The Interaction of Public and Private Health Insurance: Ireland as a Case Study

Brian Nolan

The Economic and Social Research Institute, 4 Burlington Road, Dublin 4, Ireland. E-mail: brian.nolan@esri.ie

In Ireland, the public health system has a symbiotic relationship with private health insurance not seen in other European countries. Everyone has entitlement to public hospital care from the state, but half the population now pay for private health insurance. The insured avail of "private" health care, much of it delivered in public hospitals, and the resulting two-tier system is problematic from both an efficiency and an equity perspective. This paper uses the Irish case to explore the dynamics of the interaction between public and private health care and their impact on the demand for health insurance and on equity. It brings out how a structure designed to take advantage of possible benefits for the public system of close interaction with private care can be both destabilizing for the public system and inequitable in terms of access and utilization.

The Geneva Papers (2006) **31,** 633–649. doi:10.1057/palgrave.gpp.2510105

Keywords: private health insurance; public-private mix; equity; health care access

Introduction

While representing only a small share of total health funding on average in rich countries, private health insurance covers 30 per cent or more of the population in a third of OECD members. It plays a variety of roles, ranging from primary health insurance coverage for particular population groups to a supporting role for public systems. As a recent review of private health insurance in OECD countries brings out, its function depends crucially on the interaction with publicly funded systems. It represents the sole form of health coverage for significant population groups in only a few countries (notably the U.S., Netherlands and Germany), but more often provides something extra that is not covered, or not fully covered, by the public system. In such countries as Australia, the U.K., Spain and Ireland that "something extra" is primarily access to privately financed providers. In such systems, as the OECD study notes, "differences in access to care, choice levels and utilisation patterns occur between individuals with and without private insurance" (p. 16).

Ireland is however distinctive. This is first because of the prominence of the role which private health insurance plays: about half the population now have private insurance, one of the highest levels of coverage in the OECD – despite the fact that everyone has entitlement to public hospital care from the state. Secondly, much of the

¹ Colombo and Tapay (2004a). This review is based on a series of individual country case-studies, including one of Ireland (Colombo and Tapay (2004b)).

private care to which the insured gain access is actually delivered in public hospitals. In addition, the context in which this complex mix of public and private health care operates has changed radically over the past decade, as the nature of the insurance market has changed in response to EU regulations. The two-tier hospital 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. All this means that (as recognized by the OECD) Ireland is a particularly interesting testing ground for both the advantages put forward by proponents of a strong role for competitive private insurance markets, and the drawbacks in terms of both equity and cost control/efficiency identified by the other side of this debate.

In brief, the Irish health care system provides everyone with entitlement to acute hospital care in public hospitals, subject to certain charges unless the family falls below a specified low-income threshold. Those below the threshold (covered by what is known as a "medical card") also get free general practitioner care and prescription medicines, for which the rest of the population have to pay. Health insurance (at least until recently) focused on hospital and specialist care, covering most of the cost, with those covered receiving "private" in-patient care in either private or public hospitals. The market for health insurance is tightly regulated, with all insurers having to apply open enrollment, community rating and lifetime cover. Such a two-tier structure need not necessarily imply the presence or emergence of a quality/access difference between those with and without insurance: if the public system is broadly equivalent to the private one in terms of quality and access, insurance might still be purchased by those who value improved "hotel" aspects of care and choice of specialist. However, particularly where the public and private systems are as intertwined as they are in the Irish case, there are real pressures inherent in such a system that can serve to open up a quality/access gap, and that in turn can fuel the demand for health insurance, as we shall discuss.

This paper aims to identify the key issues, review what is known about them, and identify the major gaps that make it difficult to properly assess the impact of private health insurance. We begin by outlining in the following section the role private health insurance plays in Ireland, and the major changes that have been taking place in the health insurance market in recent years. The next section then examines the factors underpinning increasing demand for health insurance. The following section focuses on the debate about equity and the policy response, while the penultimate section deals with the flow of resources and the incentive effects of the current system. Finally, the main messages are brought together in the concluding section.

Health insurance in Ireland

As in other countries, the current role of private health insurance in Ireland can only be understood in terms of its historical evolution.² (Key events in the evolution of the

² The OECD case-study of health insurance in Ireland (Colombo and Tapay (2004b)) has a useful description of the system and discussion of many of the issues highlighted here.

