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Health Policy and Management

Social Health Insurance: Further Options for Ireland

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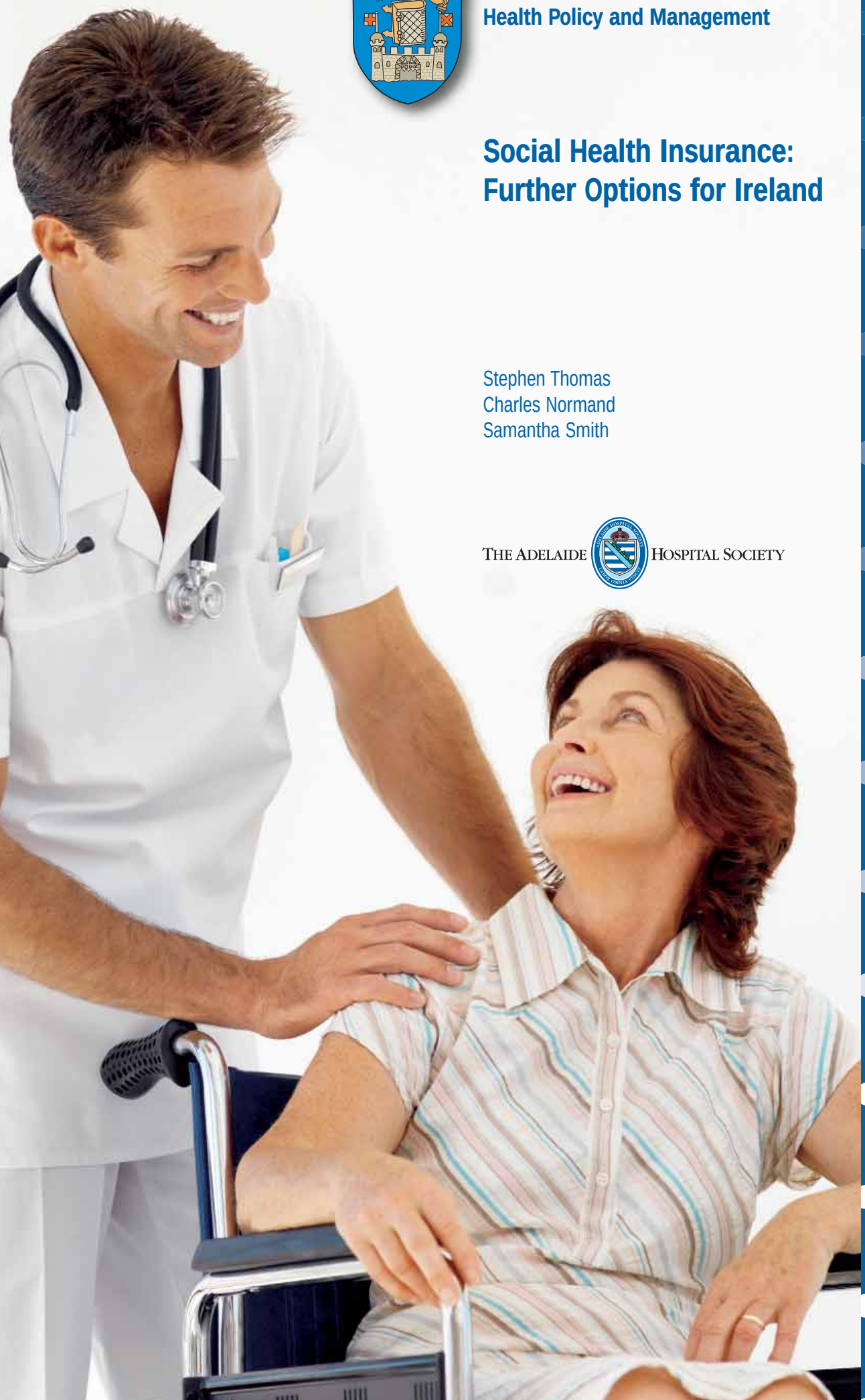

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Preface

This Report, *Social Health Insurance: Further Options for Ireland*, follows the landmark Report *Social Health Insurance: Options for Ireland* published by The Adelaide Hospital Society in November 2006.

The financing of healthcare is the most fundamental mechanism of any healthcare system and, therefore, reform of the financial arrangements is the key lever to use in affecting how any health system performs. This is now increasingly recognised in public debate concerning the crisis-laden Irish healthcare system. Many now advocate a comprehensive compulsory social health insurance system carefully designed to meet clear objectives of equal treatment for equal need and so ending the current unacceptable 'two-tier' arrangements.

The concept and practice of Social Health Insurance (often loosely referred to as "Universal Health Insurance") is a central issue in the current major debate concerning the reform of the health system in the United States of America. Leading contenders for the Presidency are now advocating Universal Health Insurance based solutions. Of course, Social Health Insurance has underpinned the health systems of many European Union countries providing more effective and less costly healthcare than that which obtains in the USA.

A social health insurance system in Ireland could

- provide free GP care for all
- provide equal hospital treatment according to need as every citizen would be an insured patient
- ensure more effective and efficient healthcare providers as the 'money would follow the patient', therefore helping to ensure quality of care
- restore transparency and public trust in providing the necessary resources for healthcare

This Report, independently prepared by authors Dr Stephen Thomas, Professor Charles Normand, Ms Samantha Smith of Trinity College, Dublin, demonstrates that the challenges in achieving such outcomes can be met and that the options are both feasible in themselves and might be used as stages in development towards a fully developed comprehensive social health insurance funding system for Irish healthcare. The Report updates the analysis with the most recent cost data available, models additional scenarios focusing on increasing children's access to healthcare, reviews strategies to alleviate current capacity bottlenecks so that social health insurance might be implemented, discusses options which might be phased and outlines a road map for implementation.

The Adelaide Hospital Society in a number of policy papers has advocated evidence-based solutions to address the continuing crisis in healthcare and in particular the gross inequities and unequal access experienced by so many citizens in our health system. We believe in social solidarity in respect of healthcare: that each citizen contributes to the overall burden of healthcare according to their means and that each citizen accesses healthcare according to their need. It is the European social model with the agreed overarching values of universality, access to good quality care, equity and solidarity (see EU Council *Conclusions on Common Values and Principles in European Union Health Systems*, June, 2006).

We are, therefore, pleased to publish this Report which we hope will contribute to policy development and implementation in respect of the necessary reform of how we finance and provide healthcare in Ireland. This now is a national challenge which we feel, with political leadership and will, can be successfully met, for surely Irish citizens deserve what is commonplace in other European Union countries: access to quality healthcare when needed without financial discrimination. We are most grateful to the professional and authoritative contribution from the authors and commend this seminal Report to all who genuinely seek to solve Ireland's healthcare crisis.

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President

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Executive Summary

1. Full medical cards to *all* children (under 19) would cost only €160million; this represents an increase of just over 2% in real terms on healthcare funding.

2. A version of social health insurance that involves upgrading the access to healthcare services for the worse-off segments of the population to that of the best-off would increase the total health expenditure as a proportion of GDP from 7.5% to 8.9% for 2006 prices.

    a. This represents an increase of about €2.1billion in running costs but such a proportion of GDP is low for a comprehensive SHI system.

    b. This Rolls Royce option would include guaranteed and timely access to hospital consultants, free primary healthcare consultations, free primary healthcare prescriptions and some limited support for long-term care

3. Full medical cards for all the population would cost just over €3 billion per year. However, government is already paying just under €2.1 billion on PHC and households a further €692 million. This leaves a funding gap of only €217 million.

4. Whether or not Ireland introduces comprehensive health insurance there is required a very significant financial investment to meet current and future capacity constraints in the period up to 2020. The additional costs associated with capacity improvement for social health insurance account for only 25% of this overall investment

5. A key capacity constraint for Ireland to improve health care provision is the scarcity of skilled health professionals. In particular:

    a. Ireland has relatively few primary care providers in comparison to other EU15 countries at 52 GPs per 100,000 population (France has 164, Austria 144, Germany 102 per 100,000 population). If no action is taken to enhance GP supply Ireland cannot maintain even the current low GP : population ratio because of the retirement of existing GPs and an increased population. With no action there is likely to be a shortfall of 230 GPs by 2010 increasing to 400 by 2020. To implement free access to GPs with social health insurance there would be a gap of 814 GPs by 2020. The cost implications of fully funding increased training are approximately €60 million per year for the next 12 years.

    b. Ireland has a very low number of consultants per 1000 population with 2,100 consultants (2006) and there is a need to bring this figure to 3,100 consultants in line with the Hanly report.

6. International comparisons within OECD countries show that Ireland has a very low number of acute beds per head of population (2.9 per 1000 in 2004). Comparative analysis does not suggest that inefficiency is a core problem in the acute hospital sector. Therefore, unless huge changes are made in the provision of community services, not least involving increasing GP supply (point 5a) and associated facilities, then acute bed capacity will have to increase substantially. The study suggests, in line with other similar research, there is a need for approximately 2500 beds (without social health insurance) and between 3000 and 4100 (with social health insurance) to cover the period to 2020.

7. Moving to an SHI system would require a reorganisation of services, toward a contracting model with a central fund or funds purchasing care from more autonomous providers with strengthened local management.

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Introduction

The report: "*Social Health Insurance: Options for Ireland*" November 2006, (Thomas et al. 2006) focussed on evaluating the equity issues in the Irish health system and exploring how Social Health Insurance could be applied in the Irish context to further equity objectives. Given the interest in the subject matter that the Report generated the Adelaide Hospital Society has commissioned Health Policy and Management, Trinity College Dublin to conduct this follow-on Report.

The scope of the Report is to:

- update previous analysis with more recent cost data;
- model additional scenarios, focussing on increasing children's access to health care;
- review strategies to alleviate current capacity bottlenecks, to allow for the implementation of SHI;
- consider options for implementation and a phased extension of insurance coverage.

A key aim of the report is to model the viability and desirability of various forms of SHI in the current Irish context. This involves examining the additional resource requirements for each model compared to currently available resources in the system. Consequently, new data have been included in the costing of the SHI options to reflect the funds already being paid directly by households to Primary Health Care providers. This embraces household "out-of-pocket" expenditure on GP fees and prescribed drugs which was not estimated in Thomas et al. (2006). Our approach also involves reviewing how each model contributes to the improvement of equity and this involves understanding access to services for, and the distribution of the financing burden across, different segments of the population. The results will provide timely information for policy makers on the costs and benefits of reforming health financing to improve equity.

Before proceeding, it is worth clarifying that Social Health Insurance is a mechanism to achieve a policy and not a policy in itself. Thus the design of a SHI scheme is, or should be, dependent on the objectives to be achieved in the health system, such as value for money or fairness. The term "social" is therefore used to differentiate it from "private" insurance. The primary focus of private insurance is to make a profit by reducing the risk to individuals of facing high health costs. The primary focus of SHI is pursuing what is good for society by delinking access to services from ability to pay for those who are covered. In some contexts, the term Universal Health Insurance is used instead as a specific form of SHI which not only promotes access based on medical need but also guarantees insurance cover for all the population.

1. Updating the Cost Estimates

In order to ensure that the analysis remains as relevant as possible, it is important to update and refine the costing of the scenarios contained in Thomas et al. (2006). This will allow an assessment of how affordable SHI continues to be. The four scenarios presented in Thomas et al. (2006) are restated in Box 1.

Methods

There is always a trade-off between timeliness and accuracy in data for policy development. While policy makers prefer the latest information, care is needed to avoid building recommendations on shifting sands. Consequently, the authors surveyed existing data sources and found that, at the time of writing, the most recent complete year for required and reliable data for the SHI model was 2005. Nevertheless, to ensure more applicability to the current context the 2005 cost data were converted into 2006 prices using an estimate of health care inflation. The Central Statistics Office Ireland estimates that the Consumer Price Index for the health sector alone rose by 7.5% between 2004 and 2005 (www.cso.ie/statistics/consumpriceindex.htm). This is much higher than the overall consumer price index rise, 2.7%. It is typical for medical inflation to run ahead of headline inflation in Western health systems (Peden and Lee 1991, OECD 2006). High medical inflation rates are not rare especially where there are systems of private health insurance and can be increased by high growth in personal disposable income and rapid technological change (Peden and Freeland, 1995). The USA in particular has historically experienced high medical inflation (Heffler et al., 2003; Hogan et al., 2000).

As indicated, one additional component has been included in this costing iteration which was absent in the previous report. This is the spending by households on costs associated with seeking care from GPs. The costs to households of purchasing supplementary private health insurance had been included in Thomas et al. (2006). The spending by households on GP related services is also part of the existing system costs, albeit not borne by the state, and should be included in the analysis to guarantee consistency. It has been calculated by

identifying the population without medical cards and their utilisation of GP services and estimating the direct costs associated with visiting their GP and purchasing prescribed medicines[1]. This represents funding that households are already paying into the system.

Annexes 1 and 2 detail the sources for the data to update the SHI model and the methods of calculation of key costs.

Box 1: Options for SHI Design

I) Levelling up access and quality of all services (The 'Rolls Royce' Option)
This version of SHI involves upgrading the access to health care services for the worse-off segments of the population to that of the best-off. Hence it ensures provision of all hospital services currently available in the public and private sectors through supplementary insurance *to the entire population*, including guaranteed and timely access to hospital consultants. In addition, members will receive free primary health care (PHC) consultations, free PHC prescriptions and some limited support for long-term care.

II) The Priority to Primary Care Model
This involves the provision of the same package offered for PHC as in the Rolls Royce Model, with free PHC consultations and prescriptions. It also involves some minimal hospital support through the removal of fees to be paid for inpatient stays for the uninsured and the removal of charges for all for using Accident and Emergency and OPD services.

III) The Priority to Hospital Services Model
As in the Rolls Royce version, members are entitled to a comprehensive package of hospital benefits, including semi-private and private rooms and quick access to consultants. There is also some support to PHC attendance. It is proposed that all PHC visits for those currently not on medical cards are charged at a fixed price of €20, with SHI providing a capitation fee to compensate GPs. €20 per visit still represents a potential barrier to use of GP services but would reduce the cost to patients by more than 50% compared with current prices.

IV) Making only small improvements in access ('The Mini')
This involves the removal of all fees for hospital attendance and fixed price charges for PHC. All inpatient (IP), and OPD charges are removed, as with II, and all A&E attendances and PHC visits for those currently not on medical cards are charged at a fixed price of €20. Further, the provider payment system is shifted towards a DRG or capitation based system and the savings incurred, once the new system is running well, will be invested in expanding public sector services to alleviate current bottle-necks.

