

# Private Spending on Healthcare

by Joe Farrington-Douglas and Miguel Castro Coelho

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## **Executive summary**

The debate about healthcare finance in the UK continues after 60 years of the National Health Service (NHS). Both critics and supporters of the NHS question whether the UK can continue to provide tax-funded healthcare free at the point of need, as private incomes increase and as demands and the costs of healthcare continue to place ever greater pressures on the health budget. In particular, shifting the balance of healthcare finance from the public to private purse is put forward by some as a desirable, or an inevitable, development. But with the focus of policy and research invariably fixed on the NHS itself, the role of private spending in the UK health economy is surprisingly under-studied.

This report addresses two key policy problems:

- The macro level problem is the future financing of healthcare in the UK. We examine how much and how future healthcare will need to be funded. In particular, we are interested in the role that private health spending is likely to play in meeting future healthcare spending demands.
- The second problem is how the current contribution of private spending in the health
  economy could be improved. Private spending in its many forms has always co-existed with the
  NHS, but has received less attention from policymakers as an integral part of the health system.
  We examine recent trends and evidence of the efficiency of different types of private spending,
  making recommendations on how they could be improved.

Note that this report focuses on private spending rather than private provision (which includes privately and publicly-funded elements). This includes spending on private health insurance, self-paid hospital care, private dentistry, over-the-counter medicines and employer spending on worker health and wellbeing.

Below we summarise our core arguments.

#### Total healthcare spending is likely to increase

We agree with the overall projections made by health economists that total healthcare spending in developed countries (including the UK) is likely to increase in the future. Demographic change, the inflationary impact of new technology and the rising relative cost of healthcare labour, as well as economic growth, will combine to lead to a likely increase in costs of, and demand for, healthcare. Improvements in productivity are necessary, but will not prevent the need for increased spending. This is not a bad thing in itself, because it leads to progress in life expectancy and wellbeing.

Other types of consumption will fall (relative to total income) as healthcare spending rises. However, this does create significant challenges for policymakers within the constraints of current public finances.

The forecast increases in healthcare spending reflect the fact that societies are likely to value this rather than other types of consumption. Such expansion could well be *affordable*, in the sense that it would not impose a decline in the absolute level of non-healthcare consumption<sup>1</sup>. In simple terms, as economies grow, healthcare will continue to consume a growing slice of a larger cake (so the remaining cake can also grow). The central issue in healthcare is, therefore, not whether we can afford to spend more on medicine, or whether it is a *qood idea* to do so, but what is *the best way of paying for it*.

Private spending plays a residual role in most international health systems, and cannot efficiently replace public spending

Private spending as a proportion of total healthcare spending has converged internationally and remained relatively stable for 20 years (at between 25 and 30 per cent). There is not a trend towards

<sup>1.</sup> While medical expenditure is predicted to rise faster then GDP, non-medical consumption will still increase as long as the growth rate of medical expenditure weighed by the share of medical expenditure on GDP is less than the GDP growth rate itself.

an increased private share of healthcare finance. Looking at its role in the UK and international health economies, we conclude that private spending will remain relatively marginal (currently 16 per cent of total healthcare spending) compared with collective funding mechanisms. At a system level, theory and evidence suggest that privately-funded healthcare plays a different role to the publicly-funded sector. It is not possible to transfer the burden of funding healthcare from the public to the private sector efficiently; increasing private spending is not an efficient way of raising healthcare finances.

# Public spending remains the most efficient and equitable way of funding healthcare and of funding rising costs in the future

We find that the theory and evidence on the economics of healthcare funding show that private spending is generally less efficient than public spending where risks are collectively pooled. This will continue to apply as healthcare costs and demand increase in the future. The most efficient way to finance increasing healthcare costs will be through public spending. Moreover, increasing publicly-funded healthcare spending will still be worthwhile if society values the added benefits brought by new technologies and the care of an ageing population.

#### Future governments will therefore need to raise increasing sums collectively

The implication of this finding is that future governments will need to raise finances collectively in order to fund increased healthcare spending efficiently. Unless collective funds are raised, we will find a shortfall in funding compared to growing healthcare demand and costs. For example, without increasing NHS resources there is likely to be a shortfall of between £6.5bn and £16.3bn by 2012/13 (ippr calculations based on Wanless *et al* 2007 and HM Treasury 2008, based on 2012/13 estimated prices). This is often described as a 'health gap.'

There does need to be a greater emphasis on improving efficiency within both public and private sectors in order to ensure that the benefits of spending are maximised, but this will not obviate the overall need to raise collective funding in the long term. There are debates about the best way to raise collective funding – between central taxation or a form of social insurance. While these issues fall outside the scope of this paper, we suggest that ideas for hypothecation or social insurance need to be debated.

#### Private spending will continue to play a valid role in the UK health economy

Although we conclude that increasing private spending will not solve the 'health gap', we argue that the role of the privately-funded sector should not be overlooked by public policy.

Private spending provides valid functions to the health economy to correct some of the problems associated with a publicly-funded system. First, the problem of 'moral hazard' (individuals consuming more 'free' healthcare than is efficient) creates an argument for some costs to be borne by the individual in certain circumstances. Second, private spending plays a role where the criteria for publicly-funded healthcare are less well met, for example where the costs are low, as in the case of many minor ailment treatments. Third, individuals can purchase healthcare privately when the single 'insurance plan' (namely, the NHS) does not meet their individual preferences (therefore improving 'allocative efficiency'). In particular, the privately-funded sector also provides an important comparator for public services, and the competitive dynamic should be maintained.

Private spending may also play an important role alongside public funding to support preventive health interventions, a question that ippr will address in future research.

# Policy should work to improve the role of private healthcare spending to the benefit of the NHS, consumers and the wider health economy

The Government has made a commitment to pursue efficient markets in the private sector as well as delivering public services. Where there are market failures in the private healthcare market these should be ameliorated as far as possible. We therefore evaluate options for improving the efficiency of the diverse private healthcare markets. We argue that:

Private health insurance is taxed at five per cent but self pay (or out-of-pocket spending) for
private treatment is tax exempt. This anomaly should be removed so that tax is charged on all

private healthcare equally (for example, five per cent VAT on self-pay).

- The rapid expansion of private cosmetic 'healthcare' spending warrants greater attention from policymakers to ensure sufficient safety regulation and consumer protection, in particular at the point of information, marketing and sales.
- The Government should review the NHS policy on patients purchasing additional 'top-up' treatments that are excluded from NHS provision to meet patients' demands without creating a two-tier health system.
- The expansion of privately-funded dentistry with high prices requires a regulatory framework to inform consumers and ensure that there is effective competition. Access to NHS dentistry needs to be improved in areas where dentists have opted out of publicly-funded provision.
- Learning from dentistry, rules restricting NHS GPs' private practice should not be relaxed.
- The use of community pharmacies by patients with minor ailments and chronic conditions should be encouraged where appropriate and safe.
- The private health insurance industry has high margins and little competition on price. The industry should improve competition in order to increase value for consumers and regulators should monitor progress.
- The Government should fulfil its commitment to review NHS charges to ensure they are more
  consistent and achieve economic efficiency and equity aims; in particular, there are concerns
  about the rise of hospital charges and some higher dental charges.
- Ways to harness synergies between employer and NHS goals in improving health among those of
  working age should be developed, including better information and guidance for employers and
  pilots of joint Primary Care Trust- and employer-funded health improvement programmes.