Table 1 Evolution of health care system and private health insurance in Ireland

Date	Health care structures	Private health insurance
1957	All but top 15 per cent of earners have public entitlement to free care in public hospitals	VHI Board established to cater for top 15 per cent of earners
1970	GMS established, those below income threshold entitled to free GP and prescription medicines	
1979	Universal eligibility for free public hospital care enacted	
1980		Percentage insured reaches 25 per cent
1987	Statutory charges for hospital care introduced for those above income threshold	
1991	Universal eligibility for specialist services (subject to charges)	
1992		EU Third Non-Life Insurance Directive
1994		Health Insurance Act opens up health insurance market to competition
		Health Insurance Regulations provide for risk equalization, lifetime cover, minimum benefits
1997		BUPA (Ireland) enters market
1999		White Paper on Private Health Insurance
2001	Publication of Quality and Fairness Health Strategy	Establishment of Health Insurance Authority
2004		Vivas enters market
2005		Health Insurance Authority recommends risk equalization payments begin (June); Minister accepts recommendation (December)
2006		Legal challenge to risk equalization by BUPA; percentage insured c. 50 per cent

Irish health care system and the health insurance market are set out in Table 1 for reference.) Entitlement to care from the public health system was made available first to those on lower incomes, not to the better-off. Efforts to extend entitlement up the income distribution then faced the resistance of providers who were reluctant to lose their income from private patients.³ In the late 1950s, a monopoly state-backed not-for-profit health insurer – the Voluntary Health Insurance (VHI) Board – was established 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 at one's marginal rate 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

³ Barrington (1987); Wren (2003).

cost of in-patient care for the rest of the population – provided in public hospitals – 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 patient 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 feefor-service basis. So the public and private systems in Ireland, rather than being distinct, have what has accurately been described as a symbiotic relationship.⁴

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 initially designed to do, with a monopoly insurer covering private care for the well off and in effect "topping off" 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 – 35 per cent – rose steadily through the 1990s and by now has reached half the population. This occurred despite the fact that full entitlement to public hospital care (subject to some charges levied on all those above a low-income threshold) was extended to the top part of the income distribution in the early 1990s.

Another major change is that there are now competing insurers. In response to the EU's 1992 Third Non-Life Insurance Directive, designed to stimulate competition in insurance, the Irish government enacted new legislation opening up the health insurance market. As a result a second significant insurer, BUPA Ireland (a subsidiary of the British insurer), commenced operation in 1997, while a third, Vivas, commenced operation in 2004. However, the way the market operates is tightly regulated: Ireland obtained approval from the EU to continue to require all insurers to apply open enrollment, community rating and lifetime cover, as enshrined in the 1994 Health Insurance Act and the 1996 Health Insurance Regulations. In 2001 a Health Insurance Authority was set up to oversee and regulate the market. Among its responsibilities is implementation of a risk equalization scheme in order to support community rating. This has proved particularly controversial and no transfer of funds across insurers has yet taken place, as we discuss shortly. The VHI continues to dominate the market, 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. Nonetheless, the entry of BUPA and Vivas, and the potential entry of further insurers, is a fundamental change in the Irish health insurance market and has

⁴ Barrington (1987).

clearly already affected behaviour, most obviously in the range of new insurance products that continue to appear and the efforts to market them. Despite price competition, however, the cost of insurance has continued to rise substantially above the general level of consumer price inflation.

The highly regulated nature of the private health insurance market in Ireland remains distinctive. Open enrollment, 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.⁵ To underpin this structure, it was recognised from the outset that a system of risk equalization across insurers was essential – otherwise new entrants could cherry-pick good risks, by targeting younger people for example. Such cream-skimming clearly undermines insurers with an older and more risky membership profile – in the Irish case, the former monopoly VHI – and ultimately makes community rating unsustainable. Risk Equalization Regulations were introduced in 1996, and subsequently analysed by an Advisory Group which recommended that a Health Insurance Authority be established. This was accepted in the 1999 White Paper on Health Insurance, and the Health Insurance Authority was established in 2001, with a key function being to advise the Minister for Health and Children in relation to risk equalization. The Risk Equalization Scheme came into legal effect from July 2003, with the Authority's role being to recommend to the Minister whether or not risk equalization payments should be commenced.

There has been a running debate between the insurers as to the justification for such a scheme and the need for a transfer, and the Health Insurance Authority has carried out several analyses and commissioned research such as the survey of consumer behaviour and attitudes towards health insurance mentioned above.⁶ The Authority recommended in 2005 that risk equalization payments commence − which in practical terms would mean substantial transfers (of perhaps €30 million per year) from BUPA to the VHI. The Minister did not initially accept that recommendation, but did so 6 months later when the Authority's analysis came to the same conclusion. However, this is subject to legal challenge by BUPA and no transfers have taken place as of yet.

The Minister linked her initial reluctance to accept the Authority's recommendation to the status of the VHI. The VHI does not at present have to meet the same requirements in terms of financial reserves as the commercial insurers, because it was established as a statutory body. There has been a lengthy debate about options for the VHI's corporate status, options including privatization or conversion into a mutual society owned by its members. The Minister has announced that she favours assigning the VHI the status of commercial semi-state body, which will take some time to bring about.

