 1994).

Family expenditure data were analysed to identify how much was spent on health care, by families in each income decile, through each of taxation, private insurance premiums, and out-of-pocket payments. Higher income families spent more, on average, in each category. But they spent a much lower proportion of their incomes, on either direct charges or private insurance. Only taxation was (mildly) progressively distributed. Moreover, this was true of families with aged heads, even though the United States has a universal public insurance program for the elderly. But that program requires its beneficiaries to pay large user fees; those that can afford it have private “Medigap” insurance.

This point seems to be well enough understood by the advocates of private payment. Such proposals have a long history of support from the wealthy and healthy. More recently these have been seeking to broaden their constituency to include the healthy and unwealthy –

---

20 But suppose the state itself collects user fees and places them in general revenue, with no direct flow through to providers of care? These then represent, quite literally, “taxes on the sick.” T, C, and R are unchanged in the accounting identity but the tax base has become more regressive, linking liability more closely with illness, and less closely with ability to pay.

21 “...[O]ut-of-pocket payments tend to be a highly regressive means of financing health care...” (van Doorslaer et al., 1993:42) but the impact of private insurance is more nuanced (Ibid., p.44). Private insurance supplementary to a more or less universal public system is a “luxury” primarily bought by people with higher incomes. But if private insurance is purchased by a large proportion of the population because public coverage is restricted or non-existent, the distribution of its costs is highly regressive. In general the larger the user charges and the more people who must pay them, the more regressive are the costs of private insurance to cover them.
Figure II

Share of Income Spent on Health Care
Family Income Decile and Payment Form

Family Income Decile (Aged & Non-Aged)

- Out of Pocket
- Total Premiums
- Public Sector
younger people – by focusing attention on a supposed “inter-generational conflict”. The strategy is fundamentally deceptive, because most of the currently young will get old but few will get rich. They may, however, get old too soon and smart too late.\textsuperscript{22}

The traditional arguments for such reforms do not, of course, emphasize redistributive effects. Rather they allege benefits in improved efficiency and effectiveness in health care – and implicitly in population health. Faced with direct charges, patients will be more selective in their use of care, and less likely to use ineffective or harmful services. The level and mix of Q will change, and on average the effectiveness of care will improve.

Moreover, informed consumers faced with prices will shop more carefully for services, forcing suppliers to be more competitive. Prices will fall, and more efficient suppliers will capture a larger share of the market. “More efficient” means using fewer resource inputs per unit of output, a lower ratio of Z to Q, thus permitting lower P for given W. Total expenditures may rise or fall. But since they will (by hypothesis) reflect the preferences of informed consumers expressed through competitive markets, whatever level they attain must be right.

All this is simply elementary economic theory, describing the market for “widgets”.\textsuperscript{23} In fact experiment and common observation both show that, faced with direct charges, patients are not able to discriminate between effective and ineffective services. (The whole history of quackery should have told us that.) Reforms that increase the costs to users do deter the use of care that, in the judgement of experts anyway, is appropriate. Not surprisingly, these deterrent effects are strongest among those with lowest incomes.\textsuperscript{24}

\textsuperscript{22} Why, after all, should they be different from their predecessors?
\textsuperscript{23} Rice (1998) provides an extended and up-to-date critique of efforts to apply “off-the-shelf” economic theory to health care systems.
\textsuperscript{24} A number of papers on this point emerged from the RAND Health Insurance Experiment: Brook \textit{et al.} (1983); Lohr \textit{et al.} (1986); Siu \textit{et al.} (1986); Shapiro \textit{et al.} (1986); Lurie \textit{et al.} (1989). But the basic point was demonstrated earlier by Enterline \textit{et al.} (1973a, 1973b), and the differential impact by income class was shown by Beck and Horne (1980).
Moreover, whatever the behaviour of providers might be in the hypothetical world of the economics textbooks, in reality they are quite capable of suppressing "perfect competition" so as to protect their incomes. Professional organizations, in particular, have been the most persistent advocates of private funding over the decades (Barer et al., 1994) because they anticipate that their income opportunities are greater in a mixed funding environment. International experience bears out this expectation.