# Private spending has a valid role in the health economy but the interaction with the publicly-funded system needs to be managed to ensure that the benefits are achieved

The privately-funded sector does not inevitably damage public healthcare. However, there are real risks that need to be managed, particularly to ensure that NHS consultants fulfil their contractual commitments. Equally, the potential benefits need to be harnessed, including NHS providers generating income from private patients and benchmarking public healthcare with the best of the private sector. Specific recommendations include:

- More effective monitoring and implementation of the NHS Consultants' Contract to ensure that NHS commitments are fulfilled before Consultants see their private patients.
- Continue efforts to reduce NHS waiting times to reduce opportunities for Consultants to shift patients onto their private list.
- Ensure that the recruitment and training of doctors and other staff continue to expand so that private healthcare does not affect the availability and price of health professionals.
- The Healthcare Commission should regulate safety in private healthcare to reduce adverse incidents that incur costs for the NHS.
- The NHS should reclaim from private providers the costs of reparative treatment in cases of negligence.
- Continue efforts to improve quality in the NHS in order to maintain the political support for collective funding.
- Innovations in private healthcare, including waiting times, choice and new treatments, should be monitored and evaluated by the NHS to determine whether they should be pursued in the public system.

#### **Conclusions**

Total healthcare spending is likely to continue to rise in the future; this should not be considered a problem *per se*. Collective funding will remain the most efficient way of financing healthcare. Private spending plays a valid role in the health economy but will not provide an efficient means of increasing resources for healthcare. Therefore future governments will need to raise increased resources for healthcare collectively.

While private spending is not a magic bullet for the long-term funding challenge, policymakers should consider the contribution and efficiency of the diverse types of private healthcare spending as integral to future health system strategies. Our recommendations would ensure that the benefits of private spending are maximised while the risks to the public sector are managed. Pursuing these would improve the efficiency of the whole health economy and thus the wellbeing of citizens.

#### Introduction

#### Political and policy context

In healthcare, the politics of finance is never far away. Seven years ago, Prime Minister Tony Blair announced a major increase in public funding for the National Health Service following a Treasury-commissioned review into projected need and financing options (Wanless 2002). Despite the real-terms doubling of public funding of healthcare in the UK in the last decade, healthcare politics has been dominated by debates about deficits, rationing and pay disputes. Internationally, similar debates surround other, often higher-funded, health systems.

In 2008, the 60th anniversary year of the NHS, the debate about the sustainability of a centrally tax-funded, universal and largely free model of healthcare continues. Although surveys of the public still find support for universal healthcare provision, polls of NHS managers and doctors find uncertainty about whether we will be able to continue to fund high-quality healthcare from the public purse (Evans 2008, Anekwe 2008). Certainly we can expect to continue debating this in anniversaries to come

In 2007 ippr argued for greater public education and involvement in priority-setting in the NHS to improve the level of debate about the feasibility of meeting rising demands with limited public funding (Rankin *et al* 2007). While this is an important prerequisite to a sustainable health system, we recognise that even a clear public understanding of the trade-offs in publicly-funded healthcare will not, on its own, constrain increasing pressures on healthcare finances. As this report will show, demand for, and costs of healthcare are projected to increase due to income growth, demographic and technological change, and the rising relative cost of healthcare labour, in addition to rising consumer expectations.

It is frequently argued that if the current projections of rising healthcare costs and demand are accurate, then the Treasury will not be able to keep pace with maintaining a publicly-funded system. A gap will then open up between the demand for healthcare spending, and the public purse's capacity to meet that demand. Bramley-Harker *et al* (2006), for example, argue that the NHS can expect a 10 per cent funding shortfall by 2015. The Boston Consulting Group, focusing on Europe, similarly warn of 'an ever-widening gap between the demand for (and cost of) health services and the system's ability to supply (and finance) those services' (2007: 1).

The implication is that if public spending will not meet demand, then other sources of funding might be harnessed to fill the projected gap in healthcare finances. Bramley-Harker *et al* (2006) thus argue that 'additional funds' might be brought into the healthcare system by co-payments, encouraging private self-payment or medical insurance or allowing people to top up their NHS care. In the same vein, the president of the Royal College of Surgeons recently argued for complementary insurance to be introduced for non-poor patients (Sylvester 2005).

#### **Primary problem: funding healthcare**

The primary problem that this report addresses is the potential shortfall in public funding for healthcare (often called the 'health gap'). We explore the theory and evidence for financing healthcare, and review the debate about future projections of healthcare spending. We do not hope to address the whole problem of healthcare funding. For a start, the challenges are not technically solvable but depend on political choices about spending priorities and the size of the state, debates beyond the scope of this paper. Our remit is to look specifically at the current and future role of individuals' private spending on health in the UK.

We examine the contribution that private spending plays at present, in its various forms from private medical insurance to dentistry and over-the-counter medicines. We will look at international evidence and theory about the balance of public and private funding of healthcare systems and evaluate the extent to which private spending could – and indeed whether it should – solve the potential 'health gap' in the future.

#### Secondary problem: improving the efficiency of private healthcare spending

Regardless of whether private spending will fill the 'health gap', it will still be an important part of the healthcare economy and one which deserves further research and policy attention. At present, public policy is preoccupied with the publicly-funded element of the healthcare economy, with potentially missed opportunities to harness the benefits of private spending. We explore how the contribution of current and future levels of private spending to the health economy can be improved, looking at the efficiency of the various private spending markets and suggesting ways in which their configuration could be improved. We also look at the interaction between the privately-funded and publicly-funded health sectors. We recommend how the interaction can be structured to improve the efficiency of the whole health system.

#### Box. 1.1. The economic approach taken by this report

We approach the question of healthcare finance from a primarily economic perspective. We aim to ask how healthcare should be funded and what role private spending should play to maximise 'efficiency'.

We use the term 'efficiency' not just in its everyday sense of maximising outputs per input (for example, operations per pound): our broader use of the term reflects the attainment of the best possible levels of socially desirable objectives under constrained sets of resources. Thus 'efficiency' incorporates health system goals such as equity and responsiveness.

There are, of course, other ways of approaching these questions. For example, we might take a more political perspective to ask what the power relations are of different types of funding, prioritising the achievement of social solidarity, democratic accountability or of individual freedom. Healthcare can be seen as a social right to which citizens should be entitled regardless of income. While equity is incorporated in our definition of economic efficiency, another approach might be to prioritise the achievement of equal access to care or equal health status regardless of wider economic efficiency considerations.

While these alternative approaches are valid, we focus here on economic efficiency as an objective of the health system. Issues of healthcare funding and the role of private spending are often viewed through an ideological lens, with players preferring private or public funding on principle. We argue that the method of funding healthcare should not be ideologically pre-determined. What matters is not how healthcare is funded, but the efficiency of the funding mechanisms in achieving health system objectives\*.