Finally, it is worth noting that the Competition Authority has recently made a significant ruling about the way health insurers operate. The Authority has ruled that health insurers cannot continue to agree common price schedules with medical specialists, as has been the practice since the late 1990s. Ironically, that practice in fact seems to have emerged due to pressure from consumers who were unhappy about the

⁵ See Department of Health and Children (1999a, b); Health Insurance Authority (2002).

⁶ See BUPA Ireland (2000); Health Insurance Authority (2003).

extent of "balance billing" – where some specialists charged amounts in excess of what was covered by insurance. The Authority's aim is to promote competition among providers, but this assumes a potential for meaningful price competition that may not in fact emerge.

Understanding the growth in numbers insured

As we have seen, health insurance in Ireland, having been the preserve of the better-off for many years, now covers half the population. Why has this increase in the numbers buying health insurance occurred? The scale of economic growth and increasing real household incomes in Ireland from the mid-1990s – the years of the "Celtic Tiger" – have clearly made it affordable 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 marginal tax rate. Econometric time-series analysis has sought to quantify the impact of trends in income and the price of insurance, going back to the late 1950s. The results show an upward trend in numbers insured from 1 year to the next, arising from factors not successfully identified in the model, but damped down somewhat by the negative effects of increases in price.

As well as income and price, in the Irish context one would expect perceptions of the public health services available to those who do not buy health insurance to be a major influence on demand for that insurance. Evidence presented in Besley *et al.*⁸ for the U.K., where not buying insurance similarly means relying on the public system, suggests that the length of waiting lists facing public patients affects the demand for private insurance. This was based on a cross-sectional comparison across people on different income levels and living in different areas, and it is difficult to capture these effects in a time-series model given available data. Data on waiting lists for hospital treatment exist only for very recent years in the Irish case, and so cannot be used directly. Public health expenditure (both current and capital) and the number of beds in public acute hospitals were tested in the models estimated in Harmon *et al.*¹¹ but no significant effects on demand for health insurance were found. Their results suggested nonetheless that the evolution of income and price still leave much of the increase in demand to be explained.

Cross-sectional analysis of demand for health insurance based on household surveys helps illuminate its relationship to various household characteristics. Harmon and Nolan¹² present the results of a probit model estimated with 1994 household survey

⁷ See Harmon *et al.* (1999).

⁸ Besley et al. (1999).

⁹ The U.K. evidence has also been further analysed and debated, notably in Propper et al. (2001); King and Mossialos (2005).

¹⁰ Given recent trends towards shorter lengths of stay and more treatment on a day case basis, number of beds is an imperfect measure of capacity.

¹¹ Harmon et al. (1999).

¹² Harmon and Nolan (2001).

data, showing that income, education, age, gender, marital status and family composition all influence the probability of choosing private insurance. Higher levels of income and of educational attainment increased the probability of being insured, women and married people were more likely to be insured, and older persons had a lower probability. Self-reported health status variables were also highly significant, with poor health lowering the probability of choosing private insurance.

While this type of analysis helps to show what type of people buy health insurance, it does not tell us why they do 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 surveys¹³ 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 (or at least not presented) 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. Almost everyone with insurance in these surveys responds that such factors as "being sure of getting into hospital" and "fear of large medical or hospital bill" are important reasons for having insurance. However, being sure of getting good treatment in hospital and being sure of getting consultant care were also advanced as important reasons in the more recent surveys, in contrast to an earlier one carried out in 1991 where "being sure of getting into hospital quickly when you need treatment" dominated. Being able to have a private or semi-private room and being able to get into private hospitals are not advanced as important by most of the insured. These results suggest that while access to hospital has remained a key reason for having health insurance, issues relating to quality of care have become somewhat more important over the 1990s in attitudes towards insurance.

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 in Ireland. The role of media coverage in influencing such perceptions merits examination, but there certainly have been long waits for certain types of public hospital treatment in recent years (that policy has been seeking to address as we discuss below) which 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 it appears they were not simply influenced by media reports.

Equity in access and utilization

The fact that Irish acute hospital care is an increasingly "two-tier" system is 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. A number of different layers to the

¹³ See Nolan (1992); Harmon and Nolan (2001); Watson and Williams (2001); Health Insurance Authority (2003).

640

argument may be usefully distinguished in assessing the fairness of the current system. Where separate and distinct public and private health care 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. The role of the state in subsidizing 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. However 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 two-tier nature of access by those with versus without insurance is more obvious and in all likelihood more likely to be seen as objectionable.

So what is most striking 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 subsidized by the taxpayer in doing so is less widely debated. This raises several important empirical issues. The first relates to how the two-tier system actually operates in practice, in terms of access and utilization. How much more rapidly do those with insurance obtain hospital care? And how much more rapidly do they obtain access to care in public hospitals? To what extent is the two-tier nature of the Irish hospital system associated with significant inequity in utilization across the income distribution, taking differences in "need" for care into account? The evidence is patchy and there are different ways of trying to capture how access and utilization relate to "need", but we can usefully look at what is known about waiting times and about actual use of services.

