

Ireland's Health Care System: Some Issues and Challenges

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Ireland's Health Care System: Some Issues and Challenges

Anne Nolan and Brian Nolan¹

1. Introduction

A variety of recent reports and strategy documents have highlighted the intimidating range of challenges facing Ireland's health system as it seeks to improve its performance. In this short paper we cannot deal with these in any comprehensive fashion, but instead focus on three specific issues. First, we illustrate the value of trying to benchmark performance against other countries, as well as some of the difficulties that arise in such an exercise. Secondly, with primary care a central focus of official strategies we look at the use of general practitioner services by people at different income levels and in particular by those with and without entitlement to free GP care. Finally, we discuss the complex web of issues in relation to both equity and efficiency that arise from the unique role which private health insurance plays in the Irish healthcare system.

2. Benchmarking Ireland's Performance

How well is Ireland's health care system functioning? Media attention tends to highlight waiting lists for acute hospital care and waiting times and conditions in A&E. These are real concerns, but the broader perspective gained by benchmarking performance against other countries can be particularly valuable, in this as in other areas. To provide this perspective we can draw on recent comparative compilations of data by the OECD and Eurostat and the methodology employed in a recent benchmarking exercise by the Conference Board of Canada (see Conference Board of Canada 2004).

The Conference Board adopts an interesting approach to benchmarking which distinguishes three dimensions: health status, non-medical factors and health outcomes. In each of these, the performance of OECD countries is assessed and each is awarded a gold, silver or bronze medal. "Gold medal" performance means the country is in the top

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one-third of the range on the indicator in question, "silver medal" performance means it is in the middle third and "bronze medal" means it is in the bottom one-third of the range. Note that this is not equivalent to being in the top one-third of countries on the indicator in question; indeed, if there was a big enough gap between the best and nextbest performer, there might be only one country in the top one-third of the range of scores. That is precisely the appeal of this approach; it is based on how close to or far away from the best performers each country is, rather than simply on where they rank on each indicator. Based on their medal performance, countries are then ranked on each dimension and in aggregate across them, by assigning different values to gold, silver and bronze medal performance respectively.

Unfortunately the results presented by the Conference Board itself, although they do include Ireland, could be misleading because they fail to take into account that some of the indicators employed were missing for some countries. So here we apply their method, but re-analyse the data taking this failing into account, i.e., instead of assigning a zero score to a country with missing information on an indicator, we exclude that indicator altogether from the analysis.² In addition, the Conference Board analysis covers 24 OECD countries, including Mexico and South Korea. In certain instances, including Mexico and South Korea widens the range of values on the indicators and has a significant impact on the results. We prefer to confine attention to 22 OECD countries in Europe, North America, Australasia and Japan, using data from 2001³.

We look first at health status. Table 1 shows how the 22 OECD countries included in the analysis were ranked on the basis of four health status indicators: life expectancy for men and for women, infant mortality and low birth weight rates. We see that for these indicators Ireland has one gold medal and three bronze medals. Ireland performs poorly on life expectancy at birth for both men and women, which is in the bottom one-third of countries. Ireland also scores poorly on infant mortality, where again it is in the bottom one-third of the range. In contrast, Ireland is among the best performers in terms of the proportion of babies born with low birth weight.

 $^{^2}$ Due to missing information for some countries, in the "health status" category we exclude disability-free life expectancy for men and women and self-reported health status while for the "non-medical factors" category, we exclude body weight and immunization rates for influenza.

³ We follow the Conference Board in not including five OECD countries (Czech Republic, Hungary, Poland, Slovak Republic and Turkey) for reasons to do with data availability and reliability, and Luxembourg on the basis of its size. In some instances, where data for 2001 are unavailable, data for earlier years are used instead. All data were obtained from the OECD Health Databank for 2003.

A ranking of countries on this dimension can then be derived by aggregating across the indicators assigning a value of two for each gold medal, one for each silver medal and zero for each bronze medal. Ireland ranks joint 14th out of 22 countries on this basis. Health status indicators are of course affected by a wide range of factors other than health care, notably socio-economic and environmental conditions. None the less, the ultimate aim of health care is indeed to improve population health.

Rank	Country	Gold	Silver	Bronze	Weighted Medal Count*
1	Iceland	3	1		7
1	Sweden	3	1		7
3	Norway	2	2		6
3	Japan	3		1	6
5	Finland	2	1	1	5
5	Canada	1	3		5
5	Italy	1	3		5
5	Switzerland	1	3		5
5	Australia	1	3		5
5	France	1	3		5
5	Spain	1	3		5
12	Netherlands	1	2	1	4
12	Austria		4		4
14	Ireland	1		3	2
14	Belgium		2	2	2
14	Denmark		2	2	2
14	Germany		2	2	2
14	New Zealand		2	2	2
14	UK		2	2	2
20	Portugal		1	3	1
20	Greece		1	3	1
22	US			4	0

 Table 1: Comparative Performance of OECD Countries on Health Status

 Indicators

* Gold = 2; $\overline{\text{Silver} = 1}$; $\overline{\text{Bronze} = 0}$

Source: OECD Health Data 2003, Conference Board of Canada (2004).