[1] The indirect costs of visiting a GP, such as travel costs, time away from work, and so on, are not included here.

Results

Table 1: Revised Cost Estimates for SHI options (2006 prices)

	RR (Hi)	RR (Lo)	Priority PHC	Priority Hospital (Hi)	Priority Hospital (Lo)	Mini
Existing Costs						
Hospital Costs	4,586	4,586	4,586	4,586	4,586	4,586
Supplementary Insurance	1,337	1,337		1,337	1,337	
Medical Card	1,327	1,327	1,327	1,327	1,327	1,327
Other Public PHC Costs	769	769	769	769	769	769
Spending on GP Services	692	692	692	692	692	692
Capital Costs	564	564	564	564	564	564
Additional Coverage						
Hospital Costs	1,921	1,533	179	1,921	1,533	162
PHC Costs	217	217	217	-	-	-
Total	11,414	11,026	8,334	11,197	10,809	8,100

The inclusion of the 2005 data, the inflation of costs to 2006 prices and the incorporation of household spending on GP services provide some interesting new findings (Table 1 and Diagram 1).

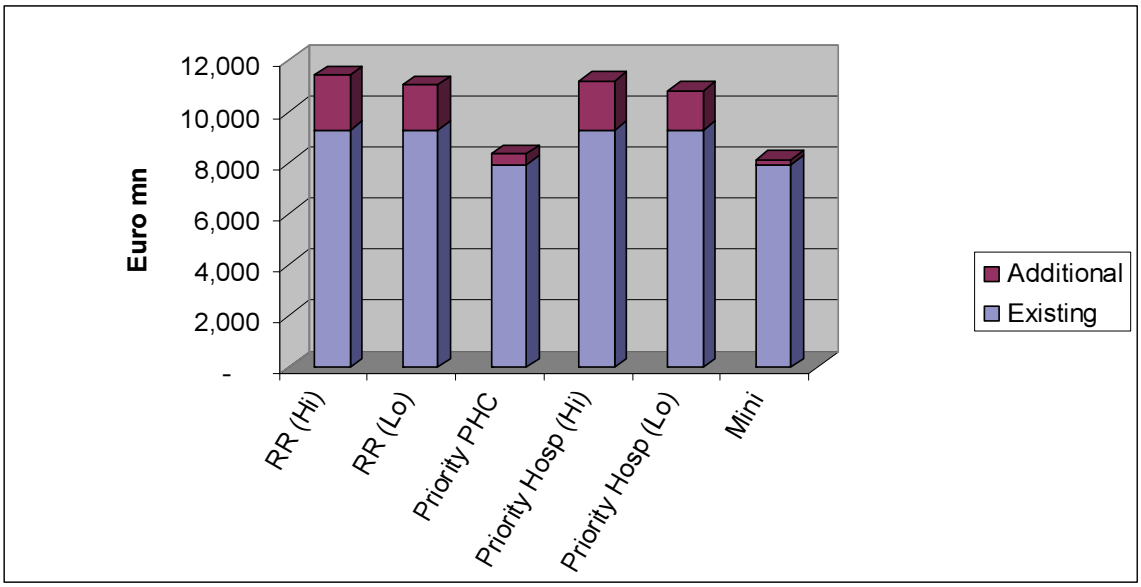
The first point to note is the cost pressures that are evident in the system. The GMS general capitation rates rose by approximately 20% between 2004 and 2005 across age and proximity bands leading to an increase in existing Medical Card costs of over €250 million. Further, the cost estimates for hospitals shown in Table 1 are substantially higher than in Thomas et al. (2006). All options, which focus on levelling up access to hospital care, cost an additional 20% at least. This was due in large part to the substantial rise between 2004 and 2005 in the pricing of private and semi-private beds in public hospitals[2].

It is important to understand whether the increased costs reflected above relate more to existing costs or those additionally required to meet the SHI models. Hence the authors review the ratio of the existing costs of running the health system to the additional costs required by each option. This serves as one measure of the affordability of the proposed change. Interestingly the Mini option requires only 5% additional funding, down from 6% using 2004 cost data. Nevertheless, all options which involve levelling up access to hospital care require slightly larger proportions of additional funds (e .g. 31% extra for the Rolls Royce option compared to 29% extra with 2004 data). Interestingly the Rolls Royce option would increase the total health expenditure as a proportion of GDP from 7.5% to 8.9% for 2006. Diagram 1 presents the data comparing existing and additional costs.

The higher existing hospital and PHC costs shown raise the issue of cost control and this is a vital issue for any regulatory body faced with a health system dominated by health insurance. SHI systems, where badly designed, can be prone to cost escalation, though typically not to the same extent as private health insurance systems. Consequently, cost control mechanisms are vital to the design of any SHI system. Certain provider payment methods, such as fee for service, discourage cost control particularly when combined with growing consumer expectations, and disposable income and rapid technological change. Nevertheless, a move to capitation payments or DRGs can help a regulatory authority to control system costs.

[2] Previous studies have suggested that the pricing of these private beds costs did not fully reflect the economic cost of provision. The increase in price may therefore have been a correction, rather than a genuine increase in costs incurred by the hospital.

Diagram 1: Existing and Additional Costs associated with each SHI option



Yet the most striking feature of Table 1 and Diagram 1 is the effect of the inclusion of the existing household spending on GP services. This reveals that the models that focus on increased PHC access have few extra total resource requirements. Full medical cards[3] for all the population would only require an additional amount of funding of €217 million given that households, that don't have medical cards, are already spending almost €700 million on PHC. In addition, those SHI options models which fix the price of GP access at about half its current rate would need no additional funds in the system, just a rerouting of existing expenditure[4].

It must, however, be emphasised that this analysis focuses on the total resources currently available to the system and says nothing about the distribution of financing. Clearly the current burden of financing is not equitable particularly for those in work on low incomes. Out of pocket direct expenditure by households is typically the least equitable form of health financing (Van Doorslaer and Wagstaff 1993). Hence the burden of financing needs to change in line with the financing principles contained in Thomas et al. (2006). Nevertheless, the additional cost to the whole system to improve PHC access through the SHI options is relatively inexpensive.

[3] Technically medical cards allow both for free PHC services and the waiver of hospital fees. Nevertheless, for the purposes of the report, the additional funding requirements relate only to GP access and prescribed drugs.

[4] It must be noted that the costs estimates for these options are based on existing capitation rates and these may increase in future negotiations with GPs. This will push costs up but is unlikely to change the order of magnitude of resource requirements.

2. New Scenarios

The original SHI report identified equity problems in the Irish health system in relation to three population groupings: those with supplementary insurance, those with medical cards and the remainder of the population, who must pay full cost for GP services and do not get preferential access to hospital services. Consequently, the report focussed on four scenarios to improve equity through the provision of Social Health Insurance with a particular focus on the "uncovered" segment of the population. The scenarios were founded on the principle that no one should be made worse off and they explored improving access to GP and hospital services. The scenarios can be seen both as end-points in themselves and stepping stones to more expensive and desirable options.

Another way of targeting health system resources to improve equity is to recognise that different age groups have different needs and ability to access services. Typically those age-groups which are most vulnerable are children and pensioners. The extension of the medical card, in 2001, to the over 70s was an example of this approach to improving access to health care. This age-based approach to targeting can also be seen in several recent proposals to improve access to health care for children (see Annex 3). Internationally there is often strong support on technical grounds for free health care for children (Victora et al., 2003), particularly given the burden of ill health in the under 5s. Nevertheless, there is also increasing awareness that the health needs of adolescents have been ignored (Viner and Barker, 2005) and require better focus and coverage. In this light the authors examine two additional SHI scenarios:

a. Medical cards or GP visit cards for children (Under 5s, Under 16s and Under 19s)
b. Full insurance coverage for Under 16s

Each of these additional scenarios is explored below. Again, as with the previous scenarios set out in Thomas et al. (2006), the models can be seen as being end-points in their own rights or stepping stones to more comprehensive coverage or forms of insurance.

2. 1. Improving Access to GP services for children.

The estimates for extending medical card and GP visit card privileges to children have been calculated using the following data:

- The number of the children in specific age-ranges currently with and without medical cards
- The standard GP capitation rates and specialised services capitation rates for different age groups in the GMS.
- The average of the different capitation rates for any age band, which reflect geographical proximity and the additional cost of home visits for GPs.
- The current prescription costs incurred by GMS and non-GMS populations by age.
- The utilization of services by GMS and non-GMS populations

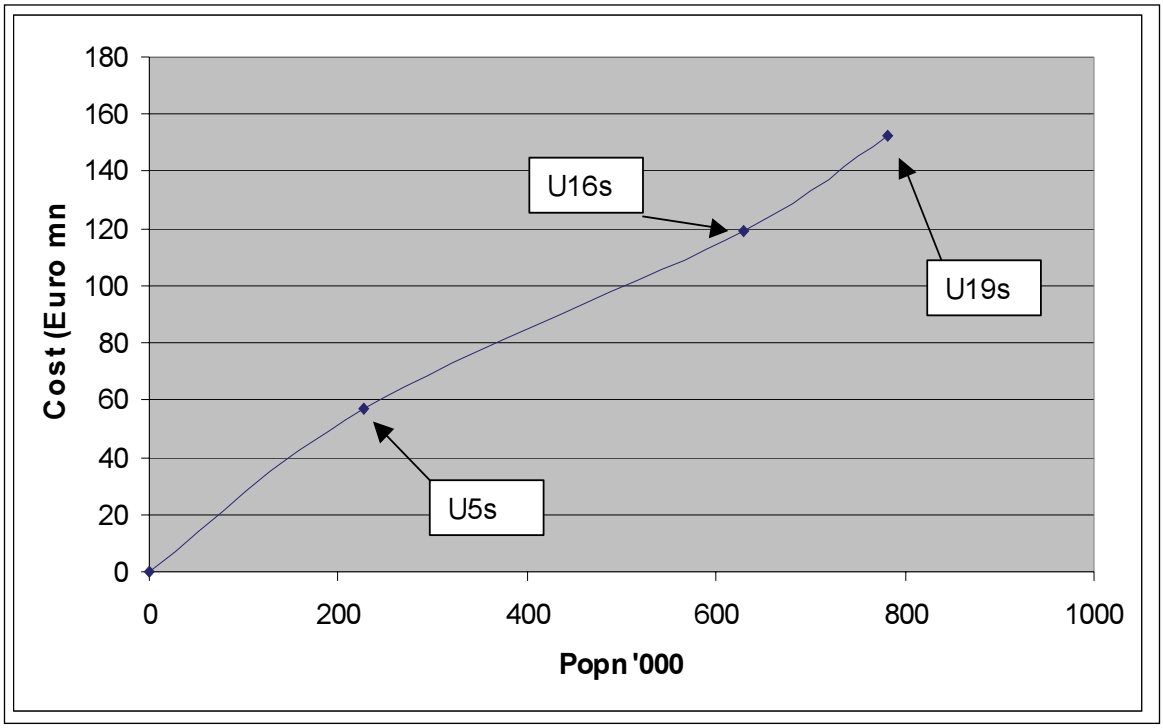
Diagram 2 and Table 2 detail the results of the costings of scenarios 'a' and 'b'. The striking feature of all three options is that they are very cheap compared to the other scenarios reviewed earlier. The extension of medical cards to all under 5s, which provides free GP services to an additional 225,000 children, only costs €57 million. Moreover, the age group from 5 to 15 are actually cheaper to cover per child than the under 5s (only €189 per capita compared to €250 per capita respectively). The total cost difference between covering the U16s and U19s is quite small, just over €30 million. Hence under €160 million is needed to provide full medical cards to all children.

An alternative to the full medical cards is the provision of GP visit cards. Nevertheless, the cost difference between these options is quite small on already low costs (see Table 2). In this case it must be wondered what the benefit to society would be to withhold the full medical card from children in favour of free access to GPs only.

Table 2: Additional Costs of Extending Medical Cards to different age bands (2006 prices)

	U5s	U16s	U19s
Medical Card per capita (€)	250	189	195
Medical Card total (€ million)	**57**	**119**	**153**
GP Visit Card per capita (€)	211	155	160
GP Visit Card total (€ million)	**48**	**97**	**125**
Estimated Existing Spending on GP Services	53	111	142

Diagram 2: Costs and Additional Population Covered - Medical Cards for Children (2006 prices)



The extra resources needed to meet any of these options are small, as noted. They equate to an additional 4% on the Medical Card budget to cover the Under 5s and 9% and 12% for the Under 16s and Under 19s respectively. Put another way health care funding would have to increase by just over 2% in real terms to fund medical cards for all children.

Furthermore, Table 2 notes the estimated current spending by households without medical cards on GP services for their children. The amounts are similar to those for extending the medical card access. Once again the additional costs to the system of improving access to PHC are small, though the burden of financing would have to change.

2. 2. Full insurance coverage for the under 16s

In essence this policy is aimed at reducing the two tier system of access for children and thus trying to ensure that there are not separate waiting lists for children with and without supplementary private insurance cover. There are, however, difficulties in costing this option and care is needed with the policy's specification if it is not to have unintended effects.

By promising to pay for all under 16s a government may introduce a disincentive for families to get or renew private insurance. This may occur whether the policy (i) is universal (i.e. all under 16s are covered), or (ii) applies only to those children who are not currently covered by private insurance.

In the first case, where universal cover is provided for all Under 16s, the enrolment of adults in such schemes may drop as they see that their children are covered, which may reduce their incentive to purchase insurance for themselves. In addition, the payment of the insurance premia for the children of the rich will act as a direct subsidy to those who need it least. In the second case, families may deliberately drop out of the insurance market in order to qualify their children for free health insurance. In both cases, there is potential for perverse incentives.

A commitment from a government to pay for this insurance may also hold it hostage to fortune, as the appropriate pricing of such cover is not clear. Some insurance firms might claim that current costs of private health insurance for children are actually subsidized by the premia paid for adults. Indeed, it is currently not possible to buy insurance cover just for children with some private insurance companies. Thus, an actuarially fair price for health insurance for a child might well be higher than current market rates, which are frequently specified in terms of additional to the main applicant. Hence the per capita price to government for covering this age range would probably be higher than current charges, where the latter are dependent on cross-subsidies. Current private insurance premia generally range from approximately €150-250 per child per annum depending on the type of hospital facility and room included in the cover as well as the specification of other benefits.