Waiting lists and waiting times

Having patients waiting lengthy periods for elective treatment is often taken to indicate that access is a problem, and the numbers on waiting lists have certainly played a major role in the debate about two-tier access in Ireland. As concern about waiting times grew in the early 1990s, the National Waiting List Initiative was launched in 1993 and as part of that process the Department of Health sought to establish a national database of information on waiting lists. This was compiled from quarterly statistical returns from hospitals, and related to the number of patients who had already been seen by a consultant and were listed for treatment (on an overnight or day case basis) as a public patient in a public hospital. Only those waiting for 3 months or more were included, and although some hospitals returned data on private patients these were not included in the statistics produced every quarter. The published figures showed a rapid drop shortly after the series was started in 1993, due to improved validation, and subsequently generally trended upwards until 1998-1999 before declining in 2000 and 2001 to about the level recorded in late 1993. The National Treatment Purchase Fund (NTPF) was set up in 2002 to arrange treatment for "long waiters" in hospitals in Ireland, Northern Ireland and the U.K. It has registered some success in reducing long waits, with the percentage of patients shown as waiting over 12 months down to 20 per cent by end-2003. Nonetheless, at that date a total of 16,000 were waiting for in-patient treatment and 11,000 were waiting for treatment on a day case basis.

The limitations of waiting lists as a statistical source are well known, and relate both to conceptual and practical problems. Conceptually, the number on a waiting list is an inadequate measure of the distribution of waiting times for treatment, which is the underlying focus of interest. Further, in the Irish case only those who have already seen a specialist can be listed for hospital treatment and thus appear on the waiting list – so lengthy waits to see the specialist in the first place do not feature. From an administrative point of view, a range of problems has been identified with the way the figures were compiled, and the NTPF is now setting up a Patient Treatment Register, an online database of patients waiting for treatment. The NTPF has also argued that the previous waiting list series overstated the number of patients actually waiting and available for treatment. Despite this, and the impact of the NTPF itself, it is clear that public patients have had to face significant waits for hospital treatment and that this has become embedded in the perception of the public hospital system.

Since no corresponding information has been available for private patients, it has not been possible to quantify differential access precisely over time, but it was generally understood that waiting times were short for much of the period. Research by the VHI quoted in NESF¹⁴ showed that nearly 80 per cent of its members were hospitalized within 5 weeks of seeking an admission. Responses to the attitudinal survey carried out by the ESRI in 1999 showed that those without insurance were much more likely to report that they were waiting for in-patient treatment, and to be on the waiting list for a lengthy period, than those with insurance. 15 Similarly, in the special module on health included with the Quarterly National Household Survey carried out by the CSO in 2001, long waits were much less common for those with insurance for out-patient care, in-patient treatment and day case procedures. 16 So the evidence suggests that although those with insurance may not now always be able to access hospital care as quickly as in the past, those without insurance wait substantially longer. In terms of access, this is compounded by differences in time spent waiting to see a medical specialist initially, without which one does not feature on a waiting list.

Utilization and "needs"

As well as waiting times, it is obviously relevant to compare actual levels of health service utilization by those with and without private health insurance – although teasing out the implications of the results is not straightforward. Information on

¹⁴ NESF (2002).

¹⁵ Nolan and Wiley (2000).

¹⁶ See CSO (2002), Tables 3–5. To give an example, only 12 per cent of those with private insurance on an in-patient hospital waiting list were waiting a year or more, compared with one-quarter of those with a medical card giving means-tested entitlement to free primary care and 38 per cent of those with neither private insurance or a medical card.

utilization has been obtained in some household surveys, which also allow respondents to be distinguished by health insurance status and other relevant characteristics (such as age, gender and income), notably in the Living in Ireland Surveys carried out by the ESRI from 1994 to 2001. Harmon and Nolan¹⁷ used data from the 1994 survey to study factors influencing the probability of having had a hospital in-patient stay in the past year. The econometric approach adopted involved estimating jointly a simultaneous linear probability model where the first-stage models the demand for insurance and allows for correction for endogeneity in the second stage equation modelling utilization. The results suggested that those with insurance had a higher probability of an in-patient stay than those without, controlling for available measures of "need", including age, gender, income and self-reported health status - the estimated probability of having had a hospital stay being 6 per cent higher for those with health insurance. While this could reflect differences in health status between those with and without insurance not adequately controlled for by the measures of health available in the survey, at least in terms of those measures there did not seem to be evidence of adverse selection into private insurance.

