Benchmarking Ireland's Health System

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Editorial

Since 2000, the health system in Ireland has experienced relatively large increases in expenditure compared to many other countries. This has raised questions over the performance and outcomes of the health sector, and particularly its future sustainability. Currently, public money accounts for four out of every five Euros of expenditure on health.

Conducting a comprehensive evaluation of the health system, however, is a difficult task. This is due to the influence of external factors and the challenges involved in defining some outcomes. That said, the publication of comparative international data can provide one way of measuring performance by examining relative trends across key indicators.

Using these key comparative indicators, this *Spotlight* provides an analysis of expenditure and outcomes and benchmarks the performance of the Irish health system. The *Spotlight* identifies some key challenges for the future and from a review of the literature, identifies some proposals for change

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Executive Summary

The following table outlines the key findings of the paper in accordance with the key categories of indicators, inputs, outputs, results and impacts.

For each of the key findings, the table also outlines proposals for changing the finance and delivery of health care in Ireland which have been identified by some key commentators.

	Key findings	Key commentators: proposals for change
Inputs	Relatively large increases in health expenditure but from a low baseline. Concerns now over economic sustainability of health spend.	Adopt a strategic approach which focuses on creating greater efficiencies and VFM with no short-term cuts.
	Proportionally large increases in expenditure on pharmaceuticals.	Introduce more initiatives to reduce spending on pharmaceuticals
Outputs	Relatively large increases in employment in health sector but from a low baseline. Low proportions of doctors and health specialists but high proportions of nurses.	Realign skills in the health sector and organise health care in a way which encourages greater efficiency
	Efficiencies in utilisation of hospital beds but this may also reflect pressures on the hospital sector and deficiencies in primary and community care services.	Enhance integration and planned development between secondary, primary and community care sectors. More integration of public and private providers in the delivery of health care.
Results	Variable levels of performance in treating some illnesses (which may indicate a mixed level of care at primary care level) but strong results in preventing and treating cancer.	Enhance evidence-based treatment and align resources to areas of greatest health need.
	Some inequity exists in terms of accessing health care services. Some anomalies exist in terms of user fees and entitlements to health care.	Introduce a new framework of health entitlements and develop a graduated co-payment system which reflects income and health status.
Impacts	Compared to other OECD countries, the health status of Irish people is generally good health and is improving in some areas.	Develop robust indicators to assess quality of care and evaluate the linkage between health policies, the design of the health system and improvements in health care.

Introduction

It is difficult to establish a comprehensive system to evaluate the entire Irish health service. However, international comparative indicators provided by the OECD can provide a method of analysis by measuring the levels of performance relative to other countries. With these indicators, it is possible to build an evaluative framework and analyse the performance of the health care system in accordance with each key step in the policy implementation process, as outlined in the Figure 1 below, and explained in the following paragraphs.

Key comparative indicators can be used to analyse the performance of the Irish health care system at each of the four main stages of policy development as follows:

- **Input indicators:** generally measure the financial inputs into the operation of a policy or programme. In relation to the health system, this refers to the levels of expenditure, the breakdown of expenditure (public or private) and the areas of expenditure.
- **Output indicators:** capture the immediate product of a policy or programme. Key outputs in the health care system include staffing, and the number and utilisation of hospital beds.
- **Result indicators:** measure the immediate benefit or effects on the beneficiaries brought about by a policy or programme. With regard to the health sector, results include the ability of the system to treat patients, admission rates, and access to health care services.
- **Impact indicators:** refer to the longer-term effects of a policy or programme. Impacts for the health sector relate to improvements in the health status of the population.

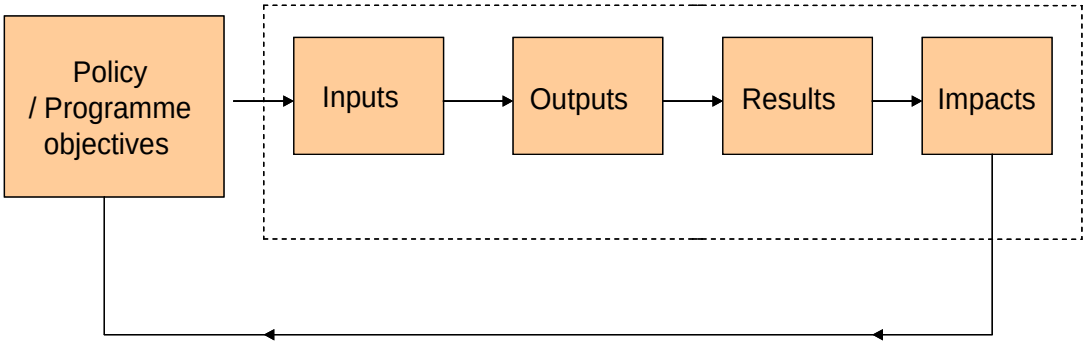
The sections of the *Spotlight* are structured to examine the health care system at each key stage of policy implementation (input, output, result and impact) with the final section outlining conclusions and recommendations for change, identified from the research literature.

Limitations of the analysis

Before analysing the health system, it is useful to highlight the parameters of the *Spotlight* and the limitations of the analysis.

- First, as a limited number of comparative data indicators are available, the framework can only provide a broad assessment of the health care system.

Figure 1: Key steps in the policy process



Source: European Commission (1999)

- Secondly, the analysis does not provide a comprehensive evaluation system as it does not take account of the influence of exogenous factors on health outcomes. Factors such as income can influence indicators such as life expectancy. These exogenous factors can make it difficult to directly attribute any changes in performance to the policy intervention.

- Finally, much of the comparative information dates from 2007 (published in 2009) and the analysis does reflect many recent changes in Ireland such as reductions in the workforce of the health sector. This is unavoidable as there is always a time-lag in the collection of comparative data.

Health expenditure

Data shows that Irish health expenditure, as a proportion of Gross National Income (GNI)[1], increased from 7.3% in 2000 to 9.0% in 2007. However, over the same period, spending also increased across the EU and OECD (Brick and Nolan, 2010). This has meant that **Ireland is ranked among one of the low spenders (8th out of the 9 countries listed[2])** in terms of health expenditure as a proportion of GNI, as outlined Table 1[3]:

Table 1: Total health expenditure as % of GNI, 2000 and 2007

Country	2000	2007	% change 2000-2007
United States	13.2	**17.3**	31.1
Canada	9.1	**10.5**	15.4
Germany	10.4	**10.4**	0.0
New Zealand	8.9	**9.9**	11.2
Netherlands	7.8	**9.8**	25.6
Sweden	8.4	**9.2**	9.5
Australia	9	**9.1**	1.1
Ireland	**7.3**	**9**	**23.3**
United Kingdom	7.2	**8.4**	16.7

Source: Brick and Nolan (2010)

The table also shows that **Ireland experienced relatively large increases in expenditure from 2000-2007**. Over this period, total health expenditure as a percentage of GNI rose by 23.3% with only the United States and the Netherlands experiencing greater increases.

