

2004 Chief Health Officer Seminar Series

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Abstract:

Current Issues in Health Economics

The talk will begin with a brief outline of the special problems associated with financing health care systems. While the diverse responses of OECD countries to these problems suggest there is no unique solution, some systems clearly do better than others in promoting universal access at relatively low cost. The talk will then touch on some important current issues in health economics, including the relationship between health and income, the promotion of universal access, measuring the effectiveness of health care systems, and the quality of health care and patient safety.

Transcript:

I want to begin with a very brief overview of something that is not just a current issue in health economics but is a key and perennial one. This is the financing of health care systems.

Financing of health care is based on insurance models and is thus subject to usual problems of insurance that will be particularly pronounced for health. The ability of insurance to pool financial risk and to promote access is weakened in a voluntary system of insurance markets for several reasons:

- Adverse selection. This arises when poor risks are more likely to insure than good risks, leading to under-consumption of health care from social viewpoint.
- Moral hazard problems also arise – insured person becomes more likely to consume beyond social optimum.
- Information asymmetry can also be a problem, whereby providers are typically better informed than insurers (or patients) about need, scope and quality of health treatment. This may mean practitioners induce demand for care.

Because these market failure problems may occur with voluntary insurance, OECD countries typically rely heavily on public health insurance, public regulation of health care and private insurance markets. Sometimes public sectors also finance and provide health care.

I'd like to do a very brief comparison of several OECD countries: the United States of America, Australia and the United Kingdom, and compare these with forty comparable OECD countries, as shown in the first table. What is noticeable here is that total expenditure of health care as a percentage of trend GDP over the period 1970 to 2000 has been steadily increasing for both Australia and the United Kingdom. But spending in the United States has been increasing rather more dramatically in the period between 1980 and 1990.

So we might well ask ourselves what is the appropriate level of spending on health care? As economists we might say that social welfare could be improved by increased health spending in

the sense there are externalities to society from a healthier population. On the other hand the market failures that I mentioned earlier mean that there could be a possible risk of over-spending. So we also have the problem of price signals that are not really appropriate for health care. Further, demand for health care is relatively inelastic. Moreover there are really quite compelling equity reasons and issues that arise in access to health care. But what we do observe is that in most OECD countries health spending is growing faster than economic growth.

The public share of total expenditure on health care over the period 1970-2000 in the United Kingdom has been drifting down slightly. The 21 comparable OECD countries spend a little less. Australia has been growing over the period as too has the United States, although very slowly.

If we look at a comparison of public and private health insurance schemes in 2000 (see Figure), public health care *coverage* in Australia and the United Kingdom is 100 per cent. If you look at France, it's just about 100 per cent (99.9 per cent). But in the US, it's 25 per cent. The average across comparable countries in the OECD is 98.2 per cent. However, notice that in France public health care coverage is financed to a large degree (73 per cent) by social security contributions. But if you look at the Australian situation and the British situation you will see that the bulk of financing comes from the public pocket and not from any social security contribution schemes. In contrast, in the US there is some public contribution but there is also an interesting anomaly where full-time workers are covered for health insurance by their work, but part time workers are not. Total public financing in the US is 44.2 per cent while private funding is 55.8 per cent.

Looking at *private financing sources*, this is broken down into three elements: private health insurance, out of pocket expenses and other private financing. In Australia total private funding is 31 per cent - and 90 per cent of that is out-of-pocket expenses. Private insurance and the high degree of cost sharing can distribute the cost of health care to higher risk groups and users because we know from loads of empirical studies that income is linked to health status. Lower income people have worse health status.

Notice from the Figure that the OECD average for private financing as a share of total health expenditure is 23 per cent. In the UK it's 19 per cent. Australia is above the OECD average of 31 per cent and in the US it is a staggering 56 per cent.

In summary, financing schemes are more equitable in their financial impact and foster greater equity of access if they're related to ability to pay. This is through taxes or social insurance contributions, as in the French example, and also if they have a low degree of cost sharing. But the big drawback of this is that, without cost sharing, schemes may be more subject to moral hazard because insured people may be more likely to consume beyond social optimum (although I know from my own experience in Britain that queues at the GP can act as a disincentive to over-consume GP services).

In summary, there are three broad models that OECD countries adopt for their health care systems: first, the integrated public model where insurance and provision are combined and operated like a government department. The Nordic countries follow that model as do Italy, Greece and Portugal and Australian public hospitals. Secondly, there is a public contract model where you have public paymasters like the state or social security funds who contract with private health care providers, and these are typically not for profit.

Lastly we've got the private insurance, private provider model where the providers are often profit making. This is quite interesting because it can either be mandatory, as in the case of Switzerland where you're compelled to take up private health insurance, thus overcoming all the

problems, or they can be voluntary like the US, which seems to me to be an extremely bad system.

Further important current issues in health economics.

I'm going to touch on several in the remainder of my talk. The first is the relationship between child health and family income. The second is the problem of promoting universal access. The third is measuring the effectiveness of health care systems. Lastly there's the issue of the quality of health care and patient safety.

