

HEALTH SPENDING AND THE BLACK HOLE

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1. Introduction

Assertions that recent steep increases in public health spending have delivered inadequate results have undermined the case for further increasing spending as a pathway to improving the health services. In 2002 the *Report of the Independent Estimates Review Committee to the Minister for Finance* already asserted that “there is a growing recognition that shortage of funding may no longer be the key issue in the health services” (Department of Finance, 2002).

The truism that health spending is a “black hole” – that “it doesn’t seem to make any difference how much money goes into the area” in the words of one former Minister for Health¹ – has notably undermined the 2001 Health Strategy’s case for substantial, sustained investment in additional health service capacity and staffing, although the validity of its assessment of capacity needs has not been challenged in any real way.²

Such assertions are often based on misleading international comparisons of health spending, informed by inadequate Irish data. They may also reflect a failure to appreciate the degree of misclassification within Irish health expenditure that requires spending on social services; the very wide range of health and social services, which the health budget must fund; and the very low base from which Irish health spending increases rose in the late 1990s.

This article examines in detail how Irish health spending compares with spending in other EU countries and reviews the fluctuations that have occurred in Irish spending since 1980. On the basis of this data it rejects the case for a “black hole” in Irish health spending but explores some instances of inefficiency, where reform could deliver better results. Finally it re-visits the 2001 Health Strategy’s case for increasing investment in health care.

The article concludes that public health spending per capita was some 96 per cent of the EU average in 2002, that Irish spending then ranked 8th among the 14 EU states for which comparable data were available and that Ireland’s relative position is unlikely to have

¹ Minister Rory O’Hanlon, *The Irish Times*, November 12th 1998.

² *The Mid-Term Evaluation of the National Development Plan and Community Support Framework for Ireland, 2000 to 2006* (ESRI, 2003), recommended that expansion of physical capacity should only take place once funding to utilise existing infrastructure was assured, pointing out that large numbers of beds had been closed due to staff shortages and funding deficits. It did not express a view on the health strategy’s assessment of capacity needs.

changed in 2003. This contrasts with the forecast by Lawlor and McCarthy (2003) that only Denmark and Luxembourg would spend more per capita on the public health system in 2003.

This article further argues that discussion based on an aggregation of public current and capital spending is misleading since while current spending in 2002 and probably subsequently has remained below the EU per capita average, capital investment has considerably exceeded it. The increase in Irish capital investment in health and social services to a level which has exceeded the EU per capita average in the years from 1997 should be seen against the backdrop of the twenty-seven preceding years from 1970 to 1996, in which Irish investment averaged only 66 per cent of the EU average.

This article explores how some of the “black hole” arguments are exaggerated and based on inappropriate comparisons. For instance, Barrett (2003) overstates the case by appearing to imply that a 125 per cent increase in spending on all health and social services delivered merely a 4 per cent increase in inpatients over the period 1997 to 2002. The actual increase in inflation-adjusted spending in the relevant hospitals programme over that period was 67 per cent and delivered an increase of 23 per cent in the number of patients treated in hospitals. While less dramatic, this more appropriate comparator still poses the dilemma of why more care has not been delivered for the substantial funds invested in recent years.

This paper concludes that despite Ireland’s relatively low spending base, steep increases in current health spending over the period from 1997 to 2002 could not deliver full value against a backdrop of capital deficiency. The pace of spending increase was also so rapid that it presented difficulties for planners and administrators, particularly in 2001, a year of significantly large health expenditure growth. Furthermore, spending increases were channelled into an unreformed public hospital network, which is over-reliant on highly paid junior doctors; in which average consultants’ incomes exceed specialist incomes in other Northern European countries; and in which there are incentives to maximise treatment of insured patients while rationing care to the uninsured.

This paper argues that current and capital spending on health still need to increase to fund the 2001 Health Strategy but that this should be in a planned and paced manner, and within the framework of the 2003 Hanly Report,³ of reform in how hospital doctors work and are remunerated, and in how patients access care.

In international comparisons of public current health spending, the OECD now excludes approximately 15 per cent of Irish health expenditure that funds social programmes. Further revision could increase this exclusion to 20 per cent. If such a 20 per cent exclusion is applied to a forecast of the eventual cost of implementing the 2001 Health Strategy, it emerges that were it

³ This is the 2003 Report of the National Task Force on Medical Staffing chaired by David Hanly.

implemented over 10 years, at the end of the period Irish health spending would be approximately 9.9 per cent of national income, close to the level in France and below that of Germany – states with envied health care provision – and also below the level contemplated in the UK by National Health Service planners, who seek to address its capacity deficits and deficiencies.⁴

2. Irish Health Spending in an International Context

Rapid change in medical technology and rapidly rising public expectations of health care have shared international experiences. Therefore, analysts frequently attempt to assess Irish health spending by comparison with other states'. (See Department of Health, 2001(a); Lawlor and McCarthy, 2003; Fitz Gerald *et al.*, 2003). There are, however, many obstacles to ensuring true comparability despite the best efforts of the OECD to develop a consistent System of Health Accounts (SHA). Ireland has been one of the slower countries to provide health statistics in the prescribed SHA manner (OECD, 2002). Consequently, whereas based on earlier OECD data, the Government's 2001 Health Strategy document *Quality and Fairness* estimated that total Irish health spending per capita had exceeded the EU average in 2001 (Department of Health, 2001(b), an estimate repeated by others including this author (Wren, 2003) , subsequent OECD revisions have changed this picture.

Difficulties in measurement arise under two headings: how to estimate private and therefore total health spending in the absence of a national system of health accounts; and how to determine what proportion of the health budget funds social spending and therefore arrive at a narrower , and more useful, definition of health spending.

(I) TOTAL HEALTH SPENDING – A POSSIBLE OVER-ESTIMATION

International comparison of total health spending is a challenging exercise because it requires some estimation of private spending, typically assumed by the Irish Department of Health to run at some 25 per cent of the total.⁵ Private spending includes private health insurers' purchase of services for their members; households' and individuals' spending on medicines, GP visits and other medical fees; and investment in private hospitals and facilities.

OECD 2004, the annual update of the OECD's international health care database, explicitly warns against trusting Irish estimates of private health spending, since they are based on imprecise national accounting definitions and "are suspected of being underestimated" (OECD, 2004). However, on closer examination

⁴ The social programmes excluded from the health budget would still have to be funded. However, their inclusion under the health heading reinforces the impression that health spending takes up a greater share of national output than its typical performance indicators would warrant.