The relatively large rise in health spending in Ireland is also highlighted in comparative indicators collected by the OECD. In regard to the annual average real growth in per capita expenditure[4] (public and private), data shows that from 1997 to 2007, Ireland experienced an annual average growth rate of 6.7%. This placed Ireland 3rd out of 30 countries when ranking countries with the highest to

[1] Nolan, *et al* (2004) states that although health expenditure is usually expressed as a proportion of GDP, the large divergence between Irish GDP and GNP/GNI figures means that, for comparative purposes, it is more appropriate to express health expenditure as a proportion of GNP/GNI.

[2] Ranking those with the highest expenditure of GNI to the lowest as per 2007 figures. The list of nine countries were selected for analysis by Brick and Nolan (2010).

[3] Data in Table 1 is based on the OECD definition of health expenditure which is based on the OECD System of Health Accounts (SHA). Countries are ranked in terms of percentage of expenditure of GNI in 2007 (highest to lowest).

[4] This refers to the average yearly growth in total expenditure per capita (population). Total expenditure on health measures the final consumption of health goods and services (i.e. current health expenditure) plus capital investment in health care infrastructure. This includes spending by both public and private sources on medical services and goods, public health and prevention programmes and administration.

the lowest percentage increases, as outlined in Figure 2.

While it is understood that these increases have occurred from a relatively low baseline, some questions have been raised over the performance of the health sector and the outcomes which were actually achieved. Moreover, given the current economic downturn, **the issue of sustainability is also becoming one of increasing concern**, particularly as total health spending amounted to €19.7 billion in 2009 (Brick *et al*, 2010).

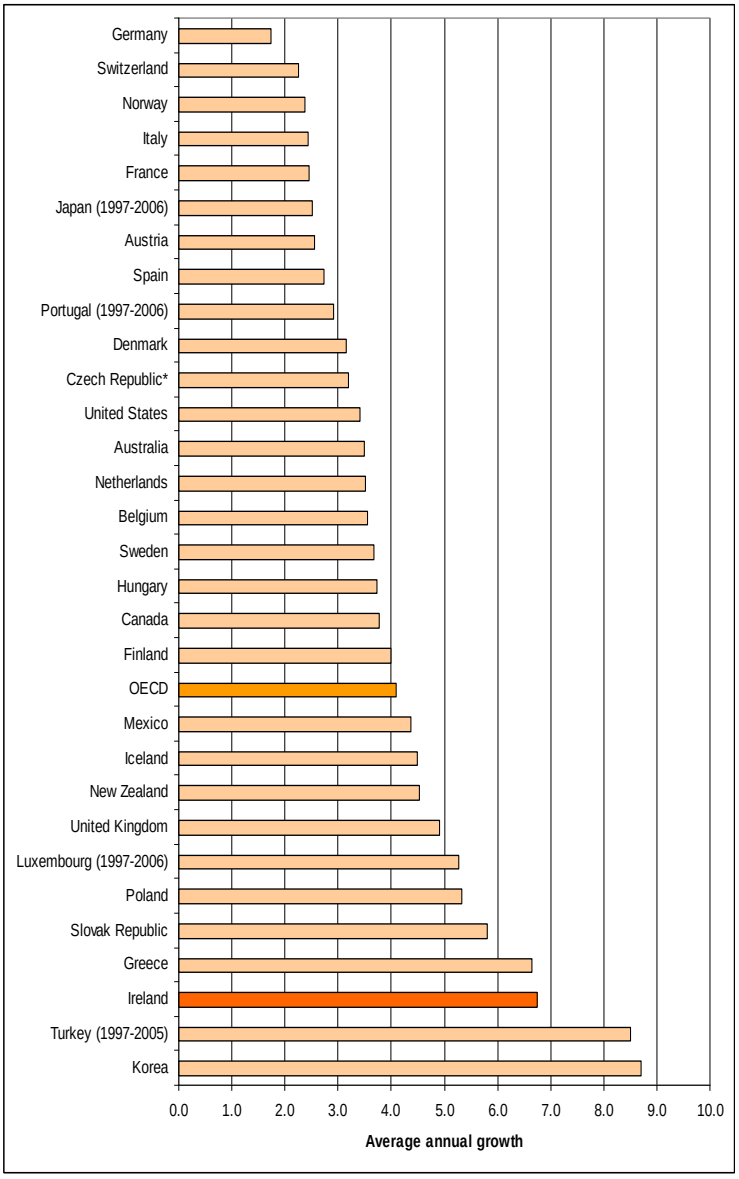
According to the WHO, sustainability is defined as the ability to meet the needs of the present without compromising the ability to meet future needs (Roberts, 1998). In their analysis of health spending in Ireland, Brick and Nolan (2010) make a clear distinction between economic and fiscal sustainability:

- **Economic sustainability** refers to the growth in health expenditure, both public and private, as a proportion of national income (see Table 1, overleaf).

- **Fiscal sustainability** refers to growth of public health expenditure as a proportion of total public expenditure. It is related to the ability of public revenue to meet public expenditure on health care. Concerns with fiscal sustainability refer to public expenditure on health 'crowding out' other areas of public expenditure that have a higher marginal benefit and / or is contributing to rising levels of public debt (see Tables 2 and 3 overleaf).

In terms of fiscal sustainability, data shows the proportion of total public expenditure allocated to health increased from 14.5% in 2000 to 17.1% in 2007, as outlined in Table 2.

Figure 2: Annual average growth rate in real health expenditure per capita 1997-2007



Source: OECD (2009)

Table 2: Public health expenditure as a percentage of total public expenditure, 2000 and 2007[5]

Country	2000	2007	% change 2000-2007
United States	16.9	**19.4**	14.8
New Zealand	15.4	**18.5**	20.1
Germany	18.2	**18.2**	0.0
Canada	15.1	**18.1**	19.9
Australia	16.6	**17.2**	3.6
Ireland	**14.5**	**17.1**	**17.9**
United Kingdom	14.8	**15.6**	5.4
Sweden	12.4	**14.1**	13.7

Source: Brick and Nolan (2010)

Although being placed 6th out of the eight countries listed[6] (ranking those with the highest expenditure to the lowest), the table shows that Ireland experienced the third largest percentage increase from 2000-2007. Over this period, public health expenditure (as a percentage of total expenditure) rose by 17.9% with only New Zealand and Canada experiencing greater increases.

Brick and Nolan (2010) have also updated the analysis to 2009. While this data is not comparable with that presented in Table 2 (as it is sourced from the Department of Finance which uses a different definition of health expenditure than the OECD[7]), it provides a useful insight into the changes which have occurred in relation to the economic downturn. On the basis of the figures from the Department of Finance, Irish public health expenditure (as a percentage of total public expenditure) ranged from 24.7% to 25.4%, and actually declined by approximately one percentage point from 2007-2009, as outlined in Table 3.