\*Note there are two different organisational issues pertinent to the efficiency of funding mechanisms. One is the type of source of finance (general taxation, social insurance, private health insurance, out-of-pocket payments, and so on); the other is the number of sources of finance (single versus multiple payer systems).

#### Our definition of private spending

For the purposes of this report, we are interested in the funding source rather than the ownership or governance of healthcare providers. Therefore when we use the term 'private sector' we mean privately-funded – even if that is provided in publicly owned NHS operating theatres; similarly, 'public sector' may be publicly-funded but privately delivered, for example in independent sector treatment centres.

Our definition of private spending is delimited by what is not collectively funded either through taxation or social insurance. We include in private spending such diverse sources of funding as:

- Individually-purchased private medical insurance
- Out-of-pocket spending on treatments (GP, hospital, dentist)
- Out-of-pocket spending on over-the-counter (OTC) medicine

- Employer spending on healthcare
- Co-payments/ user charges.

We include co-payments or user charges as a type of private spending as they fall on the individual consumer rather than the collective risk pool. In some analyses, charges are included as part of the public sector as they are a form of income that is subsumed into the wider NHS pot; pharmacists do not receive the prescription charge, for example, but collect it on behalf of the NHS. From a consumer's and from an economist's point of view, however, NHS charges or co-payments are a form of private spending – as they are funded individually.

We also include cosmetic treatment in our definition of private spending. This is because it is included in the secondary datasets that we use, which describe the private health market including all services that are provided in a clinical setting. However, from the point of view of healthcare as a public need, it is questionable whether non-pathological aesthetic cosmetic treatment – from breast enhancement to laser hair removal – should be included in the overall calculation of health spending, since they do not contribute to meeting health needs.

In the main, spending on complementary and alternative medicine is not included in our definition of private spending. To extend our remit to these sectors would have added to the complexity of our analysis. However, this is not to say that an examination of this market would not be worthwhile.

Similarly, for the purposes of keeping our scope relatively refined, we excluded spending on fitness and wellbeing – for example, health foods or gym membership – and other types of preventive health spending from our overall analysis. However, we have addressed employer spending on health and wellbeing as a specific issue in Chapter 11, and discussed the economics of sickness prevention in Chapter 4. From a public health point of view, further research into the economics and funding mix in preventive health is a high priority. ippr is developing this issue as a topic of research in our planned future work on the economics of prevention.

#### Structure of the report

This report is divided into 12 chapters.

Chapter 1 sets the context for the report by describing the current balance of private and public spending in the UK. Chapters 2 to 5 then explore the macro-level questions of the future of healthcare spending and the role of private spending in meeting future healthcare projections, drawing on economic theory and international evidence.

Chapters 6 to 11 then look in detail at the role of different types of private spending in the UK health economy, including self-pay for hospital treatment, private spending on dentistry and general practice, out-of-pocket spending on medical products including over-the-counter medicines, private medical insurance, co-payments for NHS services and employer spending on health and wellness. We describe recent and projected trends, causes and impacts and policy implications of these types of private spending.

In Chapter 12 we assess and describe the interaction between the privately and publicly financed healthcare sectors, exploring whether private spending 'harms' publicly-funded healthcare, and suggest ways of mitigating potential harm.

# 1. UK private healthcare spending in context

In this chapter we draw a macro picture of the privately financed health sector in the UK. We illustrate where the UK sits in international context and then present a typology of private spending focusing on both the sources and destination of private spending. This has not before been attempted in this way, and the collation of accurate figures for these different types of spending has proved challenging. The emphasis of official data is on public spending; therefore we are reliant on commercially produced data, including market research data\*.

The aim in this chapter is therefore to understand what comprises private spending, what the trends are and what the causes and impacts of these trends are on health system goals in the UK. We discuss the recent policy initiatives and debates relevant to the different types of private spending.

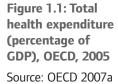
\* We are very grateful for the cooperation we have received in this task, in particular from Laing & Buisson and the Office of Health Economics, who provided us with free access to their data and assistance with follow-up questions.

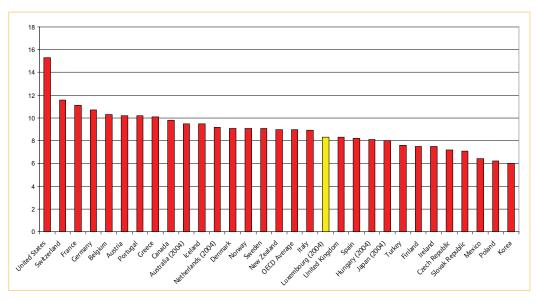
#### **UK** healthcare spending in the international context

The United Kingdom is like most developed countries in terms of the size of healthcare spending, long-term rising trends and the fact that public spending is dominant.

Before discussing the types of private spending in detail, we first place this in the context of the UK health economy.

Total health spending accounted for 8.3 per cent of GDP in the UK in 2005, compared with an average of 9.0 per cent across countries in the OECD (Organisation for Economic Cooperation and Development) (Figure 1.1).





In terms of per capita spending on health, the UK closely matches the OECD average, spending US\$2724 in 2005 (adjusted for purchasing power parity), compared with an OECD average of US\$2759 (OECD 2007a).

Total UK healthcare expenditure per capita in real terms increased 3.8 times from 1970 to 2005 (reflecting both increases in the volume of healthcare services provided as well as in medical costs; Figure 1.2). Total expenditure increased much faster than GDP since 1960, more than doubling its weight on the economy (3.9 per cent in 1960 to 8.3 per cent in 2005).

Total UK healthcare expenditure rose at a similar rate to the OECD average over the 30 years to 2005.

Figure 1.2: Total health expenditure (per capita, at 1970 GDP price level; and as percentage of GDP), UK, 2005 Source: OECD 2007a

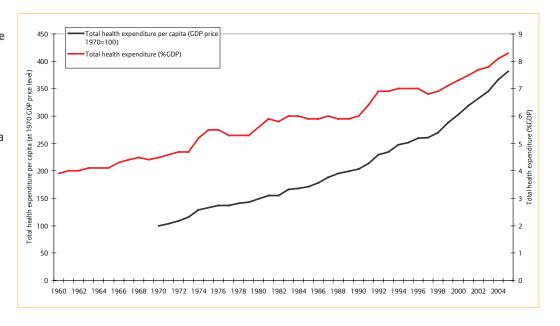
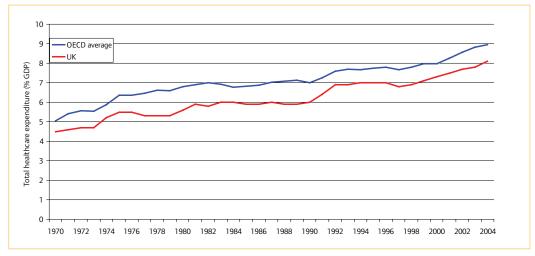


Figure 1.3: total health expenditure (percentage of GDP), UK and OECD, 1970-2005

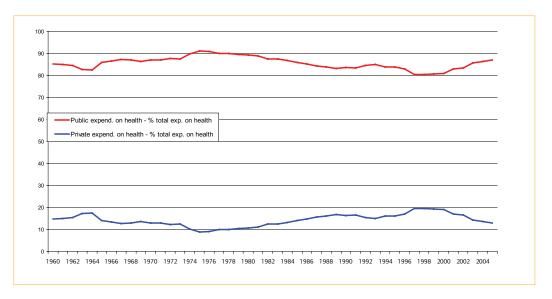
Source: OECD 2007a



The public sector continues to be the main source of healthcare funding in all OECD countries except the United States, Mexico and Greece. In the UK, 87.1 per cent of health spending was funded by public sources in 2005. The share of public spending in the UK has increased from around 80 per cent in 1998, reflecting the Government's commitment to increase public spending on health (Figure 1.4).