Indeed, professional spokesmen often explicitly advocate increased user charges to increase total costs -- raising C and/or R while holding T constant -- arguing that this will support health-enhancing increases in Q. It will also, however, support income-enhancing increases in P, and in any case must inevitably increase W x Z.25

Reforms focusing on the sources of revenue appear therefore to have two potential channels of effect on population health. By increasing (or decreasing) financial barriers they redistribute access to and use of care services within the population. But they also redistribute among individuals the burden of paying for whatever care is provided, as well as influencing the overall size of that burden.

The effect on population health of redistributing access and use of care is pretty obvious, though the magnitude may be questioned in particular cases. Financial deterrents do not differentially discourage inappropriate or "unnecessary" care-seeking, and do have a greater impact on use by people with lower incomes. So they re-allocate care away from lower income people -- who tend to be less healthy -- and towards those with greater ability to pay.26

25 As noted above, private markets tend to be less resistant to price increases than are public payers. They also provide more opportunities for expanding sales volumes -- Q -- through various forms of promotion, because no countervailing agency has a direct incentive to restrain them. The health benefits of such promotion are at best open to question.

26 In a supply-constrained environment, user charges can push lower-income people out of the market, improving the access of those with higher incomes such that their use actually increases. This is an important aspect of the appeal of private funding to the wealthy and unhealthy -- they can be more sure of getting the care that they (think they) need.
The healthy and wealthy get more, the unhealthy and unwealthy get less. Insofar as care is effective, this presumably reduces population health.\footnote{Gorey \textit{et al.} (1997), for example, compared cancer survival rates in Toronto with those in Detroit. They found that survival rates are significantly correlated with socio-economic status in Detroit, where access to care depends upon income, but not in Toronto, where it does not. But upper income Torontonians fared no worse; the overall results favoured Canada.}

But changes in health care financing also affect the distribution of income both among individuals and across income classes. The less users respond to prices (and empirical estimates suggest that the price elasticity of demand is quite low), the closer user charges approach to pure income transfers. Substituting private for public finance raises disposable incomes at the upper end of the income scale (after taxes, transfers, and direct payments for health care), and lower them at the lower end.

\textbf{Inequality and Ill-Health: A Pathogenic Reform Agenda?}

There is a strong relationship, within every population studied, between income distribution and health status. Income is associated with health, and greater inequality of income with greater inequality of health. There is increasing evidence that greater income inequality is also associated with lower average health status.\footnote{Wilkinson has been a particular champion of the latter view, though he has not been alone – see his (1995) exchange with Judge (1995). More recent evidence has come from U.S. research (Kaplan \textit{et al.}, 1996; Kennedy \textit{et al.}, 1996; Davey Smith 1996).} From a population perspective, therefore, “Sheriff of Nottingham” reforms pose threats to health quite independent of their influence on the levels and patterns of health care use.

The potential significance of this channel increases if we consider the pathways through which income inequality might have an effect on health. Those pathways, in high (average) income populations, go far beyond sheer material deprivation and biological insufficiency. A health gradient is observed across the entire income distribution. In general, hierarchical position is associated with the availability of internal or external resources (e.g. education, income, social support) to cope with external threats – “stress” in the broadest sense (e.g. Evans \textit{et al.}, 1994a). Conversely vulnerability – inability to cope with challenges – appears to
be in itself a source of illness. Animal studies offer powerful support for this view (e.g. Sapolsky, 1993; Evans et al., 1994a, ch. 6; Evans, 1996).

The relationship between the health status of individuals and their level of “coping resources” (including income) has been shown in population-based studies (Mustard et al., 1997). But equally important, as discussed by Lynch and Kaplan (1997) in a recent survey, are the effects on individual health of characteristics of the social environment – and in particular the degree of inequality of income – that have no meaning as individual-level measures. They also note that the relevant measure of inequality should be based on the distribution of income (ideally wealth) after the redistributive activities of governments – taxes, transfers, and “income in kind” such as publicly provided health care or education.

