

ACCESSIBLE, ACCEPTABLE AND AFFORDABLE:  
FINANCING HEALTH CARE IN CANADA

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The Most Popular Public Program in Canada

In the fall of 1988 there was a federal election in Canada, and the principal issue in debate during a very lively campaign was the upcoming free trade agreement with the United States. This agreement was viewed as much more than a commercial treaty with our largest trading partner. It was feared as potentially leading to a fundamental change in our whole sense of national identity, which has always been powerfully affected by our relationship (close but not too close) with the overwhelming presence of the United States. The Progressive Conservative government was committed to signing the agreement, and was re-elected on that platform, though with well short of a majority of the popular vote.

The government came very close to defeat, however, during a remarkable three day period in the middle of the campaign in which the free trade issue became entangled with health care funding. The opposition parties began to attack the agreement on the ground that it would lead to the destruction of the Canadian health insurance system and its replacement with something more similar to the American approach. The public responded to this prospect with a massive swing against the government, almost overnight, of about 10.0 to 15.0 percent in the opinion polls. The opposition Liberals emerged in front. A desperate political damage control exercise by the government convinced enough of the electorate that there was in fact no connection between free trade and health insurance, and the "tidal wave" slowly receded.

It is hard to think of a more reliable indicator of the extent and intensity of public support for the Canadian system of health care funding. Any government which was widely perceived to be putting that system at risk, would become an ex-government at the next opportunity. No one imagines that the system is perfect; it has been surrounded by political controversy since its beginnings and is likely to remain so. But that controversy does not

extend to the fundamental principles; after more than 20 years of experience universal Medicare has a broader and firmer base of support than any other Canadian institution. There is no serious political voice calling for abandonment or major change, and the 1988 election re-emphasized why.

But the extraordinary level of interest in the Canadian health insurance system which has recently appeared in the United States suggests that our concerns may have been misplaced. We feared that Americans would regard the Canadian system as an unfair advantage for our firms in the international marketplace, and would demand that it be dismantled as a condition of the free trade agreement, to ensure a "level playing field". It did not occur to us that the United States might instead want to trade health care systems! (If we were to do so, of course, we would be very foolish to trade at par. We ought to charge quite a healthy premium.)

The massive popular support within Canada for our form of health insurance is a political fact, and its relevance to Americans is simply that those who live in the system overwhelmingly approve of it. It meets the test of public opinion, and political support. That might not necessarily be a recommendation - Canadians might be wrong, or might simply not know what they are missing. After all, it appears that citizens in most industrialized countries, even the poor benighted Brits, are strongly attached to their particular health care systems, just as they are to their individual physicians. The common American rhetoric, that whatever its problems, the American health care system is still the finest in the world, presumably implies that Canadians are misinformed.<sup>1</sup>

But it is relevant, I think, to note that Canadians are comparatively

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<sup>1</sup> The somewhat less grandiose claim that "At its best, American medicine .... etc.", while less self-evidently false, contains a rhetorical boomerang. This could perfectly well describe a system in which a small privileged class received the world's best, and the care of the rest of the population was mediocre or worse. It is thus remarkable that anyone would regard this claim as grounds for pride, without further elaboration as to what proportion of American medicine meets such a standard, how far short the rest falls, and how access to "the best" is determined.

well informed about matters American, for reasons of simple proximity and relative size. Few Canadians are out of range of American television, most have travelled in the United States, and all are immersed in "North American" culture. They do have a picture of American health care which, if not complete (much less completely accurate, who has that?), is nevertheless likely to be a good bit clearer than the typical American picture of Canada. And they know, very firmly, that they do not like what they see.

Going to the other side of the mirror, the finding that a substantial majority of a randomly selected poll of Americans expressed a preference for a Canadian-style system - at least as briefly described to them - appears wholly unprecedented in international comparisons (Blendon, 1989). Again, those polled may be wrong, in the sense that if most Americans really had to live with such a system, they would be much less satisfied. But the ineluctable fact - and it appears to be a fact - is that Americans are not happy with what they have (Taylor, 1990).<sup>2</sup> Canadians are.

#### Affordability and Accessibility: Defined How? Judged by Whom?

The design of health policy, however, is not judged solely by comparative popularity polls. Analysts and commentators look for objective facts. (Although they neglect at their peril the reality that to their political masters public opinion is fact.) Ideally one would like to know what contribution different systems make to the health of the populations they serve. The true tests of a good system would then be, "Does it work?"

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<sup>2</sup> As Taylor points out, most Americans do seem to be happy with their own health care; it is the system as a whole which they report as unsatisfactory. Since a substantial majority of Americans have good insurance coverage and ready access to services, this is no paradox. Care is both accessible and affordable for most individual Americans; it is the global cost and the large minority who have inadequate or no access which lead to systemic concerns.

as well as "Do the population like it?"<sup>3</sup> The test of an innovation would be its potential for improvement on some combination of these measures.

Outcome data being notoriously inadequate at the individual level, let alone for entire populations, we fall back upon such intermediate measures as "affordability" and "accessibility". These have been of particular concern to Americans, because the various health care funding systems operating in the United States make up a package unique among industrialized countries, both in the level and rate of escalation of their costs (Schieber and Poullier, 1989), and in the proportion of the American population which has either grossly inadequate, or simply no, form of public or private health insurance (Short et al., 1989). Canada, along with all the countries of Western Europe, has achieved the combination of lower and less rapidly escalating costs, and broader population coverage, which most Americans appear to regard as proximate but perhaps (for them) unattainable goals.

Such goals, it should be noted, are in this context characteristics of a health care funding system, aggregating the experience of individuals and organizations. An individual with severe health problems and limited personal resources or insurance coverage might find care inaccessible because it was unaffordable for her. But the affordability of the system refers to its overall costs relative to the resources and priorities of the society as a whole. Whether or not the American health care system is in some sense "unaffordable" for the United States is a separate issue from whether needed care is "unaffordable" for some Americans, or for their employers; either could be true without the other.

Of particular importance, because frequently a source of confusion, the costs of a system do not become more or less affordable by being transferred from public to private budgets, or back again. At the end of the day, the

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<sup>3</sup> "Affordability" drops out of consideration as an independent criterion at this level of generality, because the program consists of its benefits and its costs. If the program really "works", and if the population is happy with the balance of benefits and costs - then clearly it is affordable. The population served have chosen to afford it.

people of a country pay for the costs of their own care, and it is the total that matters. The total costs of health care do not become less of a burden on American society, more affordable, simply because a substantially lower proportion of these costs are funded through public budgets than in other countries.

Similarly the accessibility of a health care system reflects the overall response of that system to the needs of the population it is intended to serve, and may be impeded by a variety of different barriers of which out-of-pocket costs are only the most easily identified.

There is, however, a danger that these intermediate criteria may be interpreted as more "objective" and/or more readily measureable - more "scientific" - than the ultimate goals of health effect and population satisfaction. Certainly one can measure such indicators of cost and use as dollars spent, prices, numbers of treatments, persons enrolled, terms of coverage, etc., and in principle with great precision. But words like affordability or accessibility of care go well beyond measurement, and embody implicit values and choices - judgements - which cannot be derived from the data themselves.

What is affordable depends on one's preferences and priorities as well as on costs; very rarely are wealthy societies constrained in any particular endeavour by absolute shortages of resources. But the setting of social priorities is quintessentially political, not "scientific". The "expert", medical or economic, has an important task in trying to lay out the options, as accurately and honestly as possible. But the actual setting of priorities, the making of choices, is the role of the citizen and voter. The expert *qua* expert is no better equipped than anyone else for this task, and is entitled to one vote.<sup>4</sup>

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<sup>4</sup> This statement presupposes that a prior decision has been made to deal with the allocation question politically, rather than through the marketplace in which people have different numbers of votes according to their wealth. The justification for this approach is both that in the real world no society, not even the United States, has been willing to let the

Similarly accessibility begs the question of what is to be accessible, to whom, and under what circumstances? Accessibility *per se* is really a means to one or more ends, not an end in itself. The end that is sought through health care is health, and the "accessibility" of health care is valued principally on the belief that such care will contribute to someone's health.<sup>5</sup>

The connection between health care and health is, however, highly uncertain and contentious; students of the effectiveness of health care emphasize that most of it is at best unevaluated and that even interventions which are demonstrably effective in specific circumstances are very widely misapplied (Banta *et al.*, 1981; Feeny *et al.*, 1986). It follows that accessibility as a normative concept, a proximate objective, cannot be identified or compared across systems simply on the basis of a set of measurements of utilization. One needs to know what forms of care are being provided or denied to persons in particular circumstances, in order to determine whether differences in access to care correspond in any systematic way to differences in access to health. Better access to useless or harmful care is not in general a cause for congratulation.

But useless for what? Such a statement presumes an unambiguous and generally agreed upon concept of "health" against which interventions can be evaluated. For some aspects of health this is a reasonable approximation, but other dimensions are highly debatable and culture-dependent. There will be disagreement among individuals and particularly across cultures as to the nature and extent of the "health" which accessibility to care may promote. The meaning and the value of

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marketplace govern health care matters, and that, if any society did so, the aggregate issues of "affordability" and "accessibility" would be meaningless. Who, other than individual buyers, worries about the accessibility and affordability of Mercedes-Benzes?

<sup>5</sup> This is not the only reason; considerations of social solidarity and the symbolism of caring may justify promoting access to care of dubious or no therapeutic value. But anticipated health benefits are the central issue.