In terms of the range of other factors influencing health status, the Conference Board also look at what they term "non-medical factors", namely indicators relating to tobacco consumption, alcohol consumption, road traffic accidents, sulphur oxide emissions and immunisation rates. The results in Table 2 show that Ireland has one gold medal, two silver medals and two bronze medals on these indicators. Ireland does well on road traffic injuries, is in the middle range in terms of sulphur oxide emissions and the percentage of the adult population smoking daily but scores in the bottom range for alcohol consumption and childhood immunisations. Once again this leaves Ireland ranking low down, in joint last place with Japan.

Rank	Country	Gold	Silver	Bronze	Weighted
					Medal
					Count*
1	Sweden	5			10
2	Iceland	4	1		9
3	Denmark	3	2		8
3	Finland	3	2		8
3	France	3	2		8
3	Norway	4		1	8
7	Belgium	2	3		7
7	Germany	2	3		7
7	Netherlands	3	1	1	7
7	New Zealand	2	3		7
7	Switzerland	3	1	1	7
12	Australia	2	2	1	6
12	Italy	1	4		6
12	Portugal	2	2	1	6
12	UK	1	4		6
16	Austria	1	3	1	5
16	Canada	2	1	2	5
16	Greece	1	3	1	5
16	Spain	2	1	2	5
16	ÛŜ	2	1	2	5
21	Ireland	1	2	2	4
21	Japan	2		3	4

Table 2: Comparative Performance of OECD Countries on Non-Medical Factors

* Gold = 2; Silver = 1; Bronze = 0

Source: OECD Health Data 2003, Conference Board of Canada (2004).

We focus next on key health outcomes, which one might expect to be affected by health care programmes and clinical interventions. The indicators employed relate to leading causes of mortality and premature mortality, namely cancer, heart attack, strokes and suicide. They measure mortality standardised for age for men and for women relating to lung cancer, heart attack and stroke, together with potential years of life lost through lung cancer for men and for women, female breast cancer and male suicide. Lower rates on these measures can be attributed both to lower incidence (which in turn relates *inter alia* to health-related behaviours) and to treatment. Once again, as Table 3 shows, Ireland performs very poorly, ranking joint second last of the OECD countries included. While Ireland receives four gold medals (for male and female mortality rates from strokes and for male and female potential years of life lost due to lung cancer), Ireland scores particularly poorly on male and female mortality from heart attack (the highest rates in the OECD) and for potential years of life lost due to female breast cancer.

Rank	Country	Gold	Silver	Bronze	Weighted Medal Count*
1	Switzerland	9	1		19
2	Italy	7	3		17
2	Japan	8	1	1	17
2	Spain	8	1	1	17
5	Austria	6	4		16
5	Sweden	6	4		16
5	Australia	5	5		15
5	France	6	3	1	15
5	Norway	6	3	1	15
10	Germany	4	6		14
10	Portugal	6	2	2	14
12	Finland	6	1	3	13
12	Greece	5	3	2	13
14	New Zealand	4	4	2	12
14	UK	4	4	2	12
16	Belgium	5	1	4	11
16	Canada	2	7	1	11
16	Ireland	4	3	3	11
16	Netherlands	3	5	2	11
16	US	2	7	1	11
21	Denmark	3	4	3	10
21 * Cold -	Iceland	3	4	3	10

 Table 3: Comparative Performance of OECD Countries on Health Outcome

 Indicators

* Gold = 2; Silver = 1; Bronze = 0

Source: OECD Health Data 2003, Conference Board of Canada (2004).

One can then aggregate across the three dimensions and arrive at an overall score, simply by adding up the number of medals of each type and then deriving the weighted medal count. This should be seen as only an illustrative exercise, since it implicitly makes the strong assumption that we would want to treat each of the indicators in each of the dimensions as equally important, but may none the less be interesting. Table 4 shows that on this basis Ireland ranks second last of the 22 countries covered, ahead of only the USA.

Rank	Country	Gold	Silver	Bronze	Weighted Medal Count*
1	Sweden	14	5	0	33
2	Switzerland	13	5	1	31
3	Norway	12	5	2	29
4	France	10	8	1	28
4	Italy	9	10	0	28
6	Japan	13	1	5	27
6	Spain	11	5	3	27
8	Australia	8	10	1	26
8	Finland	11	4	4	26
8	Iceland	10	6	3	26
11	Austria	7	11	1	25
12	Germany	6	11	2	23
13	Netherlands	7	8	4	22
14	Canada	5	11	3	21
14	New Zealand	6	9	4	21
14	Portugal	8	5	6	21
17	Belgium	7	6	6	20
17	Denmark	6	8	5	20
17	UK	5	10	4	20
20	Greece	6	7	6	19
21	Ireland	6	5	8	17
22	US	4	8	7	16

Table 4: Comparative Performance of OECD Countries on Health StatusIndicators, Non-Medical Factors and Health Outcome Indicators

* Gold = 2; Silver = 1; Bronze = 0

Source: OECD Health Data 2003, Conference Board of Canada (2004).

So the performance of Ireland's health-care system in comparative perspective is disappointing. What about the financial resources being devoted to health care? Table 5 looks at overall health spending as a proportion of GDP, the conventional way of comparing expenditure across countries. In comparison with the 22 OECD countries we are including here, we see that Ireland is the lowest spender (along with Finland), with 7.3% of GDP devoted to health care, compared with an average of 9.1%. However, as has been regularly pointed out, the use of GDP as the reference point may be misleading in the Irish case, since repatriation of profits abroad is both very high and variable from one year to the next. Expressing health expenditure as a proportion of GNP instead makes very little difference to any of the other countries covered but increases Irish health spending markedly, to 7.6 per cent – about the same as the UK though still well below average (joint 10th highest out of 22 OECD countries).