Reforms to health care funding that transfer costs from public to private budgets clearly increase inequality of income on this measure, and will therefore – at least on these findings – increase the dispersion and probably lower the overall level of health in the population. The magnitude of the effect may be open to question, but the direction seems pretty clear.29

More specifically, however, illness and injury are themselves a major source of stress: they present threats and challenges on a number of levels. The sense of vulnerability of the individual is linked with perceptions of both the probability and severity of such threats, and the availability of resources to cope with them – access to and effectiveness of health care. Matters of health are thus always news, and health care is never far from the top of the political agenda. And the tighter (looser) the link between personal resources and access to high-quality health care, the greater (less) the sense of vulnerability associated with lower income.

29 But by shifting financial responsibility for health care, might not governments release public funds to address broader determinants of health? This would require that the level of public revenues be maintained after health costs and responsibilities were shifted. The advocates of privatization also tend to be the advocates of government downsizing, “rolling back the frontiers of the state.” Health care funding is in most countries one of the most popular of public programs, legitimizing the role of the state more generally. It seems unlikely that in transferring this activity, governments could find support for expanding their roles in other areas.
In short, if the answer to the question “Can I get care when I need it?” is, “Only if you have the money” then lower income means greater vulnerability. And vulnerability, in humans and other animals, predisposes to illness.

Provider Organization and Payment: The Many Modes of “Managed Care”

But an alternative answer, “No, because the care you need is not available (or not approved in your case)” is hardly more comforting. The third and most complex area of health care reform involves changing the ways in which providing organizations are structured and paid, with the intent of changing both the types and amounts of services offered to patients, and the processes of their production. The focus here is on the W x Z, in the hope of increasing efficiency (Q/Z) or effectiveness (“better” mix of Q). Possibilities range from American visions of private, for-profit “integrated delivery systems” in hot competition for profitable “portfolios of insured lives”; through variants on the theme of capitated groups of providers, budget-holding or commissioned; to the more mundane and very crude “macro-management” that is implicit in the process of negotiating fee schedules, budgets, or global cost caps.

These reform efforts have their origins in cost control pure and simple. Public and private payers focused initially on P and W, trying to hold down fees and wage rates. But it was quite quickly discovered that “demand” can be driven by income aspirations and the availability of capacity – people and facilities. If fees are held down, service volumes rise; if wages are held down, services are withdrawn in various ways. Payers were thus forced to broaden their range of targets.

30 It is an interesting question as to whether the latter response might be more or less stressful than the former. Is the knowledge that others are getting what they need (through money or connections), more troubling than a sense of solidarity and shared sacrifice? The answer may turn on perceptions of the reasons for shortage (external catastrophe vs. administrative stupidity and waste) or of the relative deservingness of others (they need/earned/inherited/stole their preferred status).
31 “Managed care” as defined by Rosenbaum and Richards (1996) includes universal public systems of health insurance, at least to the extent that they “manage the health care practices of participating providers.”
Direct controls on capacity and budgets, on Z and P x Q, have had significant effects on cost escalation, but these are always politically vulnerable to variations on the charge of "under-funding". Providers claim that the overall level of care provided is simply inadequate to meet patients' needs, putting their health at risk ("people are dying"), and can produce "waiting lists" (and sometimes deaths) to prove it. Questions as to the effectiveness and efficiency of the system itself, the appropriateness of the level and mix of Q and the ratio of Q to Z, are side-stepped – unless payers raise them directly.

To do so could imply a much-expanded role for payers in the management of the care services. The difficulty of direct management has led, however, to widespread interest in more indirect approaches -- in changing the information, organization and particularly the modes of payment of providers so that they will manage themselves differently. With different incentives, they might be more willing to take up information on effectiveness, and to seek ways of lowering costs. This is the attraction of the broad range of reforms under the general heading of "managed care".

This approach leads into variants of capitation – paying people or organizations a fixed sum to provide "all necessary care" (perhaps of a specific type) to a defined population. To encourage effective care, however, one might also want to "reimburse by results" linking the capitation payment at least in part to the health outcomes achieved. But then, why restrict such organizations to providing only health care? It is but a step to the truly intriguing idea of contracting for health itself, not merely health care. Provider organizations might then attempt to influence the whole spectrum of health determinants, being paid according to their success (Kindig, 1997). One can imagine this creating powerful commercial incentives not only to extend our understanding of the determinants of health, but also to apply that knowledge as broadly as possible.