One further side effect of such a policy is that private insurance companies would probably need to lower their prices to adults to reflect the fact that there was no longer any need for a subsidy for children. The implications of this are currently not well understood and more information and research is needed to clarify how best to proceed with this policy option.

3. Increasing Capacity

3.1 Introduction

SHI will increase demand for health care, through extra funding for health care services. This must be matched by increased supply if SHI is to deliver sustainable improvements in health care and meet expectations. The current Irish health care system, though, has bottlenecks in several areas (Tussing and Wren 2006). While well-publicised waiting lists indicate that there are problems in the acute hospital sector it is important not to place too much importance on such data. International experience shows that public sector waiting lists can be, and frequently are, manipulated for specific stakeholder interests (Iversen 1997, Duckett 2005, De Coster et al., 1999). Nevertheless, the very high bed occupancy in most Irish hospitals indicates that demand is currently constrained and that supply must expand just to meet current needs let alone future requirements.

This report examines the interventions required to expand the capacity of the system to allow the achievement of SHI, with cost estimates of these interventions to explore financial feasibility and consideration of how to phase in Social Health Insurance in the next section.

3.2 Approach

There are two ways to forecast the required capacity for the Irish health care system. The first is to focus on the actual service delivery configuration and utilization to explore what restructuring and additional facilities need to be put in place to allow achievement of SHI. This takes into account current bottlenecks. The second explores instead what services should be in place given the demographics and socio-economic profile of the Irish population. The first is more realistic in that it starts where the Irish health care system actually is. Nevertheless, precisely because it focuses on what is in place it deals less with what should be the structure of services. Current supply patterns are a historical legacy and may in some instances pay less attention to need. The economics of health care literature has long acknowledged that supply shapes and sometimes creates demand. Nevertheless, the weakness with the alternative “blue sky” approach, where supply is recreated to meet need, is that it frequently bears little relation to the current configuration. It may provide a useful marker for future development but it says little about how to get there. In this study, therefore, the authors rely on a combination of the two approaches to examine capacity constraints within the current system noting the required future areas of expansion to meet the demands of a SHI system.

Significant and important research has already been done in relation to components of this work, which the authors do not intend to recreate. Hence in exploring the primary and acute care sectors the authors utilise and build on existing government policy and strategic documents and academic reports. Nevertheless, certain aspects of the task have not been addressed and these include:

- The dynamic interaction of different parts of the health system
- Full costs of developing capacity to meet current demand
- Projections of the additional capacity, and the associated cost, to meet the SHI scenarios

In the paragraphs that follow the authors focus on the primary care and acute hospital sectors to identify bottlenecks, with respect to physical facilities and health professionals, and determine how these can be resolved. Broader capacity issues are then addressed subsequently.

3.3 Primary Health Care

3.3.1 Existing supply of General Practitioners

To investigate how the PHC system could be developed to respond to SHI it is important to review existing information on the characteristics of GP supply. The following draws on available data on GP supply, including a recent survey of 545 GPs conducted by O'Dowd, O'Kelly and O'Kelly (2006) which provides useful detail on this cadre within the Irish health care system.

Number of GPs

In 2005 there were estimated to be around 2,500 GPs in Ireland up from approximately 1,900 in 1992 and 1,800 in 1982 (DoHC, 2007). This translates to an annual average increase of 54 GPs each year from 1992 to 2005.

In comparison to other EU 15 countries, for which data are available, Ireland had relatively few primary care providers[5] per 100,000 population in 2004 as can be seen in Table 3.1. France, Austria and Germany have more than double the ratio of primary care providers to population and only the Netherlands has a slightly lower value. Hence it would appear that Ireland is potentially undersupplied in GPs at least in comparison to EU states at similar per capita income levels.

Limited supply equates to higher prices, especially in a market-driven approach, and higher prices may well mean that there is currently unrealised demand or that patients seek care from other sources or at other points in the system. The study by O'Reilly, O'Dowd and Galway (2007) confirms that high consultation charges limit demand for GP services.

Table 3.1: Density of Primary Care Providers in EU member states, 2004

EU-15 countries	GPs per 100,000 population
France	164
Austria	144
Germany	102
Italy	94
Luxembourg	91
Denmark	78
United Kingdom	67
Portugal	56
Ireland	**52**
Netherlands	50

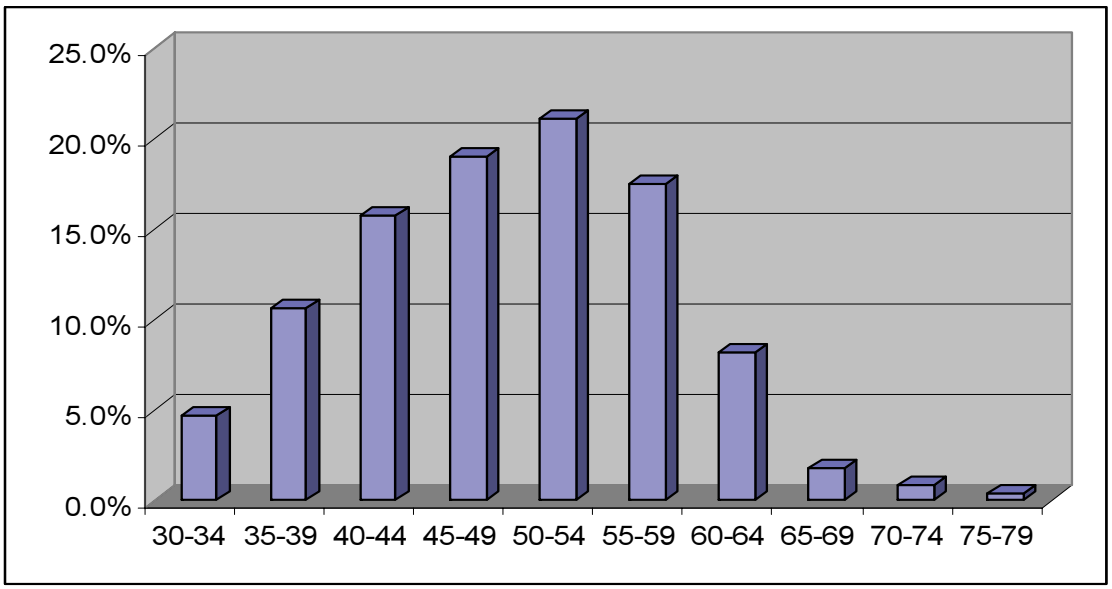
Source: WHO (2007)

[5] The term primary care provider, rather than GP, is used for the international comparisons as different systems have different names and roles for doctors in this position.

Demographic characteristics of GPs

The average age of GPs was approximately 51 in 2005 (O'Dowd et al. 2006) (see Diagram 3.1). Given that in a few years many of these GPs will retire, this may create a problem in supply with knock-on effects for patient access as noted by the Buttimer report (DoHC, 2006).

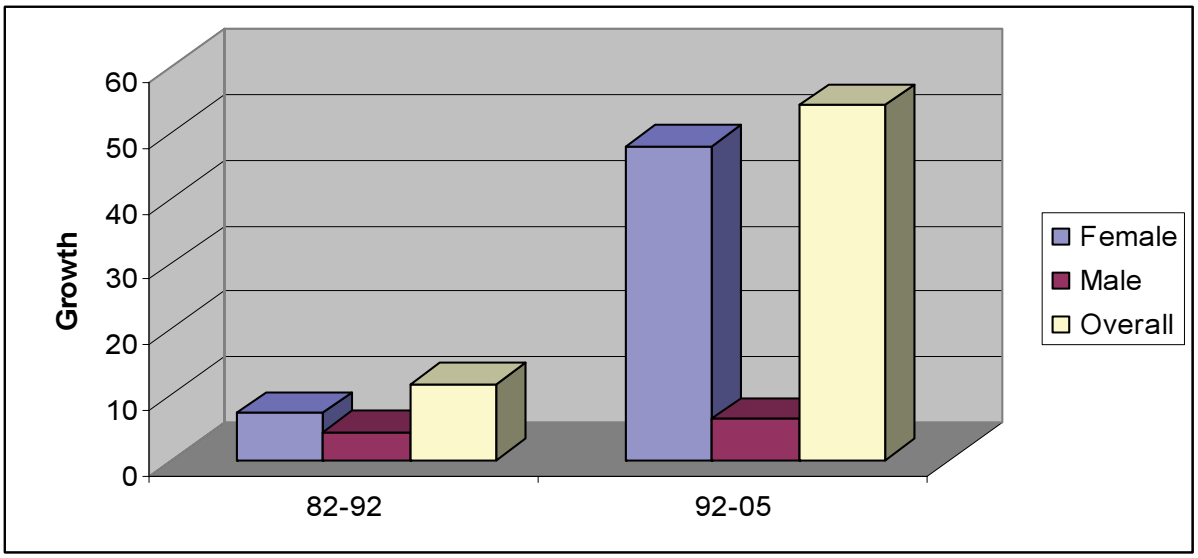
Diagram 3.1: Proportion of GPs by age range, 2005



Source: O'Dowd, O'Kelly and O'Kelly (2006)

Another key trend highlighted in the O'Dowd et al. (2006) survey is the increasing feminisation of the GP workforce. The survey estimated that in 2005, 30% of GPs were women, up from 15% in 1992 and 12% in 1982. The increase of GPs between 1992 and 2005 is almost entirely made up of female GPs, as can be seen from Diagram 3.2. The effect of this may be to decrease the average retirement age of the workforce, as the survey indicates female GPs have a preference for earlier retirement. The survey also suggests that fewer female GPs consider themselves in full-time practice (80% as opposed to 96% for male GPs); implying that increasing feminisation of the workforce may impact on the number of GP Full-Time-Equivalents (FTEs).

Diagram 3.2: Average Annual Increase in GPs by gender, 1982-2005



Derived from O'Dowd, O'Kelly and O'Kelly (2006)

Retirement patterns

It is important to explore the implications of the above age and gender profiles for future GP services to understand whether the system has sufficient capacity not only to meet projected future needs but also to respond to a new SHI system that would stimulate demand for services by removing financial barriers to care.

Data on GP preferences for age of retirement from O'Dowd et al. (2006) are used to estimate the average intended retirement age. This is estimated to be between 63 and 64 years although it was also found that female GPs wish to retire on average 3 years earlier than their male counterparts.

Given current age profiles this means that, between 2006 and 2010, over 350 GPs will retire. The number retiring is projected to grow to 450 between 2011 and 2015 and to over 500 between 2016 and 2020. These projected retirement rates are higher than recent average increases in GP supply with negative implications for a squeeze in the market for GP services. Knock-on effects of this include price increases, and increased burden on Emergency Departments in hospitals as patients seek alternative modes of care.

3.3.2 Future GP supply projections

Supply projections without SHI

Without any changes in policy, available data indicate that future supply of GPs needs to grow in order to keep pace with the number of GPs projected to retire.

Population growth will also require an increase in the number GPs just to maintain the existing GP:population ratio. Net population growth averaged 1.6% between 2000 and 2004 according to OECD (2006).

Table 3.2 outlines the number of additional GPs required in order to keep pace with retirement and population growth from 2006-2020. It is estimated that approximately 113 additional GPs will be needed each year between 2006 and 2010, increasing to just 131 per annum between 2011 and 2015 and reaching 143 per year between 2016 and 2020.

Thus in order to maintain the current GP:population ratio in Ireland, the number of GPs will have to expand by 77% from current levels just to match retirement and population growth.

Table 3.2: Additional FTE GPs required per year to meet retirement and population increases (2006 to 2020)

	Retirement	Population Growth	Total
Per annum (2006-2010)	73	40	113
Per annum (2011-2015)	90	40	131
Per annum (2016-2020)	102	40	143
Total (2006-2010)	367	202	569
Total (2011-2015)	451	202	653
Total (2016-2020)	512	202	714
Grand Total (2006-2020)	1,330	606	1,936

Key Assumptions:

1) Constant number of doctors per population
2) Population growth continues at 1.6%
3) Retirement of female GPs is on average three years earlier than male GPs

Supply projections with SHI

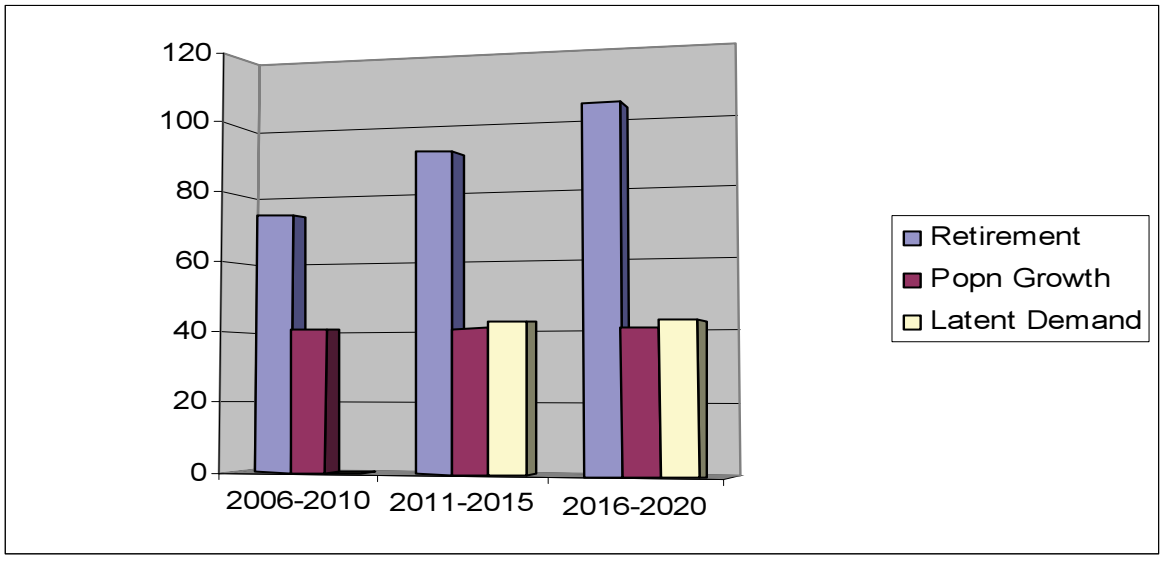
The above calculations do not take into account any new policy measures, associated with the SHI options, to improve access to GP services. By removing or lowering the price of access to GPs, demand will increase as demonstrated in a wide literature on abolition/reduction of user fees in health services. This will mean that the supply of GPs will have to rise yet further to deal with this extra demand.