"accessibility" to particular states as well as services will then also vary.

Nor is this only an abstract possibility. The individual undergoing regular monitoring of his serum cholesterol level, and on a strict dietary and drug regimen for life, may be regarded by one person as "healthy" because his probability of death from heart disease is reduced. But another may see the same individual as "sick", because he is now both physically and psychologically dependent on care - morbidly concerned with his own health. Should a "good" system promote, or even provide, universal access to cholesterol screening? Hume's Law applies; one cannot derive "ought" from "is". And words like affordable or accessible are inherently "ought" words, laden with normative content. What ought particular people to receive? And how much should they or others be willing to pay for this?

With this caveat, we shall sketch out some of the basic facts and central features of the Canadian health insurance system, noting particularly the principal similarities with and differences from the forms of funding in the United States. Structural differences then lead into differences in performance, although the connection provides fertile ground for interpretation and disagreement over precisely why things have evolved differently on each side of the border - or for that matter how different they really are.

Differences in performance are then matters for evaluation, and we will consider some of the problems of interpretation which arise in moving from "cost" to "affordability", and from "coverage" to "accessibility". These problems are not insurmountable, but they do involve certain unavoidable value judgements which provide a context for the choices inherent in any process of health care funding. Subject to this qualification, however, it does appear that the Canadian system of health care finance is both more accessible and more affordable than that of the United States, and that its advantage is growing over time. The two populations are not wrong in their respective evaluations of their systems.

## Health Care Funding in Canada and in Brief

The "stylized facts" of health care funding in Canada, stripped of a multitude of fascinating but inessential footnotes, are as follows. Canada does not have "socialized medicine", but it does have socialized insurance, for hospital care and physicians' services. Each of the 10 provinces operates a payment system which reimburses private, fee-for-service physicians for the care they provide to their patients, according to a uniform fee schedule negotiated at periodic intervals between the provincial medical association and the provincial government. The schedules differ across provinces. Physicians have admitting privileges in hospitals run by community or municipal boards; these hospitals derive their operating funding from annual global budgets negotiated with the provincial ministries of health.

The costs of this system are met by each province out of its general tax revenue. But the federal government also makes a substantial contribution to the provinces, currently about 40 percent on average of program costs, in the form of a block grant rather than as a share of audited costs. The federal government requires that the provincial plans meet certain conditions to be eligible for these funds, hence the close similarity among provincial plans despite their technical independence.

In particular, the provincial plans must cover 100 percent of their populations, for all "medically necessary" services. This is significant in those two provinces which still require their residents to pay premiums for health care. (The revenue from these premiums is not "earmarked" specifically for health care, but is in effect pooled with general provincial revenues.) One cannot be denied services for failure to pay premiums; such "premiums", which are also unrelated to risk status, are in fact a form of poll tax. (Most people do not, however, know that they cannot be denied care, and provincial governments do not try to disseminate the information.)

Furthermore, while the federal conditions do not ban charges to patients, they do provide that a province's grant must be reduced by any amount which the province charges, or permits to be charged, to patients for insured services. In response to this, provinces have in various ways discouraged physicians from extra-billing patients in amounts above the provincial fee schedule, and do not impose charges for hospital services. (Patients in long-term care institutions, however, are charged a daily rate calculated to recoup most of the public minimum pension. And patients in acute care, who in the judgement of their physicians do not require semi-private or private room care, may nevertheless choose such care on payment of a "preferred accommodation differential". If medically required, of course, such care is free.)

Accordingly, all residents of Canada are fully insured for all "medically necessary" hospital and medical services.<sup>6</sup> Access is universal, and complete, in the sense that there are no financial barriers to care. While it is clear that this does not exhaust the possible content of "accessibility", it does mean that the phenomena of medical indigence and bankruptcy, uncompensated care, patient dumping and other forms of financial discrimination simply do not exist. The anxiety and distress suffered by so many individual Americans as they contemplate the potential or actual impact of ill-health on their economic situation, has no counterpart in Canada, while those responsible for managing or paying for the system do not have to cope with the problems and costs raised by the multiplicity of manoeuvres to pass costs on to someone else.

#### Universality is Cheaper: A Paradox, But a Small One

Nor is it the case, as so often claimed in the United States, that universality implies national bankruptcy. or at least "unaffordability".

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<sup>6</sup> The significance of that qualifying phrase has never been explored. It excludes elective cosmetic surgery, though obviously repair of traumatic damage or congenital defects is covered. Conceivably the legislative phrase could serve as a basis for "deinsuring" services evaluated by expert opinion as having no actual or anticipated benefit, but this has not been tried.

The assumption that there is an inevitable trade-off between accessibility and affordability is one of the more deceptive and disabling fallacies injected into public debate, often by economists suffering from a bad case of *a priorism* and a low level of comparative information.

The fact is that Canadians spend substantially less of their national income on health care than do Americans, about one dollar in twelve compared with nearly one dollar in eight south of the border. In proportionate terms, this amounts to a saving of about one-quarter. And all of this difference is in the total costs of hospital and medical care services - those components of national health expenditure covered under the universal public Medicare program - and in the overhead costs of the insurance programs themselves. Such items as dentistry, out-of-hospital drugs, and public health are not covered by that program, and their costs do not in total differ very much from South to North (Barer and Evans, 1986; Evans, 1986).

The Canada-United States divergence, which now amounts to two percentage points of Gross National Product (GNP), or in American terms about 100 billion dollars, has emerged in the two decades since the Canadian system was fully established. The last province entered Medicare on January 1, 1971; in that year both Canada and the United States spent roughly equal shares of their national income on health care. Furthermore, the pattern of cost escalation in the two countries had been virtually identical over the previous 20 years. Between 1971 and 1987 the health spending share in the United States rose further, from 7.6 percent of GNP to 11.1 percent, while the corresponding Canadian increase was from 7.4 percent to 9.0 percent. And virtually all the Canadian increase occurred in one year of deep general recession - 1982 - when real national income fell sharply (Canada, 1987; Levit *et al.*, 1989; unpublished data from Health and Welfare Canada, 1989).

The Canadian experience thus demonstrates that, far from being in conflict, affordability and accessibility are complementary goals. It is

the universal system, channelling all reimbursement through a single payer, which has made both possible. More detailed analysis of the functioning of the health care systems on both sides of the border confirms this view.

As further evidence, most countries in Western Europe have since 1980 stabilized the growth of their health care sectors to a roughly constant share of national income. All have universal, public or quasi-public health insurance programs. Sweden and Denmark have actually significantly reduced the share of health spending, from 9.5 percent and 6.8 percent of Gross Domestic Product (GDP) respectively in 1980, to 9.0 percent and 6.0 percent in 1987. Sweden began the decade with the highest share reported among the nations of the Organization for Economic Cooperation and Development (OECD); but Denmark in 1980 was already below average. For the OECD as a whole, the average share of national income spent on health has moved from 7.0 percent of GDP in 1980 to 7.3 percent in 1987 - but this average includes the United States (Schieber and Poullier, 1989). Canada is no longer unique, although we do have the longest record of cost control.

But the total costs of health care in any country are also by definition the total incomes earned from the provision of health care. This elementary mathematical identity is extremely important to the understanding of the air of continuous controversy surrounding the system which I have portrayed as affordable, accessible, and overwhelmingly popular with the citizenry of Canada. That controversy, which is real, long-term, and likely to continue indefinitely, may mislead some external observers (and even some internal observers) into wondering if the system is collapsing.

Hospital and medical care is "free" to the user, but of course not to the society as a whole. And while the overall cost is much lower than in the United States, the fact that provincial treasuries bear all of that cost places them in continuing conflict with the physicians, nurses, hospitals, and other providers of health care for whom no amount of spending is ever quite enough. Funding health care is the largest and most politically volatile responsibility of any provincial government, with the greatest

political dangers. Precisely because the controls on spending work, the payment systems are a lightning rod for professional dissatisfaction. As a group, providers have learned to live with cost control; but they have never accepted it in principle, and it would be naive to imagine that they ever will.

But this inherent conflict of interest between payers and providers is common to all financing systems. And the fact that a sense of financial "crisis" is observed in so many national systems, at very different levels of funding in both absolute and relative terms, suggests that controversy is the result, not of spending levels *per se*, but of any attempts to contain cost growth, regardless of the level of spending. Controversy is the price of affordability (Tuohy, 1986; Evans, Lomas *et al.*, 1989; Evans, 1990a,b). As the American example shows, the price must be paid even for unsuccessful efforts at control.

But it would be quite wrong to conclude, as the American media tend to do, that every funding system has problems and therefore all are in the same boat. While all struggle with the same problems, some struggle much more successfully than others. Moreover the costs of the struggle are borne very differently. In Canada, providers and payers fight, patients are in the audience. In the United States, the patient (or the employer) is down in the ring struggling with providers, and it is a much less equal contest.

It does not follow, of course, that the Canadian system is ideal and that Americans should immediately try to import it. Each country has to develop a system of health care funding and delivery consistent with its own culture and history, and our histories and cultures are different. But if Americans really want to achieve operating results similar to Canada's, controlling overall costs and covering the whole population, then they will have to, in their own way, develop mechanisms for imposing the kinds of limitations that exist in Canada. The institutional features may be different, but they will have to do the same tasks.