Paradox in Private Markets: Can You Get Here from There?

This is leading edge stuff, attempting to harness the forces of the competitive marketplace to the promotion of health. But there are a couple (at least) of fundamental
paradoxes in this program. One is perhaps the central problem in managed care; the other is a quiet embarrassment for health promoters. Neither is approaching resolution.

The most powerful incentives to overcome barriers to efficiency and effectiveness, and to address determinants of health that lie beyond health care, are generated by profit-driven competition among private commercial organizations. But such an environment also creates the most powerful incentives for patient selection -- managing the care of people who are not sick, or not sick in complex and ambiguous ways -- and for under-serving those who are. (Death, after all, is very cost-effective.)

If managed care organizations are to be rewarded or penalized for the long term consequences of their interventions, or lack thereof, this will require not only an extraordinary data base to identify such consequences, but also long term (possibly lifetime) enrolment contracts. These may be acceptable neither to managers nor to managed. But spot market trading of "insured lives" yields maximum returns to the clever selector of the healthy and the hard-nosed with-holder of care, not the expert producer of health.\(^{32}\)

The second paradox is implicit in the expression: "empowering people to make healthy choices." But empowered people do not always make the choices you believe they should.\(^{33}\) That you ignore my good advice is bad enough, but if my firm is going to lose money when you are unhealthy then I will try to control your behaviour, through financial penalties or the "health police". There will be endless wrangles about who is responsible for bad outcomes.

Nor does management come free. Some forms of "managed care" introduce large numbers of new managers, marketers, and other income claimants -- increasing the Z term in the basic identity. This translates into higher prices, as each clinical service must now include in its (explicit or implicit) price an increased burden of administrative overhead (Woolhandler

\(^{32}\) Of course efforts would be made to regulate such behaviour, but one should not be optimistic about the outcome.

\(^{33}\) As Luther found out after translating the Bible. Anabaptists have been persecuted ever since.
and Himmelstein, 1991; Himmelstein et al., 1996). P goes up – unless the incomes of clinical personnel can be pushed down.

“Managed care”, though supposedly focused on efficiency and effectiveness, can also slide into another form of “Sheriff of Nottingham” policy. Suppose competitive private integrated delivery systems (or a National Health Service) offer a basic level of care. But a “point of service” option (or a private tier) is also made available, whereby those who can afford it can buy more convenient (or better quality?) services when they feel the need.

Advocates describe this alternative as “taking the pressure off the public system” which translates as taking the pressure off taxpayers to fund the same level of care for all. Those with higher incomes can assure themselves (what they believe to be) a higher standard without having to contribute to the same for others. Meanwhile providers can feed those perceptions, to increase their own marketing opportunities and prices. “Managed care”, if it takes the form of competition among delivery systems, may well lead down this road. Since a two-track (“deux vitesses”) system is both more accessible and less costly for upper-income people, there will always be a market.

Better Information for Better Management: “PSPB” Data Systems

So “managed care has its problems and risks. Yet health care is always “managed” by someone, and all decisions are based on some sort of information. “Managed care” reforms address: “Who manages, under what incentives, and with what information available?” The problems indicated above arise from the particular and very powerful incentives generated by profit-driven competition in a commercial marketplace. They are not inherent in management per se. Changing the location of managerial decisions, increasing the accountability of those making them, and particularly extending the information on which they are based, can lead to “better management” without the two-edged spur of commercial competition.

Perhaps the clearest link between health care management and the determinants of population health is provided by the newly developing “person-specific, population-based” data
systems (Wolfson, 1994; Roos and Shapiro, 1995). Administrative data from universal, comprehensive programs of health care reimbursement permit the construction of person-specific trajectories of care. These show, in the words of the old limerick, "who did what and with which and to whom," not merely for certain individuals or classes of patients but for whole populations.34

These "PSPB" data systems are beginning to generate more detailed and open information on patterns of care. Linked with other sources of information on health status, they point forwards to much more powerful methods of identifying patterns of practice and assessing outcomes; linked with information on personal and community characteristics they point backwards to the underlying determinants of health itself. The longitudinal structure is of particular importance, because these determinants appear to include certain factors that operate over the whole of the life cycle, becoming embedded at a very young age.