The extent to which demand for GP services in Ireland is deterred by price is not fully known but there is a growing literature that can be drawn on to generate estimates. Analyses of *Living in Ireland* survey data indicate that the difference in the price of GP services between medical card holders and non medical card holders has a strong influence on GP visiting rates (Nolan 2007).

In a small scale survey, O'Reilly et al. (2007) note that 18.9% of patients in the Republic of Ireland have not seen their GP because of cost issues and this is divided between 4.4% of non-paying patients and 26.3% of paying patients. This compares to 1.8% in Northern Ireland who were put off seeking their GP because of cost issues. Hence it is estimated that removing fees would result in 17% more patients seeking care from their GPs (18.9% - 1.8%).

To generate conservative cost estimates this study measures the additional supply required to meet the increase in latent demand that is suggested by the data provided by O'Reilly et al. (2007). It is noteworthy that the extra supply required to meet the latent demand as modelled is lower than that required to offset retirement and meet population growth (see Diagram 3.3), at around 40 GPs per year between 2011 and 2020. Nevertheless, the total additional numbers required each year to match need with SHI rises to 185 in the period 2016-2020.

Diagram 3.3: Additional GPs required per year to cope with GP retirement, population growth and increased demand from free services (2006-2020)



It is important to investigate how realistic it would be to achieve such increases in GP supply in the Irish context. The Fottrell report highlights the constrained supply of doctors into the Irish health system (DoHC, 2006), see also Table 3.1 earlier. The annual intake of doctors into medical training in 2003/04 was around 760, approximately 60% of which were non-EU. This left only 305 candidates from EU countries that were potentially more easily employable within the Irish health system. To meet the additional GP supply requirements, in the absence of additional places for medical education this would have required between 30%-60% of all EU newly trained doctors becoming GPs.

The Fottrell Report estimates that the Irish system requires the employment of 725 doctors per year (DoHC, 2006) and the Buttimer report (DoHC, 2006) that the number of places for GP training needs to increase to 150 per year. Current Government policy endorses this expansion of medical education with a move to 60% of all medical students being from EU countries in four years, which will create a

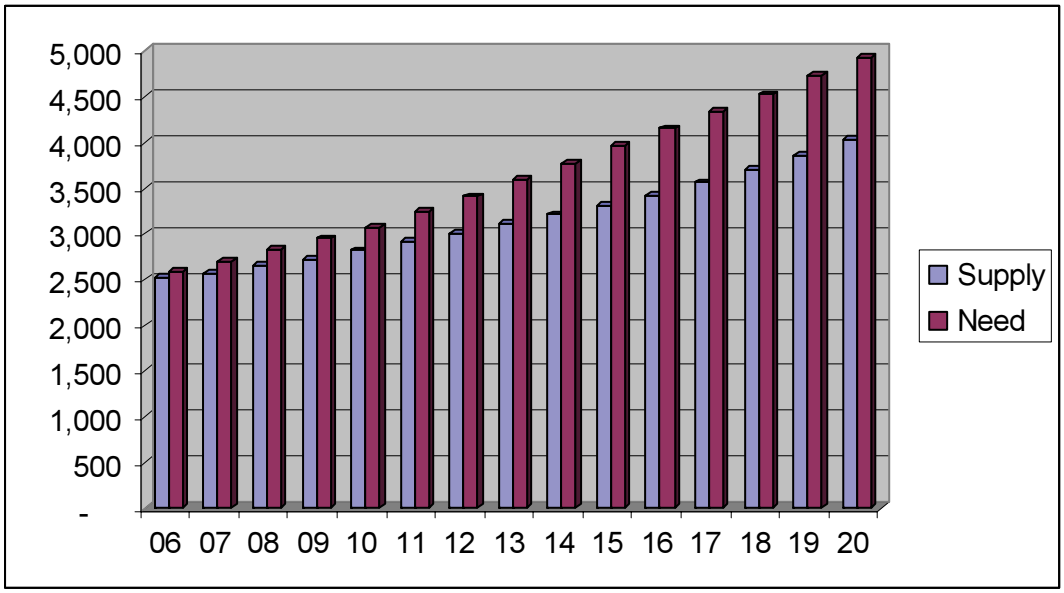
throughput of 456[6]. Nevertheless, it is clear that there are competing needs and claims on these extra doctors and it is interesting to note that GP training places have not been increased to the 150 mark.

Diagram 3.4 plots the desired increases in GP supply to meet future health systems needs in the context of an SHI model (and taking into account retirement patterns and population growth) for the years 2006-2020. This is plotted against projections for actual GP supply growth over the same period based on:

- the current number of GP training places (121);
- the current feminisation of the workforce;
- lags due to length of training;
- increases in medical education in line with the Fottrell report;
- a related, pro rata further increase in GP training places by 2015, to 155.

No estimate has been made of loss of trained GPs to other countries, return of Irish-trained GPs to practice in Ireland or immigration of overseas trained GPs. However, it is apparent that a large number of Irish trained doctors work in the UK (O'Sullivan et al. 2005).

Diagram 3.4: Actual Supply of GPs and Projected Future Need (2006-2020)



The gap between supply and demand, highlighted in Diagram 3.4, will be particularly acute in rural areas where the average age of GPs is higher (approximately 55) than in urban or mixed areas, and where there are already fewer GPs per 100,000 people (Nkhoma et al., 2007). Some counties such as Meath, Laois, Kildare, Offaly and Monaghan have less than half the number of GPs, per 100,000 population, of Dublin City. Further, new GPs tend to gravitate towards urban areas and in particular Dublin and Cork (Nkhoma et al., 2007) and thus are not offsetting the urban drift. Not only is an increased supply of doctors needed to deliver PHC but a more immediate challenge is to find ways to increase supply to some rural and underserved areas. It would appear that the private GP market cannot be relied upon to correct such imbalances itself.

3.3.3 Implications of constrained supply

In an international context, there are signs that the primary health care sector in Ireland has an undersupply of GPs. Even with the current ratio of GPs to number of persons, there are signs of a capacity squeeze if no action is taken to expand the number of doctors choosing to specialize in general practice. If there is no expansion of the existing GP supply there is likely to be a shortfall of 230 GPs by 2010 increasing to 400 (without SHI) or 814 (with SHI) by 2020. This would exacerbate Ireland's already low GP per population ratio.

[6] Simple substitution of Irish candidates for non-EU students will not, by itself, help as the medical schools rely on non-EU students as an important source of income. Substitution of just one year's intake of non-EU students with EU students would result in a loss of €13m in revenue from student fees in a single year, amounting to approximately €70m over the duration of the medical training programme (DoHC 2006).

The ramifications of inaction will be felt throughout the system. In particular, the inter-linkages between primary and emergency care attract a lot of attention in the literature. Non-urgent utilization of emergency care services is a cause for concern in health systems, contributing to overcrowding and inefficient use of resources. Non-urgent utilization refers to an attendance at an emergency department which would have been adequately and safely attended to in a primary care setting.

Government concern about inappropriate use of hospital Emergency Departments (EDs) in Ireland led to the introduction of a user fee for all self-referred non-medical card holders in the 1990s. However, recent investigation of ED attendances in the Dublin area suggests that despite similar rates, the ED charge does not act as much of a deterrent to utilization as does the GP charge (Smith 2007). There is anecdotal evidence that the costs associated with GP care are more prominent in the public mind than are the charges for ED care. This is further supported by evidence that incentives to recoup the ED charges are low at the point of collection (Smith 2007). Thus for individuals with relatively low socio-economic status and without a medical card, incentives may favour attendance at an ED rather than a GP (in cases where there is time to choose between health care providers). Consistent with this, there are tentative indications that individuals who hold neither private health insurance nor a medical card (i.e. low-mid socio-economic status) are more likely to use ED services than they are to use primary care services (Smith 2007).

There are also preliminary indications that limited availability of primary care is linked with higher than otherwise predicted levels of ED utilization, particularly non-urgent utilization (Smith 2007). These results are based on univariate analysis of a small sample of Dublin based hospitals and the inter-linkage between primary and ED care in the Irish context requires more robust analysis, particularly in light of the above indications of projected shortages in primary care. The high capacity utilisation in many hospitals (see next section) is already a matter of concern for the sector.

To remedy the problem of limited supply in primary care there are several options for government:

- increase the number of GPs trained per year;
- remove the barriers to entry, such as by helping with the start-up costs for new GPs and investigate ways for improving access to GMS lists (see below);
- facilitate the market entry of additional numbers of qualified GPs from other countries;
- encourage GPs to retire later or attract back qualified GPs who have left active practice and
- investigate ways to make rural practice more attractive.

In the baseline case where there is no SHI, given that GP services are primarily market driven then the additional costs to bridge the capacity gap will be largely met by patients. There are some areas however, where government funds will need to be targeted and these include expanding Irish facilities for GP training (which will include both capital and recurrent costs), active recruiting from other countries and possibly developing a package of incentives to attract doctors into general practice, particularly in rural areas.

Training

Indecon (2005) estimate the cost of undergraduate training for medical education. They use a bottom-up costing method in contrast to the top-down approach used by others (such as Lopez-Casanovas and Saez, 1999). This approach typically produces lower costs and is less effective at measuring indirect/overhead costs and will not capture new capital requirements. Based on data for 2001-2004, Indecon estimate that costs per student per year range from approximately €18,500 to just under €24,000. Such figures need to be inflated to 2005/06 prices and related to the extra GPs required for the introduction of free care. Further the additional costs of GP training need to be taken into account over and above undergraduate medical education. We estimate that with SHI over €700 million would be needed between 2006 and 2020 to train sufficient doctors to become GPs. This includes an additional 20% cost increase to include new capital and system overhead costs. Details are shown in Table 3.3.

Table 3.3: Costs of Training Extra GPs in the context of free GP care for all

	Extra GPs	Low (€ mn)	High (€ mn)	Average (€ mn)
2006-2010	230	79.3	90.2	84.8
2011-2015	595	204.9	232.8	218.8
2016-2020	814	280.1	318.3	299.2
Subtotal	1639	564.4	641.3	602.8
O/H and additional capital		112.9	128.3	120.6
Total		**677.2**	**769.6**	**723.4**

Notes:
1) The figures represent all costs associated with both undergraduate medical education and GP training.
2) The low and high cost scenarios are based on the cost ranges provided by Indecon.

Overseas Recruitment

While this strategy may well be the quickest and cheapest in terms of expanding supply it is the most questionable. Currently, there is a world-wide shortage of doctors. Poaching doctors from already under-served low and middle income countries runs counter to Irish Aid's focus of improving the retention of health professionals in aid-recipient countries. According to Tussing and Wren (2006) almost 20% of all physicians in Ireland were trained overseas. Hence the dependency on foreign GPs to make up the numbers is not going to change for some time. For this modelling exercise the authors propose no increase in the use of GPs from other countries.

Incentive Packages

Research into GP motivation is essential to understand what sort of package of incentives might be effective in increasing the supply of GPs and also ensuring that rural areas are more adequately covered. Currently, not enough is known about this important topic, though recent studies including Nkhoma et al. (2007), O'Dowd et al. (2006) and O'Sullivan et al. (2005) have started to explore issues around GP motivation and satisfaction. Further, recent OECD data reveal that Irish GPs are well paid in comparison to their colleagues in other EU 15 countries (OECD, 2006). In Ireland GPs are paid four times the GDP per capita value, which is a higher multiple than in the UK, Germany and the Netherlands and much higher than in France and Sweden. Thus it is important to identify which factors, in addition to expected income, are important in choosing general practice as a career and in choosing a location of practice. A precise costing of an approach to boost GPs numbers in underserved areas would need a specified package of incentives.

In the current system the majority of GPs hold a contract with the government to treat medical card patients and are reimbursed on a capitation basis for these patients. Nevertheless, to obtain a full GMS contract a GP must have practiced on one site for eight years (ICGP 2006), making it an impossible option for new GP entrants. Thus, a key motivating factor for a new GP is to identify an existing practice where they will be able to inherit a list of medical card patients in time. Location decisions may also be influenced by the scope for profitable private practice. Non medical card patients pay on a fee for service basis and thus represent an important source of additional income for a GP.

The introduction of free primary care for all has important implications for the financial incentives facing GPs. It is noted that with the introduction of the over- 70s medical card in 2001, GPs sought compensation for the loss of private practice and secured special higher capitation rates in respect of their patients who had not previously been eligible for a medical card. It is difficult to predict what rates/methods of reimbursement would have to be negotiated in the context of SHI where the scope for private practice would be greatly reduced.