Using essentially the same data, one can also measure equity in the overall pattern of utilization across the income distribution in Ireland using the methods developed in the cross-country collaborative ECuity research programme. This takes as point of departure the notion that horizontal equity in utilization means that those in equal need ought to be treated equally, and seeks to test whether there is any systematic deviation from this principle by income level. Testing involves comparing reported utilization in household surveys by those at different points in the income distribution, controlling or standardizing for "need" as reflected in age, gender and self-reported health status, and perhaps other characteristics such as education and labour force status. The degree of horizontal inequity found is summarized by the concentration index of needs-standardized use: when this is positive it indicates pro-rich inequity and when it is negative it indicates pro-poor inequity.

Results from a study for the OECD applying this method to 21 countries with data from the European Community Household Panel Survey (ECHP) and national surveys for around 2000 are presented in Van Doorslaer, Masseria *et al.* ¹⁹ The results for Ireland show no significant inequity in the use of hospital in-patient care, and this was also the case for a majority of the countries covered. The authors speculate that this may be due at least in part to the fact that only about one in 10 respondents spends time in hospital in a year and sample sizes are often quite small, so the confidence intervals around the concentration indices are high. Interestingly, though, the index for specialist visits displayed significant pro-rich inequity in most countries, and Ireland was among those with the most pronounced inequity in that regard. This is particularly important given the role which private insurance plays in covering (most of) the cost of such visits in Ireland, and

¹⁷ Harmon and Nolan (2001).

¹⁸ See Wagstaff and Van Doorslaer (2000); Van Doorslaer et al. (1993, 2000); Van Doorslaer et al. (2004).

¹⁹ Van Doorslaer et al. (2004).

difficulties those without insurance may often face in terms of lengthy waits to see a specialist.

Layte and Nolan²⁰ applied the same methods to an in-depth investigation of Ireland also using data for 2000. Once again when the available information was used to control for differences in "needs", the results suggested no significant inequity in the use of hospital in-patient care across the income distribution. The standardized coefficient for specialist visits was positive, consistent with some pro-rich inequity, but this time was not statistically different from zero. More generally, given the two-tier nature of access to hospital in Ireland and the differences in waiting times between public and private patients, it is surprising at first glance that the actual distribution of hospital utilization does not show up as inequitable. The crude nature of the measures of health status available to control for differences in needs has to be emphasized, and country studies where more health status information was available suggest that any bias is likely to be in the direction of under-stating the needs of those on lower incomes and thus under-stating any inequality. Layte²¹ combines the self-reported health measures into a single health index estimated on the basis of principal components analysis and finds some significant pro-rich inequity in the use of hospital resources in Ireland. It is also noteworthy that while pro-rich inequity in in-patient care was found in only a few countries in the OECD study, those where it was seen to actually be propoor included the U.S., not what one would have predicted given the role of private health insurance there.

The measure of in-patient utilization employed in these studies is also a crude one, namely number of nights spent in hospital in the past year. There is enormous variation across patients in the care given and the resources used in providing that care. Data from the regular Hospital In-Patient Enquiry (HIPE), whereby hospitals report on their activity levels, were employed by Nolan and Wiley²² to compare the resources devoted to different categories of patient in Irish hospitals based on the numbers treated for different conditions categorized in terms of Diagnosis Related Groups (DRGs). Those with private health insurance were not distinguished in the database at the time, so a comparison was made between those with and without medical card cover which served as a rough proxy. The results showed that the resource cost per day in hospital was higher for those without medical cards due to differences in the case-mix involved, even if one assumes that within each specialty the same costs applied to both. On this basis, it was tentatively estimated that while about one in five patients in public hospitals received private care, about one-quarter of the direct costs of providing care were attributable to those patients.

The HIPE database is also informative about bed use in public hospitals. From 1991, most beds in public acute hospitals have been explicitly designated as public or private, with about 80 per cent of in-patient beds being public and 20 per cent private, while about two-thirds of day beds are public and one-third private. Nolan and

²⁰ Layte and Nolan (2004).

²¹ Layte (2006).

²² Nolan and Wiley (2000).

644

Wiley²³ used administrative data to examine the extent to which private patients were in fact treated in public beds and vice versa. They found that almost one-quarter of all in-patient bed-days spent by private patients in public hospitals were in beds designated as public. There was also some cross-over in the other direction, with public patients being treated in beds designated as private. A substantial proportion of this cross-over was in a small number of hospitals, and was said by them to result primarily from admission through accident and emergency of patients who opted for private status but for whom no private bed was available.

Resources and incentives

One of the key rationales often advanced for encouraging private health insurance, in Ireland and elsewhere, is that it generates additional resources for health care and/or reduces the burden on the public purse. The extent to which resources raised via private insurance are in fact "additional" is often difficult to assess, in that it may simply replace rather than add to public spending. The counterfactual, what would happen were there no (increase in) private insurance, is not a given but rather is open to debate. As far as shifting the burden from public spending is concerned, this is difficult to assess even when private health insurance and health care are completely independent of the state and self-supporting. It is more complicated when one has to take into account direct and indirect subsidization of private insurance and private care, as occurs in Ireland in ways that are often difficult to quantify. Finally, when a substantial proportion of private care is delivered in public hospitals and those hospitals receive revenue in return – but the full costs incurred in providing that care are much less clear – the financial flows underpinning the system are more difficult to disentangle. So another set of empirical questions relates to tracking those flows and understanding the extent to which private care is actually subsidized and the net impact of private insurance on both the Exchequer and the overall resources available for health.