Table 3: Public health expenditure as a percentage of total public expenditure in Ireland 2000-2009.[8]

Year	Percentage
2000	24.7
2001	25.7
2002	23.3
2003	24.2
2004	25.5
2005	26.2
2006	26.1
2007	26.3
2008	25.9
2009	25.4

Source: Brick and Nolan (2010)

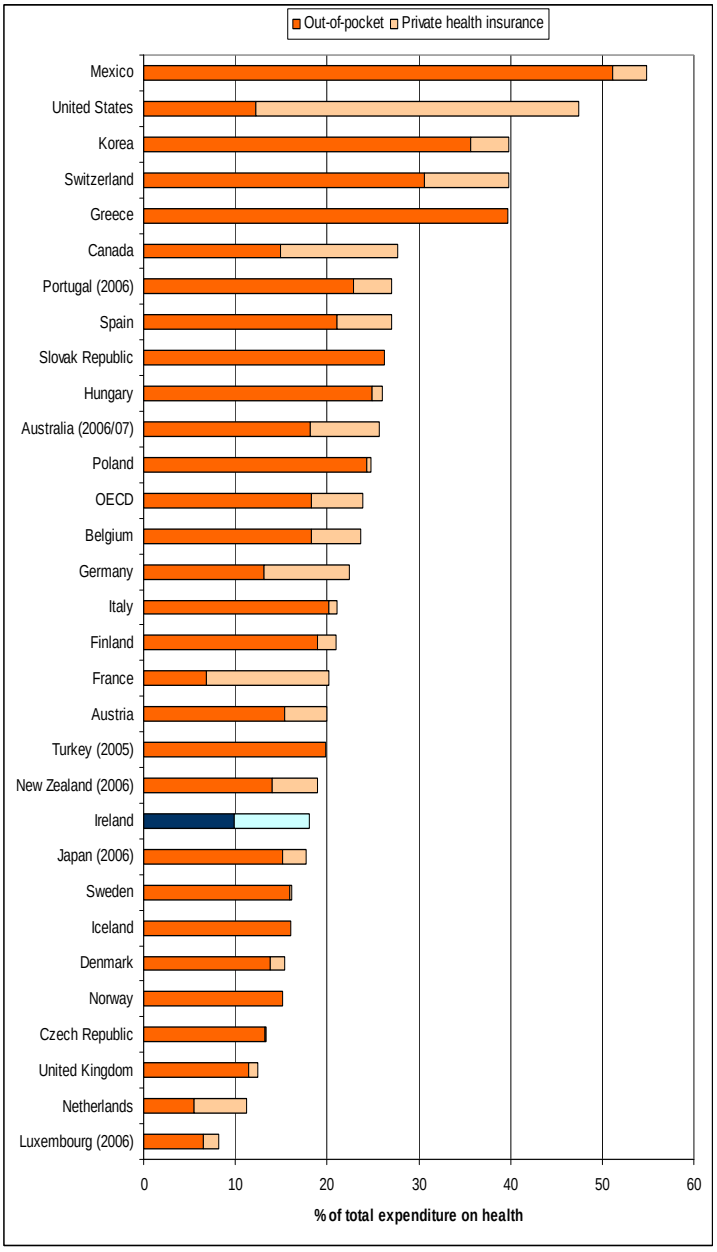
Table 3 shows that from 2000-09, health expenditure has closely tracked any changes in total public expenditure. This suggests that compared to economic sustainability, **fiscal sustainability of health spending has actually remained relatively stable**.

How is the health sector financed?

When examining the inputs into the health system, it is also relevant to compare how health care in Ireland is financed. Data from the OECD shows that by far **the largest proportion (80.7%) of funding for health care in Ireland comes from the public finances**. When ranking countries from those which have the highest proportions of public finance for health care to the lowest, Ireland is placed 9th out of 30 countries, as outlined in Figure 3 overleaf.

[5] Data is based on the OECD definition of health expenditure.
[6] The list of countries were selected for analysis by Brick and Nolan (2010).
[7] Compared to that used by the Department of Finance, the OECD definition can be considered to be a broader one as it also incorporates some elements of social expenditure.
[8] Definition of health expenditure as provided by the Department of Finance.

Figure 3: Out-of-pocket and private health insurance expenditure, 2007



Source: OECD (2009)

The figure shows that private finances (private health insurance and out-of-pocket expenditure) contribute 18% of health care funding in Ireland. This places Ireland 21st out of 30 countries when ranking those which have the highest proportions of private finance to the lowest.

The data also identifies that of the total percentage of finance for health care, out-of-pocket expenses make up 9.9% and private health insurance 8.1%.

The remaining 1.3% comes from other private funds such as non-governmental organisations and companies' funding of occupational health care.

Although the share of out-of-pocket expenses towards total health spending is relatively small, concerns have been raised over the ability of some patients to pay. At present, approximately two thirds of the population (65% in 2009) do not hold a full medical card or a GP Visit card ('non medical card holders') and are required to pay the out-of-pocket fees for private GP care which can range from €45 to €60.

These fees, however, do not take account of an individual's ability to pay and can impact on the level of access to health care for some patients.

The Report of the Expert Group on health care (2010), for example, argues that high pay-as-you-go GP charges are known to deter use of care, increase the risk of later detection of medical problems and lead to higher health care costs in the long term.

Further to this, Brick *et al* (2010) argue that an inconsistent system of user fees exists across community, primary and acute care in Ireland. They suggest that medical cardholders are not always directed to the most appropriate location which interrupts the delivery of integrated healthy care.

Public health expenditure

It is insightful to examine the trends in public health expenditure more closely as it accounts for the vast majority of total health expenditure in Ireland (approximately 4 out of every 5 euro). Overall, data shows that **revenue / non-capital expenditure**, which consumes the largest proportion of funding within public expenditure, **increased from €11,275m in 2005 to €15,122.5m in 2009, a rise of 23.8%,** as outlined in Table 4.

Within the non-capital budget, the table also shows that while forming the largest share of HSE expenditure, **spending on pay remained relatively stable over the 2005-2009 period** at approximately 50%. By contrast, the share of expenditure on non-pay items (and in particular, expenditure on Primary, Community and Continuing Care schemes such as the medical card scheme) increased sharply to 32.8%.

Brick and Nolan (2010) illustrate that it is expenditure on pharmaceuticals and payments to community pharmacists which experienced the highest rates of growth. Their study shows, for example, that while total **expenditure on the Primary Care Reimbursement Service increased by 159.5% from 2000-2009**, expenditure on other schemes increased as follows:

- The General Medical Scheme: 194.6%.
- The Long-Term Illness Scheme: 175.8%
- The High Tech Drugs Scheme: 367.2%.

Moreover, while spending on pharmaceuticals has risen faster than other main components of health care costs across the OECD, data shows that **Ireland has high levels of expenditure on pharmaceuticals, relative to other OECD countries** (Figure 4, overleaf).