### Everybody Is Doing It - Canada Is Just Nearer

This generalization is supported by the Western European experience. As noted above, the majority of developed countries have succeeded in stabilizing their health care costs as a share of national income. They have done so in very different funding systems but all provide more or less universal coverage, either through a single payer, or through a number of payers which are then co-ordinated by legislation and regulation. The coordinated payment system is then the mechanism through which various forms of controls are applied. The United States is now the outlier, the one country that has not succeeded in achieving stability. And the outstanding difference is that the United States is the one country that has not gone to some form of universal coverage (Abel-Smith, 1985).

The critical linkage seems to be between universal coverage, and sole-source, single-payer funding. As noted, this may be achieved either by a single payer in fact, as in Canada or Sweden, or by multiple but legally coordinated payers, as in Germany, or by a handful of payers each with exclusive jurisdiction. One could certainly imagine a system of large numbers of uncoordinated payers which was extended (at least briefly) to provide universal coverage; this appears to be the solution advocated by the American Medical Association (AMA) - "Universal access, not universal insurance" - to deal with the large numbers of uninsured (Todd, 1989).

Such a system would generate even more rapid escalation of costs - i.e. provider incomes - than the present American system, while preserving both the financial and the clinical autonomy of providers and the impotence of payers. It would add more money to an already over-inflated system, and more bureaucratic overheads to run yet another program or programs. But once it has been decided that everyone is to be covered, the whole apparatus of private insurance (designed in a private marketplace to determine whom to cover, at what price, and whom to exclude) becomes complete waste motion. The higher cost and dynamic instability of such an approach makes clear why, in practice, universal coverage is always associated with sole-source

funding, *de jure* or *de facto*.

While universality of coverage and sole-source funding are, as far as we know now, preconditions for cost control, it also appears that cost control reinforces universality. The absence of control, in the American environment, creates strong incentives for those who bear the ever-increasing costs to try to pass them on to others. Governments and employers are thus tempted, if not forced, to increase the premiums charged to those covered, while cutting back on the scope of coverage by imposing larger co-payments on users of care, and/or pushing people off their rolls. Contrary to the naive predictions of market economists, this has not been effective in mitigating the escalation of costs, but it does add significantly to the human cost of ill-health by combining financial insult with health injury. When the lifeboat is leaking, one reaction is to throw people overboard rather than to try to plug the leak. The universality advocated by Todd (1989) would, if ever achieved, begin to crumble in this way almost immediately.

#### What Seems to Be the Problem, Sam?

We began the discussion of health care systems by defining a "good" system as one making a positive contribution to the health of the population it served, and popular with that population. We then promptly retreated to the intermediate and somewhat more measureable criteria of affordability and accessibility. What has demonstrably been achieved in Canada and Western Europe, however, is cost control - at least relative to the United States - and the almost universal removal of financial barriers to health care utilization. As emphasized above, these are not necessarily equivalent to affordability and accessibility. The latter labels imply certain evaluative judgements on the desirability of the outcomes achieved, judgements which do not follow automatically.

There is no magic level of expenditure beyond which health care becomes "unaffordable". Americans can obviously "afford" to spend over 11 percent



of their national income, unambiguously demonstrated by the fact that they are spending it now. A number of other countries - Canada, France, West Germany, the Netherlands - spend between 8.0 and 9.0 percent, and Sweden has moved down to this range since 1980. Britain, Australia, Denmark, and Japan, by contrast, spend much less on health care - between 6.0 and 7.0 percent of their national income - and they too worry about affordability.

Countries do not spend what they do as a result of some explicit decision that that level is "right", although Denmark and Sweden seem to have made fairly broad-based collective decisions to bring their spending down, in relative terms, in the 1980s. But for other countries, and Canada in particular, the current spending share is simply the share which our previously escalating costs had reached when we managed to develop both effective instruments of control and the political will to use them - to put the lid on. After that, holding the lid on at any level requires constant political struggle with providers who are convinced that, whatever the level of spending, more would always be better.

One cannot necessarily assume that the level of spending is wholly arbitrary; different societies may have different spending propensities, and perhaps Canadians or Germans would not tolerate the health care system that they could buy for 6.0 percent of their aggregate incomes. But health spending in Canada, from 1971 to 1981, remained quite close to the 7.5 percent which it had reached when the universal public insurance system was completed. It moved up sharply to the 8.5 - 9.0 percent range in 1982, not because payers or the rest of the community had accepted providers' arguments for more, but simply because in the recession of that year, national income fell sharply. But the increase of one entire percentage point of national income in the early 1980s has made no difference whatever to the terms or the tone of the financing debate.

The United States is of course in the special situation of having both by far the world's highest costs, and as yet no effective instruments of control. But as a matter of arithmetic, normal rates of economic growth

would permit the United States to increase its share of income spent on health care for many more years (albeit slowly), and still have growing resources available for other things, consumption or investment. So why should that country be particularly concerned over the "affordability" of health care?

A commonly expressed concern is that the cost of health care borne by American business is both heavy and growing rapidly, making American products too expensive to compete in international markets - or indeed at home. This is the point mentioned above, in reference to the Canada-United States free trade agreement, that our less expensive health care system gives Canadians an "unfair" advantage, and that Americans might argue that Canadians should be forced to labour under the same handicaps that they have imposed on themselves.

On examination, however, this argument seems too simple. In the first place, a general cost disadvantage suffered by American firms can be compensated for through exchange rate adjustment. A decline in the value of the American dollar can offset a rise in health care premiums - if that is the source of competitive disadvantage.

But secondly, employer-paid health care premiums are part of the overall compensation package of labour, and it is that package, not any single component of it, which represents the cost of labour to the employer. If health care premiums are rising, why can that not be balanced by a less rapid rise, or indeed a fall, in money wages? After all, surely workers would realize that their total compensation is rising? If they prefer to take that increase primarily in the form of increasingly costly health benefits, why should that raise the firm's overall costs?

Yet each of these responses is itself as naive as it is obvious, suggesting that "affordability" runs somewhat deeper than a simple problem with labour costs. The weakness of the "currency devaluation" response (apart from the impact of devaluation on relative asset holdings), is that

the growing burden of health care costs is very unevenly distributed among employers. It bears most heavily on long-established industries with mature work-forces - older and retired workers whose health expenditures are highest. Newly established firms, in new or old industries, have a significant advantage. Thus a foreign producer of automobiles, for example, which sets up a plant in the United States can hire a younger work force, and will have no obligations to retirees. It will therefore have a built-in cost advantage which no currency adjustment can touch.

The root of the problem is the employer-based financing system. Employers with older work-forces and binding commitments to retirees must either accept a permanent cost disadvantage, or try to push down the money wages of their workers as their health care costs increase. This in turn might be through lowering wages at all ages - resulting in their becoming less competitive in the market for younger workers - or through reversing the usual seniority system by paying workers less as they grow older and generate higher (expected) health care costs. None of these options is very attractive.<sup>7</sup>

In a Canadian-style system, by contrast, the increasing health costs of older workers, like those of all other older individuals, are spread over the community as a whole through the general tax system. The province of Quebec also raises part of its revenue from payroll taxes, and Ontario has announced its intention to follow suit, but the tax rates are invariant across employers. They do not impose a differential burden on particular firms or industries. Thus the Canadian advantage from a lower cost system overall is accentuated in industries with mature work-forces.

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<sup>7</sup> As Reinhardt (1989) points out, there is another option - writing down the shareholders' equity to reflect the capitalized value of the previous commitments. This is also unpopular, and in any case is only a one-time response. Even if there were no commitments to retired workers, firms with older workforces would still be faced with a choice between higher costs, lower money wages, or lower benefit coverage relative to their competitors. The "perfectly competitive" marketplace would, one way or another, impose lower take-home wages on older workers.

But what, apart from long-established industrial relations tradition (and the consequent probability of severe industrial unrest and associated costs), is wrong with reversing the seniority profile and paying older workers lower money wages as their health care insurance costs rise? This leads into the second point above, the "overall compensation package" argument. Older workers would not really be earning less, only taking their earnings in a different form.

Indeed this argument is more general. From the "total compensation" perspective Americans collectively are not worse off as their health care costs escalate. They are simply taking their increased income - the dividend of economic growth - in the form of health benefits rather than as other types of consumption. Some analysts - economists mostly - have gone so far as to suggest that an empirical correlation between per capita national income and share of income spent on health care indicates that, contrary to the traditional interpretation, health care is a luxury good on which wealthier nations "choose" to spend relatively more.

Far from being a problem, increased health spending is on this view the natural consequence of growing wealth. As a sub-text, other countries with lower spending levels are then not ahead of the United States in being more successful at control, but behind in that, when they are as wealthy, they will spend as much.<sup>8</sup> Furthermore, this interpretation also implies that the widespread American concern over the affordability of health costs is unjustified, and presumably that all those who share it are simply misinformed or confused. Rather than wringing their hands, Americans should happily open their wallets and celebrate the increased well-being which health spending brings.

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<sup>8</sup> However gratifying to American national pride, this interpretation has had considerable difficulty with the international spread of successful cost control in the 1980s, especially the pronounced fall in the share of spending to national income in Sweden and Denmark, and its stability in Japan. The argument never did look very strong in Canada, where except for the 1982 recession the health care share has been more or less stable since 1971.