Subsidization of private insurance takes various forms, notably through tax breaks on insurance premia, the below-cost charges levied for private care in public hospitals and through the staff training provided by the public system. Tax relief is now available at the standard rate of income tax rather than the individual's marginal rate, but the standard rate is still 24 per cent, so the relief is substantial. The revenue loss implied by tax relief on health insurance is estimated by the Revenue Commissioners at about ϵ 86 million in 2000–2001. To put this in context, the revenue raised by public hospitals from charges for private and semi-private accommodation amounted to ϵ 117 million in 2001.

These charges for private care in public hospitals are traditionally aimed at covering only the "hotel" aspects of a private stay, but policy has more recently shifted sharply so that the aim is to move these charges up to the point where they cover the full economic cost involved. That cost is not easy to identify unambiguously, for both

conceptual and empirical reasons, but charges have certainly been raised very substantially over the past decade or more. Nolan and Wiley²⁴ used cost and activity data to estimate the average cost of care to private patients in public hospitals in 1997, and found that, given the level of charges, there was a substantial implicit subsidy to private care at the time – with perhaps only half the cost of provision being covered by the revenue raised by public hospitals from private patients. Charges for private care in public hospitals have been raised substantially since then, but costs have also increased rapidly, so it is difficult to assess how much of that gap has been closed without an in-depth study. The other areas of indirect subsidization are even more difficult to quantify. It remains the case that private care in public hospitals costs insurers considerably less than private care delivered in private hospitals, suggesting that the mix of direct and indirect subsidies to the former are still significant.

The broader role of private insurance in raising resources for health care is presented by policy-makers as a key rationale for the place private health insurance occupies in the Irish system. The 2001 Health Strategy, for example, stated that "Private health insurance is a long-established feature of the system of acute care provision and will continue to play a vital part in the overall resourcing of health care in this country". 25 However, while the proportion of the population with private health insurance is very high compared with other OECD countries, this is not reflected in an above-average share of resources for health coming from that source. The share of total health care spending coming from private health insurance in Ireland, at about 7 per cent, is in fact only marginally above the OECD average of 6 per cent. It is also worth noting that the proportion of total health expenditure coming from private health insurance has actually fallen recently, having been about 9 per cent in the first half of the 1990s and 8 per cent in the second half. So the resources generated for health by private insurance in Ireland are not commensurate with the leverage those with insurance have in the health care system – a case of "the tail wagging the dog''? – and that has become more rather than less pronounced as the numbers with insurance have risen sharply.

As well as generating resources, the other argument advanced for the retention of private care in public hospitals in the Irish case is that this actually improves the care provided for public patients. The 1999 *White Paper on Health Insurance*, for example, pointed to the public/private mix helping to attract and retain consultants of the highest calibre in the public system, promoting more efficient use of consultants' time by having public and private patients on the same site and facilitating active linkages between the two systems in terms of research and best practice. It also drew attention to potential drawbacks, however, pointing to the incentive for consultants to spend more time with private patients, and "the perception that" public patients tend to receive more of their care from medical staff other than consultants.

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

²⁴ Ihid.

²⁵ Department of Health and Children (2001).

public patients, this does not appear to be effectively monitored, 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 be to the detriment of public patients. Public hospitals managers also face an incentive to maximize revenue from private patients in any given year, since this is one of the few sources of additional revenue available to them. So efficiency as well as equity issues loom large in assessing the interaction between private and public in Ireland, and yet empirical information is at a premium.

The 2001 Health Strategy *Quality and Fairness* is particularly interesting in that regard in that it asserts once again that the public–private mix has significant advantages for quality of care, but now frames this together with the problem of equity of access and the contrast between public and private patients:

The private sector makes an important contribution to services needs which must be harnessed to best effect for patients. One of the key concerns of the strategy is to promote fair access to services, based on objectively assessed need, rather than on any other factor such as whether the patient is attending on a public or a private basis. This is of particular concern in the area of acute hospitals. The current mix of private beds in public hospitals is intended to ensure that the public and private sectors can share resources, clinical knowledge, skills and technology. This mix raises serious challenges, which must be addressed in the context of equity of access for public patients.²⁶