Country	Total Health	Total Health	Total Health
,	Expenditure as a	Expenditure as a	Expenditure per
	% of GDP	% of GNP	Capita in \$ PPP
Australia	9.1	9.4	2,504
Austria	7.7	7.8	2,220
Belgium	9.1	8.9	2,515
Canada	9.6	9.9	2,931
Denmark	8.8	9.0	2,580
Finland	7.3	7.3	1,943
France	9.7	9.7	2,736
Germany	10.9	10.9	2,817
Greece	9.5	9.5	1,814
Iceland	9.9	10.1	2,807
Ireland	7.3	9.0	2,367
Italy	8.5	8.5	2,166
Japan	7.8	7.7	2,077
Netherlands	9.1	9.3	2,643
New Zealand	8.5	8.4	1,857
Norway	8.7	8.6	3,083
Portugal	9.3	9.5	1,702
Spain	7.6	7.7	1,646
Sweden	9.2	9.3	2,517
Switzerland	11.2	10.4	3,445
UK	7.7	7.6	2,160
US	14.6	14.5	5,267
OECD 22 Average	9.1	9.2	2,536

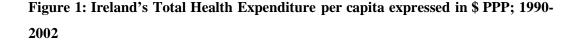
Table 5: Financial Resources Devoted to Health Care, OECD Countries, 2002

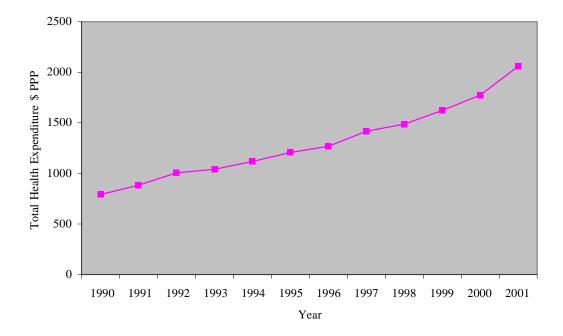
Source: OECD Health Data 2004 (for total health expenditure and GDP) and European Commission, AMECO Macro-Economic Database 2004 (for GNP).

Note: Data for Australia and Japan refer to 2001. Total health expenditure as a % of GNP for New Zealand refers to 2000.

However, the most striking feature of Ireland's health spending is how rapidly it has been increasing in *absolute* terms in recent years. Whatever about relative to rapidly increasing GNP, health spending has risen very rapidly indeed in nominal terms – from \pounds 2.2 bn. to \pounds .4 bn. between 1990 and 2002. Even when adjusted for the increases in relevant prices, health spending has risen markedly in purchasing power terms. Figure 1 charts Irish total health expenditure per capita in purchasing power terms from 1990 to 2002, as calculated by the OECD, and by the end of the period the level of spending was 3 times higher than in 1990. This depends of course on the reliability of the adjustment made for the change in prices of the goods and services involved (holding "quality" constant), which is notoriously difficult to capture in the health care area. It is also worth noting that despite its rapid rate of increase, the level of spending per capita

in purchasing power terms in Ireland had still not reached the average for these 22 OECD countries by 2002.

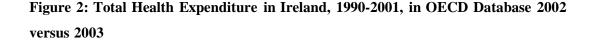


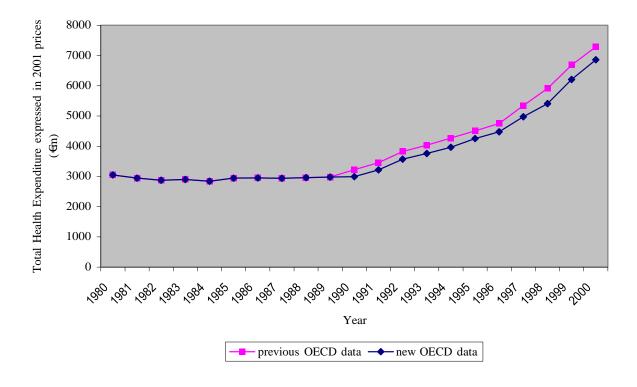


Source: OECD Health Data 2004

It is also worth entering an important caveat in relation to the comparative perspective on Ireland's health spending. This is illustrated by the comparison of the trend in health spending shown in Figure 2 labelled "2003 OECD data" with the line labelled "2002 OECD data". The latter shows the figures published in 2002 by the OECD in their databank and in "Health At a Glance", the source on which comparisons of this sort for OECD countries now rely. We can see that this shows substantially higher levels of health spending for Ireland than the set produced in 2003. This is because, in compiling their 2003 set of data, the OECD with the help of the Department of Health and Children re-examined the nature of the spending involved, and decided to exclude certain sub-heads of Irish public health spending which relate to what would in other countries probably be counted as social services or social transfers. Consequently, the percentage of GNP accounted for by health spending in Ireland for 2000 fell from 7.9 per cent using the 2002 data to 7.4 per cent using the 2003 data. (The most recent OECD figures, published in mid-2004, are on the same basis as the 2003 ones – see also the discussion in Wren 2004).