⁵ Assumptions underlying Table 3, Page 43, *Quality and Fairness*, Department of Health (2001), supplied by Department of Health in 2002.

Table 1: Total Health Expenditure (Public and Private) Per Capita

	2002		
	US\$ ppp	% EU Av.	Ranking
Luxembourg	3,065	131.8	1
Germany	2,817	121.1	2
France	2,736	117.6	3
Netherlands	2,643	113.6	4
Denmark	2,580	110.9	5
Sweden	2,517	108.2	6
Belgium	2,515	108.1	7
Ireland	2,367	101.8	8
Austria	2,220	95.4	9
Italy	2,166	93.1	10
United Kingdom	2,160	92.9	11
Finland	1,943	83.5	12
Greece	1,814	78.0	13
Portugal	1,702	73.2	14
Spain	1,646	70.8	15
EU average	2,326	100.0	

Source: OECD Health Data 2004.

Table 2: Total Health and Public Current Expenditure as a % of GDP

	Total Health Exp. as % GDP	Public Current Exp. as % GDP
	2002	2002
Germany	10.9	8.3
France	9.7	7.2
Greece	9.5	4.9
Portugal	9.3	6.4
Sweden	9.2	7.6
Belgium	9.1	6.4
Netherlands	9.1	n.a.
Ireland*	9.1	6.4
Denmark	8.8	7.1
Italy	8.5	6.2
Austria	7.7	5.3
United Kingdom	7.7	n.a.
Spain	7.6	5.2
Finland	7.3	5.3
Luxembourg	6.2	5.3
EU average	8.5	6.2

Source: OECD Health Data 2004.

*Irish data as % GNP. GNP is used as a measure of Irish national income because GDP includes multinationals' repatriated profits and is therefore an overestimation.

of OECD data for private investment, it would appear that overestimation is more probable. OECD 2004, for instance, reports

public investment in medical facilities of €409 million in 2002 against an improbable private investment of €36 million. The OECD relied here on national accounts produced by the Central Statistics Office, which indeed in a recent revision provided a reduced estimate of private investment.

Thus although OECD 2004 shows Irish **total health spending** in 2002 at 101.8 per cent of the EU per capita average, 8th in the EU ranking (Table 1), and at 9.1 per cent of GNP compared to an EU average of 8.5 per cent of GDP (Table 2), this measure must be treated with caution. As will be seen below, not only does it overestimate private spending but it also contains an overestimate of public spending.

(II) SOCIAL SPENDING AND THE PUBLIC HEALTH BUDGET

From 2003 the Department of Health supplied data to the OECD which was more compatible although not entirely consistent with the SHA. This has resulted in a significant reduction in the proportion of Irish public health spending which the OECD considers comparable to other states', excluding spending on many social services funded from the Department of Health's budget.

Thus, for example, the OECD SHA excludes spending on institutional care for the elderly or the disabled when the care provided is not predominantly medical.

Accommodation in institutions providing social services, where health care is an important but not predominant component should not be included in the health function. Examples might include institutions such as homes for disabled persons, nursing homes, and residential care for substance abuse patients. (OECD, 2000).

It would appear therefore that the OECD definition excludes the bulk of spending under two of the seven programmes of the Department of Health and Children's vote: the Community Welfare Programme which funds services ranging from home helps to contributions to patients in private nursing homes; and the Disability Programme which funds residential and day care for people with intellectual and physical disabilities. Funding for these two programmes represented 21.7 per cent of net current health spending⁶ and 20.6 per cent of capital investment in 2003. Some 10 per cent of capital investment funded facilities for the nursing degree programme (€50 million) is a clear anomaly when the Department of Education funds the education of doctors and other health professionals.

⁶ Net current health spending is gross current spending less charges for private accommodation in hospitals and some other income and is the measure used by the OECD.

(III) PUBLIC CURRENT HEALTH SPENDING – STILL BELOW THE EU AVERAGE

Where then does Irish public health spending fit in the international spectrum?

OECD 2004 ranks **Irish public current health spending per capita** in 2002 measured in US\$ purchasing power parity (ppp) as 7th of 13 pre-enlargement EU states⁷, for which comparable data are available, and at 98.4 per cent of the EU13 average in 2002. (See Table 3. Comparable data for the UK and Netherlands were not available. Were they included, it is conceivable that Ireland should have been placed 8th or 9th in a ranking of the EU15.)

Table 3: Public Current Health Expenditure Per Capita

	2002		
	US\$ ppp	% EU Av.	Ranking
Luxembourg	2,616	153.6	1
Germany	2,136	125.4	2
Denmark	2,072	121.7	3
Sweden	2,062	121.1	4
France	2,016	118.4	5
Belgium	1,782	104.6	6
Ireland	1,676	98.4	7
Italy	1,594	93.6	8
Austria	1,541	90.5	9
Finland	1,402	82.3	10
Portugal	1,172	68.8	11
Spain	1,133	66.5	12
Greece	939	55.1	13
EU average	1,703	100.0	

Source: OECD Health Data 2004.

Note: UK and Netherlands public current spending not available. UK public current plus capital expenditure marginally exceeds Irish expenditure. Netherlands total health spending per capita is 12 per cent higher than the Irish level.

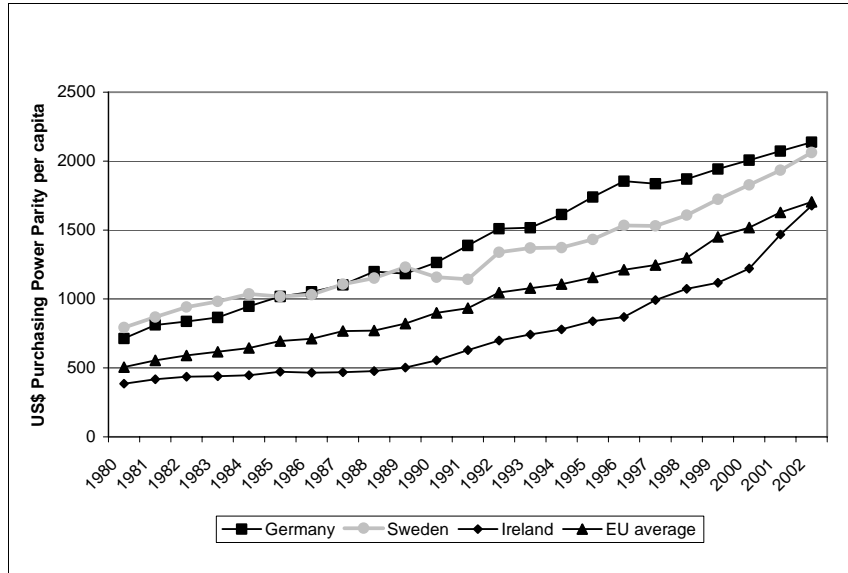
However, the OECD had excluded 15.4 per cent or some €1.2 billion of Irish health spending, less than the €1.66 billion or 21 per cent of so-called current health spending, which was allocated to fund the Community Welfare and Disability Programmes in 2002.