Facilities

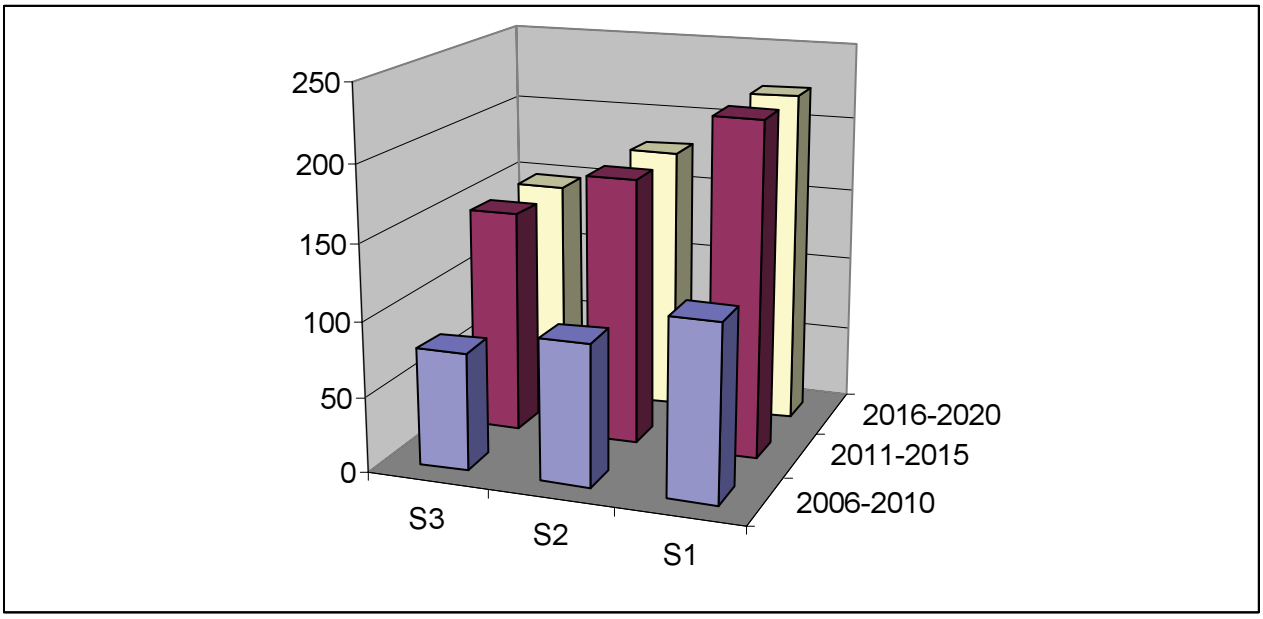
The provision of GP care relies on there being sufficient numbers of equipped practices. If there is to be an expansion of GPs then there must also be increased numbers of facilities. Nevertheless, not as many facilities will be needed since it can probably be assumed that retiring GPs would leave available their rooms for new GPs and further that GPs are increasingly sharing their facilities or working in partnerships. Indeed, the trend in GP practice has been for teams so that, particularly in urban areas, teams of three or more GPs are

very common. Diagram 3.5 shows the number of new facilities required, in the context of free primary care with SHI, according to different scenarios of concentration:

- Scenario 1 – average no. of GPs/practice is 2
- Scenario 2 – average no. of GPs/practice is 2.5
- Scenario 3 – average no. of GPs/practice is 3

The number of new facilities varies between 340 and 520 depending upon the average number of GPs per facility. If costs of provision are assumed to be around €3million per facility (Tussing and Wren, 2006), then the range of costs is between **€1.0 and €1.5 billion**. Such estimates are slightly under the Department of Health and Children's Primary Care Strategy (DoHC 2001) to provide 550 primary care centres over ten years at a total cost of **€1.65 billion** (Tussing and Wren 2007). Clearly the use of incentives to encourage GPs to share facilities may well be cost-effective, particularly in rural areas, in that the price tag for expanding appropriate premises will then tend towards the lower bound and will save valuable resources.

Diagram 3.5: Number of new facilities needed to meet the requirements of SHI



3.4 Hospitals

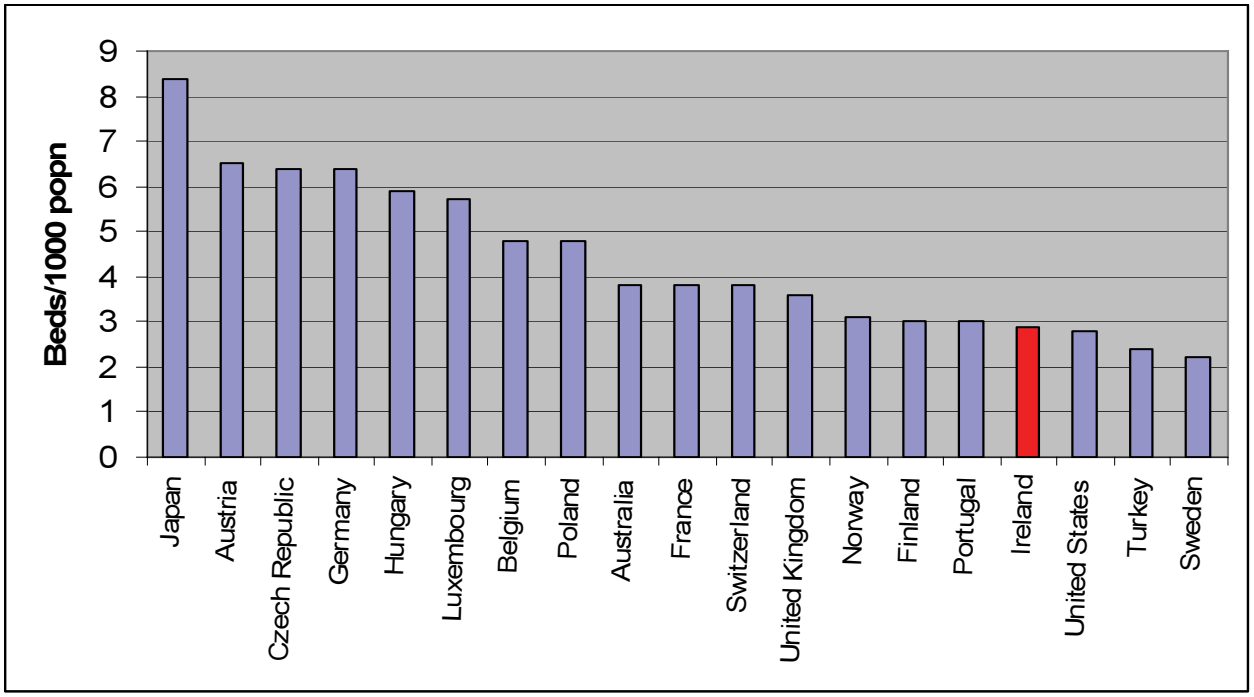
Facilities

It is not new to proclaim that there is currently a crisis in the acute hospital sector. Nevertheless it is important to investigate the data carefully and with reference to the experience of other countries to ensure that appropriate analysis and recommendations are forthcoming.

Summary figures that relate to the capacity of the hospital system are shown in Table 3.4. In-patient beds increased by an annual average of just over 1% (120 beds) per year between 1997 and 2005, reaching almost 12,100 by 2005. The number of day places increased more rapidly at 9% per year over the same time period, albeit from a much smaller base. By 2005 the total bed capacity of the acute hospital system stood at over 13,300. Over the period the proportion of total beds accounted for by day places increased from 5% to 9%.

International comparisons within OECD countries show that Ireland has a very low number of acute beds per head of the population (2.9 per 1,000 in 2004), see Diagram 3.6. This implies capacity problems in the acute hospital system and indeed this is re-enforced by a more detailed examination of hospital data later in the text.

Diagram 3.6: Comparisons of acute bed density in OECD countries (2004)



Source: OECD Health Data (2006)

Table 3.4: Acute Hospital Capacity, 1997-2005

Year	In-patient Beds	Day Places	Total	Day Places %
1997	11,118	609	11,727	5.19%
1998	11,048	637	11,685	5.45%
1999	11,058	673	11,731	5.74%
2000	11,188	720	11,908	6.05%
2001	11,375	770	12,145	6.34%
2002	11,689	812	12,501	6.50%
2003	11,805	909	12,714	7.15%
2004	11,883	1,134	13,017	8.71%
2005	12,093	1,251	13,344	9.38%

Source: DoHC, 2007

To assess the degree to which the current deployment of acute hospital services is able to cope with demands made, it is useful to explore bed occupancy and the distribution of capacity by region (see Table 3.5). Data from 2003 indicate that bed occupancy was in all regions over 80% and over 85% in three (Eastern, Midland and Mid-Western) (DoHC 2007). It is a generally accepted convention that hospitals cannot run effectively and efficiently at over 85% bed occupancy (DOHC 2002). If this is the case then on average hospitals in those regions were experiencing very serious problems with capacity constraints and the remaining regions were not far behind. An average bed occupancy for the acute hospital sector of 84.9% suggests a sector which was barely able to cope with the demands placed on it. Indeed, Ireland's very high bed occupancy rates in acute hospitals are only topped in Western Europe by Norway between 2003 and 2006, according to the European Health For All database (WHO, 2007)

Table 3.5: Summary IP Bed Capacity and Occupancy by region, 2003

Region	Average Number of IP Beds Available	Occupancy
Eastern	4,975	88.4%
Midland	500	87.6%
Mid-Western	827	87.5%
North-Eastern	857	80.5%
North-Western	737	80.7%
South-Eastern	1250	82.0%
Southern	1,854	80.1%
Western	1,299	84.0%
Grand Total		
	12,299	84.9%
Source: DoHC 2007		

Similar data from the largest hospitals reinforce this picture, as can be seen in Table 3.6. Of the nine hospitals with more than 400 IP beds, only Waterford Regional Hospital had a bed occupancy (marginally) lower than 85%. All the Dublin Academic Teaching Hospitals had over 90% bed occupancy in 2003.

Table 3.6: Summary IP Bed Capacity and Occupancy in the DATHS (2003)

	Average Number of IP Beds Available	% occupancy
Beaumont	602	95.7
Mater	455	97.1
St James's	782	92.1
St Vincent's	442	93.0
Tallaght	528	91.7
Limerick Regional	419	89.9
Waterford Regional	473	84.3
Cork University	555	90.2
University Hospital Galway	527	88.0
Source: DoHC (2007)		

More disaggregated data by specialties and bed allocations in each acute hospital present a similar, in some cases more extreme, picture. Twenty six hospitals had general medicine wards running at over 85% capacity, with 19 running at over 100% bed capacity. Geriatric medicine was in eight hospitals running at over 100% bed occupancy. Other specialisations that had particularly constrained capacity were General Surgery, Psychiatry, Cardiology, Orthopaedics and Obstetrics, as noted in Table 3.7. Such over-crowding carries additional risks to health and costs associated with treatment of hospital-acquired infections.

Table 3.7: No of Acute Hospitals with bed occupancy by Specialty over 85%

Summary	Over 100%	85%&over
General Medicine	19	26
Geriatric Medicine	8	11
General Surgery	5	9
Psychiatry	1	9
Cardiology	4	8
Orthopaedics	4	7
Obstetrics	0	7
Haemotology	6	6
Oncology	3	6
Respiratory Medicine	5	5
Source: DoHC (2007)		

Given such data, it is clear that the present system is very constrained with the deployment of existing resources. Moving towards a future SHI scheme requires not only resolution of existing capacity problems but expansion of capacity to cope with population increases and increased demand caused by broadening coverage for previously uninsured groups.

The first question relates to the resolution of existing bottlenecks in the acute hospital system. Were beds to be increased for each specialty to bring down bed occupancy to 85% then the 2003 data presented above indicate that just fewer than 1,900 beds would be required, as noted in Table 3.8. Yet this does not take account of the management of existing beds. It is important to examine whether or not resources are being utilised efficiently to see whether the capacity constraint could be at least partially resolved by better management and deployment.

Table 3.8: Extra Beds required by Specialty to remove overcrowding in acute hospitals

Specialty	Extra Beds required
General Medicine	817
Geriatric Medicine	204
Respiratory medicine	121
General Surgery	102
Orthopaedics	100
Gastro-Enterology	68
Rheumatology	59
Cardiology	57
Endocrinology	49
Haemotology	39
Others	278
Total	1,893

The first step involves exploring whether de-assignment of beds within hospitals that accommodate over-crowded specialties would bring down the extra beds needed. The data reveal that such an approach would release about 130 beds.

Improvements in long term care facilities for the elderly and rehabilitation services could reduce the number of bed days lost due to delayed discharge (DOHC 2002). A recent review of acute hospital bed use in 37 hospitals identified 13% of patient admissions and 39% of hospital days as inappropriate. Patients could potentially have been treated elsewhere if appropriate alternatives were made available (e.g. non-acute beds, home-based patient care etc.) (PA Consulting Group 2007). The report recommended improvements in management of chronic illness to reduce demand on acute care; to expand capacity of community based services to facilitate earlier discharge from hospital; and improvements in internal organisational factors within hospitals to influence length of stay and bed utilisation (PA Consulting Group 2007).

A further approach would be to assess the Average Length of Stay (ALOS) within each hospital, and for each specialty, and to assess whether some hospitals could improve their availability of beds by lowering length of stay. (In general according to WHO (2007) the ALOS in Irish acute hospitals is about average across the former EU-15 countries.) To explore potential for improving efficiency in hospital internal organization would require in-depth analysis of inputs and outputs using Data Envelopment Analysis (DEA) and this is beyond the scope of this report (see, for instance, Gannon 2005). A simple comparison of ALOS across all hospitals and specialties would be misleading as the case-mix, catchment population and function of hospitals differ[7]. Instead, the approach used by Pabon (1986) can yield some insight into whether it is possible to improve efficiency and capacity by redeploying resources. This approach uses graphical analysis to undertake combined assessment of three hospital efficiency indicators (bed turnover, occupancy and length of stay) allowing meaningful comment on the efficiency with which hospitals are operating (Thomas and Muirhead 2000). See Annex 4 for details of the technique and the results for Irish hospitals.

Analysing across three different hospital groupings (academic, regional and general) shows that there is actually, on the whole, little difference in the performance of hospitals within the same group (see Annex 4). There may be a tendency for some of the DATHS and one General Hospital to have longer lengths of stay which, while justified by case mix and catchment areas, may also reflect patients remaining inappropriately in acute hospital beds, as there are no suitable non-acute beds available for them to which they could be discharged. This may not only point toward the need to provide more chronic beds but suggests that it is worth changing the incentive structures facing hospitals which encourage them to keep patients for longer than is necessary. Nevertheless, there is little evidence from the above analysis that current hospital resources are on the whole being managed poorly. (Further analysis using DEA techniques would be welcome in this area.) There is however, strong confirmation that many hospitals are operating at the limit of their capacity.