So, let's look first at the *relationship between child health and family income*. We know from countless studies that poor health in childhood is associated with lower educational attainment, lower health in adulthood and worse labour market outcomes. There's an interesting and influential paper by Anne Case and some of her colleagues, published in the *American Economic Review* recently, which found for the US that there was a significant income gradient – children from poorer families have significantly worse health than children from richer families. What is the income-health gradient? If you plot self-assessed measures of health on the vertical axis and values of income on the horizontal axis, then you can see how the gradient of income relates to self-assessed measures of health from very good to very poor. Case *et al* found there's a very significant income gradient, both in the raw data and after putting in all sorts of controls in the statistical analysis. Furthermore, this income gradient actually steepens with child age. What this suggested was that the protective effect of family income accumulated over the childhood years or, if you didn't have the protective effect of family income, then your health situation was exacerbated as you grew from childhood into adolescence. A similar result was found for Canada.

A recent very interesting paper by Alison Currie, Mike Shields and Steve Wheatley-Price has done the same sort of analysis for the UK. They found that for the UK there's a much smaller income gradient and it doesn't widen as children age. They interpreted this as providing some evidence that the UK National Health System has a protective effect on child health, relative to that in the US and Canada. These cross country comparisons are really important because they do shed some light on how different systems of health care can have different outcomes.

Next, consider the second important current issue in health economics - *the problem of promoting universal access*. The OECD countries have near universal access - except for Mexico, Turkey and the US - and coverage varies from comprehensive to exclusion of some services to cost sharing for some. Obviously this is a trade-off between equity and public cost containment and clearly political and economic factors play an enormous part here. So how do you achieve universal coverage?

Well, you can have default or all-inclusive public programs or you can mandate the purchase of private coverage. But you may need, where an insurance system has gaps or requires patient cost sharing programs for vulnerable populations on a targeted basis, for example with regard to the Indigenous population in particular. Australia has indeed introduced programs for populations on a targeted basis, such as for indigenous groups, remote groups, low income people and the unemployed. But even with universal coverage we still need policies for equitable access and one of these is the manpower planning issue.

There also issues about the timely availability of services instead of long waiting lists. In the UK to deal with this problem patients are now being allowed to go to continental Europe for some of their operations.

Then of course we've got the socio-cultural barriers – language, geographical isolation, cultural norms, economic status or a combination of them all. Maybe different cultural groups interpret survey questions about their self-assessed health status differently. This might be the case even though, in the case of Indigenous surveys there are Indigenous interviewers. None the less it has certainly been suggested that, in some remote areas, the notion of welfare differs depending on attachment to the land for Indigenous groups, and that this might lead them to overstate their health status. This too is a pressing issue in health economics in Australia.

Next, consider a third important current issue in health economics – *how can we measure if the health care system is effective?* One measure that OECD countries have used is that of consumer satisfaction and the Eurobarometer survey has been used for European countries to deal with this. Perhaps another matter concerning measuring the effectiveness of a health care system is the percentage of the working population on disability pension in Australia in the period 1965 to 2003. It has been growing to about 5 per cent. But if you look at men in the age group 50 to 59, you will see that it began from about 3 per cent back in 1965 and it peaked in the late 1990s at 11.62 per cent. This is really high. So what is going wrong with the health of these people? Why are there so many people of this age group, men, on disability pension? Is it some failure of the health system? Is it some failure of the pension system? Should we be considering allowing these men to work part time without losing their pension entitlement? Is there something wrong with industrial relations? Why are people feeling too stressed, why do we observe this? These are very interesting questions I think, and ones that I believe are under-researched here.

We can't really consider the effectiveness of the health care system without mentioning the percentage of the population who are overweight or obese. Just about every economist and health economist that I know of wants to investigate this question so I'm sure we'll be hearing a lot of this in the future.

There are also other important measures of how effective is our health system, such as the population health status and patient outcome measures. If you look at the OECD publications you'll see that Australia does extremely well on issues like child mortality and life expectancy. On average we are doing really well. But then if we start looking at the Indigenous population, which accounts for 2.4 per cent of the Australian population, we see that life expectancy at birth is 56 years for indigenous men and 63 for indigenous women compared with 77 years for all Australian men and 82 for all Australian women. That's roughly 20 years difference. That's really striking.

Amongst our Indigenous population, well over half of women aged 45 to 64 are classified as being in fair or poor health. If you look at the Non-indigenous women you see that considerably less are in this situation. With Indigenous men aged 45 to 64, you'll see that about just under 40 per cent are in fair or poor health. Compare this with Non-indigenous men in the same age group and you'll find 24 per cent are in fair or poor health.

Next, I would like to consider a final important current issue in health economics - *medical indemnity insurance*. This is another example where there are problems with information, with the symmetry of information and imperfect information. In addition there are two principles that have to be considered here: the compensation principle, to make sure the patient is adequately compensated, and the deterrence principle. The problem with some forms of indemnity insurance is that you may put off doctors doing procedures that are actually rather important procedures.

Only relatively recently has information emerged suggesting such problems are more common than previously believed. But to measure the problem and design and evaluate policy in this area

we need data about medical indemnity insurance claims and incidents. Systems for monitoring processes and outcomes of health care are still in their infancy across OECD countries. It's worth noting that in the US medical errors were responsible for more deaths annually than car accidents.

There are now potentially three data sets that can be used in Australia to identify trends in the frequency and cost of medical litigation, as well as those activities and procedures that have the highest risk of litigation. That's going to be a really exciting and interesting area for health economics in the future.