It is understood that the Department of Health will further refine these figures in discussion with the OECD and there is an expectation that as much as 20 per cent of current spending could eventually be excluded. Had this full exclusion been applied to the 2002 data, it can be inferred that Irish current spending would have ranked 8th in the EU13 (Table 3) and dropped to some 93 per cent of the EU per capita average.

Figure 1 gives some sense of the historical context by graphing Irish public current spending from 1980 to 2002 against spending in other states, as measured by the OECD. The steep increase in Irish health spending over the five years since 1997 is seen to have come from a very low base. Public current health spending per capita had

fallen as low as 60.9 per cent of the EU average in 1987 and remained under 72 per cent of the average in 1996 before its steep climb to 98.4 per cent of the average in 2002. Irish current spending was under 40 per cent of the German level in 1988, remained at 46.8 per cent in 1996 and attained 78.5 per cent in 2002.

Figure 1: Public Current Health Spending Per Capita 1980-2002



Source: OECD Health Data 2004.

With an adjusted increase in 2003 of 4.9 per cent in overall public current health spending and with spending on the hospital programme having increased by only 0.5 per cent over public authorities' inflation, an assessment of spending increases in core "health" programmes adjusted for relative purchasing power appears unlikely to advance Ireland's position in the rankings in 2003. (Any such forecast must necessarily be tentative given the potential for accounting revisions to effect retrospective changes in other countries' data, as they have in Ireland's case.)

This analysis would seem to contradict the forecast by Lawlor and McCarthy of DKM Economic Consultants (Lawlor and McCarthy, 2003) and repeated in the ESRI's *Mid-Term Evaluation of the National Development Plan* (Fitz Gerald *et al.*, 2003) produced in association with DKM that "only Denmark and Luxembourg will spend more per capita on the public health system in 2003". In fact even had spending on all Irish core health programmes increased by 5 per cent in real terms, Ireland's position in the rankings would at best have remained unchanged unless other states had reduced their spending in real terms. However, the DKM forecast is based not on current expenditure but on an aggregation of public current and capital spending.

(IV) PUBLIC CAPITAL INVESTMENT IN HEALTH AND MISMATCHES IN SPENDING

When current and capital spending are aggregated, OECD 2004 places **Irish public spending per capita** at 93 per cent of the EU14 average (excluding the Netherlands) in 2001 and 101 per cent of the average in 2002. Ireland is ranked 8th of the EU14 in 2002, with the UK now included.

When this measure is adjusted for the probable overstatement of Irish public current health spending of close to 5 per cent suggested above, Irish public spending per capita falls to 96 per cent of the 2002 EU average although its place in the ranking remains unchanged. While adjustment downwards of public capital spending to take account of investment in social services would also appear warranted, this is not the case in this instance for reasons peculiar to these 2002 data.⁷ As argued above in the analysis of current health spending, with effectively no real increase in capital spending in 2003 and an adjusted increase in current spending of under 5 per cent, Ireland's position in the ranking is unlikely to have changed in 2003, subject to the same caveat that other countries' data remain unrevised. These aggregated data do not therefore support the DKM/ESRI forecast.

Table 4: Public Health Expenditure (Current Plus Capital) Per Capita

	2002		
	US\$ ppp	% EU Av.	Ranking
Luxembourg	2,618	149.2	1
Germany	2,212	126.0	2
Sweden	2,148	122.4	3
Denmark	2,142	122.1	4
France	2,080	118.5	5
United Kingdom	1,801	102.6	6
Belgium	1,790	102.0	7
Ireland	1,779	101.4	8
Italy	1,639	93.4	9
Austria	1,551	88.4	10
Finland	1,470	83.8	11
Portugal	1,201	68.4	12
Spain	1,176	67.0	13
Greece	960	54.7	14
EU average	1,755	100.0	

Source: OECD Health Data 2004.

Note: Netherlands n.a.

⁷The Department of Health and the OECD have not as yet agreed a formula to exclude investment in social facilities from the OECD measure of capital investment in health. However OECD 2004 sources its measure for public capital investment from the Central Statistics Office, which had estimated this on a national accounting basis, and recorded a public capital investment in health of €409 million in 2002. This happens to coincide almost exactly with the Department of Health's capital expenditure in 2002 less 20 per cent investment in social facilities. However, the CSO has now revised this 2002 figure upwards significantly, a revision which when adopted by the OECD would once again capture investment in social facilities, like nursing homes.

Discussion based on such a snapshot view of aggregated public current and capital spending obscures two important distinctions: first, while current expenditure in 2002 and probably subsequently has remained below the EU per capita average, capital investment has considerably exceeded it; and second, this capital investment has taken place against an historical backdrop of sustained under-investment. Aggregation fails to capture tensions and mismatches between current and capital spending, which become daily more manifest and go a long way to explaining the perceived “black hole”.

OECD 2004 records that Irish per capita public investment in medical facilities has exceeded the EU per capita average since 1997 and has been the highest in the EU since 2000. (See Table 5 and Figure 2). It is this capital investment (which as we have noted generally includes investment in social facilities⁸) that pushed the OECD measure of aggregated Irish public health spending above the EU average in 2002.

Figure 2 places this recent performance in its historical context. As OECD 2004 records, for the 27 years from 1970 to 1996, Irish capital investment in health had exceeded the EU average in only one year – 1980 – and averaged 66 per cent of EU average investment. It is the resulting deficiency in health service (and associated social service) capacity that the 2001 Government Health Strategy identified. It proposed to remedy the deficiency over the 10 years from 2001 to 2011 at an estimated capital cost of €7.66 billion (2001 values). At least one quarter of this investment would fund social rather than health care infrastructure.⁹ By this reckoning the increase in capital investment since 1997, while considerable, falls far short of the investment required to meet service needs. To implement the strategy implied an annual average investment of €766 million in 2001 values, a real increase of more than 100 per cent on the 2001 level. In the three years since 2001 capital investment has run at approximately 35 to 38 per cent in real terms above the 2001 level.