Table 4: Pay and non-pay components of HSE (non-capital) expenditure, 2005-2009 (€m)

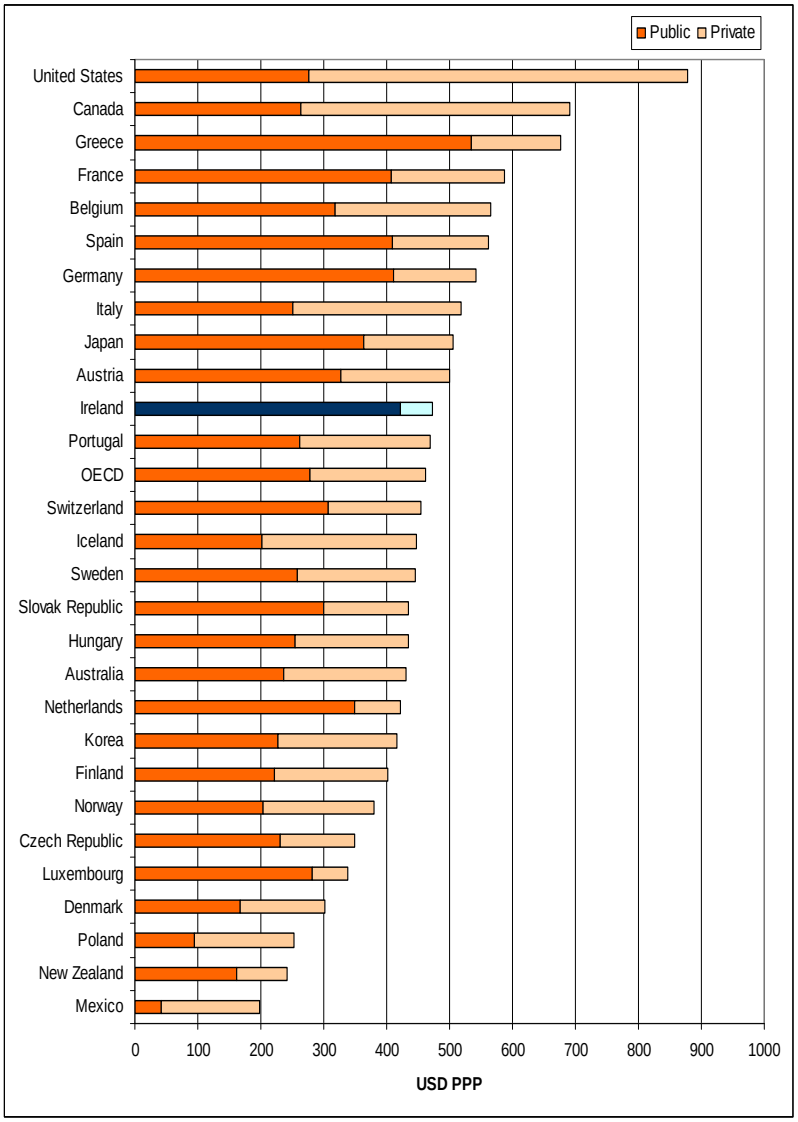
	2005	2006	2007	2008	2009	% change 05-09
Pay / salary	5,751.7	6,328.2	6,881.4	7,245.7	7,576.4	21.6
	51%	51.4%	49.7%	48.6%	50.1%	
Non-pay (schemes)	1,997.1	2.232	2,470.9	2,797.9	2,874.8	32.8
	17.7%	18.1%	17.9%	18.8%	19.0%	
Non-pay (excl. schemes)	3.525.1	3,751.9	4,365.1	4,635.5	4,592.0	20.2
	31.3%	30.5%	31.5%	31.1%	30.4%	
Health Repayment Scheme[9]	n/a	n/a	119.8	236.5	79.4	-
			0.0%	1.6%	0.5%	
Total (gross expenditure)	11,274.0	12,312.2	13,837.1	14,915.5	15,122.5	23.8
	100%	100%	100%	100%	100%	100%

Source: Brick and Nolan (2010)

[9] The Health Repayment Scheme came into effect in 2007 and provides for the refund of those who were charged for services in nursing homes even though there was no legal basis for the charges.

Further to this, Bennett *et al* (2009) estimate that if current trends in prescribing continue, **the total number of prescriptions items will increase to 105 million by 2021.** This is almost double the number of items in 2006 (55 million items). They also anticipate that **costs will increase from €1.06 billion in 2006 to €2.4 billion in 2021.**

Figure 4: Expenditure on pharmaceuticals per capita, 2007



Source: OECD (2009)

In setting pharmaceutical prices, a key issue for any government is to find the appropriate balance between obtaining good value for money for patients while ensuring that the incentives remain strong to encourage further innovation.

During 2009-2010, the Government introduced a number of measures aimed at reducing the costs of pharmaceutical drugs. The government, for example, agreed on price cuts of 40% on nearly 300 widely prescribed medicines, as well an increase in the annual rebate paid by manufactures to the HSE on sales under public schemes.

In addition, in 2010, the Government introduced a prescription charge €0.50 (capped at €10 per month and per family), proposed the implementation of references prices (maximum reimbursement amounts for clusters of products) and announced a right of pharmacists to substitute cheaper (non-branded) but equivalent products.[10]

Brick and Nolan (2010), however, argue that efforts to increase out-of-pocket expenses are not cost-effective. In particular, although acknowledging that a 50c charge per prescription can contribute to fiscal sustainability, Brick and Nolan suggest this measure will not ensure economic sustainability as it will deter the intake

[10] Oireachtas Library & Research Service, 2010

of medicines among the poor and chronically ill.

Outputs: Human resources and hospital beds

Human resources

One key output of the health service for which comparative data exists is the number of staff in the sector. As a share of total employment, levels of employment in the health and social sectors in Ireland are broadly in line with the OECD average.

In 2008, employment in the health and social sectors accounted for 10.7% of total employment. When ranking countries from those which have higher shares of employment in the health and social sectors, this figure places Ireland 13th out of 30 OECD countries but close to the OECD average of 9.9%. **However, when analysing employment growth in the sector from 1995-2008, Ireland experienced one of the largest increases**, as outlined in the Figure 5.