Can't Pay? Won't Pay? Don't Want to Pay! (And Can't Stop)

Providers of care are in the main in enthusiastic agreement with this line of argument, but few other Americans seem impressed. Just as workers strongly resist accepting lower wages as their health premiums rise - hence the competitive disadvantage of their employers - so Americans in general seem by their behaviour to have rejected the idea that their increased health spending is adequate compensation to induce them to give up other consumption. This could reflect a belief that additional health spending is not in fact yielding "value for money", but is being dissipated in higher provider incomes, overhead costs, and ineffective interventions. Alternatively, it may be that even "effective" care, which results in some form of health benefit, is no longer considered worth the price. This is in fact a perfectly reasonable position, for low enough benefits and high enough prices - but very few are willing openly to admit it.

Either way, the real source of distress is not that Americans cannot afford their health care, but that they do not want to. The social priorities of the United States, and the private priorities of individual Americans, are in conflict with the amounts that are spent on health care. But the American institutional framework does not permit the balancing of health care against those other priorities, or generate effective pressures to promote "value for money". Instead it encourages or forces the expansion of health care, which is not valued as much as the other opportunities which are foregone in consequence. The absence of any mechanisms for the containment of overall costs, or for the more equitable distribution of those costs over the whole community, means that Americans remain unhappy with the overall result. If that is not what the concern for affordability means, it is hard to think of any other logical content which it might be given.

At the level of the individual firm, the result is that profitability and competitive advantage come to depend not just on the value of the product or the skill and effort of management and labour, but on the

historical accident of the age and health status of the work-force, and the relative conservatism or extravagance of the local health care providers.

At the national level, the unwillingness of Americans collectively to forego other consumption as their health care costs rise may be part of the explanation for the particularly anaemic American savings rate, relative not only to that of Japan and other Pacific Rim countries, but even to that of Canada. A difference of several percentage points of national income spent on health care - 3.0 percent more than most other industrialized countries and 5.0 percent more than Japan - leaves room for a great deal of difference in savings. Business spending on health benefits has risen from 14.4 percent of after-tax profits in 1965 to 94.2 percent in 1987 (Levit *et al.*, 1989).

In summary, the American health care financing system seems most responsive to the priorities of providers of care, for whom ever-growing expenditures represent ever-growing incomes. The users of and payers for this care do not seem to value it as much; this is expressed both in their widespread complaints about "unaffordability" and in their resistance to reducing other forms of consumption to pay for this supposed benefit. Their resistance, in turn, may be part of the explanation - although the tentativeness of this part of the argument must be emphasized - for the decline in American savings rates, such that investment levels can only be maintained with increasing foreign borrowing. In this way the long-run growth of the American economy is mortgaged, in part to pay for the expansion of health care. Such a scenario can certainly be described as "unaffordability".

On the other hand, the shrill cries of "unaffordability" which arise regularly from governments and other payers for health care in all the other countries of the developed world are, ironically, part of the process of control. Since cost control is always and everywhere achieved in the teeth of the providers of care, who are constantly struggling for quite understandable reasons for expansion, it is necessary to mobilize a

political constituency for control. This is done, not by arguing - in defiance of providers and usually patients as well - that more spending on care would not be a good idea, but only that the cost pressures are so severe that it is for the moment "unaffordable".

It is "unaffordable" in the United Kingdom, where 6.1 percent of national income is spent (Schieber and Poullier, 1989), or in Canada, where 8.6 percent is spent, or in the United States, where 11.2 percent .... The difference is that in most countries other than the United States there are institutional mechanisms capable of imposing control. The principal problem is the maintenance of political will, which in turn ultimately depends upon popular support or at least acquiescence.

"You Don't Want Your Baby to Die, Do You?" ... Doctor Knows Best

Across the political and rhetorical trenches from the advocates of affordability are the defenders of "accessibility" - again a confrontation observed everywhere in the developed world. These are the beneficiaries - providers and to some extent patients - of increased expenditure. Outside the United States, universal financing systems have largely removed the issue of individual ability to pay for care; the arguments over access now turn on the adequacy of the total resources mobilized through the health care system, its capacity and level of output. All health care systems outside the United States are "underfunded" according to the official spokesmen of those who work in them; this includes in particular the Canadian system which, according to the OECD statisticians, is the second most expensive in the world. None, it is claimed, have sufficient resources to meet the needs of those for whom they are supposed to care.

The structure of the argument has become familiar, during 1989, to any American interested in health care. Defenders of the *status quo* in American medicine have responded to the increased interest in universal public funding, and particularly the Canadian example, by charging that the Canadian system fails grievously in meeting the needs of the Canadian

population, or does so under conditions which would be unacceptable to most Americans. The process of cost control is alleged to result in long waiting lists and queues for care, unavailability of the most modern technology, depreciation of the physical plant, and a general deterioration of standards in a stagnant, bureaucratic, "public utility" style of medical care.

The apparent universal accessibility of health care in Canada is thus portrayed as a hollow boast; care may be "free" at the point of service, but the services are not really there when needed. Affordability has been gained, but at the cost of genuine accessibility; in this context financial accessibility is simply a sleight-of-hand. An air of artistic verisimilitude is then added by selected anecdotes of particular Canadian patients suffering, and perhaps even dying, as a result of care delayed or denied, or fleeing to the United States for the services their own country cannot or will not provide.

This argument draws on two powerful rhetorical traditions. First, it alleges implicitly that everyone is out of step but Uncle Sam. All the countries of western Europe also have public or quasi-public funding systems, covering all or almost all of their populations. And all have now succeeded in limiting the growth of costs to a proportion of their national income equal to or less than that in Canada. It follows that they must be "underfunding" their systems, and subjecting their populations to inadequate care, to an even greater degree than is Canada. This sort of argument, that American differentness implies American superiority, has always been popular in the United States. A foreigner such as myself can only ask, if Americans really are convinced that they have the world's finest health care system, or even an adequate one, why are so many of them so unhappy with the result?

Secondly, the "underfunding"/"unmet needs" argument follows very smoothly from an ancient medical tradition which can be expressed alternatively as "Your money or your life". Only professionals are capable of determining how much and what kinds of care are needed by a population - and in the sub-text, only professionals should decide how much they



themselves are entitled to be paid in the process.<sup>9</sup> The third party payer, public or private, has no right to interfere in this process, its only legitimate function is to pay the bills. To the extent that it fails to do so, the patient should be required to make up the difference, but the overall size of the bill is a matter for professional judgement alone.

That professional judgement is, by definition, exercised only and wholly on the patient's behalf. It follows that any attempt to limit the flow of resources into health care must lead to harm to patients - needless suffering and perhaps even death. After all, if the care were not needed, professionals would not be recommending and providing it. And the price they demand for their services will be both fair, and necessary, to compensate for their effort, responsibility, and training. Again, one can rely on professional responsibility for that.

The argument is quite circular, and is intended to be so. Since Canada is containing costs, relative to what American - and many Canadian - providers would demand, then *a priori* Canadian patients must be suffering as a result. Interestingly this circular argument has an exact parallel when naive neo-classical economic analysis is applied to the question, a parallel in which "the market" plays the central role which professionals assign to professional responsibility.

#### The Economic Variant: Doctor Pangloss Goes To Market

The economic argument begins from the accounting identity noted above, that total expenditure on health care necessarily equals total incomes earned from providing health care. If that total is reduced - or its growth restrained, it follows that either fewer goods and services must be provided, or lower prices must be paid, on average, for them. But by

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<sup>9</sup> In the United States the professional rhetoric may make a politically expedient reference to the forces of the competitive marketplace at this point, but the formal and informal institutional arrangements of the medical profession have heretofore been sufficiently powerful to ensure that the market works weakly, if at all, even when supply is increasing rapidly.

hypothesis, the price of the services is a reflection of their "quality" - that is ensured by the competitive marketplace. It follows that cost control reduces either the quantity or the quality of the care provided, or both - exactly what the AMA would - does - say.

Both forms of analysis demonstrate conclusively that accessibility must be reduced, in either quantity or quality terms, as a consequence of cost control. Moreover they do so on purely *a priori* grounds, in a totally data-free environment. (Actual information would be an irrelevant distraction.) Nifty, though alas fraudulent. The trick is worked, as in all *a priori* arguments, by careful choice of assumptions and definitions. In particular, both medical and economic arguments sidestep completely the question of outcomes, or the effects of care on the health of patients.

Most people interested in health policy, most patients, most physicians, most of us, judge the quality and appropriateness of care by the likelihood that it will do more good than harm to someone's health. The Canada Health Act, which lays out the conditions that provincial health insurance plans must meet to be eligible for federal financial contributions, explicitly states that the purpose of the system is to maintain and improve the health status of the population.

Accessibility is then judged in terms of whether people can in fact get the care that they need, in the sense of care that is likely to improve their health. And accessibility of higher cost care is only worthwhile if the higher cost purchases higher expectation of benefit. How much higher? That is a touchy policy judgement. But most of us can agree that there had better be some extra benefit.

The *a priori* arguments, on the other hand, both professional and economic, carefully avoid explicit consideration of this issue. The first imposes the assumption that whatever is provided must have been needed, otherwise expert and responsible professionals would not have provided it. The second modifies this to the assumption that "consumers" of care (not

patients) will use only those services which they value - and that their valuations, not health outcomes, are the legitimate standard against which to judge accessibility.

As an aside, on this argument the American health care system must be faulted for making access to laetrile, or quack remedies generally, more difficult, because a number of "consumers" obviously want to buy them. It cannot be faulted, however, for failing to provide care to those "unwilling" to pay for it. That is right and proper, because they obviously do not value care sufficiently to justify its cost of provision. That their unwillingness may be rooted in absence of insurance or personal resources, is irrelevant.