The most readily apparent deficiency in Ireland’s core health infrastructure is in acute beds at 3 per 1,000 population compared to an EU average of 4.4 in 2001 (OECD, 2004). Since many existing beds are in small hospitals which cannot offer a full range of acute care, the deficiency is arguably greater still. The 2001 strategy also listed needs for thousands more convalescent and geriatric care beds; for day, residential and respite places for the physically and intellectually disabled; for foster and residential care for children; for facilities for the homeless; and for investment in 600 primary care “one-stop shops”.

⁸See footnote 7.

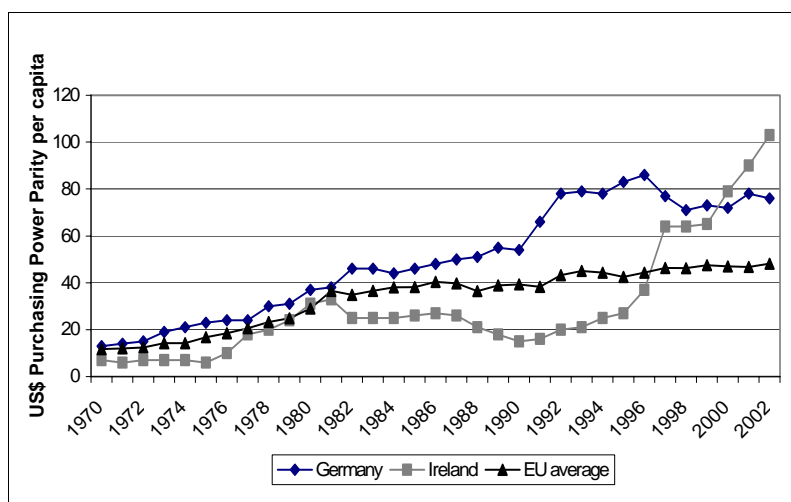
⁹Based on analysis of a programme by programme breakdown of health strategy spending supplied to the author by the Department of Health in 2002 under Freedom of Information.

Table 5: Public Capital Health Expenditure Per Capita

	2002		
	US\$ ppp.	% EU Av.	Ranking
Ireland	103	213.9	1
Sweden	86	178.6	2
Germany	76	157.8	3
Denmark	70	145.4	4
Finland	68	141.2	5
France	64	132.9	6
Italy	45	93.5	7
Spain	43	89.3	8
Portugal	29	60.2	9
Greece	21	43.6	10
Austria	10	20.8	11
Belgium	8	16.6	12
Luxembourg	3	6.2	13
EU average	48	100.0	

Source: OECD Health Data 2004. Comparable data for UK and Netherlands not available.

Figure 2: Public Capital Investment in Health Care Per Capital



Source: OECD Health Data 2004.

Since increased current spending has taken place against a backdrop of serious deficiencies in capacity, this has caused diminishing returns on current spending increases – perhaps the most coherent theoretical explanation for the perceived “black hole”, advanced by O’Reardon (2004):

Although health spending has recently approached European norms, it has done so after years of significantly lower levels of funding. Levels of investment in the system have been poor, while demand for services has increased rapidly. One consequence of this has been a rapid increase in current spending, to address immediate needs, being applied to an

inadequate capital base. As elementary microeconomics tells us, the inevitable result is diminishing returns from current spending. Therefore, a period of sustained above-average spending on capital projects will be required to enhance the efficiency and effectiveness of current spending.

Anyone who is familiar with the Irish health service can instance many examples of this phenomenon. Surgical and anaesthetic teams are underemployed when surgical patients can not be admitted due to the occupation of available beds by patients (like elderly people with chest infections) who require medical rather than surgical treatment. Newly appointed consultants have complained that they are unable to work due to the unavailability of operating theatre sessions.¹⁰ Large Dublin hospitals are notoriously unable to deploy their staffs to treat the optimal number of patients because of the presence of long-stay patients, for whom no convalescent or rehabilitative accommodation can be found.

Paradoxically, the perception of a “black hole” caused in 2003 an effective freeze in the overall hospitals’ budget with the result that many larger hospitals closed wards, exacerbating the capacity deficiency. Simultaneously, new facilities developed at a reported capital cost of €400 million remained idle in 2003 and 2004 due to Department of Finance strictures. It emerges then that in a health service with marked undercapacity and an unchallenged strategic assessment of capacity needs, political belief in the inefficacy of health spending increases caused this effective mothballing of new health care facilities. At the time of writing, it appeared that these facilities would open in phases over a two-year period.¹¹ The Department of Finance had nonetheless agreed a five-year programme of investment with the Department of Health totalling €2.7 billion and rising to €95 million in 2008.

This recent experience makes clear that addressing mismatches in public capital and current spending has become of critical importance in planning health service development. The question remains whether these mismatches are sufficient to explain away the perceived black hole.

To summarise this attempt to place Irish health spending in an international context, the latest OECD comparisons suggest that in 2002 Irish public current health spending per capita was 98.4 per cent of the EU average, but this probably still involves an over-estimation of as much as 5 percentage points, so that per capita public current spending is unlikely to have exceeded the EU average in 2003. Public capital investment in medical facilities (based on CSO national accounting definitions) was over twice the EU per capita average in 2002. Total Irish health spending per capita in 2002 was measured at 101.8 per cent of the EU per capita average and also exceeding the EU average as a proportion of national income (Irish GNP). However total spending is a measure to be treated with caution given the degree of estimation involved in

¹⁰ “Surgeon resigns over restricted access to theatres”, *The Irish Times*, July 20th 2004.

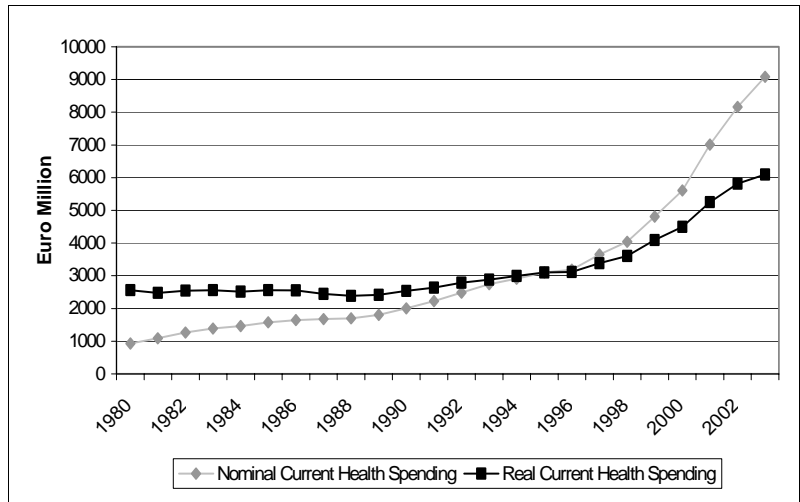
¹¹ “Deal agreed on funding of idle health facilities”, *The Irish Times*, July 23rd 2004.