The point is not that this reclassification was inappropriate, but rather that there is no guarantee that spending in other countries is delimited in exactly the same way. What is being counted as health spending may not be harmonised across countries to the extent one would want, despite the best efforts of the OECD. In relation to the hazards of comparative analysis it is also worth noting that the recently-produced OECD figures only carry this re-categorisation of health spending in the Irish case back to 1990, so the unsuspecting user of their data will get a misleading picture of the increase in health spending over time if the base year used is earlier than that.





Source: OECD Health Data 2002, 2003

3. Use of GP Services by Income Level and Medical Card Status

As we noted in the introduction to this paper, primary care has become a central focus of official health strategy as Ireland, like many other countries, seeks to shift the emphasis from expensive hospital-based health care to primary curative and preventative interventions. General practitioners play the central role in primary care, and one of the most distinctive features of the Irish healthcare system is the pricing of GP services. For those who have medical card cover – generally because they fall below the specified income threshold – GP visits are free. For the rest of the population, GP visits must be paid for out of pocket on a fee per service basis; usually the patient has to bear that full cost (i.e., it is not reimbursed even where they have health insurance). GPs are free to set the charge to meet their full costs and provide them with an income and the majority of GPs provide services to both sets of patients – medical cardholders and non-medical cardholders. In many other OECD countries, by contrast, primary care is either free or heavily subsidised, by one means or another, for most or all of the population.

This pricing structure in the Irish context gives rise to a number of concerns, so it is useful to look at the empirical evidence about the use of general practitioner services by people at different income levels, and in particular by those with and without entitlement to free GP care due to the medical card system. Once again it is helpful to start with a comparative perspective. Using data from the European Community Household Panel Survey for representative samples of the populations of most of the "old" EU 15 countries, we can derive GP visiting rates for adults by position in the income distribution.⁴ Table 6 shows for 2001 the average number of GP visits in the previous year for adults (aged 16+) in the bottom one-tenth (decile) of the income distribution in their country, the next one-tenth and so on up to the top one-tenth, as well as the overall average. (This ranking is on the basis of household income adjusted for the size and composition of the household using what are termed "equivalence scales").

We see first that the overall average visiting rate in Ireland, of 3.6 visits per person per year, is about the middle of the range across these countries. That range is in fact rather wide, running from almost 5 in Austria, Belgium and Italy down to less than 2 in Greece, reflecting *inter alia* the different roles played by general practitioners in

⁴ Sweden did not participate in the survey, and some other countries (Germany, France) participated but did not have exactly the data we are focusing on here for 2001.

different healthcare systems. The Irish average is slightly higher than the UK, where the GP role is similar.

Looking now at the way the frequency of GP visiting varies across the income distribution, we see that in almost all countries visiting rates are higher towards the bottom of the distribution and lower towards the top (Finland being the exception with a very flat pattern across the deciles). The gap between top and bottom varies a good deal though. In Ireland, visiting rates are about twice as high towards the bottom compared with the top, whereas in most of the other countries that ratio is rather lower, at approximately 1.5. Where Ireland also stands out, though, is in the very sharp fall in the visiting rate as one goes from the second to the third decile – when the average number of visits drops from 6.6 to 3.6. No other country sees such a sharp decline; the obvious question to ask is whether this could reflect the impact of medical card entitlement on the cost of a GP visit to patients. (The visiting rate in the Irish case also jumps up again in the sixth decile and then down in the eight, but the gap between the second and third decile is considerably wider.)

Country	Bottom	2	3	4	5	6	7	8	9	Тор	All
	10%									10%	
Austria	5.8	6.4	5.1	4.8	5.0	4.7	3.7	4.1	4.3	3.8	4.7
Belgium	7.6	6.9	6.2	4.8	5.0	4.7	3.8	3.5	3.5	3.6	4.9
Denmark	3.4	3.6	3.6	4.1	2.8	2.7	2.1	2.0	2.3	2.0	2.9
Finland	1.8	2.6	2.4	2.4	2.0	1.9	2.0	1.9	2.3	1.8	2.1
Greece	2.5	2.4	2.1	1.9	2.1	1.8	1.6	1.4	1.6	1.2	1.9
Ireland	4.8	6.6	3.6	3.0	3.1	4.1	3.7	2.3	2.6	2.4	3.6
Italy	5.0	5.7	5.0	5.6	5.8	4.9	4.3	4.3	4.3	3.9	4.9
Netherlands	3.4	3.2	3.2	3.1	2.8	2.9	2.6	2.3	2.4	2.4	2.8
Portugal	3.8	3.6	4.1	2.8	3.0	3.0	3.0	2.6	2.5	2.6	3.1
Spain	4.5	5.6	4.2	4.4	4.3	3.6	4.0	3.5	3.0	1.9	3.9
UK	3.8	4.4	3.7	3.4	3.3	3.2	2.9	2.7	2.8	2.5	3.2

Table 6: GP Visiting Rates for Adults 16+ by Income Decile, EU Countries, 2001

Source: European Community Household Panel Survey, 2001

Note: Data are unavailable for France, Germany and Sweden

The first point to note is that people in the various deciles differ not only in terms of income but also in terms of other characteristics that may well influence their use of health services, most obviously their age. The incomes of older people are particularly concentrated in Ireland, with a high proportion on low (but not the lowest) incomes. Therefore, the difference in visiting rates between the second and third deciles could partly reflect the fact that far more people in the second decile are older. In addition the Irish situation in 2001, the year to which these figures relate, is complicated by the fact that medical card entitlement was extended to all those aged 70 or over in the latter part of the year. It is therefore useful to look in Table 7 at visiting rates across the various countries for those aged between 16 and 69 only.