This is not merely a debating point. "Consumer" willingness to pay, unadjusted for differential resources or imperfect information, is by assumption the fundamental test of value in the intellectual framework of market economics. It is the foundation stone on which are based all normative statements, all policy recommendations as to what "should" be done. The well-organized economy provides whatever people want - if they have the resources to pay - and does not provide commodities for which they will not or cannot pay. The full implications of this assumption are rarely highlighted by neo-classical economists. But the advocate of "free market" approaches to health care delivery and finance, who does not simultaneously advocate open access to "quack" practitioners and remedies of all kinds, is simply being intellectually inconsistent. In the free market there are no quacks; the concept has no meaning.

It is important to be clear about the fundamentally circular nature of such critiques of the Canadian health care system, since otherwise a good deal of time and energy can be wasted in discussions which by design go nowhere. But the question of the accessibility of needed care in different funding systems remains a very serious one, quite apart from its misuse in public relations exercises. Americans know full well that a substantial proportion of their population has access to either sub-standard, or no,

care, as a result of economic barriers. But it is certainly possible, though not self-evident, that the accessibility which the Canadian funding system gives with one hand, by removing financial barriers, it takes away with the other, by providing insufficient resources to meet population needs. What do the data show?

#### The Price of Paying Less: What Do Canadians Give Up?

But what data? It was suggested above that the tests of a health care system were its contribution to the health of the population it serves, and its acceptability to that population. Does it work, and do they like it? Both are linked to accessibility. If a system is "underfunded" in a real sense, not just in that the people working in it would like higher incomes and more gadgets to play with, then the resulting restriction of access should be visible in either or both of adverse health outcomes - mortality and morbidity - or increased time and trouble for patients in gaining access to care. Health status and/or public satisfaction should suffer.

One could add a third criterion: the degree of equity of access within the health care system. Some, myself included, believe that a good health care system provides care on the basis of need rather than ability to pay, and treats all members of society equally in this respect. All systems "ration" care, in the obvious sense of the elementary economics textbooks. But a system which denies or impedes access for those with greater needs and lesser resources, while responding with alacrity and enthusiasm to those with minimal or imaginary needs but ample resources, is on this criterion significantly inferior, in terms of accessibility, to one in which all citizens with equivalent needs are treated (more or less) equally, even if the latter does not meet all needs which providers can imagine and communicate to their patients. Nor is this inferiority compensated for by a higher level of provision overall; inequitable access is not mitigated by providing even more services to those who do not need them.

It is not, however, appropriate to insist on this criterion in the present discussion. In the first place, it is probably not as widely shared, particularly in the United States, as the first two. (Although it may be more widely shared, even there, than is reflected in current practice; why else would the existence of so many uninsured and underinsured be the occasion for such public hand-wringing, even by those who have no intention of doing anything about the situation? See also Taylor, 1990.) And secondly, such a criterion rigs any comparison with Canada so heavily against the United States as to amount to settling the accessibility issue *a priori*, a strategem which was just criticized above.

Despite the political controversy which forever surrounds health care funding in Canada, the popular support for that system remains, as noted at the outset, overwhelming. Moreover, that support has been demonstrated in the most unambiguous fashion possible; it is not merely inferred from the conversations of visiting academics with taxi drivers. But that still leaves open the second question: "Does it work?" Or does universal public funding with cost containment result in impeded access to needed care, and consequent adverse outcomes?

Ideally, we would wish to be able to measure the patterns of morbidity and mortality in Canada and the United States, and attribute them to the contributions of the respective health care systems. We would then be able to determine, for example, whether the fact (if it is a fact) that the United States has more CT scanners than 7-Eleven stores, and Canada does not, pays off, all else equal, in greater health for Americans. Those who argue that the Canadian system is "underfunded" are implicitly asserting that this is the case. Unfortunately, they do not have the evidence to support this claim. Nor do I, and nor does anyone else.

It is notorious, throughout North America and Western Europe, that minimal data are available on the health status of populations, let alone on the relationship between that health status and the provision of health care. Mortality data are available but, as everyone knows, there is much

more to health than life alone, and anyway, many other factors affect mortality. The rather idiosyncratic approach which Americans take to gun control, for example, clearly has a bearing on their relative mortality statistics. Indeed, the country which is currently showing both the best and the most rapidly improving life expectancy statistics, at all ages, is Japan. Its health care system has recently been described by a respected external observer as "anachronistic" (Iglehart, 1988), and the OECD statisticians report that Japan spends a bit more than half as much as the United States on health care, relative to its total income.

For what it is worth, the comparative data available on mortality and morbidity in North America show Canadians as slightly healthier than Americans, but very little different (Battista *et al.*, 1986). There is no necessary connection with the effectiveness of our respective health care systems. One can certainly say that there is no indication, at the aggregate level, that the health of Canadians has been affected as a result of our spending less on health care. Whether Americans are beginning to see, in their infant mortality and life expectancy trends, the consequences of unequal access to care is another matter, but fortunately not one which need be dealt with here.

While it may be impossible to assess directly the relative health contributions of entire delivery systems, clinical epidemiologists make their livings carrying out such investigations on particular diagnostic and therapeutic manoeuvres. They very commonly find that such interventions, offered in good faith and carried out competently, turn out to do no good, and sometimes even harm, to some or all of those who receive them. Accordingly, there is no *a priori* reason to assume that less care, in total, implies less health - Canada may simply provide less ineffective care. But then again, maybe not.

One can, however, get at the accessibility question indirectly, and produce a partial answer which goes a good deal of the way, by examining just what it is that Canadians spend less on. If it could be shown that the

difference in overall spending were accounted for by items which have no direct connection with health outcomes, that would support the inference that accessibility was not in fact being impaired in Canada. As it happens, not all but most of the difference is accounted for by such items.

The discrepancy between health spending in Canada and that in the United States can be measured in several different ways, but the most common is through comparison of the percentages of national income, because this avoids problems of adjustment for both exchange rates and differential inflation rates. (It also introduces some problems of its own, but for comparisons between economies so closely interlocked as those of Canada and the United States, these are minor.) At present, the gap is nearly three percentage points of GNP, implying that Canada spends about three-quarters as much as the United States. This differential is almost entirely accounted for by differences in administrative costs, in the rate of escalation of physicians' fees, and in the intensity of servicing of patients in hospitals (Evans, Lomas *et al.*, 1989; Evans, 1986).

#### Pruning Private Bureaucracy: Canada's Teeth-to-Tail Ratio Is Higher

Of these, the first category is the most unambiguous with respect to accessibility. Canadians have, through their health care system, much less access to the services of accountants, administrators, insurance salesmen, specialists in public relations and marketing, and management consultants. The whole panoply of services provided by the private insurance industry, and charged for in the form of the net revenues of health care insurers, costs between five and six times as much in the United States as in Canada. The reason is simple. When the whole population is covered, for everything, the costs of designing and selling policies, determining eligibility, making rates, all disappear. Much of the effort of a for-profit insurer must be devoted to determining who not to cover, and what not to cover, in order to hold down losses (consider AIDS). This is not inherent meanness; insurance companies make profits by collecting premiums, not by paying claims. The competitive marketplace forces them to try to increase the former while

minimizing the latter; and they quite understandably devote a good deal of high-priced talent to both. But in a universal system, these functions vanish.

In addition, the costs of providers, both hospitals and other institutions, and professional offices and clinics, are significantly reduced because the staff required to deal with the payment system are minimal. The large financial apparatus of an American hospital has no Canadian counterpart, and the physician's office staff can be reduced as well (Himmelstein and Woolhandler, 1986). In the business services sector, the whole field of employee benefits is significantly simplified. The United States maintains a vast private bureaucracy whose function is to push around the bits of paper associated with health care (Reinhardt, 1988). Canada does not. The total impact of this bureaucracy on health care costs is difficult to estimate with precision, but the order of magnitude is conservatively about one percentage point of GNP, or about one-third of the Canada-United States differential - over 50 billion dollars.

Only part of this total bureaucratic cost, however - perhaps about half - shows up explicitly in the differential costs of the insurance system - prepayment and administration. The remainder is buried in the budgets of hospitals, and to a lesser extent of physician practices and clinics, where it takes the form of costs of administrative and financial services necessary to establish patient eligibility for coverage, submit and justify claims, collect bills, and generally meet the demands of the payment system. These costs are recorded as costs of hospital and medical care, although they are really costs of the insurance system.

The gain in American health status from such activities is, however, easier to estimate - nil. The administrative overhead of the American system contributes nothing at all to health outcomes, and contributes negatively to patient well-being. The compliance costs, of choosing and maintaining coverage (or trying to discover it!) and struggling over reimbursement entitlement, and the associated anxieties, are again simply



non-existent in Canada. If there is a question about coverage, or appropriateness, which there rarely is, that is for the provider and the payer to sort out. The patient is not involved.

In military terms, the "teeth-to-tail ratio" is much higher in the Canadian system. A substantially higher proportion of resources is devoted to providing care and a lower proportion to pushing paper. Nor is the effectiveness of the system reduced by leaner administration, because most of the "tail" in the American system does not in fact support the functions of the "teeth" component, the actual providers. Rather it is involved in an elaborate game of cost redistribution, of determining who will pay.