Figure 1.4: Public and private health expenditure (percentage of total health expenditure), UK, 1960-2005

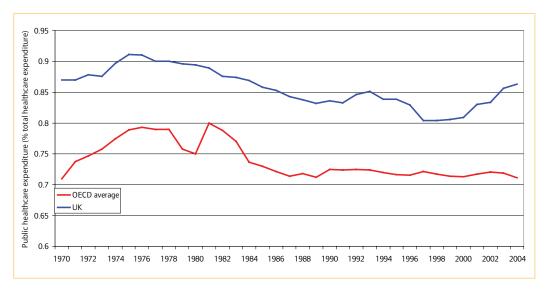
Source: OECD 2007a



As will be discussed in detail in Chapter 2, there is no evidence of a trend towards increasing private spending as a percentage of total healthcare expenditure, either on average internationally or in the UK, although there are significant cross-country differences.

Figure 1.5. Public spending as a proportion of total spending, UK and OECD, 1970-2004

Source: OECD 2007a



However, beyond the aggregate figures presented here, there are trends within private spending and within different types of private spending in the UK. This reflects changes in determinants of private spending, including technologies, individuals' disposable income, employers' economies of scale and the coverage and perceived quality of the NHS. Trends within private spending also lead to different outcomes in terms of equity, efficiency and population health status. These micro-trends will be discussed in the chapters that follow.

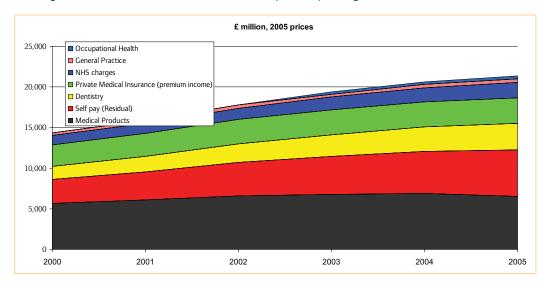
#### Types of private spending in context

UK private spending comes from a wide range of sources. While private spending on healthcare has grown, it has increased less quickly recently than have public spending and the wider economy.

The privately financed healthcare sector in the UK comprises a range of types of spending. Table 1.1 on the next page presents recent data on the comparative sizes of the different categories of private spending, by source of funding and by service, for 2000 to 2005 (the latest year for which we have full figures).

Figure 1.6 presents this graphically, with trends presented in real-term changes at 2005 prices. Looking at recent trends, while the nominal size of private spending has increased, this has not been

Figure 1.6. UK private spending types, 2000-2005 Source: Laing & Buisson 2006, Office for Health Economics 2007, ippr calculations



Year	2000	2001	2002	2003	2004	2005
NHS charges (prescription medicines, etc)	£1,058	£1,168	£1,296	£1,532	£1,681	£1,869
Private healthcare treatment	£5,697	£6,481	£7,426	£8,172	£8,865	£9,643
By sources of income						
Self pay	£2,756	£3,270	£3,953	£4,528	£5,090	£5,701
Private medical insurance (premium income)	£2,450	£2,653	£2,854	£2,970	£3,041	£3,156
Health cash plans (premium income)	£363	£389	£396	£431	£445	£461
Self-insured medical expenses schemes (claims)	£129	£169	£223	£243	£289	£325
By service						
Hospital sector	£2,932	£3,221	£3,583	£3,896	£4,163	£4,447
General practice	£310	£350	£394	£315	£405	£450
Dentistry	£1,522	£1,825	£2,194	£2,563	£2,931	£3,300
Care of mentally ill	£323	£390	£484	£575	£555	£580
Private Health Insurance and Health Cash Plans gross margins	£610	£695	£771	£824	£810	£866
Medical products	£5,265	£5,722	£6,266	£6,542	£6,750	£6,525
Pharmaceutical products	£2,803	£3,144	£3,378	£3,460	£3,551	£3,345
of which						
Over-the-counter medicine	£1,650	£1,720	£1,890	£1,990	£2,070	£2,140
Other medical products	£465	£469	£477	£478	£472	£470
Therapeutic appliances and equipment	£1,997	£2,109	£2,411	£2,604	£2,727	£2,710
Total private expenditure	£12,020	£13,371	£14,988	£16,246	£17,296	£18,037

increasing faster than the rate of growth in the economy, or the rate of growth of total health spending. Again it is self-pay treatment (when patients pay out of their pocket rather than through insurance) that has seen the biggest increases in recent years.

Specific sectoral trends are explored in detail in Chapters 6-11.

The following chapters 2-5 draw on economic theory and empirical evidence to explain what influences how much societies spend on healthcare, including rising costs and changing demand. We then discuss the theory and evidence on how that expenditure should be funded.

## 2. How much should we spend on healthcare? International evidence

This chapter reviews the strength of empirical drivers that appear to explain recent growth in healthcare internationally. The rising trend in health expenditure has been propelled by four main drivers: demography, income, technology, and changes in the price of supply. The inflationary effect of demography on health expenditures per capita has been weak in the past, but it is set to increase in the future if the projected increase in the share of older people occurs.

An extensive empirical literature has sought to determine whether healthcare behaves more like a luxury good (responding with a more than proportional increase to income growth) or as a necessity (responding with a less than proportional increase to income growth). The results from this literature remain inconclusive. Nevertheless, rising income is a main driver of increasing healthcare spending.

Technological progress can be cost-saving and reduce the price of individual treatments, and improve cost effectiveness. However, technological advances may also lead to increases in demand for new treatments and the net effect on expenditure tends to be inflationary. Also, as healthcare is a relatively labour intensive service, costs in this sector will tend to grow faster than the rest of the economy. These factors combine to lead to the share of GDP spent on healthcare increasing over time.

Although cost-effective investments in prevention should be pursued, they will only reduce the rate of increases in healthcare spending, rather than stop the rising trend.

#### Breakdown of empirical drivers of healthcare spending

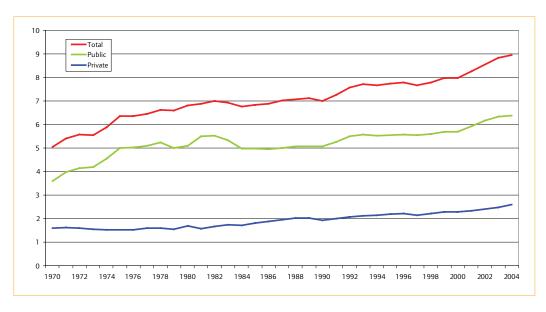
Rising trends in total healthcare spending have been driven by (i) demographics, (ii) income and (iii) technology and labour intensity. These trends are likely to continue.