The strategy advanced in *Quality and Fairness* in this respect focused on making access to health services more equitable -"the perceived two-tier aspect of health care to be eliminated". ²⁷ This was to be done in effect by improving access for public patients without altering the fundamentals of the public/private mix. The key aim was specified in terms of reducing public patient waiting lists. This was to be done by increasing the number of acute hospital beds and designating these as for public patients; by exploiting the capacity of the private hospital sector; by more active management of waiting lists; by the establishment of the National Treatment Purchase Fund; by clarifying and fully implementing the bed designation arrangements; and by suspending admission of private patients for elective treatment if public patient waiting lists are above a target level. Implementation of all but the last of these has been under way, and the impact so far seems to bear out the conclusion advanced at the time the NESF²⁸ that such measures could bring about a real improvement in the position of public patients. However, as the NESF also pointed out, this did not deal with the problem of lengthy waits for first consultant appointment after referral by a GP, and it did not put in place a system whereby access to public hospitals were prioritized in accordance with medical need not ability to pay.

²⁶ *Ibid.*, p. 43.

²⁷ *Ibid.*, p. 57.

²⁸ NESF (2002).

What is striking is that there has been no attempt whatsoever to assess the scale of the purported quality benefits to the public system associated with the inter-mingling of public and private care in the Irish system, nor whether these benefits are outweighed by the distortionary impact of the incentive structure. Neither part is easy to assess, of course. Information about how medical specialists spend their time critical to assessing both the benefits and the costs – is jealously guarded, although efforts to increase the scope for effective monitoring continue in the context of negotiating the "Common Contract" which govern consultants' relationship with the public hospital system. It is clear however that many public patients – unlike private ones – will be treated by junior doctors rather than consultants (and as noted earlier awareness that this is the case seems one of the factors influencing demand for private health insurance). It is hard to see the current structure of incentives as conducive to efficient use of resources, but that impact is very difficult to assess empirically. Recent studies demonstrate that there is a good deal of variation across acute hospitals in efficiency levels, ²⁹ but have not as yet been able to explore whether this is associated with the public/private mix and the incentive structure. Indeed, since that mix prevails to a greater or lesser extent across the major acute hospitals in the country, it may well not be possible to identify its effects by internal comparisons across Irish hospitals – although that is worth investigation. Making comparisons in efficiency levels between hospitals in Ireland and elsewhere seems the next step, but it may well be difficult to do satisfactorily, and assigning responsibility for any differences detected to specific factors such as the public/private mix will in all likelihood be even more difficult.

The argument advanced for the positive impact of the present distinctive public/private mix on the quality of care available to public patients rests on an assumption that if the public and private systems were separate rather than intertwined, the result might well be a high-quality private system for the well-off and a poor-quality public system for the poor. This is particularly interesting in the light of the recent commitment to substantially increase the number of consultant positions in the public hospital system, but that those employed would have to commit to being full time in the public system. This goes together with encouraging private investment in building new hospitals – either as stand-alone private facilities or as separate elements alongside public ones – and the aim of transferring private beds in public hospitals to these new private facilities, freeing up capacity for public patients. Delivering on these goals will depend *inter alia* on being able to negotiate an appropriate contractual arrangement with medical consultants. If achieved it will mark a fundamental change in the public–private mix in Ireland, and one whose consequences for public patients and for overall resources for health are difficult to predict.

Conclusions

Private health insurance plays a distinctive role in the Irish health care system, with about half the population now having such insurance despite the fact that everyone

²⁹ Gannon (2005).

has entitlement to public hospital care, and much of the insured's private care is delivered in public hospitals. While health has become an extremely high-profile and politically sensitive topic, health insurance has not come centre-stage in that debate – which has instead focused on waiting times for public hospital care and the location of those hospitals. The two-tier hospital system is now widely regarded as problematic from an equity perspective, but there are also serious efficiency issues to be faced because of the incentive structures embedded in this particularly close intertwining of public and private.

The introduction of competition in the health insurance market, in a tightly regulated setting, has led to a wider range of insurance products but does not address these fundamental problems. The fact that risk equalization payments across insurers have not been implemented casts some doubt on the stability of the insurance market itself as it is currently structured. The prioritization of promotion of competition in that market and the encouragement of the development of privately financed hospital facilities appear to go together as elements of a more market-based approach, but with the stated aim of also moving away from having private patients in public hospitals. This paper has highlighted a range of empirical questions that need to be answered if the efficiency and equity aspects of the current public—private mix are to be properly assessed; this is all the more urgent if such an approach and the alternatives are to be evaluated.

The 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, be inequitable in terms of access and utilization, and undermine that public system. It also demonstrates that, in a system where private insurance has a substantial role and affords preferential access to care, the political economy of reform can be highly problematic. Those with insurance may well be reluctant to give up preferential access and what is perceived to be better-quality care, and where they constitute as many as half the population – and they are primarily the better-off – their political power is not to be underestimated. Together with the difficulties in negotiating satisfactory contractual arrangements with medical consultants and other health service providers, this means that there are major obstacles to structural reform that seeks to increase both equity and efficiency.