One could certainly imagine an administrative support system which did make a significant contribution to the effectiveness of care, for example by monitoring and evaluating its impact and improving the knowledge base which lies behind clinical decisions. There is plenty of room for improvement in this area, everywhere in the world, and the Canadian record is not particularly impressive in this respect. But that is not, in fact, how most American administrative resources are now spent. This activity may be greatly expanded in future (Roper et al., 1988), and that will be all to the good, but it will also represent yet a further cost item.

#### A Restaurant Analogy: Who Chose This Place, Anyway?

The current American situation can be represented by the well-worn economists' analogy of a group of people going to a restaurant for lunch, and agreeing to split the cheque equally. This is meant to represent the incentives in an insurance system - public or private - in which care is "free" - what you eat is mostly paid for by others. The usual argument is that all the diners will eat more than they really want - or would eat if they had to pay the full cost - and the bill will be distressingly high as a result. Everyone will be unhappier than if they had all paid their own

bills.<sup>10</sup>

But the story is incomplete. The maitre d' presents the bill, and indeed it is very high. In the American system, the diners immediately begin to argue about what their respective shares should be, and to try to recontract out of their prior agreement to pay equal shares. As the dispute intensifies, they each bring in their accountants to justify their claims to a smaller share. Matters escalate, and soon the lawyers begin to arrive. All these back-up experts are paid by the hour. The lunch becomes very expensive indeed, though the costs of arguing over the bill leave no one better fed, and do significant harm to the digestion.

The Canadian approach is different. There too, the bill for lunch is rather distressing, including items the diners are not sure were ever provided, others which seem to be overcharged, and still others which were not very good. But instead of arguing among themselves, to the relief of the maitre d' and the profit of their accountants and lawyers, the Canadians appoint a spokesman (the provincial government) and call in the maitre d' to negotiate the bill.

These negotiations may become acrimonious, and the maitre d' frequently insists that it is unprofessional for him to have to justify the bill. The consequences will be demoralization in the kitchen, deterioration of standards, and conceivably (though not yet) food poisoning. Sometimes he wishes he worked in the American restaurant next door, though he really would not want to put up with the shouting, pushing, and crowding, and he knows that staff over there occasionally get hurt in the melee.

The net result, however, is that the restaurant bill is lower than next door, and the total cost of lunch is much lower. But do the Canadians get

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<sup>10</sup> Even on its own terms the analogy is inconsistent. If the diners are completely selfish, as the example assumes, and take no account of the impact of their behaviour on others, then why did they agree to go to the restaurant together in the first place, and split the cheque?

less food, or lower quality? Well, what else gets cut out of the bill? As noted above, the second and third components of the Canada-United States cost differential are physicians' fees and hospital servicing intensity.

#### Controlling Physicians' Fees: Processes and Consequences

In Canada, as noted above, physicians in each province are paid according to a uniform fee schedule, negotiated at periodic intervals between their provincial medical association and the provincial government. They cannot extra-bill the patient, and the schedule includes both procedural definitions and values, and a set of rules of payment which define the circumstances under which particular fees are payable. These fee schedules have risen, averaged over time and across the country, more or less in line with overall inflation rates. Divergences in both directions are observed from time to time, depending upon the relative skill and bargaining power of the negotiators, and particularly upon their success (or lack of it) in forecasting general inflation rates. Over time, however, these divergences tend to average out (Barer *et al.*, 1988).

This is in sharp contrast to American experience where, with the exception of the early 1970s, physicians' fees have consistently outrun inflation. Thus a significant part of the difference in health care costs on the two sides of the border arises because, when physicians have to negotiate their fees with a single payer, those fees rise less rapidly. The "private market", at least in its present American form, supports a steady escalation in fees in real terms - adjusted for inflation. Bilateral negotiations do not.

Under these circumstances - "price controls" in an industry of self-employed practitioners - economic theory predicts unambiguously that the quantity of services offered by providers will go up, or down, or (less

likely) remain the same.<sup>11</sup> Each of these possibilities has been forecast by participants in the American debate on physician fee schedules.

Cross-border comparisons suggest that in fact the increase in services, or at least billings, per practitioner has been slightly more rapid in Canada over the past two decades (Barer *et al.*, 1988). The difference has not been large, however, and has not offset the difference in fee trends, so that overall costs have gone up more slowly in Canada. This is in part due to the rules for payment associated with the schedules, which have limited the opportunities for providers to expand their billings through procedural multiplication. In addition, some provincial governments have in recent years negotiated fee schedules in which fee increases are phased in over time, and may be reduced if utilization rates rise too fast (Lomas *et al.*, 1989). In a more open-ended system of payment such as the United States, one might well find that attempts to limit fees were met by offsetting increases in servicing - unless corresponding measures were taken to limit their growth.

In any case, the Canadian and the American evidence suggests that controls on fees will tend to increase, not lower, the volume of services offered by practitioners. To the extent that utilization of services is a proxy for access, fee controls at least do not impede access, and are much more likely to enhance it. The real problem is not impeded access, but "hyperaccess" - overuse. There are however two possible qualifications, only one of which can confidently be dismissed.

Most obviously, if fees were set in a hypothetical competitive market,

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<sup>11</sup> One cannot base predictions on a positively sloped supply curve, because the opportunity cost of the professional's own labour is the predominant component of "firm" costs, and this cost is positively correlated, through income levels, with output prices. Furthermore, a large share of the return to labour is in fact a quasi-rent to the human capital embodied in the professional; entry to the field is not free; and input mixes are constrained by regulation. Under these constraints, a backward-bending supply curve both of own-time and of total output is not only possible, but quite likely.

with free entry and fully informed participants, the long run effect of fee controls would be to discourage people from taking up medical careers. Supply would eventually dry up, in the way that rent controls are alleged to reduce the supply of rental housing. But of course medicine does not even remotely approximate the conditions in such a market. And what we find in reality is that in Canada medical school places are over-subscribed to an even greater degree than in the United States.

There are as many physicians per capita in Canada as in the United States, and this ratio is rising at between 1.5 percent and 2 percent per year (an increase several times the increase in "need" represented by the changing population age structure). By the end of 1989 the number of people per physician had fallen below 450, and the decline will continue for the foreseeable future.

The principal concern of those responsible for manpower policy is what to do to control the numbers? Some physicians do go to the United States, but not enough to affect the overall stock and, in any case, many come back. Thus fee controls have not impeded access to physicians' services by reducing their numbers any more than by reducing their work incentives.

A more subtle effect, however, might be to induce physicians preferentially to provide more remunerative services, or to adopt a style of practice - short visits, frequent recalls - with higher payoff per hour. Servicing rates per capita would rise, but if the effectiveness of care were reduced (which it need not be), "access" might be interpreted as reduced. Indeed, access to needed services would be unambiguously reduced if physicians' time were all taken up with the increased provision of less needed but more remunerative care.

This line of argument, which it must be emphasized is pure speculation, takes us back to the fact that the linkage between utilization and outcome is distinctly shaky, in every health care system. Since we have so little information on the effectiveness of health care services, we would be hard

put to know how to test this possibility. But there is equally no warrant for assuming that, if Canadian fees increased more rapidly, any resulting changes in patterns of practice - if they occurred - would result in improved outcomes. The assertion that physicians must be given whatever fees they ask for, or they will react in ways which will harm their patients' health, is an interesting commentary on the professional standards of practitioners, as well as yet another example of a circular argument, in a data-free environment, that any attempt at cost control must lead to harm. But it does provide further support, if such were needed, for gaining more hard information on the connection between servicing patterns and patient outcomes.

So the second thing that Canadian patients give up, in addition to the services of insurance salesmen, accountants, and management consultants, is some part of the lifestyles of their doctors. Canadian physicians are, like their American counterparts, at the top of the occupational income scale, but they do not earn quite as much, absolutely or relatively. The impact of this form of "reduced access" on the health of patients is rather difficult to detect, though it goes far to explain the concern of American physicians' organizations to protect their patients (and even those who cannot afford to be) from the disaster of universal public insurance.

#### Hardware and Hard Questions: How Will I Know When I'm Better?

The third major area of expenditure differences is in the acute care hospital sector, and that is where the interesting questions of differential access and associated outcomes arise. It is also from here that the tales are carried south of the border, about long waiting lists for elective surgery, insufficient and out of date equipment, and patients suffering or even dying for lack of care. Queues for medical services form, not because of a shortage of physicians, but because of insufficient provision of facilities, equipment and personnel for physicians to work with - not too few cardiac surgeons, but too little surgical capacity. The situations described or alleged are multi-dimensional and complex, and cannot be

easily assessed with the sort of evidence which we brought to bear on the first two sources of cost differences.

To begin with, some of the stories are true. Waiting lists for elective surgery do build up at some times in some parts of Canada, and the availability of advanced diagnostic and therapeutic equipment, on a per capita basis, is less and sometimes substantially less, than in the United States. There are periodic crises of access, and more often allegations of crises, and some people do go to the United States for care. But the explanation of these observations is much more complex than simply a global shortage of resources imposed by stingy or impecunious governments, and their implications for the health or well-being of patients is by no means unambiguous.

Like physicians, hospital beds are in ample supply in Canada, and are heavily used. Canadians use one-third to one-half more patient days per capita in acute care than do Americans, about twelve hundred days per thousand population per year, and occupancy rates average about 85 percent across the system as a whole. These compare with American average occupancies in the 65 percent range. Thus Canadians may appear to have less access to hospitals than Americans do, because with much higher average occupancy rates a randomly chosen Canadian hospital is much more likely to be full on any given day.