This report aims to address questions about how as a society we should fund healthcare, in particular as the costs of healthcare are likely to rise in the future. Before discussing how we should fund it, we consider why in the UK (and in other societies) there is such demand for healthcare expenditure. We first present the international, empirical explanations of levels and trends in healthcare spending. We then discuss how economic theory explains rising healthcare spending.

The share of the economy devoted to healthcare has been growing, on average, across OECD countries. Per capita health expenditure increased by more than 80 per cent in real terms between 1990 and 2005, while growth in GDP per capita was 37 per cent. In 1970, health expenditure accounted for 5 per cent of GDP in OECD countries. In 1990, it reached nearly 7 per cent. In 2005 (latest data), it stood at 9 per cent, with a quarter of OECD countries spending more than 10 per cent of their national income on health (OECD 2007a; Figure 2.1).

Figure 2.1.
Healthcare
expenditure
(percentage of
GDP), OECD
unweighted
average for
available
countries, 19702004

Source: OECD 2007a

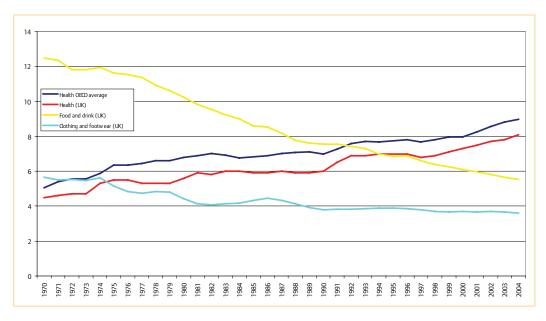


At the same time the share of national income that OECD countries devote to other goods, such as food, drink, clothing and footwear is clearly decreasing. Taking the UK as an example, in 1970 the British spent 18.1 per cent of GDP in meeting their dietary and clothing requirements, and 4.5 per cent on healthcare. In 2004, the costs of food and clothing dropped to 9.1 per cent of GDP, whereas costs associated with medical treatment rose to 8.1 per cent (see Figure 2.2).

As health spending has risen, other types of consumption spending have fallen. It is reasonable to expect that this will continue to be the case in the future (although food prices are increasing in the short term). From this point of view, therefore, rising healthcare consumption has not been empirically an economic problem. However, it should be noted that the other types of consumption described in Figure 2.2 tend to be borne by private individuals rather than the state, leading to a political challenge of increasing pressure on public resources.

Figure 2.2. Total healthcare expenditure, OECD, UK; expenditure on food and drink, UK; expenditure on clothing and footwear, UK – percentage of GDP, 1970-2004

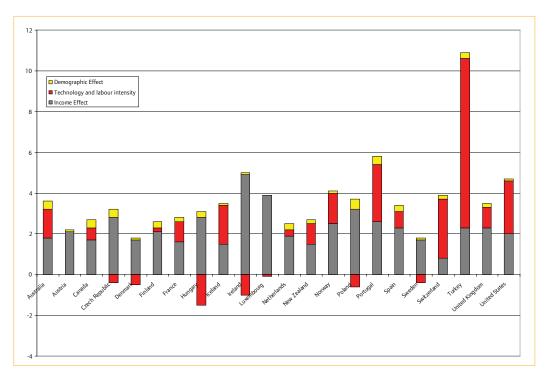
Source: OECD 2007a, ONS 2007



As Figure 2.3 shows, based on OECD calculations, the rise in health expenditure in the past two decades has been propelled by four main drivers: demography, income and technology and labour intensity. We explore these factors below.

Figure 2.3. Breakdown of public health expenditure growth, 1981-2002

Source: OECD 2006

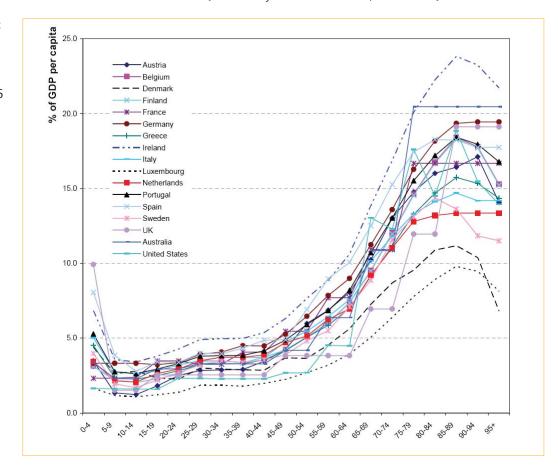


#### **Demography**

The rising proportion of older age groups in the populations of OECD countries has put upward pressure on healthcare costs. Total health expenditure on those aged over 65 is approximately four times higher than on under-65s. As Figure 2.4 shows, the impact of age on public health expenditure is consistent across OECD countries (Productivity Commission 2005a, OECD 2005).

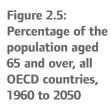
Figure 2.4. Public healthcare expenditure by age groups

Source: OECD 2006

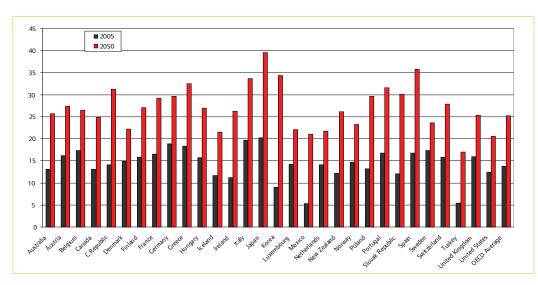


The inflationary effect of demography on health expenditures per capita has been weak in the past (Jönsson and Eckerlund 2003), but it is set to increase in the future if the projected increase in the share of old people becomes reality.

In 1960 only one out of 12 people was aged 65 and over on average in OECD countries. By 2005, this proportion had increased to one in seven. In some countries (for example, Italy and Japan), one in five



Source: OECD 2006



people is aged 65 and over (OECD 2007a). This trend is expected to continue due to the ageing of the baby-boom generation (who will start turning 65 years and older in 2010), further gains in life expectancy at 65 and older ages, and declining fertility rates (see Figure 2.5) (latest research suggests that the increasing share of the older population will accelerate up to 2035 and decelerate after that (Lutz *et al* 2008).

#### **Income**

An extensive empirical literature has sought to determine whether, in reacting to income growth, healthcare behaves like a luxury good/service (responding with a more than proportional increase to income growth, known as income elasticity) or as a necessity (responding with a less than proportional increase to income growth, known as income inelasticity). The results, however, remain largely inconclusive.

There are two level of analysis of the impact of income on healthcare spending (Getzen 2000). At the micro level is the individual within an insured group, who is likely to have little incentive to limit health spending on the basis of cost, and thus whose healthcare spending is likely to be relatively insensitive to income. At the macro level are the insured groups themselves, whose total spending on healthcare is limited by their total group income, and will be more responsive to income than individuals.