Creatively used, such databases permit both more precise analysis of the social correlates of morbidity and mortality (e.g. Mustard et al., 1997) and better targeting of possible interventions. Wider dissemination of their contents could also raise general public understanding and mobilize support. Improved health care management can thus support the more broadly based promotion of health.

The trick now is to develop the organizations – regional boards, commissioning groups, integrated delivery systems? – that will be capable of, and accountable for, translating that information into more efficient and effective patterns of intervention, in and out of the health care system. Some of the tools developed in the American competitive environment may turn out to be useful for this purpose, even if that environment itself looks like another blind alley.

34 Large linked (or more accurately, linkable) data systems containing sensitive personal information about individuals raise obvious issues of privacy and confidentiality. These issues, however, can be and are being dealt with, apparently effectively, by establishing clear criteria and lines of accountability for data access. Much of the agitation over privacy issues appears to come not from individual citizens, but from those who fear, quite correctly, that better data systems might make their own activities more transparent, and accountable.
Most importantly, the juxtaposition of data on population health with that on care use can be a way of informing the general public, as well as those responsible for health policy, about the significance of determinants of health beyond the health care system (British Columbia, 1997). If strategies for promoting health are to be developed and to find support as alternatives to health system expansion, they will probably have to be based on information at an equivalent level of specificity – not “How can we all be healthier?” but “What to do about condition X?”

Keeping the Hyaena on a Diet

More generally, if health care delivery is not to crowd out policies to address the broader determinants of health, its global scope and costs must be contained. “It’s hard to advance while there’s a hyaena chewing on your foot.” Wildavsky (1977) summarized the fundamental growth dynamic of modern health care systems in his Law of Medical Money: “Costs will increase to the level of available funds... that level must be limited to keep costs down.” Failure to limit the demands of health care will make it difficult to find (public or private) resources to improve other aspects of the social and physical environment that contribute to health. It is also likely to lead to more private financing, with effects such as those described above. Better management of health care may be essential to population health.

The forces arrayed against cost containment are formidable, all driven by the fundamental fact that expenditures equal incomes. Efforts to limit expenditure elicit a standard cry from providers to the public:

“The system is underfunded and your health is at risk! Make the politicians give us more money, or protect yourself privately!”

---

35 Again a paradox emerges if care managers are in profit-driven competition. This environment creates powerful incentives to generate information on both the health status of different populations and the relative effectiveness of various interventions. But the information so generated is inevitably proprietary. If it is exposed to external evaluation, it can be copied by competitors. Just because the idea of patenting care protocols or health promotion strategies is absurd, does not mean that it could not happen.

36 It is also likely to lead to more private financing, with effects such as those described above.

37 Attention should not be wasted on an idle dream that improvements in population health could be “self-financing” by lowering the need for and hence the cost of health care. Apart from the extreme disjunction of time scales, such a hope would be based on a complete mis-reading of the determinants of health care use and cost.
The containment of health care systems will fail unless it is — and is seen to be — consistent with preserving access to effective high-quality health care, at need. Is this possible?

This is really a double question. First, is it technically feasible to maintain and improve the effectiveness of modern health care systems while containing and perhaps even reducing current expenditures? The answer appears to be very clearly yes — in principle. Health care systems throughout the developed world continue to provide inappropriate and ineffective services, in ways that are unnecessarily costly.38 Wide variations exist, within and between regions, in patterns of care for apparently similar populations and problems. These variations are linked to the availability and aspirations of providers, not the needs of the populations served. The cheerleaders of technology, for whom no (amount of) expenditure is without benefit, draw their inspiration from the marketing department.

The second question, however, is more difficult, being primarily one of administrative and ultimately political feasibility. Can knowledge about effectiveness and efficiency be translated into changed behaviour? Restraining costs, whether by brute budget or persuasive protocol, always comes back to restraining incomes. Health care is managed within a “capacity” environment set by public and private investment policies that determine the long-run path of the Z — in a sense the demand for incomes.39 Investments in training of highly “human capital intensive” people such as physicians are especially critical. Once trained, they will expect one way or another to make a living. That means they will have to be paid — by someone. And training places are politically much easier to open than to close.