This shows that the overall average visiting rate for Ireland is once again in the middle of the range across these countries and slightly above that in the UK. The differential between the top and bottom of the income distribution is narrower than when the elderly were included, but is still substantial and particularly marked in the Irish case. Furthermore, although the drop in visiting rate comparing the second and the third deciles is now smaller, from 5.5 to 3.1, it is still very large and unusual both in comparative context and in terms of the pattern across other deciles in Ireland. So these figures certainly suggest that it is worth investigating in some depth whether the distinctive features of the "pricing system" for GP visits in Ireland has implications for use of the services.

Table 7: GP Visiting Rates for Adults aged 16-69 by Income Decile, EU Countries,2001

Country	Bottom	2	3	4	5	6	7	8	9	Тор	All
	10%									10%	
Austria	4.3	5.1	4.2	4.5	4.1	3.9	3.2	3.8	3.6	3.3	3.9
Belgium	6.0	5.2	5.0	4.2	4.2	4.2	3.2	3.3	3.3	3.2	4.1
Denmark	2.6	2.2	3.6	4.2	2.6	2.7	2.1	1.8	2.3	1.9	2.6
Finland	1.8	2.3	2.3	2.4	2.0	1.9	2.0	1.9	2.3	1.9	2.1
Greece	1.7	1.7	1.5	1.4	1.6	1.3	1.3	1.2	1.2	1.1	1.4
Ireland	4.2	5.5	3.1	2.9	2.7	4.0	3.6	2.3	2.4	2.3	3.2
Italy	4.3	4.4	3.7	4.2	4.5	4.2	3.5	3.9	3.7	3.6	4.0
Netherlands	3.4	3.0	2.8	2.8	2.4	2.8	2.4	2.1	2.3	2.2	2.6
Portugal	3.2	3.1	3.4	2.5	2.8	2.6	2.7	2.4	2.3	2.3	2.7
Spain	4.0	4.3	3.5	3.6	3.7	2.9	3.6	3.2	2.8	1.7	3.3
UK	3.7	4.2	3.6	3.2	3.1	3.0	2.8	2.6	2.7	2.4	3.0

Source: European Community Household Panel, 2001

Notes: Data are unavailable for France, Germany and Sweden

We have pursued this using micro-data from the Living in Ireland Survey, the Irish element of the European Community Household Panel. Estimation of an econometric model of GP visiting behaviour using Irish data for 2001 allows us to relate the reported number of visits by each adult to a range of characteristics including their age, gender, education, household income and medical card status. Valuably, we were also able to control to some extent for differences in health status, which is particularly important since those on low incomes are distinctive not just in having medical card cover, but are also likely to have poorer health and a greater need for health care than the rest of the population. While the measures of health status available to us in the survey are crude, they do allow us to go some way towards taking such differences in needs into account.

Cross-sectional analysis described in detail in Nolan and Nolan (2003) and Madden, Nolan and Nolan (2004) find that medical card entitlement has a highly statistically significant and substantial influence on the number of GP visits an individual reports. Having controlled for all the other characteristics mentioned, including health status, those with medical card cover have on average about 1.6 more visits each year than those with similar characteristics but without a medical card. Even if the health status indicators available to us understate the difference in needs between those with and without medical cards, it seems likely that the different financial incentives they face also play a role in producing this very substantial gap.

It is also important to investigate whether this effect is more pronounced in the income ranges above but still quite close to the medical card threshold. There has been a great deal of concern expressed about the position of families just above the threshold, who would be brought within medical card entitlement by raising the threshold as the government are committed to doing at some point. For this paper we tested whether proximity to the threshold makes a marked difference to visiting rates by introducing a set of interaction terms between income decile and the variable in our model capturing medical card status. These interaction terms do not turn out to be statistically significant. These results suggest, on the face of it, that the key difference in terms of GP visiting rates in Ireland is simply between those with and without medical cards.

While the analysis to date has been cross-sectional, we have also begun to exploit in this context the longitudinal nature of the Living in Ireland Survey data, i.e., the fact that it sought to interview the same individuals from one year to the next. This means we can follow people from 1995 up to 2001 and identify those who moved from having medical card cover to not having cover and vice versa, and investigate whether their GP visiting rates changed. Visiting rates do fall on average when medical card cover is lost and rise when medical card cover is "gained", but this could be for a

variety of reasons including changes in health and thus the need for care.⁵ The next stage in the analysis is to estimate econometric models controlling for, among other things, changes in reported health status and see the extent to which changes in visiting rates not associated with such variation in need are identified.

How should one react to the fact that medical cardholders visit the GP more often than those without cover, even when we control for measured differences in health status? Does this mean that medical cardholders "overconsume" or non-medical cardholders "underconsume" GP services, or indeed both? Deciding on an appropriate benchmark against which to make such a judgement is difficult, since we don't know the "right" level of visiting from a medical, much less a cost-effectiveness point of view. International comparisons reveal countries with higher average levels of visiting towards the bottom of the income distribution than Ireland, and ones with similar (though not lower) rates towards the top. What we can say is that, given the gap between those with and without medical cards, it is unlikely that both are optimal – again, from a medical or cost-effectiveness point of view.