Studies that focus primarily on insured individual expenditures have shown that the majority of the variation of spending (50 to 90 per cent) is explained by individual differences in health status, whereas the impact of income is small or negative (reviewed in OECD 2006).

In health economies (for example, pre-1960) or sectors such as dentistry or cosmetic surgery where insurance is less prevalent and out-of-pocket expenditure more important, individual spending is more sensitive to rises and falls in personal income. At the insured group level, however, the evidence suggests that the impact of income on health expenditure is lower – a rise in group income of one per cent is reflected in a rise in healthcare spending of around one per cent (OECD 2006).

Thus the evidence on the impact of income on health spending is inconclusive. As societies get richer they do tend to spend more on healthcare, and this is a major factor in empirical trends of rising health spending. However, we should not assume that healthcare is a 'luxury' good, in that after other factors like demographics and technology have been taken into account, health spending does not necessarily grow faster than the economy.

#### **Technology and labour intensity**

Once demographic and income effects are taken into account in explaining the increases in health expenditure, a residual growth remains (as shown in Figure 2.4 above). Between 1981 and 2002, public healthcare spending grew on average by 3.6 per cent per year for OECD countries (OECD 2006). Demography accounted for 0.3 percentage points increase, income 2.3 percentage points (assuming unitary income elasticity), which leaves a residual growth of around 1 per cent per year. This is explained by two linked factors, technology and labour intensity.

#### **Technological innovation**

It has been suggested that technological changes and relative price movements underlie this residual expenditure growth (OECD 2006). While some forms of technical progress can lead to the average cost of an intervention to fall, any potential saving tends to be more than offset by an increase in demand for treatment. Equally, if new technologies increase the variety and quality of medical products available, even if their price remains the same or increases, demand is also likely to increase. The net effect of technological innovation therefore tends to be inflationary.

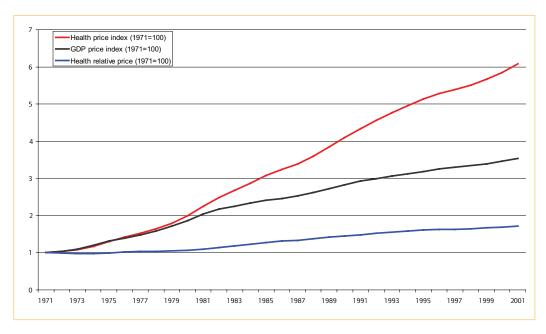
#### Labour intensity

Healthcare is a highly labour intensive service. Thus the scope for steady productivity gains is probably limited when compared with the average for other sectors of the economy. Healthcare could be exposed to a 'cost disease' or Baumol's effect (Baumol 1967, 1993) – in other words the prices of medical care services compared with other goods and services in the economy (where mechanisation

has reduced production costs) rise. Figure 2.6 illustrates the growing relative price of healthcare compared with the rest of the economy in the US.

Figure 2.6. Healthcare relative price index (United States, 1971-2001)

Source: OECD 2007a



This section has shown empirically why healthcare costs have been increasing. These trends are likely to persist in the future. In particular, demographic change is likely to lead to increasing demand for healthcare spending. While improving public health to reduce future illness, and improving the efficient use of existing resources, are important policy goals, they will not stem the long-term trend towards increasing spending on healthcare.

#### Prevention and healthcare spending

Future need for spending on healthcare is obviously influenced by the future population health status. This raises the question of whether public health improvements can reduce future healthcare budgets.

The expected future growth in the burden of chronic diseases in developed countries reflects, to a large extent, specific patterns of individual behaviour. In 2002, the European population lost an estimated total of 150.3 million disability-adjusted life-years (DALYs) (WHO 2005). The bulk of this burden was due to chronic, degenerative diseases (77 per cent of total), followed at great distance by external causes of injury and poisoning (14 per cent), and communicable diseases (9 per cent).

Many of the leading causes of DALYs losses are largely preventable, in the sense that the main risk factors are behavioural. Seven leading risk factors (high blood pressure, tobacco use, harmful and hazardous alcohol use, high cholesterol, being overweight, low fruit and vegetable intake, and physical inactivity) account for over half of the attributable DALYs in the European region. In the UK, 76.7 per cent of all deaths and 50.5 per cent of total DALYs lost are attributable to these seven factors (ibid). Each of the leading risk factors is associated with multiple leading conditions and, conversely, each of the conditions is associated with multiple risk factors.

Therefore there are opportunities for improvements (or denigrations) in projected future population health status. As was illustrated in the Wanless review (2002), policy decisions and social trends can have an ameliorative or exacerbating effect on future healthcare spending requirements.

However, the Wanless review also demonstrated that improvements in public health could only reduce the rate of increase in healthcare spending. The same applied to productivity improvements. Wanless's 'fully engaged scenario' (incorporating optimistic productivity and public health improvements) still projected an average annual increase in healthcare spending of 4.7 per cent, in real terms, from 1999/00 to 2022/23 (Wanless 2002: 79).

Moreover, while some preventive interventions may indeed lead to a net decrease in healthcare

expenditure, other interventions might not. However, as long as the latter are 'cost-effective', in the sense they generate a positive net welfare effect for society, they should still be implemented.

ippr is planning further work on the economics of prevention, since successful prevention will be key to efficiency of the health system and to populations' wellbeing and reducing health inequalities. Spending on prevention is also addressed in Chapter 4. The key point here is that there will be a challenge for policymakers to meet the need for future increases in healthcare spending notwithstanding investments in prevention.

This report does not aim to produce new projections of healthcare spending in the UK. However, drawing on the Wanless projections (Wanless 2002), total health spending is likely to rise by between one and three percentage points of GDP by 2022/23. In terms of public spending this equates to between £58bn and £88bn (2003 prices).

# 3. Economic theory on how much we should spend

As societies get richer, people may value the benefits of additional healthcare spending more than they do the benefits of other, non-healthcare spending. Past increases in health spending have been generally justifiable in economic terms. Future rising healthcare spending should not be seen as a problem per se.

This chapter focuses on the theoretical drivers of healthcare expenditure. Technological improvements in medical care offer an incomplete account of the reasons why societies find it advantageous to spend an increasing share of their income on healthcare. The key theoretical explanation for the decision to devote a rising share of income to healthcare is that, as societies get richer, people may value the benefits of additional healthcare spending more than the benefits of other additional, non-healthcare spending. In economic terms, the marginal utility of non-healthcare consumption is likely to decline faster, as income increases, than the marginal utility of healthcare spending.\*

From a macro level the literature supports both the proposition that historical increases in healthcare consumption have been largely justifiable, and that there are still many opportunities even with existing medical technology, to justify expanding healthcare consumption in the future. We conclude that rising healthcare spending should not be seen as a problem per se. It reflects the predictions of economic theory that the relative value of healthcare spending is likely to continue to increase.

\*The marginal utility of healthcare spending encompasses the additional utility of living an extra year (and/or living the same amount of time in better health status) and the ability of health spending to generate that extra year (and/or better health status).