Similarly, when more generous patent privileges are conferred on drug manufacturers, their prices and profits, P and W, are raised. These privileges both encourage and support

38 For example, in-patient hospital use has been falling dramatically in a number of countries. But a pair of recent studies in British Columbia has found that, although acute care use (per capita) has fallen roughly 70% since 1969 (McGrail et al., 1998), it would still be possible to halve current use by medical patients if adequate alternative facilities (mostly outpatient) were available (Wright et al., 1997). On the other hand, reductions in in-patient use do not necessarily save costs. Costs and incomes may simply be transferred to other venues and earners (Reinhardt, 1997). More generally, there is a huge literature on both the appropriateness of current care patterns, and the possibilities for resource substitution.

39 Or in Reinhardt’s (1987) terms, the allocation of lifestyles to providers.
increased investment in pharmaceutical innovation -- increases in Z -- and these too will have to be paid for. There may be more effective ways to advance population health than by developing and consuming ever more, and more expensive, drugs. But once the (very large) investments have been made, their owners will fight tooth and nail to get their return – with a profit.

Short-sighted decisions to encourage particular private investments can thus impose very long run constraints on management choices. They put in place a level and mix of personnel or products that powerfully influence the pattern of services produced and their overall cost. If the scale and structure of Z is pre-committed, it is hard to change the mix of Q – or reduce P – whatever the form of management.

Efficiency at Whose Expense: Was There Someone In That Bathwater?

But managed care may also have implications for population health on another level, that go to the core of the belief that the health care services need "More management, not more money." Along with the extensive evidence of inappropriate and simply unevaluated servicing, there is also considerable evidence that (at least in the absence of financial barriers) the sickest people do receive the most care. Since health is correlated with socio-economic status (SES), on average people at lower SES are the heavier users. The SES gradient in use is not, however, uniform across all services. It is found in those forms of care for which outcomes are less well defined, and the boundaries between medical and social needs less clear – especially in hospital care for patients with medical and psychological diagnoses and relatively long stays (Roos et al., 1997).

Yet in-patient care is precisely where cost containment pressures have had the greatest effects. Surgical and diagnostic procedures – which display less of an SES gradient – are migrating out to ambulatory or short-stay facilities. Lengths of stay are down because people are simply going home – as many of them wish to, and should. But what happens to those
with real but ill-defined needs, who are in hospital because the hospital is there? And by the
time they get there, such people are in fact quite sick (Roos et al., 1997). Some of the
resources released by “downsizing” might be re-deployed to support them in other ways. But
if not? The SES gradient is at least a warning that “better management” on medical criteria
might have adverse implications for the health of vulnerable sub-populations.

Conclusions – And a Few Suggestions

The relation between health determinants and health care reform is thus a complex one.
Reform of health systems to improve effectiveness and efficiency in the provision of care may
be essential if resources are to be made available to address other determinants of health. You
have to get the hyaena off your foot. On the other hand powerful economic forces tend to
distort all reform efforts, trying to blunt or reverse cost containment while inserting regressive
cost shifting. Such distortions are most likely to have negative effects on population health.
But they will never lack for advocates. There is simply no way around the fact that more
expenditures equal more incomes for providers, or that tax-financed health care transfers
resources from the healthy and wealthy to the unhealthy and unwealthy. The economic
interests are well-defined, and a permanent feature of every national debate on health care.

“Re-forms” that would substitute private for public funding sources are more or less
overt efforts to re-distribute access and costs. Their effects on population health seem
unambiguously negative. Common sense suggests, and empirical evidence confirms, that
linking access more closely to ability to pay results in more care for those with more resources,
and less for those with less, and overall a worse match between care use and needs.

But privatizing revenue sources also redistributes access to other goods and services.
Paying less (more) in total -- taxes plus private charges or premiums -- to support the health

40 Hertzman suggests that we have in our societies two types of institutions for people who have simply “given
up” and can no longer cope with their lives -- hospitals and prisons.
care system, the healthy and wealthy (unhealthy and unwealthy) have more (less) to spend on other things. Health care finance is part of the general pattern of taxes and transfers in each society that mitigate (more or less) the inequality emerging from the marketplace. Privatizing health care funding weakens that mitigating effect, leading to greater economic inequality and probable negative consequences for health.

