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HEALTH EXPENDITURE IN IRELAND - GROWTH AND CONTROL

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Introduction
This paper examines trends in health expenditure across a range of countries, and places the growth in health expenditure in an international context. It then considers factors which lay behind the growth in Irish health expenditure, and establishes the need for cost containment. Finally it examines several control measures that have been proposed for containing costs.

Section 1. Trends in Health Expenditure

The International Experience

During the 1960s and 1970s expenditure on health in many OECD countries expanded considerably. For example in the OECD, total health expenditure averaged 4% of gross domestic product (GDP) in 1960, by 1970 this average increased to almost 6.0%. This expansion was fuelled by the availability of improved services as well as democratic pressures to extend the benefits of access to health care to all citizens and was possible given the high levels of economic growth. This upward trend continued through the 1970's and 1980's in most OECD countries (Table 1). However, the rate of increase was not as rapid following the oil crises, though continued to rise, from 6.5% in 1975 to 7.2% in 1985 on average in the OECD area.

With many countries experiencing a period of prolonged inflation, economic stagnation and increasing public deficits and public debt following the oil crises, governments realised that public expenditure needed to be controlled. As a consequence, during the 1980s a range of measures were introduced in an attempt to contain the growth of general expenditure and health expenditure was affected by this. In most Western economies the State is the
dominant player in relation to health expenditure. Measures introduced included tighter central control of public expenditure and cost shifting away from central Government; supply side controls such as bed closures and renegotiation of approached to physician payment; the introduction of a range of micro efficiency measures such as case-mix management; and the development of incentives for the population to adopt healthy lifestyles and consumption patterns to improve health status.

Despite the common trend in the growth of health expenditure over the past three decades, the shares and changes in shares showed considerable variation across countries. For example in 1960, the share of total health spending in the OECD ranged from 1.5% in Spain to 5.5% in Canada, while the shares ranged from 5.2% in Greece to 13.4% in the US in 1991.

Substantial variations were also evident in the absolute levels of health expenditure per capita when converted using the US$, GDP purchasing power parities and medical specific purchasing power parities (the difficulties associated with establishing absolute levels in a numeraire currency led to the development of GDP PPPs and medical specific PPPs. In the case of GDP PPPs health care expenditure is valued at the prices of all goods and services, with medical specific PPPs it is valued at the prices of medical goods and services)(Table 2). Using GDP PPP, per capita spending ranged from $400 in Greece to $2600 in the US. Greece and the US were also the extremes when the medical specific PPPs were used as the conversion factor.

The Irish Experience

In Ireland, expenditure on health increased during the 1960s and 1970s, with rapid growth occurring in the early part of the seventies. Following the first oil crisis, and the budget imbalances associated with it, there was a slowdown in the growth of expenditure on health. However, towards the end of the 1970's, expenditure picked up and by 1980 total expenditure on health had increased by 125% in real terms on the 1970 level. The share of public health spending relative to GDP mirrors the
trends in total health expenditure (Table 3). In 1960, the share of public health spending in GDP was 3%, by 1970 it had increased to 4.5% and by 1980 it was 7.5%, and in real terms, between 1970 and 1980, public expenditure on health rose by 175%.

During the 1980s both total and public health expenditure were affected by the budgetary crisis. Total health spending fell from 9.2% in 1980 to 7.0% in the 1990, while public expenditure on health was reduced from 7.5% to 5.2% over the same period. Since the late 1980s, with the easing of the budgetary crisis, and the recovery in the economy, total and public expenditure on health have increased.

Throughout the period of analysis, there tended to be substitution between public and private expenditure on health. During the 1960s and 1970s as public expanded, private expenditure declined. In the first half of the eighties however, private expenditure was substituted for public expenditure as the government introduced various cost cutting measures.

To conclude this section, the above analysis reveals that health expenditure in Ireland is heavily influenced by government budgetary considerations. In addition it shows that past and current levels of total and public expenditure on health in Ireland are similar to the OECD average. However, if an allowance was made for the lower income per head in Ireland relative to other countries, expenditure on health would be considerably higher here than in other developed countries. It is this phenomenon (higher than the average OECD expenditure on health) which needs to be explained.

Section 2. Causes of Increasing Expenditure on Health

Public expenditure on health in Ireland is heavily influenced by the state of the public finances and the perception of the extent of the budget constraint facing the Government. As a general rule, Governments have sought to contain health expenditure when budget deficits were considered extreme, while when the budget constraint has been relaxed, expenditure has expanded.
Demonstration Effect

The perception of the budget constraint is important. The most significant expansion in health expenditure occurred during the late 1970s when Government and others believed there was no budget constraint. Health expenditure was increased deliberately as a proportion of GNP when GNP was rising sharply following an increase in Gross Domestic Expenditure that was generated by a widening public deficit. The new Government in 1977 set about increasing the share of GNP accounted for by health.