#### **Economic theory**

According to economic theory, there is an 'optimal level' of consumption of different types of goods and services<sup>3</sup>. In theory, this is determined by the operation of market mechanisms. However, various features of healthcare markets – including the lack of insurance against risk type and information asymmetries between insurers, insurees and healthcare providers (see discussion in the next section) – have been shown to deviate from the norms that would theoretically characterise perfectly competitive markets (see, for example, Arrow 1963).

In an effort to mitigate, or to avoid altogether, problems intrinsic to healthcare markets, most countries fund and provide most healthcare publicly. As a result, the bulk of healthcare expenditure typically consists of *public* expenditure across OECD countries. As such, the size of total health spending depends largely on the outcomes of the political process, and in particular of the majority voting system which tends to reflect the preferences of the median voter (Black 1948, Downs 1957). From an economic perspective, this has significant implications.

First, the level of healthcare spending thus defined is unlikely, at any given point in time, to reflect a state where all marginal benefits and marginal costs for all possible alternative uses of resources have been taken into account in a way that maximises individuals' welfare. The simple fact that individuals value different forms of consumption (and/or leisure) differently makes it logically impossible for a single, uniform level of per-capita healthcare expenditure to be 'allocatively efficient'. Private healthcare expenditure plays an important role in the healthcare economy to the extent that it makes the whole system more flexible, allowing individuals to meet their preferences more fully, even where efficiently funded and provided public healthcare is available.

This raises two inter-related questions: (i) whether the total (public and private) share of national wealth currently devoted to healthcare is optimal, and (ii) how this share should evolve in the future.

<sup>3.</sup> As with any other consumption item, society should consume healthcare to the point where the rates at which individuals are willing to substitute healthcare for other goods/services are just the same as the rates at which the economy can transform these other goods/services into healthcare (Arrow and Debreu 1954).

Existing theory and evidence do not provide unambiguous answers to any of these questions. However, they do shed light on the set of criteria that should be taken into account by policymakers in setting the level of healthcare funding.

Hall and Jones (2007) present arguably the most comprehensive theoretical analysis of this issue to date. The authors develop a theoretical model based on standard economic assumptions regarding the individual preferences to conclude that health spending is predicted to rise faster than national income (i.e. healthcare is a superior good – its income elasticity is above one<sup>4</sup>). According to this model:

'As people get richer and consumption rises, the marginal utility of consumption falls rapidly. Spending on health to extend life allows individuals to purchase additional periods of utility. The marginal utility of life extension does not decline. As a result, the optimal composition of total spending shifts toward health, and the health share grows along with income.' (ibid: 39)

In practice, whether or not the healthcare share rises over time is thus an empirical question. At stake is a race between diminishing marginal utility of non-healthcare consumption and diminishing marginal utility of the returns of healthcare spending. More specifically:

'...the health share rises over time as income grows if the marginal utility of non-healthcare consumption falls sufficiently rapidly relative to the joy of living an extra year (and/or having better quality of life) and the ability of health spending to generate that extra year (and/or better quality of life).' (ibid: 50)

The joy of living an extra year and/or enjoying better quality of life reflects individuals' preferences. Hall and Jones (2007) conclude that the most sensible estimates of the shape of these preferences imply the value of an extra year of life will grow faster than non-healthcare consumption and income.

Substantial uncertainty surrounds the factors that determine both the optimal current level of healthcare expenditure and its optimal future trend (including the empirical value of health gain; the shape of individual preferences; and level of productivity and efficiency of the healthcare system in converting expenditure into health-status benefits). Nevertheless, viewed from a macro level, the existing literature seems to support the proposition that historical increases in healthcare consumption have been largely justifiable, and that there are still many opportunities to explore with existing medical technology that justify expanding healthcare consumption in the future<sup>5</sup>.

To conclude, the economic theory suggests that societies' choices over how much to spend on healthcare, and demand for increasing spending on healthcare as a proportion of the economy, should reflect the relative benefits that healthcare can provide compared to other types of spending (public and private). The upward projections for future healthcare spending should not be viewed as a problem per se, insofar as they reflect these trends.

Moreover, such expanding healthcare spending could well be affordable. As described above, as spending on healthcare has grown, other types of spending have declined. Moreover, expanding healthcare spending would not impose a decline in the absolute level of non-medical consumption in the economy: while medical expenditure is predicted to rise faster then GDP, non-medical consumption will still increase as long as the growth rate of medical expenditure weighed by the share of medical expenditure on GDP is less than the GDP growth rate itself.

<sup>4.</sup> Note this is in contrast to most empirical estimates of healthcare demand elasticity reviewed later in this chapter. However, as we mention then, these estimates are inconsistent across different studies and therefore remain largely inconclusive.

<sup>5.</sup> An interesting result from Hall and Jones' (2007) simulations with data from the US is that optimal health spending is invariably high. Those simulations suggest that, by 2050, optimal health spending as a share of GDP ranges from a low of 23 per cent to a high of 45 per cent: 'We believe it likely that maximizing social welfare in the United States will require the development of institutions that are consistent with spending 30 per cent or more of GDP on health by the middle of the century' (ibid: 39).

This is commonly expressed as healthcare taking up a larger slice of a larger cake – still leaving room for other types of spending in the economy to expand. The central issue in healthcare – and arguably the main challenge for policymakers – is thus not whether we can afford to spend more on medicine, or whether it is *a good idea* to do so, but *what is the best way of paying for it?* That is the question we address in the following section.

# 4. Economic theory on how we should fund healthcare

This chapter presents standard health economics arguments on how healthcare spending should be financed. Healthcare is an obvious candidate for some form of insurance coverage as individual care needs are relatively unpredictable and potentially large in size. However, private healthcare insurance markets tend to suffer from three independent problems: moral hazard; adverse selection; and inability to insure against risk type (see Chapter 5).

The latter two market failures create a clear case for government intervention in healthcare funding. Both theory and evidence strongly suggest that regulation by itself is insufficient, and that there is a strong economic efficiency argument in favour of a single national health insurance pool (like the UK National Health Service). The bulk of future increases in healthcare demand should, therefore, be met through collective funding as opposed to expanding private (insured and/or uninsured) spending.

However, private healthcare expenditure plays a valid role in the health economy. Co-payments, for example, can be an important way of combating the problem of moral hazard (by deterring 'over-consumption' of healthcare resources that are free at the point of use – see Chapter 10). There is a less strong case for public funding for some types of healthcare where the market failures are less pronounced – for example where the losses borne by individuals for spending on drugs for minor ailments are more predictable and relatively low. Private spending can enhance health system efficiency by allowing some individuals to meet their preferences more fully, even where efficiently funded and provided public healthcare is available. This may include types of healthcare, such as cosmetic or cost-ineffective treatments, that are excluded from the public package by a legitimate priority-setting process.

We also consider arguments about the economics of sickness prevention in relation to the question of private spending on healthcare.