**3.
Rapid Spending
Growth**

calculation of private health spending in addition to the probable overstatement of public spending.

Although on this evidence, Irish public current spending per capita remains below the EU average, proponents of the black hole theory are influenced as much by the perceived inefficacy of health spending increases as by their understanding of the relative international ranking of Irish health spending. The growth in public current health spending since 1980 is illustrated unadjusted for inflation in Figure 3. Public debate about health spending too often takes place at this level, such as headlines that read “Health spending has more than doubled”.

Figure 3: Public Current Health Spending (Real and Nominal)



Source: Revised Estimates for the Public Services.

Note: Public current health spending measured as gross non-capital expenditure.

Figure 3 also graphs public current health spending when adjusted for inflation in public authorities’ spending on goods and services. This is a minimal deflator for health spending, given the requirement for health employers to pay nationally agreed wage increases in a highly labour intensive sector and given the internationally acknowledged experience of rapidly rising inflation in health care, reflecting the prices of new technologies and drugs and their increased application.¹²

¹² Price inflation in Irish public authorities’ spending on goods and services averaged 5.4 per cent in the five years 1998 to 2002, compared to 3.8 per cent annual average inflation in consumer prices, a difference of 1.6 percentage points. The Department of Health in 1999 identified that average prices for medical goods and services had increased annually since 1988 by 2.9 per cent above the CPI. (Department of Health, 1999). One US study found that over the years 1965-1985 the index of prices for medical care services rose annually by 7.4 per cent, in a period when the consumer price index for all items except medical care rose by an annual average rate of 5.9 per cent, a difference of 1.5 percentage points. (Reichert and Cebula, 1999).

It will be observed that when adjusted for inflation public current health spending was effectively flat through the 1980s and fell marginally late in the decade. It is the apparent inefficacy of the steep increase in public health spending over the years since 1997, an increase after inflation of 77.5 per cent over the five year period to 2002, which has fed unease about the existence of a black hole in health spending. Following health spending increases which ran in double digits even after adjustment for inflation in the years from 1999 to 2002, the increase fell back to 4.9 per cent in 2003, the lowest adjusted increase since 1996.

It is critical to any discussion of health spending to recall that this increase was not destined solely for what is conventionally understood as the health sector – hospitals, doctors and drugs. In 2003 less than half (46 per cent) of the current health vote went to the acute hospital sector, a further 15 per cent to general practitioner services and subsidised or free medication, under 7 per cent to mental health services and nearly 21 per cent on what might broadly be regarded as social services (in areas like care of the elderly, disabled, homeless and children at risk).¹³

Figure 4 graphs spending on the general hospital programme, often popularly assumed to be the sole destination for health spending. It will be observed that this programme had a much more rocky experience than the overall health vote. Adjusted spending on hospitals declined significantly during the late 1980s. In the years of rapid spending growth, the rate of growth in spending on hospitals lagged behind the overall rate of increase in health spending. Nonetheless, the realisation that an adjusted increase in spending on the general hospital programme of 67 per cent over the five-year period to 2002 delivered only a 23 per cent increase in the number of patients treated (either as inpatients or day cases) has given further fuel to the black hole theory.

This is nonetheless a better performance than painted by some black hole theorists. Barrett (2003) instanced “while spending has increased by 125 per cent between 1997 and 2002, inpatient discharges have gone up by only 4 per cent.” Barrett here juxtaposed the increase in unadjusted spending for the entire health and social services budget with the increase in hospital inpatients. Furthermore, Barrett correlates total public health spending with inpatient activity, notoriously constrained by the sharp reductions in acute bed stock in the late 1980s which were only marginally reversed from 2001. He excludes the most rapidly growing area of hospital activity – day cases – which increased by 66 per cent between 1997 and 2002, rising from 31 to 42 per cent of all hospital activity, and in 2002 accounting for 68 per cent of all elective activity.

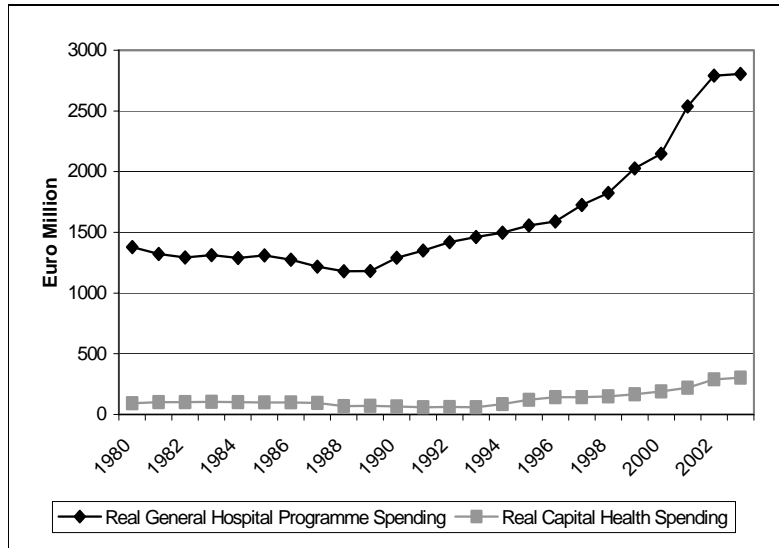
The impact of black hole scepticism on public policy contributed to the decision by Government to rein in health spending when faced with the need for fiscal correction in 2003 with the consequence that current spending on the general hospital

¹³ Revised Estimates for the Public Service, programme basis.

programme increased by merely 0.5 per cent in that year after adjustment for public sector inflation. Consequently, any expansions in services required reductions elsewhere, which explains the very real perception of cutbacks in services in the year.

In 2004 with gross current health spending budgeted to increase by 8.8 per cent, spending on the general hospital programme by 8.1 per cent¹⁴ and public sector inflation forecast at 6 per cent (ESRI, 2004), both overall health spending and spending on hospitals should increase in real terms by a few percentage points.