More private funding would, however, raise total expenditures on health care. Advocates now seem almost unanimous on this point. But these increases are likely to be primarily in incomes, not in services provided, and *a fortiori* not in the most effective services. And the significance of emerging evidence on the broader determinants of health is precisely that further expanding the health care system may NOT be the best route to population health.

"Re-forms" of funding sources deserve particular attention, because these are "degenerate forms" of virtually every other approach to health care reform. When proposals to improve the functioning of health care systems run into opposition from those whose incomes would be threatened, sooner or later someone will suggest "more private funding" — cost shifting — as a compromise. But even apart from the distorting effects of economic interest, harnessing health care reform to the improvement of health remains a significant challenge with much still unknown.

Improving the evidence base for health care interventions seems to be making the most rapid progress. But that area also shows clearly the need for organizational structures to ensure both that new knowledge is used appropriately in health care delivery, and that the process of information generation is not itself subject to systematic biases rooted in economic interest. Changing the organization and management of health care systems may improve the uptake of evaluative information, and ideally may encourage attention to a broader range of health determinants. A good deal of experimentation is going on with different forms of "managed care", but settled results are still scarce.
There seems a widespread interest in "primary care reform" based on some form of capitation, and an agreement that fee-for-service, as the predominant mode of reimbursing care, has outlived its usefulness. Nor do profit-motivated competitive managed care systems in the United States appear to be overcoming their inherent paradoxes (though Americans have low expectations and a high ideological commitment to the market). But the ball is still very much in play. Whatever the organizational framework, however, controlling the costs of health care in the face of intense provider pressure and public anxiety and scepticism seems certain to require progressively more sophisticated and detailed management, whether by payers or by providers themselves.

The data systems that this will require are, however, now coming into being. Comprehensive population-based data systems assembled from health care utilization records are providing a framework on which to assemble a wide range of other forms of information on personal and community characteristics. Integration of these different sources of information promises to provide support for both better management of health care delivery, and more effective approaches to the determinants of health. (The effective use of such information, however, will still depend upon the development of organizations with the capability and the incentive to do so.)

It would be ridiculous to conclude by offering a "blueprint" for managing health care services so as best to promote population health. Certain points do, however, seem to emerge from the above discussion.

First, if we are to take advantage of our growing understanding of the determinants of health, it is essential to contain the enormously powerful growth dynamic in the health care system. The hyaena must be kept on a diet.

Second, better information on "what works and what does not" in the clinical setting is necessary but far from sufficient for this purpose. The more difficult challenge is that of
instituational design, of developing the organizations that will do the job instead of doing something else.

Third, no such reform is likely to have a chance if short-sighted decisions expand the numbers of long term (public or private) income claimants – vesting future interests in health care spending.

Fourth, since there are permanent economic interests at stake, any effort to redirect health policy will inevitably be a political struggle. Much better – both detailed and reliable -- information on system performance is now needed not only to ensure but also to demonstrate to a concerned public the integrity of the containment process. The competitive clamour of “too little” versus “too much” at a global level is uninformative and distracting.

Fifth, the “person-specific, population-based” data that is necessary for the effective management of a health care system is also a major resource for generating public information. It should be used.

Sixth, more detailed information on where, how, and why health differences emerge is required if appropriate policy responses are to be introduced. From an observed mortality gradient by SES to a more progressive tax system, for example, would be a rather long leap; the connection between symptom and underlying cause is still far from clear.

Seventh, for this purpose also an information base assembled from the activities of the health care system can be augmented with individual and community-level data to become a significant source of knowledge about both the broader determinants of health and the effectiveness of interventions – and a source of public information.

Eighth, never forget that the Sheriff of Nottingham is always out there, and that he is hazardous to health!
References


Roos, N.P and E. Shapiro eds. (1995) Medical Care Special Supplement “Health and Health Care: Experience with a Population-Based Health Information System” Vol. 33 no. 12 (December)


37


Shapiro, M.F., J.E. Ware and C.D. Sherbourne (1986) "Effects of Cost Sharing on Seeking Care for Serious and Minor Symptoms," Annals of Internal Medicine, 104: 246-251.