References

- Barrington, R. (1987) *Health, Medicine and Politics in Ireland 1900–1970*, Dublin: Institute of Public Administration.
- Besley, T., Hall, J. and Preston, I. (1999) 'The demand for private health insurance: Do waiting lists matter?', *Journal of Public Economics* **72**: 155–181.
- BUPA Ireland (2000) Private Health Insurance Briefing Document on Risk Equalisation, BUPA Ireland, Cork.
- Central Statistics Office (CSO) (2002) Quarterly National Household Survey. Health. Third Quarter 2001, 30 May 2002.
- Colombo, F. and Tapay, N. (2004a) Private Health Insurance in OECD Countries: The Benefits and Costs for Individuals and Health Systems, OECD Health Working Papers No. 15, Paris: OECD.
- Colombo, F. and Tapay, N. (2004b) *Private Health Insurance in Ireland: A Case Study*, OECD Health Working Papers No. 10, Paris: OECD.

- Department of Health and Children (1999a) Risk Equalisation and Health Insurance in Ireland, Dublin: Department of Health and Children.
- Department of Health and Children (1999b) White Paper on Health Insurance in Ireland, Dublin: Government of Ireland.
- Department of Health and Children (2001) Quality and Fairness: A Health System for You; Health Strategy, Dublin: Government of Ireland.
- Gannon, B. (2005) 'Testing for variation in technical efficiency of hospitals in Ireland', Economic and Social Review 36(3): 273-294.
- Harmon, C., Nestor, R. and Nolan, B. (1999) Public and Private Health Insurance in Ireland and its Impact on Utilization of Health Services, mimeo, Dublin: Economic and Social Research Institute.
- Harmon, C. and Nolan, B. (2001) 'Health insurance and health services utilisation in Ireland', Health Economics 10(2): 135-145.
- Health Insurance Authority (2002) Consultation Paper: Lifetime Community Rating, Dublin: Health Insurance Authority.
- Health Insurance Authority (2003) The Private Health Insurance Market in Ireland, Dublin: Health Insurance Authority.
- King, D. and Mossialos, E. (2005) 'The determinants of private medical insurance prevalence in England, 1997–2001', Health Services Research **40**(1): 195–212.
- Layte, R. and Nolan, B. (2004) 'Equity in the utilisation of healthcare in Ireland', Economic and Social Review 35(2): 111-134.
- Layte, R. (2006) Equity in the Utilisation of Hospital In-Patient Services in Ireland: An Improved Approach to Measurement of Health Need, Mimeo, Dublin: Economic and Social Research Institute.
- National Economic and Social Forum (2002) Equity of Access to Hospital Care, Forum Report No. 25,
- Nolan, B. (1992) Low Pay in Ireland, ESRI General Research Series No. 159, Dublin: ESRI.
- Nolan, B. and Wiley, M. (2000) Private Practice in Irish Public Hospitals, Dublin: The Economic and Social Research Institute.
- Propper, C., Rees, H. and Green, K. (2001) 'The demand for private medical insurance in the UK: A cohort analysis', The Economic Journal 111(471): 180-200.
- Van Doorslaer, E., Wagstaff, A. and Rutten, F. (1993) Equity in the Finance and Delivery of Health Care: An International Perspective, Oxford, UK: Oxford University Press.
- Van Doorslaer, E., Wagstaff, A., Van der Burg, H., Christiansen, T., De Graeve, D., Duchesne, I., Gerdtham, U.G., Gerfin, M., Geurts, J., Gross, L., Hakkinen, U., John, J., Klavus, J., Leu, R.E., Nolan, B., O'Donnell, O., Propper, C., Puffer, F., Schellhorn, M., Sundberg, G. and Winkelhake, O. (2000) 'Equity in the delivery of health care in Europe and the US', Journal of Health Economics 19(5): 553-583.
- Van Doorslaer, E., Masseria, C. and the OECD Health Equity Research Group Members (2004) Income-Related Inequality in the Use of Medical Care in 21 OECD Countries, OECD Health Working Papers No. 14, Paris: OECD.
- Wagstaff, A. and Van Doorslaer, E. (2000) 'Equity in Health Care Financing and Delivery", in A.J. Culyer and J.P. Newhouse (eds) *Handbook of Health Economics*, Amsterdam: North-Holland, pp. 103–1862.
- Watson, D. and Williams, J. (2001) Perceptions of the Quality of Health Care in the Public and Private Sectors in Ireland, Dublin: The Economic and Social Research Institute.
- Wren, M.A. (2003) Unhealthy State, Dublin: New Island.

About the Author

Brian Nolan is Head of the Social Policy Research Division at the Economic and Social Research Institute, Dublin. He is an economist and has published widely on health economics and health inequalities, income inequality, poverty, public economics and the economics of social policy.