Figure 4: Public Capital Health Spending and Spending on the General Hospital Programme



Source: Department of Health.

As Figure 4 also illustrates, capital investment in the health care sector was very low indeed from 1988 to 1994 and it is against this backdrop that increases from the late 1990s should be seen. Capital investment has run at over €500 million annually for the three years 2002-2004¹⁵ against a backdrop of almost flat prices for new construction in the health sector, following 14 per cent annual average inflation in the three years 1999-2001.¹⁶

¹⁴ Revised Estimates for Public Services.

¹⁵ €07.1m (2002), €14.1 (2003), €09.5 (2004).

¹⁶ Source: Department of Health construction price indices. Inflation in the price of new equipment (typically one-third of investment in hospitals) has continued to run at between 3 and 4 per cent p.a.

While it is clear that Ireland has a large capacity deficit in health and social infrastructure and that Government current spending increases cannot be as efficacious as they might against this backdrop, the question remains whether this is sufficient explanation for the failure of the steep current spending increases from 1997 to 2002 to deliver more perceptible improvements in services. More specifically, how can one explain that even after adjustment for public sector inflation, a 67 per cent increase in spending on the general hospital programme in the five years to 2002 delivered only a 23 per cent increase in the number of patients treated as inpatients or day cases?

(i) Pace of Spending Increases

Deloitte and Touche who reported in 2001 on “value for money” in the health system, observed that pre-1997 “hospital managers saw financial restraint as the main agenda” and were therefore ill-equipped to “strategically plan and manage the increased resources”:

The large increase in funding has been a major shock to the health system. Some of those interviewed during the study noted that recent levels of expenditure might themselves pose problems of value for money. This was seen as arising from:

- *The sheer pace at which additional funding has been injected into the hospital system;*
- *Financial rules such as pressure to spend resources before the end of the financial year or on a specific clinical initiative, which encourages rapid spending rather than the most effective spending;*
- *A tendency for a first shot of investment to lack follow-up investment so that, for example, the cancer strategy has led to the appointment of consultant oncologists but not sufficient funding for their subsequent expenditure on drugs (Deloitte and Touche, 2001).*

It emerges, therefore, that while based on Ireland’s per capita current health spend relative to other EU states a good case could be made in the late 1990s and indeed can still be made for increasing current health spending, the pace of increase caused difficulties in the 1997-2002 period. It is unlikely that inexperience in planning major and rapid health sector expansion was solely confined to hospital managers. Officials of health boards and the Departments of Health and Finance had also had no opportunity to acquire such experience. The particularly large spending increase in 2001 – a nominal increase in the hospitals’ budget of 26.3 per cent and a real increase of 18 per cent – appears to have been driven by the electoral cycle rather than sober assessment of what the system could sensibly absorb in any one year.

(ii) Medical Staffing and the Hanly Agenda

Meanwhile the hospital system was facing inflationary pressures which exceeded those of the general public sector. While during the 1990s extra staff were recruited to provide new services, they were also needed to maintain services: to make up for junior doctors’ reduced hours; to replace trainee nurses, who went into fulltime

education and ceased staffing wards; to avoid sole rostering, where staff might be vulnerable to accusations of abuse; and to replace the dwindling religious, who frequently worked unpaid overtime or took no salary (Department of Health, 1999).

The national nurses' strike in 1999 secured significant improvements in nurses' pay and conditions. From 1989 the excessive working hours of non-consultant hospital doctors' (NCHD) had progressively fallen and there was a concomitant increase in their numbers. In 2000 the negotiation of a new NCHD contract so increased basic pay and overtime rates that junior doctors in Ireland could earn more than in many other states. The average senior registrar earned more with overtime in 2002 – €146,076 for an 82 hour week – than the average consultant's public salary and allowances of €142,051 (Hanly, 2003). And with the traditional Irish political imperative to offer acute care in every county, albeit delivered by unsupervised junior doctors, the health service was employing an army of well-paid juniors, who must frequently refer up the line for appropriate clinical decisions in the "serial failure" model of tiered on-call working, as described in one of the earlier unpublished drafts of the 2003 Hanly report.

While some Irish public hospital consultants have little opportunity to augment their public salaries, others have sizeable opportunities for private practice either within or outside their public hospital. Although there are no published data on individual consultants' private earnings, it is possible to infer that public consultants' incomes ranged in 2002 from €149,000 for those with no private practice to an average of €280,000 for those with significant private practice. This compared to an average salary range of £30,000 – £139,000 in the UK with relatively small opportunity for private practice; £8,000 – £100,000 in the Danish public system; and an average fee income of €162,000 – €214,000 in Canada (Wren, 2003).

The Hanly agenda to replace inadequate "acute" care largely delivered by junior doctors in a multiplicity of hospitals, with regional centres staffed by teams of consultants offering high-skilled around the clock acute care, would undoubtedly improve the quality of Irish hospital care. Hanly proposed a substantial increase in consultant numbers and a reduction in the number of junior doctors. While Hanly eschewed industrial relations issues, it logically follows that these juniors would receive much reduced pay for working shorter hours but would gain better working conditions and much enhanced career prospects. It further follows that consultants should be required to work fulltime for the public sector at rates comparable to their European counterparts.

Although Irish public current health spending was approaching the EU average in 2002, Ireland had at most 24 doctors for every

10,000 people compared to an EU average of 31.¹⁷ Irish specialists regularly point out how few they are in proportion to population compared to their European counterparts. It could be argued that it would be possible to employ more specialists were their remuneration more modest, or conversely that were there more specialists, their remuneration would fall. Medical representative organisations deny the existence of a medical cartel and point out that specialist numbers are determined by the Department of Health and Comhairle na n-Ospideal.

While OECD 2004 has no up to date Irish data on specialist numbers, it would appear that with 1,731 public consultants and 198 consultants engaged in solely private practice, Ireland had a ratio of 5 consultants for every 10,000 people in 2002 compared to an OECD 2004 – derived EU average of 18 (which must be treated with some caution since the definition of specialist varies internationally).

A crude calculation suggests that since a public pay bill of approximately €98 million¹⁸ in 2002 employed 5,664 hospital doctors (of whom 70 per cent were juniors) at an average pay cost of €123,200¹⁹, the same pay bill could employ 6,477 full consultants at the top of the Danish scale, giving Ireland a ratio of 16 consultants to every 10,000 people. Perhaps more realisably, implementation of the Hanly report could increase the Irish ratio to 10 specialists for every 10,000 people, at very little extra medical payroll cost, by substituting consultants for highly paid juniors, provided newly appointed consultants required no more remuneration than their public salaries. Further increasing current health spending could further increase doctor numbers and quality of care.