If we regard the present situation as distorted, then, the next issue is best how to address that distortion. From an incentives perspective, one can look at both supply and demand sides, providers and patients. Focusing on providers, it seems plausible that providers paid on a fee-for-service basis to treat patients facing zero price would be particularly likely to induce demand; this was indeed a key rationale behind the change in the reimbursement system for GMS GPs in the late 1980s, following on the research by Tussing (1985). However, when we estimated the cross-sectional models mentioned earlier for 1987, 1995 and 2000, this did not reveal any narrowing of the gap between medical cardholders and others after the change to a capitation reimbursement system (see Madden, Nolan and Nolan 2004).

Turning to the patient side of the equation, the issue of charging for health care and its impact on utilisation and efficiency is a perennial and much-debated one in the health economics literature (see Nolan 1993 for a discussion). The key question is not now whether charges affect utilisation – the accumulating evidence is that they do, and our findings to date are consistent with that pattern. Rather, the critical question is whether charges reduce "necessary" as well as "unnecessary" visits, and by its nature

⁵ It would hardly be surprising if visiting fell when someone moved from being out of work due to illness or disability into work, or rose when the opposite occurred; the pattern described remains when we exclude such cases, but .

that is very difficult to assess. Perhaps the most important point to stress in this context is the uncertainty inherent in making that distinction for the patient *ex post*. It is difficult for experts to make an assessment of the value of a specific visit after the event; it is even more difficult for a "layman" to do so when deciding whether to visit, since the motive for visiting a doctor is often to see if medical intervention is needed because the individual simply doesn't have the knowledge to make that judgement. This uncertainty, identified as critically important to the economics of health care as long ago as Arrow (1963), means that charges inevitably discourage "necessary" as well as "unnecessary" visits. This of course applies to the current substantial charges facing Irish patients without medical cards, as well as to any charges that might be levied on medical card patients.

4. Health Insurance

Over the past decade or so the context in which Ireland's complex mix of public and private health care operates has changed radically, as the numbers purchasing health insurance soared and the nature of the insurance market has changed in response to EU regulations. This has widened the divide between those with and without health insurance, and called into question the public-private structure on which Ireland has relied for many years. Almost half the Irish population now pay for private health insurance, one of the highest levels of coverage in the OECD. This is despite the fact that hospital care is covered by private health insurance and everyone has entitlement to public hospital care from the state. The insured can avail of "private" health care, but much of this private care is actually delivered in public hospitals. The resulting two-tier system is now widely regarded as problematic from an equity perspective, but there are also serious efficiency issues arising from the incentive structures embedded in this particularly close intertwining of public and private.

It is worth dwelling briefly on how this situation has come about. For many years those towards the top of the income distribution in Ireland have been encouraged to take out "private" health insurance. In the late 1950s the Voluntary Health Insurance Board (VHI) was established as a monopoly state-backed not-for-profit health insurer to cater for the top 15 per cent or so of the income distribution, who did not (then) have entitlement to public hospital care from the state. This state-backed insurer operated community rating and income tax relief was available on premia paid. This structure

was designed, *inter alia*, to ensure that the entire population had access to hospital care while satisfying the demands of medical consultants that their private practice not be undermined. Those towards the top of the distribution were in effect encouraged to take out "private" insurance, while the cost of in-patient care for the rest of the population was fully covered by the state.

To complicate the picture – and it is a crucial difference between Ireland and many other countries – not only was "private" insurance provided for many years by what was to all intents and purposes an arm of the State, much of the "private" care it covers was and is delivered in public hospitals. Medical consultants retained the right to treat their private patients in public hospitals, and about half of all private hospital care is in fact delivered in those hospitals. Most patients receiving private care – in a public or private hospital - have insurance, and the insurer reimburses both medical consultant and hospital. However, for many years public hospitals only charged for the "hotel" facilities associated with being in a private room. In addition, most medical consultants are contracted to care for public patients in public hospitals on a salaried basis, while maintaining the scope to treat private patients on a fee-for-service basis. The public and private systems in Ireland, rather than being distinct, have had what has accurately been described as a symbiotic relationship (Barrington 1987; see also Wren 2003).

From the 1950s to the late 1970s or early 1980s, this public-private mix supported by "private" health insurance functioned in roughly the way it was designed to do, with a monopoly insurer covering private care for the well-off and in effect "topping up" the public system. There have been fundamental changes in the health insurance landscape since then. The first is the dramatic rise in the percentage of the population buying health insurance. This jumped up from about 20 per cent to 30 per cent in the late 1970s, jumped once again in 1987 to 35 per cent, rose steadily through the 1990s and by now is very close to half the population. This occurred despite the fact that full entitlement to public hospital care (subject to some charges levied on all those without medical card cover) was extended to the top part of the income distribution in the early 1990s.

So health insurance in Ireland, having been the preserve of the better-off for many years, now covers half the population. Quite why this increase in the numbers buying health insurance has occurred is not well understood. The scale of economic growth and increasing real household incomes in Ireland during the 1990s – the "Celtic Tiger" - has clearly made it possible for more people, but this does not explain why they

want or feel the need to have health insurance cover. The upward trend in numbers insured has also proved remarkably resilient in the face of significant annual premium increases and a diminution in income tax relief as tax rates fell and relief was scaled back to the standard rather than the purchaser's marginal tax rate. Econometric time-series analysis also suggests that the evolution of income and price still leave much of the increase in demand to be explained (Harmon and Nolan 2001), so it is also important to explore what people think they are buying when they buy insurance, and the alternative they face or believe they face without it.