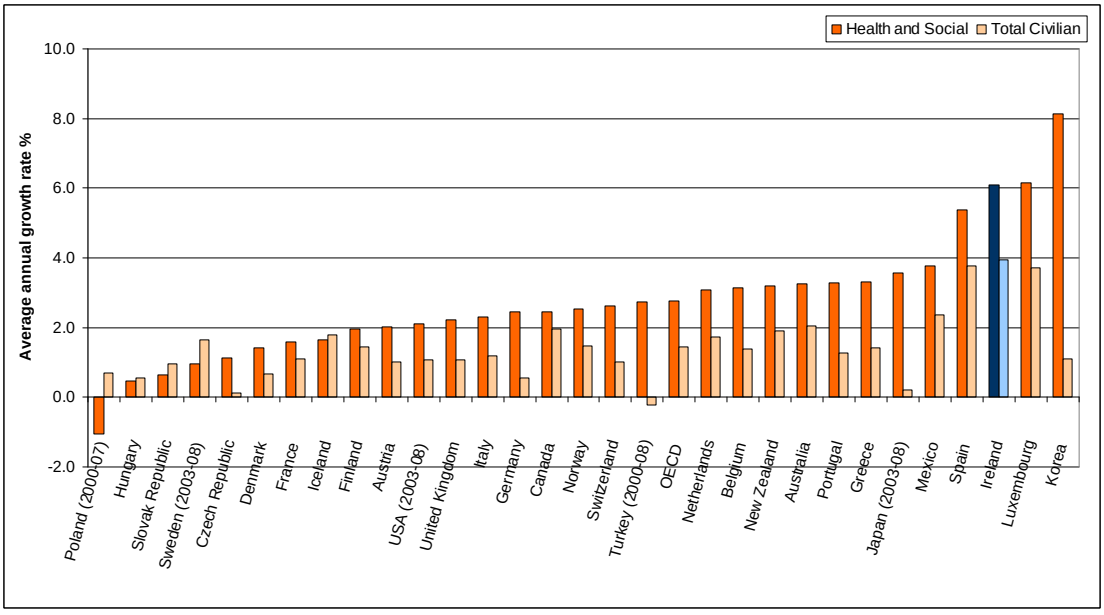
The figure shows that, as a percentage of total employment, employment in the health and social sectors increased by 6.1%. This places Ireland third out of 30 countries (ranking from the highest percentage to the lowest) and above the OECD average of 2.8%. This demonstrates that the growth in Ireland occurred from a relatively low baseline. Over the period from 1995-2008, the growth in employment in the health and social sector of 6.1% far exceeded the growth in total employment from 1995-2008 of 3.9%.

Composition of the health workforce

When analysing the composition of the health workforce, data highlights that Ireland has a lower proportion of doctors and health specialists, compared to the OECD average, but a much higher proportion of practicing nurses, as outlined in Table 5, overleaf.

Table 5 shows that differences are particularly marked in regard to General Practitioners (per 1000,000 population), Gynaecologists and Obstetricians (per 100 000 females)

Figure 5: Employment growth rate in the health and social sectors compared with all sectors in the economy, 1995 to 2008 (or nearest year available)



Source: OECD (2009)

Table 5: Composition of health professions in Ireland compared to the OECD average

Profession	Ireland	OECD average
Practising physicians per 1,000 population	3.0	3.1
General practitioners per 1,000 population	0.5	0.9
Specialists per 1,000 population	1.1	1.8
Gynaecologists and Obstetricians per 100 000 females	6	24
Psychiatrists per 100 000 population	9	15
Practising nurses per 1000 population	15.5	9.6

Source: OECD (2009)

and Psychiatrists (per 100,000 population), with Ireland having fewer of those than the OECD average. By contrast, the position is reversed for practising nurses who have a much higher number per 1,000 population than the OECD average.

In highlighting the relatively high proportion of nurses, the OECD has conducted analysis of the ratio of nurses to physicians. The data shows that **in 2008, Ireland had a ratio of nurses to physicians of 6.4 to one**. This was the highest ratio of the 32 countries (for which data was available) and well above the OECD average of 2.9 to one.[11]

[11] Although information from the OECD is one of the main ways of gaining insights into how Ireland's health system compares with that in other countries, some caution needs to be exercised in interpreting the data. The OECD requests data on the total number of nurses practising in public and private hospitals, clinics and other health facilities, including the self-employed. This data, supplied to the OECD by An Bord Altranais (The Nursing Board), however, covers nurses who keep up their full registration even though they may not be practising in Ireland. This suggests the OECD figure for nurses in Ireland may be considered high.

Future GP services

Thomas and Layte (2009) also comment on the composition of the health workforce in Ireland and project a future undersupply of GPs in Ireland. As older age groups are heavier users of GP services, Thomas and Layte anticipate that due to demographic changes, the number of consultations will increase from 12.2 million by 2010, 13.4 million by 2015 and 14.8 million by 2021. This represents a 20% increase by 2015 and a 33% increase by 2021. They suggest that given current recruitment and training and projected trends in population growth and retirement, **there will be a shortfall of approximately 300 GPs by 2021**. This under-supply could have knock-on effects for the current policy of transferring patient care from acute hospitals to primary care services and lead to longer waiting lists, prices increases and increased burdens on Emergency Departments.

Hospital beds

Number of acute beds

The number of hospital beds for acute care can provide a measure of the resources available for delivering services to inpatients in hospitals. Data shows that in 2007, **Ireland had a relatively low number of acute beds per 1,000 of the population at 2.7**. This figure placed Ireland below the OECD average of 3.8 and 22nd out of 28 countries when ranking those from those with the highest number of beds to the lowest.

Most OECD countries, however, have focused efforts on reducing the number of acute beds by supporting a

move to day surgery and reducing the need for hospitalisation which is more costly. From 1995-2007, the OECD average number of acute beds per 1,000 of the population declined by 19.1% while the number in Ireland fell from 3.1 to 2.7, a reduction of 12.9%.

When looking forward, the number of acute beds is expected to fall even further from the level of 11,660 public patient beds in 2007. A study, conducted by the PA Consulting group, has estimated that based on current utilisation patterns, 19,822 public patients hospital beds will be required by 2020. This is 8,162 more public patient hospital beds than are currently in place and so requires an annual increase of 4% per year until 2020.

However, the report argues that if the HSEs Integrated Health System model is fully implemented, just 8,834 public patient beds will be required by 2020 (O'Reilly *et al* 2010). This model is centred on providing community delivered care which is considered to represent better value for money and quality of care for patients.

Occupancy of acute beds

Although having a low number of acute beds, Ireland has relatively high occupancy rates. **In 2007, the occupancy rate of acute care hospital beds was 87%, placing Ireland third out of 23 countries** (when ranking those from the highest rates of occupancy to the lowest).[12] Indeed, when analysing the OECD data, Ireland is among a group of countries (including Canada, Norway, Ireland, Switzerland, and the United Kingdom) which have fewer acute beds but higher rates of occupancy. Although being a crude measure, these indicators suggest a high level of efficiency in the utilisation of acute beds.

Average length of hospital stay (ALOS)

The average length of stay in hospitals (ALOS) is often treated as another indicator of efficiency. All other things being equal, a shorter stay will reduce the cost per discharge and shift care from inpatient to less expensive post-acute settings.[13] From 1995 to 2007, the average length of stay fell in all OECD countries (for which data was recorded) from 8.7 to 6.3 days (a reduction of 15.9%) and declined from 6.6 to 5.9 in Ireland during this period (a reduction of 16.9%).

Harkin (2007) argues that while the relatively high utilisation of hospital beds and short length of stays in Ireland **highlights efficiencies, they also reflect pressure on the acute hospital sector**. He comments that this has occurred due to deficiencies in step-down care facilities, primary and community care services, and the increasing centralisation of clinical services.