It remains the case that delivery of the Hanly agenda would require substantial investment in regional hospital capacity, ambulance services and primary care so that communities need no longer regard their local hospital as their first port of call in medical need. The funding of thousands more acute beds should be predicated on the implementation of Hanly – specifically the choice of regional centres of excellence in which to locate the beds - and vice versa.

(iii) Dual Medicine and Two-Tier Access

The parallel existence of public and private medicine in Irish public hospitals has fostered the development of a dual medicine, in which the privately insured not only achieve more rapid access to care but they, their insurers and their doctors face a set of incentives to maximise their treatments in subsidised public facilities. Insured

¹⁷ Source: OECD Health Data 2004 which may overstate doctor numbers since it sources from the Medical Council register. A more conservative estimate from totalling known numbers of general practitioners, hospital doctors, and doctors in public health would reduce Ireland's ratio to 22 per 10,000.

¹⁸ Including employers' PRSI at 7.75 per cent.

¹⁹ Average pay of €14,000 plus 7.75 per cent employers' PRSI.

patients' hospital care is free at the point of delivery while they must pay for primary care out of pocket; their public hospital care is priced to their insurer below economic cost while private hospitals charge them an economic rate; their doctors are paid by fee for service; they have access to ring-fenced private beds in public hospitals even when public patients on waiting lists have greater medical need.

Meanwhile, the Irish public patient continues to experience rationed care, must pay an overnight charge if he has no medical card and is treated by salaried doctors. VHI payments per insured member rose by 9 per cent in the year ending February 2002 and by 13.2 per cent in the year ending February 2003²⁰, exceeding the increase in total health care spending per private insured person in the US which rose by 10 per cent in 2001 and 9.5 per cent in 2002 (Strunk and Ginsberg, 2004).

Were Irish public hospitals to administer a common waiting list for public and private patients, insured patients would take their place in the queue. It can be inferred that waiting times for public patients would fall and waiting times for insured patients would rise but those in greater need would be treated more rapidly, a not unreasonable measure of improved public health system performance. At present the policy tool to reduce public patients' waiting times is the National Treatment Purchase Fund, which has gone some distance to achieving that end, but has done so by purchasing private care for public patients while private patients retain preferential and subsidised access to public facilities – an inefficient use of public funds.

If the Hanly reform were coupled with a requirement that public consultants should work fulltime for the public sector and that the system of two-tier access to public hospital care should end, it should be possible to ensure that public investment delivers better consultant-delivered care for all patients. Such a reform package would remove the existing duality in which public doctors and hospitals are incentivised to supply more care to some patients while rationing care to others.

(iv) Nurse Staffing

Although the 2001 health strategy identified an ongoing need to employ more nurses, Barrett (2003) discovered an “apparent productivity problem” in Irish nursing, citing OECD data from 2001 which reported 16.5 practicing nurses per 1,000 population in Ireland in 1999 compared to 4.5 in the UK and 8.3 in the US. While OECD 2004 would equally appear to accord Ireland top billing in the 2001 EU ranking with 14.8 nurses per 1,000 population compared to the UK's 9 and an apparent EU average of 8.6, on examination it emerges that this is an area in which the OECD's efforts to ensure comparability have had scant success.

²⁰ VHI Annual Accounts. Cost of claims incurred per member.

In the OECD ranking head counts of nurses appear alongside whole time equivalents (WTE), measures which can differ significantly in a sector with large numbers of part-time workers. The basis for calculating WTE varies from state to state. Entire categories like midwives are excluded in some states. Most relevantly, the figure for Ireland is a head count of all “active” nurses on the Board Altranais register.

The OECD works from a Board Altranais head count of 57,059 nurses registered to work in Ireland in 2001 and not explicitly recorded as retired, unemployed, working abroad or otherwise “inactive”. This count is not however regarded as an accurate census of those at work. It compared to a Department of Health count of 31,429 whole-time equivalent nurses in the public service that year.²¹ If it is assumed that an estimated 10,000 nurses (Department of Health, 2002) in the private sector have a WTE rate comparable to the public sector, Ireland’s count falls to approximately a whole-time equivalent of some 9.8 nurses per 1,000 population, which although underlining the OECD overstatement still fails to offer any sensible basis for comparison given the still approximate Irish figures and the irreconcilable international data. Barrett’s “productivity problem” would appear to be a statistical mirage.

(v) Value for Money – An Overview

From this discussion of the hospital sector it emerges that although successful reform will require investment, it should also be able to deliver more efficacious current health spending. An acute hospital sector with more beds, well-staffed by teams of more modestly remunerated specialists, no longer discriminating between classes of patient, should be able to offer patients higher quality care and acceptable waiting times for elective treatment and in accident and emergency departments. In place of the assertion that health spending is a black hole, the Irish electorate could legitimately be offered the argument that it is worthwhile for this community to fund substantial capital investment and increased current spending in health, provided this is accompanied by reform. However the electorate must also come to accept that efficacious health spending will require support for reforming the hospital network.

This discussion of value for money in the health service has focused on the hospital sector because that is where much of the unease about health spending has been centred. It is probable that issues of value for money could also be identified in areas like child protection (where staff shortages have driven up salaries) and in care of the disabled where large increases in spending have been channelled through voluntary organisations with little experience of managing such funds. However, to argue that better value might have been achieved with more gradual increases of funding is not at

²¹ Department of Health personnel census.

all the same as to argue that increased funding was or is not required in any of these sectors.

Ultimately the only true measure of value for money in health care is improved health and it remains the case that Ireland has a primary care system, which is unaffordable for many citizens, and has inequalities in income and access to social services, which foster ill-health. Were these issues addressed, the demands on the hospital sector would be much reduced.

If the health of the nation were viewed as an asset or an investment in the future, as education has come to be viewed, then it would be logical to introduce a system of universally accessible primary care, the norm in other western European states, whether funded by taxation or social insurance. While this would require increased public current spending on health, this should to some degree substitute for private spending. If funded from progressive taxation or social insurance, there would be a redistribution from higher earners to lower earning families and individuals who cannot now afford care. Across income brackets, there would be a redistribution from the well to the ill. The gains would accrue to society as a whole. It is by such fiscal measures that European states with universal health care systems express the value of social solidarity.