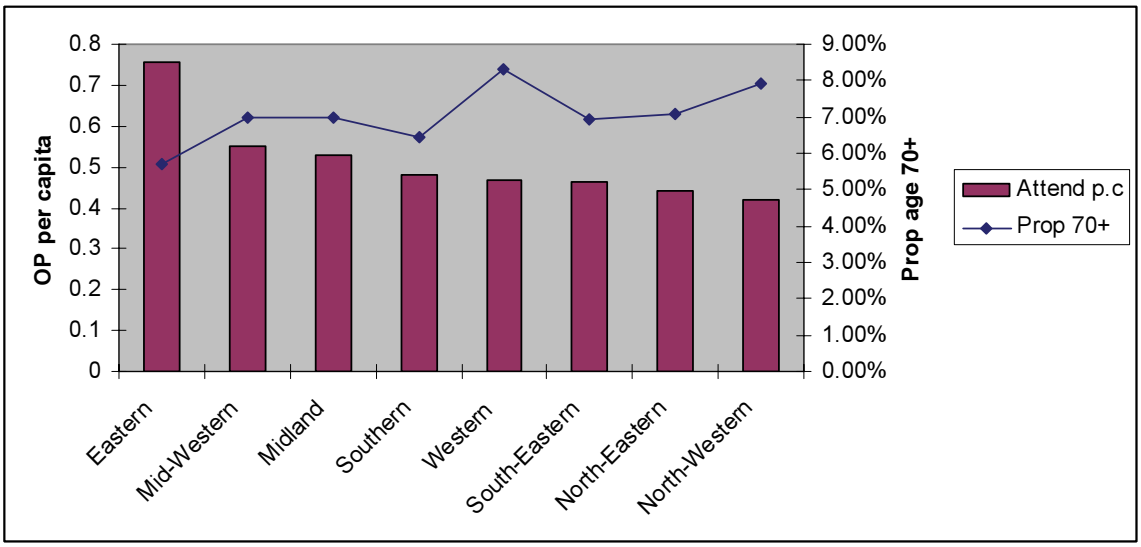
A further area of constrained supply relates to consultant-led outpatient (OP) treatment. Table 3.9 below and Diagram 3.7 highlight differences across the regions in this regard. Most notable is the high number of OP attendances per person in the Eastern Region. This is even more pronounced when compared with the low proportion of the population over 70 years of age in the Eastern Region, as highlighted in Diagram 3.7. Using the proportion of the population aged over 70 years as an indicator of health need in the area, it would appear from the data that supply is particularly constrained in the Western and North-Western regions. The question of the appropriate distribution of consultant-led OP services across the country needs further research. Nevertheless, if the attendance per person were to rise across the rest of the country to that experienced in the Eastern region then a further 720,000 attendances would occur, suggesting a need for a 25% increase in consultant-led OP capacity. However, this does not take into account the movement of patients across different regions and further research is required to clarify the capacity requirements for equitable access to such services.

[7] It is perhaps mischievous and misleading to note that if all specialties brought down their ALOS to the lowest of all acute hospitals then there would be sufficient beds within the system to bring down bed occupancy, ceteris paribus, to below 85%. Nevertheless as we have argued this approach is specious as it ignores case mix, catchment population and hospital function.

Table 3.9: Out-Patient Attendance by Region (2003 data)

	Sessions	Attendances	Att/popn	Prop of population aged 70+
Eastern	57,304	1,076,893	0.76	5.71%
Midland	5,553	111,901	0.48	7.00%
Mid-Western	7,174	152,020	0.44	6.98%
North-Eastern	6,428	150,478	0.42	6.44%
North-Western	7,494	124,431	0.55	8.29%
South-Eastern	9,858	201,005	0.46	6.96%
Southern	17,450	276,972	0.47	7.09%
Western	9,440	206,335	0.53	7.92%
Total	120,701	2,300,035	0.58	6.66%

Diagram 3.7: Out-Patient Attendance per Capita and Proportion of Population Over 70, by Region



Bed projections for the acute sector

Given the reasonable efficiency scores highlighted in Annex 4, the initial analysis of approximately 1,900 beds required to bring down bed occupancy to 85% still stands. Nevertheless, it is important to factor into this equation further increases in hospital beds required by rising populations and also the extra demands produced through social health insurance. Furthermore, our analysis has not focused on the replacement of existing capital stock and it has been noted that because of the underinvestment in the past many hospital facilities need renovation (Wren 2003). Such factors are important but require additional research before cost estimates can be developed.

Projected population growth is estimated to be 1.6%, as in the above estimates for GP supply. To maintain the current ratio of beds per population, hospital beds will have to increase to offset population growth. Furthermore, the ageing of the population may have an effect on bed needs; although evidence from other countries shows that this can be overestimated. Research being conducted by ESRI and TCD, and funded by the HRB, will illuminate the precise bed requirements of the ageing of the population (Layte et al., 2007).

In addition, the introduction of social health insurance would improve access for groups who currently do not have private insurance. Bed capacity would have to increase further to accommodate the additional demand. To model this, the authors equalize the probability of admission for those currently without insurance to those currently with insurance using data from the Living In Ireland survey (2001). The impact of this is to require another 500 beds.

If insurance also impacts on length of stay, to increase this to the levels experienced by those who are insured, then up to an extra 1,500 beds are required. Nevertheless, this latter calculation assumes standard needs across those who have medical cards with and without private insurance and there is evidence that this is not the case (e.g. Living in Ireland survey). For instance those who hold both a medical card and private insurance are more likely to be aged over 70 with a higher burden of illness and therefore higher lengths of stay than younger medical card recipients. Hence 1,500 beds is the upper extreme and a figure between 500 and 1,000 more likely. The summary data are included in Table 3.10 below.

The specifications of the Rolls Royce and Priority Hospital models of SHI also indicate that all beds should be private or semi-private to match the care currently accessed by those covered by private insurance. It might be thought that this impacts on the cost of providing additional beds. However, international research shows that actually single beds are cheaper to run and more cost-effective for service provisions. For a fuller review of the evidence on the lower costs of providing services in single rooms see Hugodot and Normand (2007). The reasons for the lower costs of care include lower nursing costs, shorter lengths of stay, reduced complications and fewer accidents and errors. Further savings have been demonstrated where patients are cared for in acuity adaptable facilities. While apparently surprising, the evidence is strong that single rooms lower costs of care, and the small extra cost of construction is repaid in a short period.

Table 3.10: Estimates of Extra Beds to meet Capacity Constraints for SHI

	IP Beds Required	Notes for Calculation
Resolution of Excess Bed Occupancy (>85%)	1,762	Based on existing hospital utilization data by specialty in each hospital
Meeting Population Growth (pa)	98	Based on historical population growth rate of 1.6% between 2000 and 2004
Meeting Latent Demand through Social Health Insurance	500 – 1,500	Based on equalization of: a) probability of admission and b) length of stay between insured and uninsured

Note: Replacement of old capital stock not included in the calculations

The IP bed implications for 2007 are approximately 2,500 without implementation of health insurance[8] and between 3,000 and 4,100 with health insurance. It is important to triangulate these figures against other studies which use a variety of approaches and data sources. Such comparisons are contained in Table 3.11 below.

Most of the reports yield consistent findings, despite different methods. It is interesting to reflect on the results of the Acute Bed Hospital Review carried out by the PA Consulting Group (2008) as this seems, at first sight, to be at odds with the other models. The PA report estimates bed requirements for two alternative scenarios in acute hospital care:

- Maintenance of current patterns of service delivery (no change scenario);
- Development of much stronger community services allowing integrated management of patients across levels of care (the fully integrated model).

[8] i.e. 1762 + 4 * 98 (to increase the number of beds from 2004 to 2007)

Neither scenario is probable, as there will be some partial integration as a result of current policy direction. Yet government is unlikely to develop a fully integrated system without a considerable injection of resources into primary care and other community services. Interestingly, assuming partial integration the assumptions for acute hospital bed needs are similar to other reports. For instance, the PA report predicts that with partial integration of 25%, approx. 4,500 beds would be needed by 2020, which is in line with the other projections.

Table 3.11: Extra Bed requirements – Comparison of Studies and Methods

Name of Report/Study	Beds required	Timescale	Notes on Methods
Morgenroth and Fitzgerald, ESRI – (Ex-ante Evaluation of National Development Plan)	1,821-3,280	2007-2013	Needs-based approach reviewing demographic trends
Thomas et al. 2007	2,553 (without SHI) 3,000-4,100 (with SHI)	2007	Analysis of current system capacity and utilisation
Department of Health and Children	3,000	2011	
PA Report	8,162 (based on current practices) -2,826 (fully integrated model with developed community services)	2020	Based on expected demand and hospital best practice

Morgenroth and Fitzgerald (2007) estimate that the extra bed requirements translate to an average annual cost of approximately €700 million between 2007 and 2013 (over €4 billion). The DOHC estimate that the cost of a new hospital bed runs from €500,000 to €600,000 (Tussing and Wren 2006) whereas the PA Consulting Group (2008) uses a higher figure of €1 million per bed. Using a cost range of €600,000 to €1 million per bed, our earlier need requirements would imply a total cost of between €1.5 and €2.5 billion without SHI and between €1.8 and €4.1 billion with SHI, depending on which scenario is costed. Some savings may be available with new procurement strategies but this needs to be investigated more closely. As already noted, these estimates do not take into account replacement of existing old stock.

Hospital Health Professionals

Ireland has a very low number of consultants per 1,000 population which has been noted by many (DoHC 2003; DoHC 2006; Wren 2003). By 2006 the number of consultants had increased to almost 2,100 from around 1,500 in 2001 (DoHC, 2007). However this rate of increase is insufficient to meet future needs. The Hanly Report (DoHC, 2003) noted that

> "in order to meet the hospital medical staffing requirements arising from implementation of the European Working Time Directive approximately 3,100 consultants should be employed by 1st August 2009." (p87)

The Hanly report estimated that the cost of achieving this would be around €52 million assuming a decrease in the number of non-consultant hospital doctors and achievement of the EWTD. Its target for a fully-consultant provided service by 2013 would cost €111 million.

As noted earlier, there are several ways of expanding the effective supply of health sector human resources. These are:

- Expand the number of people trained;
- Import health professionals from other countries;
- Enhance the responsibilities of some cadres /Change the skill mix.

Summary of Costs

Drawing together all the cost estimates detailed in this section provides us with an estimate of the cost of relieving the capacity constraints and developing a foundation for a SHI system. The details are shown in Table 3.2 below, but the minimum costs required are €3.2 billion reaching up to €6.4 billion, depending on the assumptions.

Table 3.12: Summary of Costs to relieve Capacity Constraints

Health System Component	Cost	Timescale
1. Training Extra GPs	€680 - 770 million	2006-2020
2. Developing PHC Infrastructure	€1.0 – 1.5 billion	2006-2020
3. Adding Extra Hospital Beds	€1.5 – 4.1 billion	2008
4. Training Extra Consultants	€52 million €111 million	2009 2013

It is interesting to reflect on the proportion of these costs which relate to our models of SHI rather than the limited capacity of the Irish health system in general. To accommodate SHI, only between €600 million and €1.9 billion is required to increase system capacity, assuming other capacity limitations have been removed. Hence SHI related capacity costs are under 30% of overall capacity enhancement costs.

3.5 Capacity as Health System Strengthening

Enhancing the capacity of a health system requires a multi-pronged approach. This cannot be limited to beds and human resources, though these are essential, but to management systems and cultures of governance. Indeed, better management will improve the utilisation of current resources and, by itself, increase system capacity. In support, a synthesis of the international literature reveals that a range of factors are important for building capacity (Senge 1990, Hildebrand and Grindle 1994, Crisp, Swerissen and Duckett 2000, Bennett and Mills 1998):

- Human resources - number of staff, experience, skills, qualifications, workload, motivation, for both staff involved in health care provision and administration;
- Physical resources – buildings, equipment, supplies and beds;
- Institutional context, policies and structures – internal workings, organisation and software of providers and administration within health care;
- Task networks – frequency and quality of communication and interaction with other institutions;
- Environment - the broader context of society including political and economic developments.

Each of these factors will affect the others. It is important, therefore, when considering capacity to take a system approach (Iles and Sutherland 2001) and to understand not only how interventions will help increase capacity with respect to specific components, but also what the likely system effects are (i.e. how the components interact).

> "A system is a set of elements connected together which form a whole, thereby possessing properties of the whole rather than of its component parts (Checkland 1981). Activity within a system is the result of the influence of one element over another. This influence is called feedback and can be positive (amplifying) or negative (balancing) in nature. Systems are not chains of linear cause and effect relationships but complex networks of interrelationships (Senge 1990)" (Iles and Sutherland 2001)

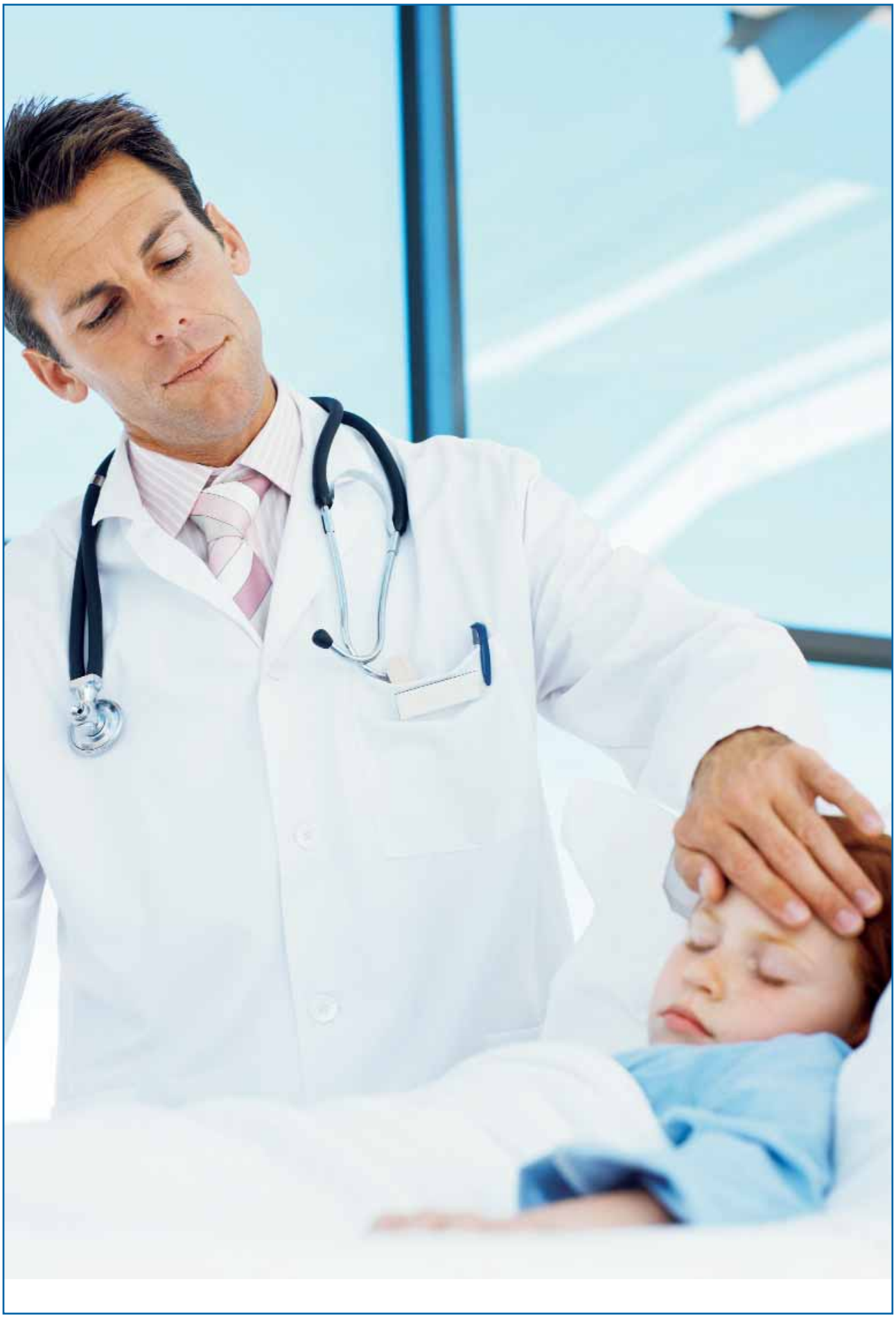
Hence while the authors have examined the resource implications of increasing capacity, any associated costings will be partly dependent on the institutional context, interaction between different parts of the health system and the broader socio-economic environment. While bricks and mortar and additional human resources are required for SHI to be implemented they do not get to the heart of the system change required to deliver SHI. In particular the way in which institutions (regulators, funders and providers) behave will have to change. While SHI has different forms it is most likely that a system of contracting service providers, based on the services that they provide, would ensue. There is no international evidence to suggest that an entirely government command-style SHI scheme would function better than a contract model. Given the Irish reality of major private sector participation in the acute hospital sector (both voluntary and for-profit) and universal private provision in the primary care sector, a contract-based model would appear to fit best. It may also give rise to improved efficiency as discussed and illustrated in Thomas et al. (2006).