The Report of the Expert Group (2010)[14] also found that despite initiatives to develop an integrated model of health care and enhance the primary care sector, **over-reliance on**

[12] The occupancy rate for acute care beds is calculated as the number of hospital bed-days related to acute care divided by the number of available acute care beds (which is multiplied by the number of days, 365).

[13] It is recognised, however, that shorter stays tend to be more service intensive and more costly per day. Too short a length of stay could also cause adverse effect on health outcomes, or reduce the comfort and recovery of the patient. If this leads to a rising readmission rate, costs per episode of illness may fall little, or even rise (OECD, 2009).

[14] The Expert Group on Resource Allocation and Financing in the Health Sector was established by the Minister for Health to examine how the existing system of resource allocation could be improved to support better the aims of the health reform programme and deliver better, more equitable health care provision for all our citizens. The Group includes individuals with a mix of skills among group members, covering economics, health system management, health-care delivery, business practice, and community care.

hospitals in Ireland has continued. The Group argues that a number of incentives exist within the system which are supporting the usage of hospital services and leading to inefficient resource allocation. Some of the incentives are identified below:

- Many individuals pay less for their care if they attend hospital out-patient departments rather than GPs or other care providers in the community.
- The professionals required to manage and treat chronic disease tend to be concentrated in hospitals rather than the community.
- The absence of resources in the community means that the length of stay in the hospital is often longer than it should be.

Variation across hospitals (ALOS)

O'Reilly *et al* (2010) have conducted analysis specifically on the length of stay in hospitals in Ireland and identified that much variation exists across hospitals and hospital groups. They found that the length of stay was higher than expected in voluntary and special hospitals[15] and higher than expected for regional and community hospitals.[16]

Amidst efforts to develop an integrated model of health care, shorten the length of stay and reduce overreliance on hospitals, O'Reilly *et al* argue that any national policy aimed at increasing day case rates will need to take account of this variation and be targeted at individual hospitals and specific procedures.

[15] Voluntary hospitals are those run by voluntary organisations such as the Church, while special hospitals include teaching hospitals (such as University College Hospital Galway) which are operated in conjunction with a university.
[16] This analysis made controls for discharge characterises.

Results: Medical care and access to services

Medical care

According to the OECD (2009 and 2010b), data on avoidable hospital admissions for asthma, Chronic Obstructive Pulmonary Disease (COPD), diabetes and Chronic Health Failure (CHF) provide indications of a well functioning primary care system. It is argued that effective primary care settings should be able to prevent exacerbations of any of these illnesses and, if they occur, treat them accordingly without the need for hospitalisation. Table 6 outlines how Ireland compares to the OECD average.

The table shows that the **admission rates for Ireland, compared to the OECD average, vary depending on type of illness**. While admission rates for diabetes (lower extremity amputation rates), CHF and hypertension are much lower than the OECD average, this is not the case for diabetes (acute complications) and particularly, COPD. This data suggests a mixed level of care at the primary care level.

Comparative information provided by the OECD on cancer screening programmes provides further indications on the capacity of a health service to prevent and treat some illnesses. On these measurements, however, data shows that Ireland performs relatively well compared to other countries of the OECD. For instance, in regard to the percentage of women who have received screening tests for cervical and breast cancer, Ireland is above or close to OECD average.

Table 6: Rate of hospital admission rates for a selection of illnesses, Ireland and the OECD average, 2007

Illness	Ireland	OECD average
Asthma admission rates, population aged 15 and over, per 100,000 population	52	51
COPD admission rates, population aged 15 and over, per 100,000 population	384	201
Diabetes lower extremity amputation rates, population aged 15 and over, per 100,000 population	10	15
Diabetes acute complications admission rates, population aged 15 and over, per 100,000 population	44	21
CHF admission rates, population aged 15 and over, per 100,000 population	192	234
Hypertension admission rates, population aged 15 and over, per 100,000 population	42	84

Source: OECD (2009)

Access to health care services

In terms of measuring the level of access and equity in the health care system, information on the degree of health needs which remain unmet is provided by the EU Survey on Income and Living Conditions (SILC), 2007.

This survey identified the percentage of the population which reported having an unmet need for a medical examination and also recorded views on why health care needs were not addressed. The survey found that **a larger proportion of the population in Ireland, relative to other countries, reported having an unmet need (6.3%)** and the main reason for this was due to cost (4.1%). This placed Ireland 5th out of 20 countries when ranking those which the highest percentage of the population reporting unmet needs to the lowest, as outlined in Figure 6, overleaf.

This data would appear to support the research conducted by the Expert Group on health care (2010). This Group highlighted that for some services, individuals with private health insurance in Ireland gain faster access to hospital services than those with equivalent health needs who do not have insurance. The report also found anomalies in regard to the entitlements to health care. The long-term illness scheme, for example, was found to provide coverage for some important diseases but not for some others which are as serious.

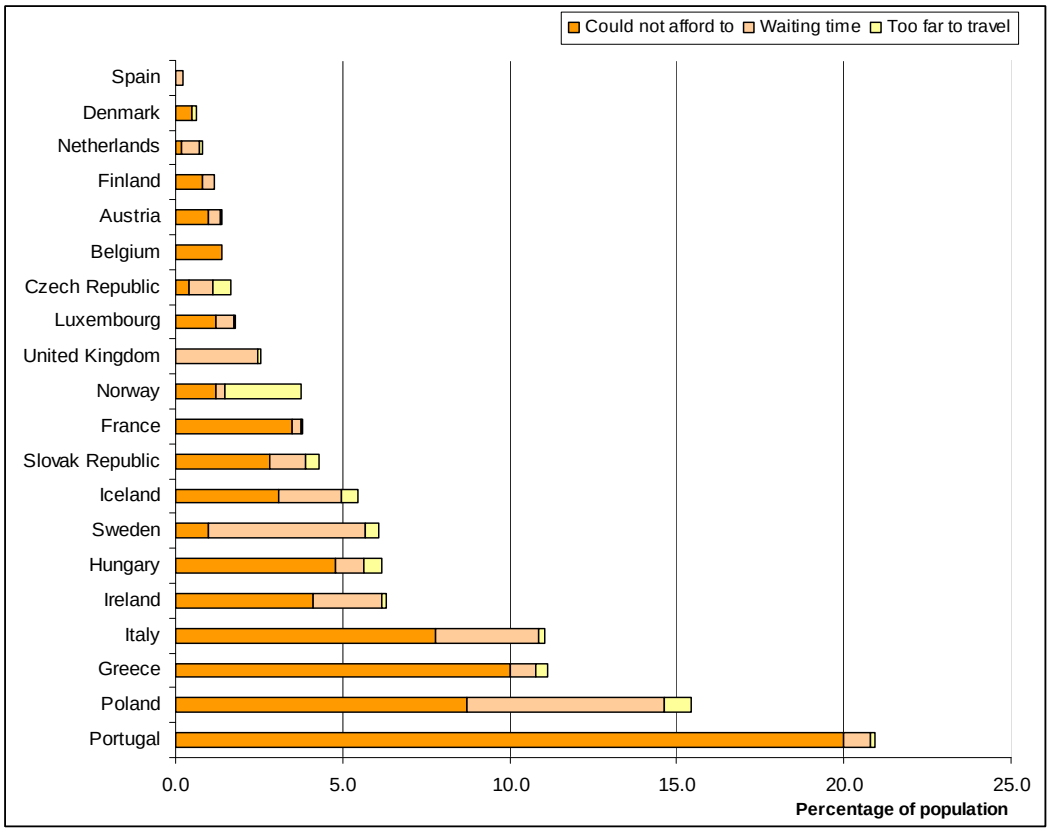
A recent report, the Annual Health Index Report for 2010, published by Pfizer, suggests the current economic downturn may increase health inequalities in Ireland. Evidence from this report found that since 2008, there has been a decline in the number of people reporting that they accessed the following services:

- Visits to the GP fell from 75% to 71%
- Attendances at voluntary medical screenings fell from 48% to 44%
- Visits to a hospital for a medical procedure or operation fell from 19% to 16%.

In addition, the **survey found that the decline in utilisation of these medical services was most pronounced among lower income groups** who do not have a medical card or private health insurance.[17]

[17] http://www.pfizer.ie/pfizer_health_index.cfm

Figure 6: Percentage of population reporting unmet need for a medical examination, selected reasons by income quintile, European countries, 2007



Source: EU-SILC (cited by OECD, 2009)

Impacts: Wider health outcomes

The ultimate or final goal of any health care system is to successfully treat patients and improve the health status of the population. While it is acknowledged that many exogenous factors can influence individual health, a number of indicators exist to provide comparative assessments of broader health impacts in Ireland.

Life expectancy levels

Data shows that life expectancy at the age of 65 in Ireland is broadly similar to the OECD average. For females in Ireland, life expectancy is 20.1 years compared to the OECD average of 20.2, while for males it is 17.1 years which is just above the OECD average of 16.9. Since 1970, however, life expectancy at the age of 65 has been increasing at a greater rate than the OECD average as outlined in Table 7.

Table 7: Life expectancy at age 65, 1970 and 2007, males and females

Females			
	1970	**2007**	**Percentage change 1970-2007**
OECD	15.6	20.2	30.0%
Ireland	15.0	20.1	34.1%
Males			
	1970	**2007**	**Percentage change 1970-2007**
OECD	12.7	16.9	33.4%
Ireland	12.4	17.1	37.6%

Source: OECD (2009)

Mortality rates

In terms of the mortality rates from strokes and cancers, Ireland is also well positioned compared to other countries of the OECD. Ireland, for instance, **has one of the lowest mortality rates from strokes**. At 40

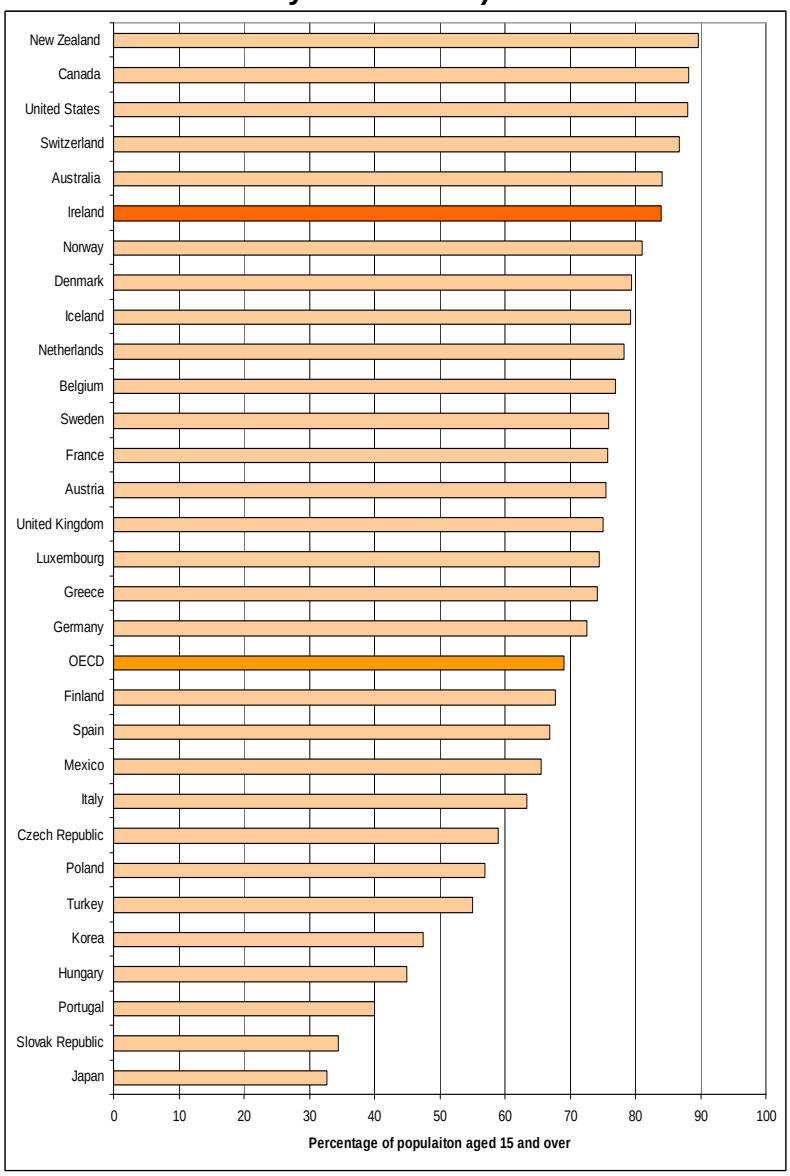
per 100,000 population, Ireland is well above the OECD average and is placed 4th out of 28th countries when ranking those which have the lowest mortality rates to the highest.

In terms of cancer (all cancers), Ireland has the same rate of mortality (212 per 100,000 population) as the OECD average. This presents a comparative improvement on the 2000 data, relative to other countries. In 2000, Ireland recorded a mortality rate of 195 per 100,000 population which was above the OECD average of 179 per 100,000 (OECD, 2003).

Ireland, however, has **relatively high mortality rates from heart diseases, at 141 per 100,000 of the population**, ranking above the OECD average (126 per 100,000 population) and 21st out of 28 countries (when ranking from those which have the lowest mortality rates to the highest).

According to survey evidence, reported on by the OECD (2009), the **health status of the population in Ireland can be considered relatively good.** Data shows that 84% of adults (aged 15 and over) in Ireland report to have a good health status. This is well above the OECD average of 69.1% and places Ireland 6th out of 30 countries when ranking those which perceive to have good health status to the lowest, as outlined in Figure 7.