**5.
The 2001 Health
Strategy Re-
visited**

Finally, I would like to address the issue of the cost of implementing the 2001 Health Strategy. In 2002 with the assistance of Professor John Fitz Gerald of the ESRI and with the benefit of a programme breakdown of the strategy costs over 10 years obtained from the Department of Health under Freedom of Information, I attempted to estimate the eventual level of health spending in 2011 as a proportion of GNP applying the growth and inflation forecasts of the ESRI's *Medium-Term Review*. The resulting forecast was that health spending would rise to approximately 12 per cent of GNP by 2007 and would remain close to that level, if the strategy were implemented (*The Irish Times*, April 24th 2002 and Wren, 2003). The share of national income going to health would exceed that of all other developed states except the US – a disturbing conclusion.

Revising this forecast now in the light of the OECD's adjustments to Irish health spending produces a far more politically palatable outcome and suggests that the 2001 Health Strategy deserves to be re-visited. My 2002 forecast assumed that 10 per cent of Irish health spending should be excluded on the grounds that it was social spending. If instead 20 per cent of Irish health spending is excluded, there is a quite different outcome from this exercise. Operating on the assumption that the strategy had been implemented from 2001 and that the costs had been as then forecast by the Department of Health, by 2011 total health spending would have stabilised at approximately 9.9 per cent of GNP, a comparable level to France, below Germany's and below the level contemplated as necessary to fund the NHS (Wren, 2003). Total health spending peaks at 10.6 per cent of GNP six years into the 10 year investment programme and subsequently falls. Private

spending is assumed to fall as a proportion of total spending as the quality of the public health care system improves.

Of course the Health Strategy proposed investment in social services, which this exercise explicitly excludes but which nonetheless looks likely to continue to be funded from the Health vote. Its exclusion here is by no means an argument that it is any less necessary than investment in health care. What this analysis suggests is that if this society chooses to fund the health care capacity needs identified in the 2001 Strategy, in the long run Irish health care spending need not be out of line with that of neighbouring states.

Political, medical and industrial relations decisions would determine whether for a French level of spending, Ireland achieved a health care system of comparable quality to the French. It is never a foregone conclusion that any level of investment will deliver an acceptable level of care.

6. Conclusion

Detailed analysis of health spending reveals that Ireland has just begun the process of remedying a considerable and decades long deficiency in health and social service infrastructure. The resulting increase in capital spending on health has brought Irish public health spending per capita close to the EU average. However, when capital and current spending are disaggregated, it is apparent that public current spending remained below the EU average in 2002, the latest year for which comparable data are available.

Increases in current spending over the period from 1997 to 2002 could not deliver full value against this backdrop of capital deficiency. The pace of spending increase was also so rapid that it presented difficulties for planners and administrators. Furthermore, the hospital system faced inflationary pressures which exceeded those of other areas of the public sector.

Unease about the quality of health spending is not without basis. However, arguments for health sector reform are not incompatible with acceptance that the sector requires increased investment. The case for sustained investment in health care made in the 2001 Health Strategy and the related primary care strategy remains unchallenged. Without this investment Ireland will be unable to achieve the standard of health and social care of other northern European states. Its achievement at an acceptable ongoing current cost requires reform of the hospital system, along the lines advocated in the Hanly Report, further reform of how hospital doctors work and are remunerated, and of how patients access care.

Developing a planned, transparent programme of investment in health care, with planned, accompanying increases in current funding in a reformed health sector would seem an appropriate agenda for agreement between the new Health Service Executive and the Department of Health.

This article has drawn attention to some current problems in the comparability of international health data and considerable inadequacies in Irish data collection and classification. While international comparisons may have their uses when interpreted

with care, they offer only limited insights to domestic policy-makers, because health care systems differ so greatly. Improving the quality of domestic data would however assist in both domestic decision-making and international comparison and possibly even convince some black hole proponents that, to paraphrase, “it does make a difference how much money goes into health”.

REFERENCES

- BARRETT, S., 2003. “The Task of Irish Health Service Reform”, *Irish Banking Review* (Winter 2003).
- DELOITTE AND TOUCHE, 2001. *Value for Money Audit of the Irish Health System*.
- DEPARTMENT OF FINANCE, 2002. *Report of the Independent Estimates Review Committee to the Minister for Finance*, Dublin: Stationery Office.
- DEPARTMENT OF FINANCE (annual publication). *Revised Estimates for Public Services*, Dublin: Stationery Office.
- DEPARTMENT OF HEALTH, 1999. *Health Inflation: Cost Pressures Within the Health Services*, Paper prepared for the Public Accounts Committee, Dublin.
- DEPARTMENT OF HEALTH, 2001(a), *Primary Care – a new direction*, Dublin: Stationery Office.
- DEPARTMENT OF HEALTH, 2001(b), *Quality and Fairness*. Dublin: Stationery Office.
- DEPARTMENT OF HEALTH, 2002. *The Nursing and Midwifery Resource Final Report of the Steering Group*, Dublin: Stationery Office.
- FITZ GERALD, J., C. McCARTHY, E. MORGENROTH and P.J. O’CONNELL (eds.), 2003. *The Mid-Term Evaluation of the National Development Plan and Community Support Framework for Ireland, 2000 to 2006*, Dublin: The Economic and Social Research Institute.
- ESRI, 2004. *Quarterly Economic Commentary Summer 2004*, D. McCoy, A. Bergin, D. Duffy, J. Cullen (eds.), Dublin: The Economic and Social Research Institute.
- HANLY REPORT, 2003. *Report of the National Task Force on Medical Staffing*, Department of Health (June 2003).
- LAWLOR J. and C. McCARTHY, 2003. “Browsing Onwards: Irish Public Spending in Perspective”, *Irish Banking Review* (Autumn 2003).
- OECD, 2000. *International classification for Health Accounts*, Paris: OECD.
- OECD, 2002. *The state of implementation of the OECD manual, A System of Health Accounts*, Paris: OECD.
- OECD and IRDES, 2004. *OECD Health Data 2004: A comparative analysis of 30 countries*, CD-ROM, Paris: OECD.
- O’REARDON C., 2004. “Improving Irish Public Services”, *Irish Banking Review*, July 2004.
- REICHERT, U. and R.J. CEBULA, 1999. “A Note on Health Care Inflation”, *Journal of Economics and Finance*, Vol. 23, No.3.

STRUNK B. and P. GINSBURG, 2004. "Tracking Health Care Costs", *Health Affairs* (June 9th 2004).

WREN, M. A., 2003. *Unhealthy State – anatomy of a sick society*, New Island.