Attitudinal surveys (see for example, Watson and Williams 2001, Health Insurance Authority 2003) suggest that concern about waiting times for public hospital care is uppermost in people's minds, that quality of care has also come to be seen as a significant issue, and that having a private room or other "hotel" aspects are not seen as an important reason for buying private insurance. Waiting times for public hospitals are widely perceived to be long, both by those with and without insurance. So what people essentially believe they are buying is the assurance that they can access hospital care when they need it, without undue waiting and with care from a medical consultant of their choice.

It seems plausible then that perceptions of access to public hospitals combined with perceptions of the quality of public versus private care are key drivers underpinning demand for health insurance. The role of media coverage in influencing such perceptions merits examination, but there are indeed long waits for certain types of public hospital treatment that are by-passed by those with insurance. In one of the attitudinal surveys, for example, almost half the respondents said they personally knew someone who recently had a lengthy wait for public hospital treatment – so they were not simply reacting to media reports.

This two-tier hospital system is now widely regarded as problematic from an equity perspective. Indeed, the issue of equity of access to hospital care for public versus private patients has become a very high profile one politically and equity as a goal has been highlighted in the official Health Strategy produced after lengthy consultation in 2001. The focus of policy has been on regulating access to public hospitals, on the proportion of private versus public beds in them, on the charges for private care in public hospitals and on reducing waiting times for public patients. However in our view this focus misses some deep-seated structural problems, in respect

to both equity and efficiency, which the recent upsurge in numbers insured has not created but has certainly exacerbated.

Dealing first with equity, a number of different layers to the argument may be usefully distinguished in assessing the fairness of the current system. Where separate and distinct public and private healthcare systems operate side-by-side and private health insurance provides cover for the latter, then a likely outcome is that those with insurance – who are most often on higher incomes – will have more rapid access to health care. Views may, and do, differ about whether this is equitable, both within and across societies. However, the role of the state in subsidising health insurance or private health care, directly or indirectly, adds a further dimension: some who see differential access as fair if the full cost is being paid by those "going privately" might question its fairness if the taxpayer is in effect covering part of the cost. A further, and even more complex, dimension arises when – as in the Irish case – much of the private care to which those with insurance gain access is actually being delivered in public hospitals. In that situation, the financial flows underpinning the system are more difficult to disentangle but the two-tier nature of access by those with versus without insurance is more striking.

So what is distinctive about the Irish case is that the *public* hospital system has come to be seen very widely as a two-tier one, offering the better-off more rapid access; the fact that they are in effect subsidised by the taxpayer in doing so is less widely debated but well understood by analysts. Subsidisation comes through tax breaks on insurance premia and below-cost charges for private care in public hospital; recently this charge has been raised significantly but still represents an implicit subsidy to private care in public hospitals (Nolan and Wiley 2001). The clarity of the distinction between private versus public beds in those hospitals and how to ensure that private patients do not obtain preferential access through public beds have also been the focus of particular attention from policy-makers.

Even if private care in public hospitals covered its full cost or even generated a surplus to cross-subsidise care of public patients, an equity concern would arise about two-speed access to those hospitals. The main argument advanced for retention of private care in public hospitals is that this allows the most able medical specialists to be available to care for public patients. There has been no attempt to assess the scale of the purported benefits to the public system, nor whether the benefits of close interaction with private care are outweighed by the costs. These costs include not only the direct and indirect subsidisation already mentioned, but also the distortionary impact of the incentives for medical consultants and hospital managers associated with the inter-mingling of public and private care. Most medical consultants employed to treat public patients, and paid a salary for doing so, also have private patients for whom they are paid on a fee-per-service basis. While consultants are committed to a specified number of hours per week caring for public patients there is no effective monitoring and the incentive they face to concentrate more of their attention on private patients – even if it is by working very long hours over and above their public commitment – may clearly be to the detriment of public patients. (Unlike private patients, many public patients will be treated by more junior doctors). Public hospital managers also face an incentive to maximise revenue from private patients in any given year, since this is one of the few sources of additional revenue available to them.

Some of these incentive issues might still feature, though they would probably be less pronounced, if private care was delivered only in private hospitals – if for example consultants still had a mix of private and public patients and were in effect incentivised to prioritise the former. Equity concerns could still be raised about faster access to such private hospitals, especially if the state subsidises them not only indirectly by favourable tax treatment of insurance premia and via training of staff in the public system, but also by direct tax breaks to encourage building private facilities as have recently been introduced by the Irish government. However, both efficiency and equity concerns are undoubtedly heightened by Ireland's peculiarly intimate publicprivate mix.