The logic behind this was never articulated. In the background was an attempt to emulate the UK National Health Service, then seen as the model for Western societies, and an attempt to raise the level of absolute expenditure, which was low, and of service. Policy makers were consistent across a whole range of social policy issues - the level of social welfare entitlement both for unemployment and pensions were also targeted at UK levels, and of course in many areas wage rates were only marginally below UK wage rates. The demonstration effect was a major factor in the increase in expenditure, so much so that as the UK NHS deteriorated it became widely believed that the level of service was better in Ireland than in the UK.

Medical Development and Medical Inflation

Generally we tend to consider technological development as cost reducing or capacity expanding i.e. we either reduce the costs of producing a particular product or develop new products which widen consumer choice. In healthcare, technological development has been associated with increased costs and in many cases only marginal improvements in services/outcomes.

For many illnesses new drug products have replaced long standing products and new products are much more expensive. It is the case that the most commonly prescribed drugs are high cost drugs.

The same applies to equipment. What generates this is the obligation derived from medical ethics to provide the 'best'
treatment on ethical grounds. Best treatment is equated with the latest technology. This explains the level of technology associated with the final days of life for many who die in hospital. There is a great deal of expenditure, but not much benefit. Voluntary bodies add to problems by resisting finance for equipment which then requires higher current expenditure in the future. There is also duplication of equipment throughout the system.

Health service inflation (i.e. changes in input costs of pay and prices for goods and services) has tended to outstrip general inflation and also public sector inflation. Partly this reflects the costs of new drugs, drugs which are not significant improvements on existing drugs, but also the ability of the lobbies in health to extract large pay increases and improvements in conditions of service.

Principal - Agent Problem

Typically the principal-agent problem is seen as deriving from an asymmetry of information between patient and medical practitioner. However, there are many other forms in which this problem arises e.g. between the Department of Health and those it funds, between the Department of Finance and the Department of Health and of course between the departments and Government.

The ability of one tier to hide activities from other tiers of Government is well known (e.g. the flu epidemic of several years ago which 'cost' £35 million, the borrowing of £100 million undertaken by Health Boards which required a special one-off payment through the Exchequer). The acquisition of the information necessary to judge programmes and expenditure is possible though costly. However, it exposes agencies of Government to regulatory capture. This is a serious problem for policy makers. The situation in Ireland is complicated by the dual role of hospital consultants, i.e. as public employees, but public employees who can determine the time frame for treatment
of some patients within both a public and private environment within the terms of their contract.

**Financing Methods**

Although budgeting for acute hospitals has recently been reformed, the previous practice of block grant budgeting acted to increase the level of expenditure. Hospitals were effectively free to provide extra services at the margin - services that required increased funding for their maintenance. At the individual level where healthcare is 'free' at the point of delivery there will be greater utilisation of services, most especially for trivial complaints. There may also be a moral hazard problem since people are possibly less careful than if they were paying directly for services. Financing methods only look at inputs not outcomes. No incentive to increase throughput by improved practices - filling beds.

**Population**

The increase in population over the past 30 years has clearly caused an increase in the provision of healthcare services. The expansion in the number of births increased claims on maternity hospitals, whilst the ageing of the population will have serious effects on expenditure in the long-run - the more so since this is presently unfunded.

**Section 3. Methods to Control Health Expenditure**

There is a wide selection of methods adopted by different societies to control healthcare expenditure. None seem to be without problems.

**Drug Budgets**

A drug budget sets limits on the value of drugs prescribed by a GP to public patients. Those who stay within limits are rewarded
by bonus payments. This creates an incentive for the GP to stay within the budget set. It matters how the GP sets out to achieve this - perhaps by using generics rather than the new expensive drugs or by simply reducing prescriptions where drugs are not necessary. There is an alternative, which is to pass the patient onto some other agent, for instance into the hospital system. Experience in the US indicates that control systems in healthcare tend to cause shifting to uncontrolled activities where there is genuine illness. There is no published economic analysis of the effect of drug budgets in the Irish system and the data are not published which would allow the necessary analysis.

Capping

The VHI introduced capping of expenditures by hospitals as part of its emergency measures to contain expenditure following the sudden deterioration in its financial position in the late 1980's. What was initially a temporary measure is now a control mechanism and has been extended from hospitals to consultants.

Capping works by limiting the amount the VHI will pay each hospital during the year. Once a hospital has reached its limit, in a pure capping situation, then it cannot attract private insured patients, or if it does, it cannot reclaim costs. The VHI has introduced some flexibility into the pure system by a variant of marginal cost pricing.