Yet per capita rates of hospital admission are remarkably similar in the two countries, just under 150 per thousand population per year, indicating that perceived shortages in Canada reflect higher propensities to hospitalize and/or more intensive use of facilities, rather than lower rates of admission. Canadians do get into hospital, and at about the same rate as Americans. And once admitted Canadians stay longer on average; they have substantially greater "access" to days of care.

There are several possible explanations for this greater utilization of patient days. The usual official story is that, because the public

insurance programs were introduced for hospital care in the late 1950s, and only 10 years later extended to medical care, Canadian physicians and patients both became used to an institutional style of care which has persisted to this day. But examination of American payment data shows that most hospital expenses there are also covered by some form of insurance - about 90 percent - while physicians' services are much more commonly paid out of pocket. Yet American patient day utilization rates are much lower.

Another incentive arises from physician fee schedules, which do not cover the technical component of costs for many of the more expensive forms of diagnostic and therapeutic equipment - lithotripters, for example, or diagnostic imagers such as MRI, PET, or CT scanners. This limits physicians' ability to expand their incomes by setting up free-standing facilities and self-dealing by referring their patients. The expensive equipment is provided to the hospitals, where operating costs are funded through the annual global budgets. This both restricts the availability and use of such equipment, and channels patients through the hospital.

But that does not explain the use of inpatient beds, since hospitals can and do provide a range of ambulatory diagnostic and therapeutic services. Just because the hospital owns, and is paid for, a particular facility or piece of equipment, is no reason for physicians who refer patients to that facility to admit them as inpatients first. Certainly Canadian hospitals do not require this; after all they are not paid fees for service, and the hospitals with the high-technology equipment are not in general troubled by low occupancy. And in any case, if admission were required for access to high-tech equipment, that should be reflected in higher admission rates, not longer lengths of stay.

A third argument, frequently heard from physicians, is that acute care beds in Canada are being "blocked" by *de facto* long-stay patients, who would more appropriately be cared for in some form of extended care facility. High levels of acute care utilization are alleged to reflect an inadequate supply of such facilities - again an "underfunding" problem.



Detailed analysis of the trends in hospital utilization, and of reported reasons for hospitalization, provides some support for this position, but not very much. There has been an increase, over the last decade, in the numbers of acute care days identified as "patient awaiting placement", but this appears to be due in part at least to changes in the diagnostic coding systems. The ninth revision to the International Classification of Diseases, which was adopted in Canadian hospitals at the end of the 1970s, introduced this category for the first time, and physicians have learned over time to use it (Hertzman *et al.*, 1990).

Furthermore, very large increases have taken place in long-term bed capacity in Canada, without alleviating the alleged pressure. Canada has a rate of institutional utilization which is among the highest in the world. And finally, even if reported acute care hospital use is reduced by arbitrarily removing all patients with lengths of stay of 60 days or longer, this still leaves per capita use rates well above comparable American rates (Evans, Barer *et al.*, 1989).

#### "It's Just Our (Clinical) Policy"

One comes back to explanations in terms of the more conservative practice styles of Canadian physicians, and the lesser incentives for them to care for patients out of hospital. These are reinforced by the differential incentives bearing on hospital managements; global budgets are less strained when patients are kept in longer, while item of service reimbursement rewards high turnover and plenty of servicing.

Canadian hospital utilization by acute care patients is in fact moving slowly downwards. But the adjustment is taking place through administrative squeezes. While in the United States the Prospective Payment System provides financial incentives to reduce inpatient use, in Canada provincial governments achieve the same result by providing fewer beds than the medical staff would like, or encouraging (pressuring) hospital administrations to convert acute beds to extended care, and to set up alternative ambulatory

facilities. The relentless increase in the supply of physicians, pushing against a relatively stable (per capita) bed supply, not only holds up occupancy rates but generates increasing pressure for individual physicians to economize on beds. Bed-to-population ratios are high and relatively stable; but bed-to-doctor ratios have been falling steadily for a long time, and this is forcing changes in practice patterns.

Physicians do not like the process. The administrative squeezes generate political conflict, claims of shortages, and waiting lists for care. But the problem is often not a shortage of facilities in absolute terms, but rather a conflict between government policies to encourage more use of ambulatory facilities, or simply less bed use, and physicians wishing to keep putting patients in beds because they have always done so. Hence one sees the paradoxical combination of "shortages" and waiting lists in an environment of apparent overutilization of inpatient care - at least relative to American practice. Over time, however, the necessary adjustments have been occurring, and inpatient utilization has been drifting down, though these trends have to some extent been masked by the simultaneous expansion of extended care wards within acute care hospitals.

This latter development makes it difficult to interpret the cross-border comparative data on hospital costs. Hospital expenditure per capita, adjusted for hospital input prices, has been rising substantially faster in the United States than in Canada, for many years (Barer and Evans, 1986). This is consistent with the argument that, even if there is plenty of hospital space in Canada, much less in the way of diagnostic and therapeutic services is provided to hospitalized patients. The real problems are of access not to beds or doctors, but to up-to-date technical services. The limitations on free-standing facilities in Canada point in the same direction.

But hospital accounting systems in Canada do not permit one to identify, on a system-wide basis, the share of acute care hospital expenditures which are going to acute care patients. And we know that the

mix of hospital patients, and especially patient days, has changed towards a higher proportion of long term care use. Consequently the intensity of servicing of the truly acute care patients may well be going up substantially faster than is reflected in the aggregate data.

If one were to remove from both countries' data the proportion of hospital costs accounted for by financial and administrative activities, which is much larger and faster growing in the United States, and then focus only on acute care patients, it is not clear that there would be a substantial difference between treatment patterns on the two sides of the border. The analysis has not been done, but there is some supportive expert opinion from clinicians and administrators with cross-border experience.

Moreover, recent cross-border comparative studies of the rates of performance of particular surgical procedures have shown that although the United States has higher rates for some complex procedures (e.g. coronary artery bypass surgery) the rates for other complex procedures (e.g. repair and replacement of heart valves and major peripheral vascular procedures) are as high or higher in Canada (Anderson *et al.*, 1989). Procedural studies also show that in Canada, as in the United States, there are large and unexplained regional variations in performance of high intensity procedures. Rates of performance of certain specific procedures - carotid endarterectomy, pacemaker implantation, caesarian section, and in some regions cardiac bypass grafts - are at levels which justify concern about over-servicing and possible harm to patients.

That said, however, one still comes back to the fact that on a simple count of major, high-technology equipment, there is substantially more available in the United States than in Canada. Even though the Canadian facilities tend to be used more intensively, and partly in consequence have lower unit costs, it seems undeniable that Americans in and out of hospitals receive a number of such procedures and services (not all) at a higher rate than do Canadians.

Cardiac bypass grafts have been a leading example. Although the rates of increase are similar, many more procedures per capita are done in the United States. For bypasses in particular, complaints of insufficient capacity, long waiting lists, and patients going to the United States, are common in the media.

This, finally, is where we come to the hard edge of the accessibility question. It is clear that improved access to the services of insurance salesmen and management consultants is not the primary objective of a health care system. Access to higher physicians' fees and incomes is also of lesser immediate priority, unless one happens to be a physician. But is not access to the services of MRI machines and lithotripters, or to cardiac bypass grafts, a more plausible primary objective? Well, in fact no, or at least not necessarily.

#### The Politics of "Saving Lives", On Camera and Off

The key point to remember is that nobody in his right mind wants health care services for their own sake. And the phrase "in his right mind" is used advisedly, because there is a mental illness, known as Munchausen's syndrome, whose victims want health care when they are not sick. The same point is made by the wisecrack that anybody who wants health care when he is not sick, is sick. It is access to needed care which is critical, access to care which is effective, which has a demonstrable (positive) impact on patient outcomes.

But it is well known, and has been extensively demonstrated by students of health care utilization, that one cannot infer need from use. One cannot assume that, simply because Canadians use fewer of certain types of services, they necessarily suffer from a reduction in access in the sense of access to health outcomes. And that is what we are really interested in, not activity, however technically impressive, for its own sake.

Furthermore, there are adaptation processes in the Canadian funding system. It is by no means as stagnant and as starved for funds as it is sometimes portrayed in the American media. There, Canada is frequently bracketed with the United Kingdom as virtually equivalent "horrible examples" of "socialized medicine", but the parallel is without merit except for propaganda purposes. As noted above, Canada has socialized insurance superimposed on a private delivery system, and spends as much per capita as any other country in the world, outside the United States, on health care. Accordingly, when pressure points develop more resources are available to remedy the situation.

The process of resource mobilization is, however, overtly political. The theatre of shortages and unmet needs, what we have called elsewhere "orchestrated outrage" (Evans, Lomas et al., 1989), creates political pressures which define social priorities and determine where the resources are most needed - or where the advocates can mobilize the greatest political pressure.

Coronary artery bypass grafts are a case in point. Waiting lists and shortages are not the result of a refusal by provincial authorities to provide facilities, on the contrary, capacity and utilization are expanding rapidly. But cardiac surgeons are bringing people to surgery even more frequently, and particularly very elderly people. This growth in "demand" by surgeons is outstripping the growth in facilities and utilization. Cardiac surgeons have in effect decided to re-allocate public resources into this field (and to themselves) through a powerful political campaign, including elements of "disinformation".