Health insurance underpins Ireland's public/private mix. The major change in the landscape in that respect came in response to the EU's 1992 Third Non-Life Insurance Directive, designed to stimulate competition in insurance. The Irish government enacted legislation opening up the health insurance market, and BUPA Ireland commenced operation in 1997. The way that market operates is tightly regulated: Ireland obtained approval from the EU to continue to require all insurers to apply open enrolment, community rating and lifetime cover, as enshrined in the 1994 Health Insurance Act and the 1996 Health Insurance Regulations. In 2001 the Health Insurance Authority was set up to oversee and regulate the market. Among its responsibilities is the implementation of a risk equalisation scheme in order to support community rating. This has proved particularly controversial and no transfer of funds across insurers has yet taken place. The VHI continues to dominate the market, with about 95 per cent of subscribers and although its status has been debated it remains a not-for-profit body whose board is appointed by the Minister for Health, requiring official approval for changes in premium levels.

The highly regulated nature of the private health insurance market in Ireland is distinctive. Open enrolment, community rating and lifetime cover are enshrined as core principles, reflecting the role which public policy has traditionally assigned to insurance in the health care system. These restrictions have not been much debated and appear widely supported, but their rationale is in fact open to question. The logic that applied when public policy saw insurance financing hospital care for the well-off cannot simply carry over to what is now a very different situation. Indeed, it is far from clear where policy now sees insurance fitting in and going, in a situation where everyone is entitled to avail of public care on the same basis but half choose to buy insurance.

Implementation of the risk equalisation scheme in order to support community rating, on the other hand, has proved controversial – at least between the two insurers who would be affected. A vigorous debate between them has continued as to the justification for such a scheme and the need for a transfer and no transfer of funds across insurers has yet taken place. This uncertainty may be acting as a deterrent to the entry of further insurers to compete in the Irish market.

None the less, the entry of BUPA and potential entry of further insurers is a fundamental change in the health insurance market. The fact that the VHI, though still dominating the market, faces real competition from BUPA and the potential for entry by more competitors has clearly affected behaviour in the market. This is most obvious in the range of new insurance products which continue to appear and the efforts to market them. Despite competition, however, the cost of insurance has continued to rise.

As well as the supply side, the prospects for the demand for health insurance are also uncertain. Even if it were to plateau at about the current level, the dynamic effects of recent growth in the numbers purchasing health insurance still have to work their way through. It is not clear, from a financial or broader public policy perspective, whether a 50/50 split between those with and without insurance, is inherently unstable. From a public policy perspective, it is hard to see why the number taking out private insurance should in itself be a target variable. If however public policy gave priority to effectively improving access to, and quality of, care for public patients in public hospitals this might have a significant impact on demand for private insurance, given the apparent importance of perceptions of the public system in promoting that demand.

While health has of course become an extremely high-profile and politically sensitive topic, health insurance itself has not come centre-stage in the public debate – which has focused on waiting times for public hospital care and the location of those hospitals. Some alternative structures involving "insurance for all", either via social insurance or subsidised private insurance, have been put forward but this discussion has not as yet progressed very far. The slogan that "everyone should be a private patient" amply illustrates that having 50 per cent of the population with insurance alters the context for such a debate. However, it will clearly be difficult to move forward when "insurance for all" means very different things to different groups advocating it – and clarity about who would gain and lose is notably lacking. In sum, recent Irish experience shows that a structure designed to take advantage of possible benefits for the public system of close interaction with private care can create perverse incentives, come to be seen as inequitable in terms of access and utilisation and potentially undermine that public system. The numbers currently with health insurance can also be expected to fundamentally influence the political economy of structural reform.

4. Summary and Conclusions

This paper began by illustrating the value of benchmarking the performance of Ireland's health-care system against other countries. This showed that performance, as reflected in a variety of indicators, to be disappointing. Some of the difficulties in such a benchmarking exercise were seen when we looking at a key indicator, namely the level of health spending. This has risen very rapidly indeed in nominal terms in recent years, outpacing even the exceptional scale of economic growth. However, in purchasing power terms and as a percentage of GNP it was only at the UK level – which the British government considers too low compared with other EU countries – by 2002. Reclassification of some spending by the Department of Health by the OECD in 2003 also significantly reduced their estimate of Ireland's health spending, a process which may not be applied uniformly across countries.

With primary care a central focus of official strategies we then investigated the use of general practitioner services by people at different income levels, in particular those with and without entitlement to free GP care.. Having controlled for other characteristics, including health status, those with medical card cover were found to have on average about 1.6 more visits each year than those with similar characteristics but without a medical card. Even if the health status indicators available to us understate the difference in needs between those with and without medical cards, it seems likely that the different financial incentives they face also play a role in producing this very substantial gap. The current substantial charges facing Irish patients without medical cards in all probability discourage some "necessary" as well as "unnecessary" GP visits, and this would also apply to introducing charges for medical card patients, essentially because of the uncertainty about drawing this distinction – particularly for the layman in deciding whether to visit.

Finally, we identified some key issues in relation to both equity and efficiency arising from the unique role which private health care and health insurance plays in the Irish healthcare system. The public hospital system facilitates the better-off in obtaining more rapid access to care, and incentives for medical consultants and hospital managers are distorted by the inter-mingling of public and private care. Health insurance underpins this public/private mix in a highly regulated market. Open enrolment, community rating and lifetime cover reflects the role which public policy has traditionally assigned to insurance, but the logic that applied when insurance financed hospital care for the top 15% now needs to be re-examined. A structure designed to take advantage of possible benefits for the public system of close interaction with private care has created perverse incentives, come to be seen as inequitable in terms of access and utilisation, and could potentially undermine that public system. However, the numbers now having health insurance also fundamentally influence the political economy of structural reform.

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