Figure 7: Percentage of adults reporting to be in good health, females and males combined, 2007 (or latest year available)



Source: OECD (2009)

Conclusions

From evaluating and benchmarking the performance of the Irish health system with other countries, a number of broad conclusions can be drawn from the data as follows:

Inputs

- Although not being ranked as one of the highest spenders on health

care, Ireland has experienced large expenditure increases in heath expenditure over the last number of years.

- While these increases have occurred from a relatively low baseline, this has lead to concerns over the performance of the health system, the outcomes which were actually achieved and the economic sustainability of the sector.

- Total health spending amounted to €19.7 billion in 2009 and by far the largest proportion (80.7% in 2007) of funding comes from the public finances. Within non-capital expenditure (which consumes the highest proportion of funding), pay has remained relatively stable from 2005-2009 but it is non-pay items and more particularly, spending on pharmaceuticals and payments to community pharmacists, which have experienced the largest percentage increases. Spending on pharmaceuticals in Ireland is also high relative to other OECD countries.

Outputs

- While the levels of employment in the health and social care are broadly in line with the OECD average, from 1995-2008, Ireland experienced one of the largest increases in employment growth in the sector. In a similar trend to expenditure, this suggests the workforce in the health sector has increased from a lower baseline, relative to many other countries of the OECD.

- In terms of the composition of the workforce, data shows that Ireland has a lower proportion of doctors and health specialists, compared to the OECD average, but a much higher proportion of practicing nurses. Some projections indicate that by 2021, Ireland will have an undersupply of GPs. Relative to other OECD countries, Ireland has a low number of hospital beds, high levels of occupancy and short lengths of stay. While this data indicates efficiency in the utilisation of acute beds, some research suggests it also highlights pressure on the acute hospital sector and reflects deficiencies in primary and community care services.

Results

- In regard to data on avoidable hospital admissions such as diabetes and hypertension, Ireland has achieved variable levels of performance compared to other countries. This indicates a mixed level of care at the primary care level. Ireland, however, performs relatively well in preventing and treating cancer.

- Survey data indicates that some inequity exists in terms of accessing health care services in Ireland. Compared to many other countries, Ireland has a relatively high percentage of the population who report having an unmet need and that the main reason for this is the cost of health care. Other research supports this finding by highlighting anomalies in regard to entitlements of health care, inequity in access to care between patients who have private health insurance and those who do not, and inconsistent structures in relation to user fees.

Impacts

- In relation to health status, in general, Ireland performs well when compared to other countries. Compared to the OECD average, Ireland has relatively low morality rates from strokes, and similar figures in regard to the mortality rate from cancer and life expectancy at 65.

- Indeed, from 1990-2007, life expectancy at the age of 65 has been increasing at a greater rate than the OECD average. While data highlights that Ireland has relatively high mortality rates from heart disease, survey evidence shows that a high percentage of the population age 15+ in Ireland consider they are in good health.

Key commentators: proposals for change

From reviewing the literature, some proposals for enhancing the delivery of health care, improving health outcomes and ensuring sustainability can be identified, as follows:

Delivering value for money not short term cuts

The OECD (2010a) argues that to ensure the sustainability of health-care finances, there is a need to adopt a strategic approach which, focuses on creating greater efficiencies. They maintain that funding cuts in the short-term can lead to negative impacts such as:

- reduced access to care.
- less equitable provision of services.
- less responsive care.
- poor quality services.
- delayed access to new technologies.

This view is supported by Brick and Nolan (2010) who argue that measures which seek to achieve better value-for-money are more appropriate for ensuring sustainability than short-term cuts or those that seek to re-distribute to the costs of health to other sectors (i.e. user fees and private health insurance).

Reducing pharmaceutical expenditure

While recognising that initiatives to reduce the costs of pharmaceuticals have been announced, Brick and Nolan (2010) argue that a number of other opportunities remain. These include:

- re-assessing the choice of comparator countries for benchmarking and setting prices.
- using aggressive / regressive wholesale and retail mark ups; creating incentives for generic prescribing.
- introducing tendering for sole supply contracts.
- implementing prescribing protocols.

Overall, Brick and Nolan (2010) argue that initiatives which target providers, as opposed to patients (e.g. €0.50 charge), are more effective in reducing and changing the volume and mix of products that are prescribed and ultimately, limiting public expenditure.

Realigning skills

The OECD (2010a) argues that as Ireland appears to have an oversupply of nurses, this creates scope for aligning skills and organising health care in a way which encourages greater efficiency. The OECD state that this approach is supported by evidence which shows that the productivity of health professionals appear to be higher in countries where supply has been constrained.

Promoting integration

To enhance efficiency and value for money in the health system, the Report of the Expert Group outlines the need for greater integrated and planned development between the primary and community care sectors.

The study argues that this would maximise resources and ensure that users can get the best combination of health care to support them on clearly defined pathways (within and across the hospital, primary and community care sectors).

Going further, the Report also suggests that the Department of Health should adopt an integrated approach to planning the health sector which would cover both public and private providers, and integrate capital and current funding decisions. This approach, it is argued, could shift resources and align them closely towards addressing health needs. While understanding that efforts to promote co-ordination can prove expensive, the OECD (2010a) also argues that integration can improve the quality of care and achieve greater value for money.

Implementing evidence-based treatment

In many countries, the OECD (2010a) argue that health care services are provided without any evidence about their effectiveness and that where strong evidence exists on effectiveness, patients do not always receive appropriate treatments. Coupled with ensuring that health care resources are directed towards the areas of greatest need, the OECD maintains that efficiencies can be enhanced by supporting evidence-based medicine. Initiatives which could be progressed in this regard could include, among other things:

- Reviewing medicines to ensure those of little proven clinical benefit are excluded from reimbursement.
- Carrying out cost benefit analysis comparing newer more costly medicines with existing less costly alternatives.
- Regularly reviewing patients to ensure they do not stay on expensive drugs for longer than necessary.

Developing ICT

The OECD (2010a) argues that ICT has great potential to increase value for money in health. It is maintained that ICT can make improvements in delivery in terms of reducing medical errors, and preventing duplication and inefficiency, and improving coordination of care by sharing information to mange complex diseases.

Improving access to services

This *Spotlight* has identified that concerns exist in regard to access to the health system and the ability of some patients to pay for health care. Reflecting on this issue, the Report of the Expert Group (2010) proposed introducing a new framework of health care entitlements.

The Group suggests that the current complex arrangements in relation to medical cards, GP Visit Cards and Long-term illness cards, could be replaced by a single integrated stepped system (involving four different levels of primary care card). It is proposed that this approach would be supported by a graduated co-payment system that would reflect both income and heath status.

Developing monitoring and evaluation systems

The difficulties in measuring and evaluating the health care system have been well documented. The OECD (2010b), however, argues that countries should place more emphasis on developing robust indicators which can assess quality and evaluate the linkage between health policies, the design of the health system, and improvements in heath care and health of the population. It is maintained that this information can be

used to improve services and deliver quality heath care services.

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