The difficulty with capping is that it limits the expansion of the most efficient, does not penalise the most inefficient, creates an incentive for hospitals not to treat 'costly' conditions - forcing the people elsewhere in the system, or delaying treatment - and makes it difficult for new entrants to gain access to the market.

Overall, capping is essentially what the UK NHS did for most of its history, but recent developments are attempting to apply more directly market based solutions.
NHS - Fundholding

It is somewhat ironic that at a time when the US is tantalising itself with an administrative approach (which looks like an NHS type) to the problem of the size of healthcare expenditure (one seventh of total output), that the UK is moving to market based solutions. The most obvious manifestation of this is the new fundholding practice. A certain number of large NHS practices were invited to become fundholders. Fundholding practices receive a budget from regional health authorities. With this budget they must cover their own costs but they can also purchase a range of services from hospitals, and other providers of health services.

Fundholders are expected to treat revenues as commercial revenues and to purchase inputs on behalf of patients. They have the possibility of generating surpluses which ultimately can benefit the practice holders. There is an incentive to turn away high risk patients. There have been some well-documented cases recently which make this a serious concern and the problem will worsen as fundholding spreads, as is intended.

The principal agent problem is not resolved by fundholding. In fact it may be exacerbated, as there seems to be little attention to outcomes for patients. In a totally free market system, providers of medical services have an incentive to get patients to buy what they sell, in fundholding the incentive is not to use services. In neither case is the outcome, compared to alternatives, considered.

Fundholding is unlikely to develop in Ireland. There are very few large practices in Ireland - a characteristic that is worth further research - and without multi doctor large practices it is unlikely that individual doctors will develop the necessary knowledge on costs and available services in supporting activities. In the UK this knowledge is being acquired by professional management newly hired by fundholders, but the fundholding practice needs a reasonable size to be able to hire management.
Activity Based Costing

A characteristic of the Irish hospital system is the difficulty of obtaining cost of treatment data. Since hospitals operated to fixed budgets derived from the public purse the main emphasis has been on minimising the price of inputs of materials rather than minimising the cost of activities. Acute hospitals are introducing systems to record activity based costings, and these will provide data which will allow comparison between hospitals and hopefully shifts in resources to reflect relative costs. The base data remains suspect and much still needs to be done in this area.

Conclusion

Healthcare illustrates a variety of economic problems deriving from the principal/agent relationship. This is complicated by the episodic random nature of illness at an individual level which necessitates some form of insurance - whether private or the public provision of healthcare services.

The private insurance model is a financing model and does not correct the principal/agent problem. It suffers from the fact that both the providers of healthcare services and the beneficiaries do not appear to be constrained by costs (US).

The public provision of Healthcare transforms the principal/agent problem, but government's activity on behalf of citizens has not been successful in the past in countering the basic cause, and the consequence, of the principal agent problem, and beneficiaries are not obviously constrained by costs.

This suggests two routes to go in attempting to deal with this problem. The first is where the government, acting as principal, attempts to provide itself with the information necessary to evaluate the claims of providers of services. This is what the old UK NHS tried to do, and was reasonably successful for a long time in providing first rate services at relatively low cost.
This system is difficult to monitor. Recent revelations about regional differences in services, and the nature of some services, indicate that the problems of the NHS may have had more to do with the nature of bureaucracy, than with serious underfunding.

The second approach is with Health Maintenance Organisations (HMO). The essence of the HMO is competition between providers of services for patients, in terms of costs and quality of services, and cost minimisation at service level to derive and increase profitability. The HMO model has the added advantage that it is in the interest of the HMO to provide information to the member in regard to the state of health, and preventative measures that are necessary. HMOs, however, have not attracted a significant amount of attention, even in market systems. The equity question must additionally be addressed, though this is not an insurmountable problem.

There will always be a reluctance to fundamentally alter systems, whether in health or elsewhere. Change will inevitably adversely affect some people, and they will be vocal in protecting their interests. This is particularly so in the case of providers of services, who tend to be well organised, though not so for those in receipt of services, who lack an effective lobby defending their interests. In the face of this and because governments will not readily give up control in health, the correct strategy is for the government to get more heavily involved in the evaluation of expenditure. This should be done at the centre, given the problem identified with different tiers of government, and the different tiers where the principal agent problem arises. There is another reason for this, viz. that decentralised decision making does not allow government to choose between expenditure on different programmes at the margin. Self evaluation of programmes by departments encourages increasing expenditure. Crude measures of control by setting budgets, avoids choice between departments and programmes. Of course, if one could incentivise government departments, while maintaining or improving outcomes, this would be optimal. Without this greater controls are needed.