But as in the United States, clinical practice in this area shows wide geographic variations which seem unrelated to patient needs (Anderson and Lomas, 1989). There are thus good grounds, reinforced by the equivocal or absent evidence from clinical epidemiology, for believing that some, perhaps much, of the surgery is inappropriate. Knowing this, provincial ministries of health have deliberately tried to restrain the growth of surgical

capacity. But the political costs are high.

No one would pretend that such a process is perfect in its ability to match resources to actual needs. Indeed in the case of cardiac surgery the political process is looking quite vulnerable. But overall, this approach does not look too bad when one considers the known alternatives.

And it would be quite misleading for outsiders to imagine, as many Americans do imagine, that the political theatrics indicate a system in collapse or even under markedly more strain than any other in the world. On the contrary, the on-going political controversy is itself a form of solution to the inherently very difficult problem of setting social priorities with respect to health care, and giving those priorities effect. Unlike the current situation in the United States this solution, imperfect though it inevitably is, appears both acceptable and stable for the medium term at least. The American combination of rising costs and falling coverage, by contrast, suggests a system which is not dynamically viable; projection of the current trends indicates steadily increasing conflict and misery for a growing proportion of the American population.

#### The Missing Links: Utilization, Need, and Health Outcomes

It is in this context that one must consider the issue of relative accessibility of particular medical procedures and interventions on the two sides of the border. Substantial differences in utilization, for some at least, are readily demonstrable, but the significance of these for comparative health outcomes is unknown. A number of American researchers have concluded that certain procedures are greatly overutilized in the United States, far beyond what either scientific evidence or even expert opinion supports as beneficial or appropriate (Brook and Vaiana, 1989).

It is quite possible that Canadians are better off with less, in straight-forward health outcome terms. At least one knowledgeable American observer (Enthoven) has conjectured that more Californians die in the course

of unnecessary or inappropriate heart surgery, than Canadians die from delays. But it must be admitted that, in North America and everywhere in the world, we know much less than we should about the positive and negative consequences of health interventions.

Until we do, it is not possible to say with confidence that no Canadian ever suffers as a result of inadequate access to health care - and indeed the statement is almost certainly not true. Would it be true in any other country? What is much more sustainable is the statement that the Canadian health care system suffers not from underfunding but from undermanagement (Rachlis and Kushner, 1989), so that the problems of access which do exist will not be remedied simply by throwing in more resources. Again the international evidence is supportive; health care systems in all developed countries display on-going conflicts over costs and access, regardless of how much is spent on care. Would those Americans who feel that Canadians suffer from lack of access to certain services want to claim that their own much higher level of expenditure has solved, or even significantly mitigated, access problems in their country?

For that matter, it is a gross over-simplification to refer to levels of access "in Canada", or "in the United States", as if the national averages were representative of the entire of two very large and diverse countries. American researchers have clearly documented the wide diversity of patterns of care in the United States, diversities which show up between regions or states, and also among very small regions within states, but which cannot be shown to bear any relation to patient needs or outcomes.

Recent work by Wennberg *et al.* (1989) has even shown very large differences in average utilization and costs between Medicare populations in Boston and New Haven, each served by one of the most prestigious health science complexes in the world. Mortality patterns are the same in both areas, but it costs twice as much to die in Boston. Per capita use rates for particular procedures are even more variable. Which represents "American medicine at its best"? If per capita use patterns and costs in

Boston were somehow brought into line with those in New Haven, a great deal of money would be saved for the American taxpayer. Would this represent the catastrophe of "rationing" in Boston, but not in New Haven? Does "rationing" mean nothing more than holding providers accountable for what they do, and spend?

But let us not pretend that the Canadian approach to funding represents an adequate response to this situation of apparently arbitrary patterns of use and cost. Inter- and intra-provincial variations are just as prominent north of the border. The most costly province in Canada - Ontario - may be quite similar to many states in the United States, while if one compared patterns of care and cost in Boston with those in, say, Quebec or British Columbia, really spectacular differentials would emerge. Yet each is consistent with acceptable levels of care for a modern population.

Recognition of the extent of regional variation in each country underscores, heavily, the essential arbitrariness of patterns of medical care. This in turn demonstrates the patent absurdity of the claim - endlessly repeated by provider representatives - that any attempt at control must threaten the health of patients. This arbitrariness is the other side of the coin from the observation that a high proportion of the care actually provided, in any modern health care system, is of unevaluated, or no, beneficial effect in the circumstances in which it is given.

#### The Role of Research: Guide or Alternative to Action?

The pervasive lack of knowledge about the effectiveness of health care provides strong support for a major expansion in research on the determinants of health outcomes. As a sub-species of that, research on the differences in patterns of care, and in outcomes, on the two sides of the Canada-United States border might be particularly interesting. American researchers appear to be well out in front of the rest of the world in such effectiveness research, though there are also several strong groups elsewhere.



But while a certain humility in the face of the vast unknown is both seemly and prudent for the scientist and the scholar, it can be remarkably dangerous for those responsible for public policy. The researcher will always assert that more research is needed; it is sometimes hard to distinguish modesty from marketing. One does not have to go over the Canadian experience with a fine-tooth comb, and turn it inside out, to decide whether it offers, in Enthoven's (1989) compact phrase, "politically feasible incremental changes ... that have a reasonably good chance of making things better."

Those who argue that, until the differences between Canada and the United States are mapped and understood in much more detail, no secure conclusions are possible, are both marketing their own services, and providing a very powerful defence for the *status quo*. That might be a more plausible position, if there were fewer problems with the American *status quo*.

Thus while there is clearly much more which can be learned from comparative research on health care patterns between the two countries, it is quite wrong and dangerously misleading to suggest that such detailed research is either necessary or sufficient for the design of American policy based on Canadian, or other international, experience. The fundamental issues in health care policy are political, not technical, and an attempt to portray them as amenable to "scientific" solutions is simply part of that political process, often with researchers as conscious or unconscious participants.

Moreover, even in the technical sphere, "life is the art of drawing sufficient conclusions from insufficient premises". Hegel's comment that Minerva's owl flies only in the darkening twilight, can be interpreted to mean that by the time the facts are all in and the situation fully understood, the game is long over and players and spectators have all gone home. "More research" can easily be a stratagem for delaying action until the window of political opportunity has closed.

I think we now understand how and why the Canadian health care system works, after watching it for 20 years, much better than did the people who designed and established it. They were by no means totally ignorant; they had spent a lot of time drawing inferences from the examination of other experience, and thinking pretty hard. But they certainly did not have the quality of data that would be published in the New England Journal of Medicine. What they did have was quite a lot of courage and the will to begin.

### Do Right, and You May Be Right, But Be Prepared for the Long Haul

Perhaps even more important, the architects of the Canadian system had a moral vision of what a good health care system, in a decent and humane community, should look like. That moral vision carried them through a great deal of technical uncertainty, to the national legislation, unanimously adopted, which one of the leading Canadian commentators has called "a leap in the dark". And it has paid off, with a system which is (relatively) affordable and accessible, apparently sustainable, and remarkably popular.

Universal coverage, in a single-class, single-payer system, with the financial burdens spread according to ability to pay, through the tax system, rather than according to needs for care, has turned out to be not only morally but economically sound, even if the latter was not central to the original intention. Americans may not wish to adopt, may not be able in their context to adopt, an exactly similar system. But as far as we can tell, any successful funding system will have to have those same characteristics.

Furthermore, any funding system must have built into it a combination of adaptive intelligence with a fairly stable framework. There is no once-for-all set of rules which can be established, after which the funding of health care can become an automatic process like eighteenth century clockwork. Instead, health funding is an on-going game among parties with interests which are inevitably opposed but who are committed to the game.

Their strategies will evolve, as they react to each other and as the external world changes. But they must also have enough continuity in structure and personnel to learn how to play the game without tipping over the board. The conflict between payers and providers must be channelled and contained, managed as constructively as possible. It will never go away. The High Noon scenario in which the bad guys (government bureaucrats? the AMA?) are confronted and blown away is a story for children; the dream of an objective, scientific solution to an inherently political problem is equally mythical.

And finally, this funding game is everywhere a collective process, managed through organizations which pool financial and political interests. In Canada, as everywhere else in the developed world, this process is managed to a greater or lesser degree by the state. Only in the United States, for historical and ideological reasons, is there so firm a commitment to finding private structures within which to manage the funding of health care.

One cannot say that this is impossible; there are in the United States a number of very good and innovative minds working hard on the problem. The fertility of their ideas explains why European countries, Canada included, maintain such an interest in organizational developments in the United States, even though the operating characteristics of the American system are grossly inferior to their own. But one can, I think, say confidently that no other country has tried to run its health care funding system through the private sector, and that the American record to date is not one of success. If the United States ever pulls the trick off, the international interest in American models will rise several fold. But at the moment the dominant American approach looks like a very long shot indeed, being pursued only because the ideological constraints are so severe that the obvious is not permissible.

Meanwhile, as the pressures build, recall that not too far away, in a country more similar to the United States than any other in the world, a

pretty decent system is functioning to general satisfaction. If the art of the possible should become more attractive than ideological purity or technical virtuosity, some of our experience may be helpful. For the moment, despite the widely trumpeted inadequacies of the current American arrangements, I suspect that not enough (politically relevant) people are really suffering. But that is probably only a matter of time.

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