To move to such a system design would mean that funds held centrally or across several funding institutions would be used to purchase services from providers, whether public or private, according to set specifications.

The mechanisms for a contract model in primary care already exist whereby GPs hold a government contract to provide services to a proportion of the population (i.e. medical card holders).

For secondary care, such a shift would require changes to networks (how different institutions relate to each other) changes to the institutions themselves and changes to the public sector context in which the bulk of acute care is provided. Several key changes would have to be implemented before SHI could be properly introduced.[9] Providers should have the ability to be able to manage their own deployment and use of resources. This would mean for many state hospitals more autonomy in decision-making, which would require a shift in current public sector culture and legislation. Furthermore, the management of each hospital would have to be strengthened to negotiate and manage contracts from funding agencies for provision of services. The budgeting process for hospitals would also have to change to reflect the contracting approach and, in all likelihood, all funding to providers would then be based on case-mix.

[9] These changes would involve training, the costs of which would also need to be factored into the total costs involved in the transition to SHI.



4. A Road Map for Policy Implementation

Social Health Insurance is a complex reform. Not only does it restructure finances and incentives but it changes institutional roles and responsibilities. Policy makers trying to implement reform thus must deal with a whole range of technical and political issues. In particular, an important theme that emerges from the international literature is the concept of phasing or sequencing of reform. This is important for two reasons. First, introducing reform requires significant effort and resources. An all-at-once strategy may well be too much for state capacity and risks failure. A more focused phasing may allow more effective use of limited resources in implementation. Second, while universal coverage of SHI may be the end goal, it is important to see that any intermediate stage or steps towards this are coherent, and desirable, in themselves. It is possible that the reform process may get blocked or at least slowed down before the final end point is reached. Policy makers need to make sure that what they are left with in such circumstances is still better than where they started.
Given the need to deal with both technical and political issues in reform implementation, the criteria for considering what stepping stones to choose would be based on:

- Desirability – maximum improvement toward objectives (i.e. equity);
- Organisational Feasibility – minimal change from the current organisational status quo;
- Political Feasibility - least resistance from stakeholders.

Given these criteria the following stages for increasing cover of a comprehensive Social Health Insurance scheme are suggested:

1. Extend free primary care to ever higher proportions of the population:
   - Under 19s
   - All families on average incomes and lower
   - All population

2. Extend hospital insurance cover to:
   - All families on average incomes and lower.

   Or
   - All those in employment who currently have neither insurance nor a medical card.
   - All medical card holders who do not have insurance.

   Then
   - All the population.

In addition the following organisational/governance steps would need to be taken:

3. Expansion of existing provider capacity to meet current and future demand
This requires extra training of GPs, building of GP facilities, development of new hospital beds and training of additional consultants, as noted in section 3.

4. Creation/Adaptation of an organisation or organisations to act as (the) SHI Fund
Separate from government, a new fund holding organisation/s would need to be created, or adapted from an existing body/ies, to manage the SHI fund.

5. Development of new Organisational relations
A contracting approach to service funding and provision would need to be worked out between a central fund or funds and both GPs and the acute hospital sector. Strengthening of management within hospitals would be required to allow them to negotiate contracts with central funding agencies.

6. Development of new Information and Financial Systems
To support the contracting approach with SHI, systems would have to be introduced or adapted to support governance at all levels. Information would relate to both finances and services provided.

7. Design and Implementation of SHI Regulation system

To monitor the SHI scheme an independent body would need to be established with appropriate powers, funding and human resources.

8. Design of new Legislation

Such legislation would need to cover the above matter such as:

- the creation of an independent SHI Fund (or funds);
- new budgetary relations between the Fund and providers;
- a more independent status of public acute hospitals to allow them to be contracted, to be accountable for their performance and to hold their own staff accountable for their work;
- an independent body which would regulate the entire SHI scheme.

The suggested sequence of implementation would focus first on point 3, alleviating the current capacity constraints while also implementing free GP care for U19s. When done, points 4-8 should be implemented together. Once this has been achieved the remainder of points 1 and 2 can be phased in, in the sequence suggested and according to the availability of resources.

5. Conclusions

A key aim of the report has been to model the viability and desirability of various forms of SHI in the current Irish context. It has explored what needs to change in terms of financing, service delivery capacity and governance to make SHI a reality. The main conclusions and recommendations are outlined below.

5.1 Revised Costings

Affordability

The Rolls Royce option would increase the annual health expenditure by around €2.1 billion or from 7.5% to 8.9% of GDP for 2006. Such a proportion of GDP is low for a comprehensive SHI system, compared to other such systems in Germany or France.

Cost escalation

There are evident cost pressures in the system, relating both to GMS general capitation rates and the pricing of private beds in public hospitals. SHI systems, where badly designed, can be prone to cost escalation, though typically not to the same extent as private health insurance systems. Consequently, cost control mechanisms are vital to SHI design.

PHC

Full medical cards for all the population would only require an additional amount of funding of €217 million given that households that don't have medical cards are already spending almost €700 million on PHC. In addition, those SHI scenarios which fix the price of GP access at about half its current rate would need no additional funds in the system, just a rerouting of existing expenditure.

5.2 New SHI Scenarios

Another way of targeting health system resources to improve equity is to recognise that different age groups have different needs and ability to access services. Internationally there is often strong support on technical grounds for free health care for children (Victora et al., 2003).

Medical Cards for Children

The extension of medical cards to all under 5s, which provides free GP services to an additional 225,000 children, only costs €57 million. Under €160 million is needed to provide full medical cards to those aged eighteen and under. Health care funding would have to increase by just over 2% in real terms to fund medical cards for all children.

Full insurance coverage for the under 16s

There are difficulties in costing this option and care is needed with the policy's specification if it is not to have unintended effects.

Difficulties relate to: (i) destabilising the market for health insurance, given adults currently cross-subsidise children, (ii) undermining equity as children who already have insurance would have their premiums paid by government, (iii) unclear financial implications of the policy given no agreed or stated current price for insuring children.

5.3 Offsetting Capacity Constraints

SHI will increase demand for health care, through extra funding for health care services. This must be matched by increased supply if SHI is to deliver sustainable improvements in health care and meet expectations. Nevertheless, the current Irish health care system has bottlenecks in several areas.

Access to GPs

In order to maintain the current GP:population ratio in Ireland, the number of GPs will have to expand by 77% from current levels by 2020 just to match retirement and population growth. The total additional numbers required each year to match need with SHI rises to 185 in the period 2016-2020. The cost associated with increased training to produce the additional GPs will be over € 700 million by 2020. A further challenge is to find ways to increase supply to some rural and underserved areas.

The costs for building appropriate facilities range from €1.0 and €1.5 billion, according to the degree of sharing by GPs. Such cost estimates are slightly under those contained in the Department of Health and Children's Primary Care Strategy (DoHC 2001). The use of incentives to encourage GPs to share facilities may well be cost-effective.

Acute Hospital Beds

International comparisons within OECD countries show that Ireland has a very low number of acute beds per head of the population (2.9 per 1,000 in 2004), very high bed occupancy and about average length of stay. Nevertheless, according to the Pabon Lasso analysis in this report most Irish acute hospitals appear to be efficiently run, though there is some indication of the presence of patients inappropriately in acute beds caused by the current financing system. Were beds to be de-assigned, it is estimated just under 1,800 beds would be required to bring over-crowded specialties down to 85% bed occupancy.

The IP bed implications for 2007 are approximately 2,500 without implementation of social health insurance and between 3,000 and 4,100 with health insurance

Using a cost range of €600,000 to €1 million per bed, this implies a total cost of between €1.5 and €2.5 billion without SHI and between €1.8 and €4.1 billion with SHI. Some savings may be available with new procurement strategies.

There is an imbalance in consultant-led OP services across the country. OP attendances per person in the Eastern Region are much higher than elsewhere, implying a need for increased consultant-led OP capacity around the country.

To relieve *all* identified capacity constraints, including current bottlenecks and additional capacity for SHI, would require a minimum of €3.2 billion reaching up to €6.4 billion. SHI specific capacity expansion accounts for around 25% of this.

5.4 Developing SHI system architecture

With SHI, the way in which institutions (regulators, funders and providers) behave will have to change. It is most likely that SHI would entail a system of contracting service providers, based on the services that they provide. To move to such a system design would mean that funds held centrally or across several funding institutions would be used to purchase services from providers, whether public or private, according to set specifications. Providers should have the ability to be able to manage their own deployment and use of resources. This would mean for many state hospitals more autonomy in decision-making, which would require a shift in current public sector culture and legislation. Furthermore, the management of each hospital would have to be strengthened to negotiate and manage contracts from funding agencies for provision of services. The budgeting process for hospitals would also have to change to reflect the contracting approach and, in all likelihood, all funding to providers would then be based on case-mix.

5.5 A Road Map to SHI

It is unfeasible and undesirable to move immediately to SHI given the scale of change that would be needed. It is therefore important to consider carefully the phasing or sequencing of reform.

The suggested sequence of implementation is outlined in Diagram 5.1. An initial phase would see a focus on relieving capacity constraints and providing free medical cards to children. A second phase would develop the system architecture of SHI, developing new systems of budgeting, contracting and monitoring while also creating funding agencies and boosting provider level management capacity. Finally the technical elements of SHI can be phased in to increase access to services at both the primary and acute care levels.

Diagram 5.1: Phasing of Social Health Insurance

	Phase 1	Phase 2	Phase 3
Improving Access	U19s Medical Cards		Implement SHI - GP and Hospitals (1) average income and lower (2) All population
Provider Capacity	Alleviate current constraints and build extra SHI capacity.		
SHI Systems Capacity		Develop legal, institutional, systems infrastructure	

5.6 Areas for Further Research

- Stakeholder positions on different SHI scenarios
- Further analysis of hospital efficiency
- Data on international movement of GPs into and out of Ireland
- Geographical analysis on the availability of, and access to, health care services

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Annex 1: Achieving the SHI options – Costs, Data Sources and Methods (2005 prices)

a. Upgrading access to hospital care (Rolls Royce, Priority to Hospital Services)	Cost[1] and utilisation data	Data sources	Non-insured population (millions)	Per capita cost of upgrading hospital care[2,3] €		Total additional costs €m	
				High[4]	Low[5]	High	Low
Benefits of privately insured hospital care include: private/semi-private accommodation (i.e. more 'hotel' facilities); reduction in waiting times; consultant-provided care. To proxy these benefits, the authors apply supplementary charges for privately insured hospital care, adjusting for estimated utilisation rates for non-insured population, and include measures to improve access to consultants.	Per bed day charges for private and semi-private care in public hospitals	DOHC (2006)	1.98	901.42	719.40	1,787	1,426
	Cost estimate of introducing consultant-provided care	National Task Force on Medical Staffing (2003)					
	Supplementary private health insurance costs	DOHC Health Statistics and VHI Annual Reports					
	Average in-patient utilisation rates for non-insured population	EU SILC (2005)[6]					

[1]All costs are in 2005 prices.
[2]Costs of day case and out-patient services are not upgraded.
[3]Assume current in-patient utilisation rates of non-covered population reflect unmet need - apply insured population utilisation rates to adjust for unmet need.
[4]Private bed charges
[5]Semi-Private Bed Charges

[6] European Survey on Income and Living Conditions (2005), Central Statistics Office – SILC Microdata File © Government of Ireland

b. Extending access to free primary health care (Rolls Royce, Priority to Primary Care)	Cost[1] and utilisation data	Data sources	Non medical card population (millions)	Per capita cost of extending free primary care €	Total additional costs[2] €m
Application of costs of GP and prescription services under the GMS scheme, adjusting for estimated age and GP utilisation profiles of non medical card population.	GP capitation charges (by age group)	Primary Care Reimbursement Service (formerly the GMS (Payments) Board) Annual Report (2005)	2.98	365.8	846
	Per capita prescription charges for medical card holders (by age group)	Primary Care Reimbursement Service (formerly the GMS (Payments) Board) Annual Report (2005)			
	Average GP utilisation rates by medical card/non medical card groups	Living in Ireland Survey (2001)			

[1] All costs are in 2005 prices.
[2] Costs of Drug Payment and Long Term Illness refund schemes (€244 million) deducted from total primary health care costs.

c. Removal of in-patient and out-patient charges (Priority to Primary Care, Mini)	Cost[1] and utilisation data	Data sources	Non-covered population (millions)	Per capita cost of removing in-patient cost-sharing[2] €	Total additional in-patient costs €m	Non medical card population	Per capita cost of removing OPD charges €	Total additional OPD costs €m
Application of public in-patient and out-patient charges to utilisation.	Public charges for hospital care (in-patient, out-patient)	DOHC (2006)	0.96	21.36	20.4	2.98	32.79	97.72
	Average in-patient utilisation rates by coverage category	Living in Ireland Survey (2001)						

[1]All costs are in 2005 prices.
[2]Assume current in-patient utilisation rates of non-covered population reflect unmet need - apply insured population utilisation rates to adjust for unmet need.

d. Removal/reduction of A&E charges (Priority to Primary Care, Mini)	Cost[1] and utilisation data	Data sources	Non medical card population	Per capita cost of removing A&E charges €	Total additional A&E costs in Priority to Primary Care Model €m	Non medical card population	Per capita cost of reducing A&E charges (Mini) €	Total additional A&E costs in Mini €m
Application of A&E charges to utilisation.	Public charges for A&E care	DOHC (2006)	2.98	16.32	48.62	2.98	10.88	32.41

[1]All costs are in 2005 prices.

e. Support for GP attendance (Priority to Hospital Services, Mini)	Cost[1] and utilisation data	Data sources	Non medical card population (millions)	Per capita cost of allowance €	Total additional costs €m
Costs of support per GP visit applied to estimated GP visit rates of non medical card population.	€25 per GP visit		2.98	60.00	178.81
	Average GP utilisation rates by coverage category	Living in Ireland Survey (2001)			

[1]All costs are in 2005 prices.

Annex 2: Costs of Existing Services - Data Sources

Item	Data sources	Notes
Hospital costs[1]	Revised Estimates for Public Services 2006 (Provisional Outturn for 2005)	Adjustments made for Education costs. Funds from National Treatment Purchase Fund deducted in Rolls Royce and Priority to Hospital Services.
Medical card costs	Primary Care Reimbursement Service (PCRS) (formerly GMS (Payments) Board)	
Other primary health care costs	Revised Estimates for Public Services 2006; PCRS	

[1]All costs are in 2005 prices.

Annex 3: Selected Health Policy Commitments

Fianna Fail

Improving Health Services

- Introduce a Personal Health Check entitlement for all, to include screening and allow for prevention and early action
- Create Primary Care Teams in all communities
- Build Local Injury Clinics to take pressure off A&Es and allow faster treatment of less urgent conditions

Source: www.thenextsteps.ie/step6 Accessed 20 April 2007

Progressive Democrats

The agenda for the Progressive Democrats in the next government will be to lead Ireland towards excellence in all aspects of healthcare. We will continue to support the reform agenda which Mary Harney is delivering for patients.
Targets for Government

- A License for all hospitals to guarantee higher standards of hygiene and care
- Faster admission and faster discharge from hospital
- 1,500 new consultants on a new contract
- 1,000 new public hospital beds by faster private investment

Source: www.progressivedemocrats.ie/our_policies/reforming_health/ Accessed 20 April 2007

Fine Gael and Labour

Major proposals include:

- An additional 2,300 hospital beds.
- Scrapping the Harney plan to build private hospitals on public land.
- Extend medical card coverage to 40% of the population over the life-time of the Government, increasing the income thresholds for qualification, and enhancing the weighting for children in assessing medical card eligibility.
- Extend GP-only cards to all children under five, who are not covered by a medical card.
- Introduce free health insurance for all children up to the age of 16 - including an element of free GP care for children from 5 years upwards.
- Change the way that doctors and hospitals are paid so that the money follows the patient.
- 1,500 new consultants, with a corresponding reduction in the number of junior doctors in general specialities, until a better balance is achieved.
- Implement the Fottrell report on medical training to expand the number of doctors in training.

Source: www.finegael.ie/campaign/index.cfm/type/details/nkey/87/pkey/1084 or www.labour.ie/policy/listing/117017032186465.html Accessed 19 April 2007

The Green Party

- The Green Party will introduce free primary health care for children under the age of six in our first term in office
- The Green Party will restore medical card eligibility to pre-1996 levels on a phased basis, i.e. 34% of the population
- Primary care centres staffed by doctors, nurses, midwives, nutritionists, psychologists, physiotherapists and occupational therapists should be set up
- Primary care should be developed within a publicly-funded, not-for-profit model of health care
- GPs should be required to provide an agreed level of out-of-hours cover as part of their GMS contracts

Source: www.greenparty.ie/en/policies/health__1/executive_summary
Accessed 19 April 2007

Sinn Féin

- Invest all health funding in the public system, immediately end tax breaks for private hospitals and the land gift scheme, phase out public subsidisation of and ultimately replace the private system within an agreed timetable.
- Medical cards for all under-18s (as a transitional measure towards a fully-universal public access service).
- Rollout of the promised Primary Care Centres throughout the state on an accelerated timetable.
- A timetabled and fully resourced strategy to deliver the additional 3,000 hospital beds required.
- Halting the over-centralisation of hospital facilities and reversal of cutbacks in services at local hospitals.
- All new hospital consultant posts to be public-only.

Source: http://www.sinnfein.ie/policies/document/202 Accessed19 April 2007

Annex 4: Pabon Lasso Analysis of Hospital Efficiency

This technique uses graphical analysis to assess the efficiency of hospitals. Bed occupancy and turnover rates are plotted for each hospital within a comparable group. The graph is then divided into four quadrants with the dividing lines being drawn through the average values for the hospitals (as seen in Table A4.1).

It needs to be noted that the setting of the cut-off points at the mean values of bed turnover and occupancy may be contentious. Hence Pabon (1986) suggests allowing for a margin of one standard deviation from the mean.

As highlighted in Table A4.1. Zone III is the most desirable and efficient, with hospitals locating there exhibiting high occupancy rates and high turnover. Zone I is the least desirable. While not all of the features noted in each quadrant will apply to all hospitals which fall there, some of the features will and these features can form the basis for further exploration of efficiency.

Table A4.1: Pabon Lasso Technique

Zone II: (High Bed Turnover, Low Bed Occupancy) • Excess bed capacity • Unnecessary hospitalization • Many patients admitted for observation • Predominance of normal deliveries	**Zone III: (High Bed Turnover, High Bed Occupancy)** • Good quantitative performance • Small proportion of unused beds
Zone I: (Low Bed Turnover, Low Bed Occupancy) • Excess bed supply • Less need for hospitalization • Low demand/utilization	**Zone IV: (Low Bed Turnover, High Bed Occupancy)** • Large proportion of severe cases • Predominance of chronic cases • Unnecessarily long stays

The analysis is done by grouping hospitals into three types:

- academic teaching,
- regional
- general

The results are shown in Diagrams A4.1-A4.3.

The Academic Teaching Hospitals are quite clustered and many fall within a standard deviation of the average turnover and occupancy (see Diagram A4.1). The only slight outliers are University Hospital Galway with a higher turnover, the Mater with a very high occupancy rate and St James with a low turnover. For both the Mater and St James the catchment population, because of its lower socio-economic profile, may be expected to have a complex case-mix. Nevertheless, it is possible that there may be patients inappropriately occupying acute beds in both these hospitals, lowering turnover of patients.

Diagram A4.1: Pabon Lasso Analysis for the Academic Teaching Hospitals (2003 data)

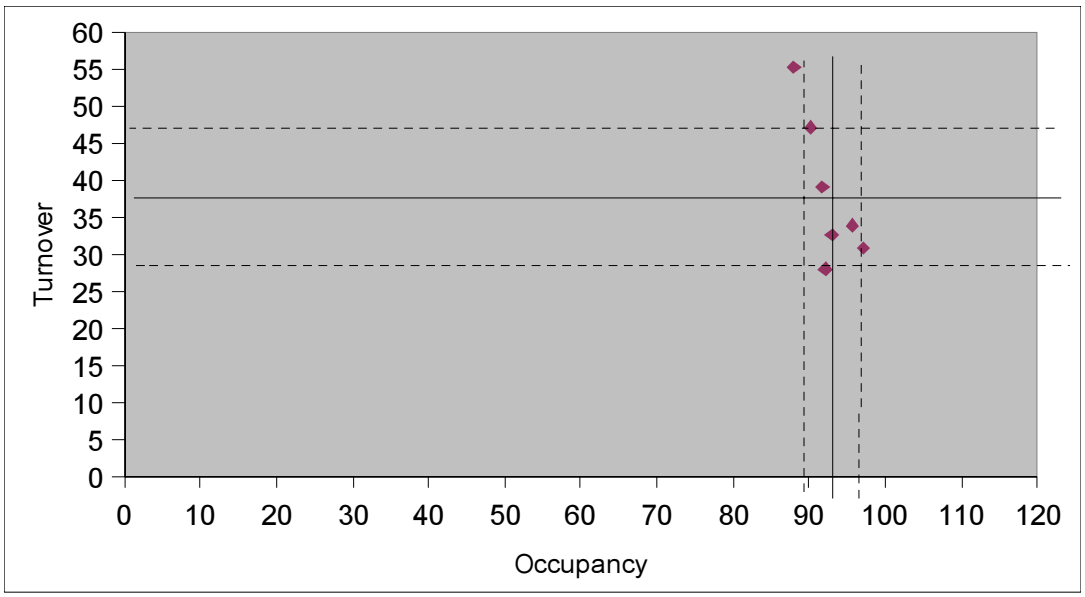
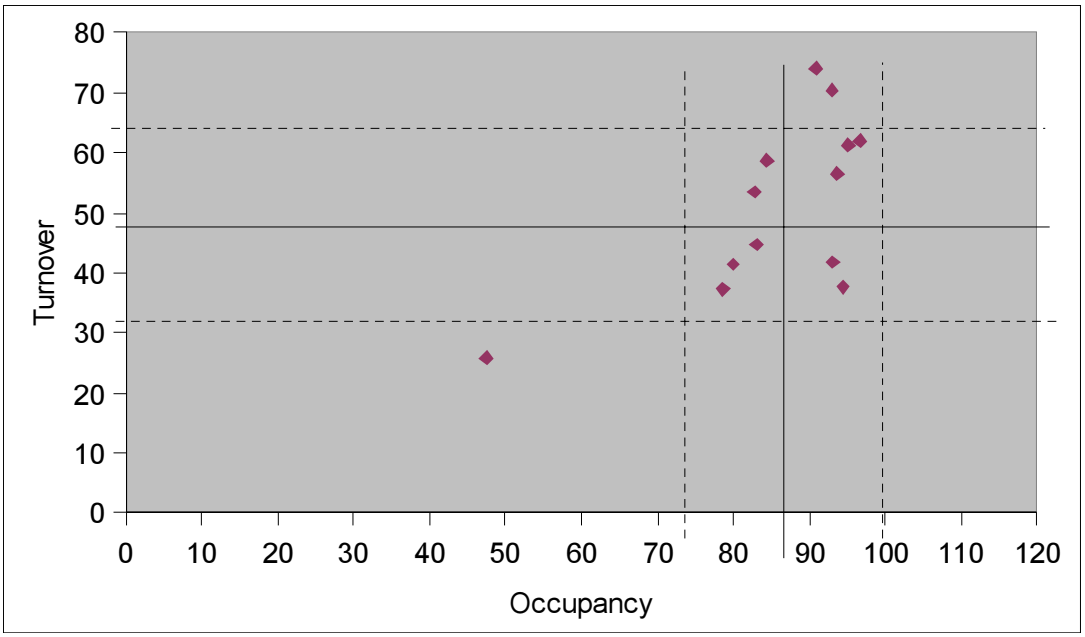
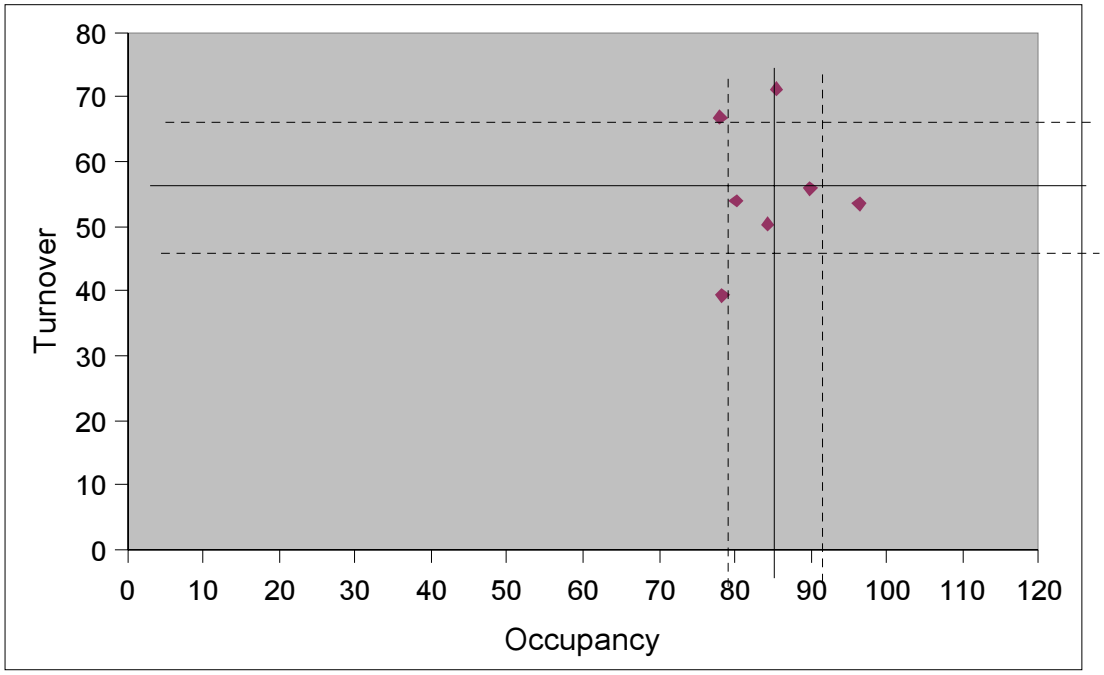


Diagram A4.2: Pabon Lasso Analysis for the Regional Hospitals (2003 data)



The regional hospitals also show a lot of clustering, the only exceptions being Wexford and Mayo which are operating very well with high turnover and high occupancy, and Monaghan which is the only hospital significantly out of line with the performance of the others in this group. At first sight this might imply that Monaghan has excess capacity and poor turnover relative to other hospitals. Nevertheless, removal of Monaghan would either place extra burdens on other, already full, hospitals or leave needy patients without treatment or with delays in accessing care.

Diagram A4.3: Pabon Lasso Analysis for the General Hospitals (2003 data)



There is slightly more dispersion for the General Hospitals with four of the seven lying outside the standard deviations from the average, albeit not by much. The least efficient performer with quite low turnover is Merlin Park Galway. The Tullamore General Hospital is showing high occupancy with average turnover indicating perhaps a longer than necessary length of stay or a more complex mix of cases than other hospitals. The Mullingar General Hospital is performing relatively well with high turnover at full capacity. The General Hospital in Port Laois has relatively low occupancy but with higher turnover.

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