#### Theories of insurance and market failures

According to economic theory, the characteristics of healthcare make it suitable for some form of insurance (private or public). Individuals' healthcare expenditures vary considerably across time and cannot be predicted with certainty. Lack of certainty drives people's willingness to buy insurance. Insurance enables individuals to redistribute income from times of good health to periods of sickness and to access medical services they would otherwise not afford. The value of health insurance increases with risk aversion (the degree to which uncertainty about marginal utility makes a person worse off), and with the variability of medical costs incurred (Cutler 2002).

There are, however, problems with insurance. First, people are likely to use more services when they are insured (what is commonly known as moral hazard [Arrow 1965, Pauly 1968, Zeckhauser 1970, Spence and Zeckhauser 1971, Kotowitz 1987]). This over-consumption may occur for two reasons: (i) people become less attentive to their health (because they expect the insurer to pay for their care if they require it); and (ii), insurees do not bear the marginal cost of care when they consume it. Therefore, healthcare insurance – both public and private – is a compromise between the inefficiencies created by moral hazard and the benefits of improved risk sharing. This is discussed further in Chapter 10.

Second, different individuals represent different risk types. At the most basic level, genetics could explain to a considerable extent differences between risk types (for example, Cutler and Gleaser 2005). Socio-economic conditions are possibly another important determinant (for example, Cutler and Lleras-Muney 2007). In markets with several competing insurers, if insurers are not fully capable of distinguishing those who are relatively sick from those who are relatively healthy – which is quite likely to occur due to asymmetric information between insurers and insurees about the health risk of the later – people will have an incentive to pretend they are healthier than they truly are (which is normally designated adverse selection).

Under such circumstances, the healthcare insurance market is likely to fail in two important ways (Rothschild and Stiglitz 1976, Wilson 1977): (i) people may be in the wrong plans (adverse selection prompts people at the margin to enrol in less generous (but cheaper) policies, when on the basis of

their own preferences and costs more people would choose generous (and expensive) insurance); and (ii), insurers have incentives to attract low risks and repel high risks.<sup>6</sup>

Third, as individuals' health risks vary, their demands for insurance policies also differ (high-risk individuals will be interested in purchasing more extensive health insurance than low- risk individuals). That is to say that even if insurance were sold at actuarially fair prices (that is, reflecting buyers' risk profiles) and there were no problems of adverse selection of any kind, it would be in the best interest of both high- and low-risk individuals to purchase insurance coverage in line with their specific risk type, which implies high-risks paying more for insurance than low-risks (so resulting in risk segmentation).

This state of affairs is efficient *given risk types* (once risk types are known) but it is inefficient from an *ex ante* perspective, that is before people know their risk type (Cutler 2002). Put simply, it is not possible to insure yourself against the risk of having a high- or low-risk type before you are born.

Since being a high health risk is associated with social disadvantage – for example, growing up in poverty – the efficiency arguments coincide with social justice arguments. Cutler's economic concept of ex-ante insurance bears notable similarities with Rawls's theory of justice, whereby a system is just if you would be satisfied with being allocated to any starting position from behind a veil of ignorance (Rawls 1971).

The latter two problems of risk segmentation and adverse selection create a clear case for government intervention. Both theory and evidence strongly suggest that regulation by itself is insufficient to offset the problems resulting from biased enrolment (for example, Cutler 2002, Colombo and Tapay 2004). Mandatory coverage is required to prevent the healthy from declining coverage, and a single plan is required to prevent sorting by risk. The case for a single national health insurance plan (of which the NHS is a type, as are some continental social insurance systems) is therefore clearly one of economic efficiency as well as other collective, social benefits.

This is not to imply, however, that *all* healthcare expenditure should be channelled through a single national health insurance plan. First, as indicated, the problem of moral hazard (people consuming excessive amounts of healthcare free at the point of delivery, or taking less care of their own health) applies in public insurance systems. This creates an economic argument for some costs to be borne by the individual in certain circumstances – usually as a co-payment or user charge. Second, insurance coverage (public or private) may be inefficient if the criteria for insurance are less well met – for example where the potential losses to the individual patient are relatively low, as in the case of many drugs for minor ailments. Third, individuals differ in the value they place on different forms of consumption and in their ability to pay for them making it impossible for a single insurance plan to allow everyone to meet their insurance preferences, and leaving an important role to be fulfilled by private health expenditure.

Finally, as Kenneth Arrow once observed 'the taste for improving the health of others appears to be stronger than for improving other aspects of their welfare' (Arrow 1963: 954). Healthcare (much like education) seems to be part of a set of goods and services on which society has special attitudes expressed through the desire to impose specific ethical distributions for those goods (Reinhardt 2001). In these examples, taxpayers maximise their own utility when tax-financed transfers to the poor are made in kind instead of cash. A complementary non-altruistic view of purely redistributive healthcare' is related to people's preference to reduce uncertainty and variability. Universal access to healthcare can thus be seen as a form of social insurance that offers a certain degree of protection against income volatility and/or persistent poverty (Buchanan and Tullock 1962, Haveman 1985).

<sup>6.</sup> A large body of literature has looked for biased enrolment in insurance markets, and invariably shows strong evidence of adverse selection (see Cutler and Zeckhauser 2000 for a good review).

7. This occurs whenever the contributions that individuals make in form of taxes and/or social security payments during the course of their lifetime are not enough to entitle them to the healthcare services they receive as a direct counterpart of an implicit insurance contract.

#### The economics of spending on sickness prevention

The focus of this report is on healthcare, but in the current political context – in part driven by the increasing awareness of the costs of poor public health – there is increasing policy interest in improving prevention. In particular, policymakers are interested in ways in which ill-health prevention interventions can be introduced and funded. This may be an area where there is a greater potential for private spending to bring health improvement benefits.

As discussed, improving prevention of ill health is an important objective, economically and for social justice reasons. Variations in healthy behaviours and public health will have an impact on projected healthcare spending, although as Wanless showed this can only reduce the degree of increase in future healthcare spending, rather than lessen the challenge of rising healthcare spending.

Some types of private spending behaviours can clearly have an impact on health status. For example, joining (and using) a gym or other exercise facility, purchasing healthy foods and paying for adequate heating can all be linked to improved health status. Other types of preventive spending are funded collectively, for example vaccination programmes or public education campaigns. There is therefore an argument to consider *how much* we do (and should) spend, and *how* we should do so.

On the first question, the available evidence on the link between investments in prevention and changes in individual behaviour is still the subject of controversy (for example, Suhrcke *et al* 2007, Schwappach *et al* 2007, Cutler 2002). The availability of sound economic evaluations of both non-clinical (primary) and clinical (secondary and tertiary) prevention is still limited and tends to be biased towards the latter. Partially as a result, virtually everywhere prevention earns only a small share of overall healthcare expenditure when compared to the one absorbed by curative treatment. In 2005, OECD countries spent on average just over 3 per cent of their public healthcare budget on prevention activities (such as vaccination programmes and public health campaigns on alcohol abuse and smoking (OECD 2007a). There is clearly a case for identifying cost-effective preventive interventions and calculating their likely costs and benefits.

However, unlike the provision of healthcare, ill health prevention does not *necessarily* have a direct financial cost. For example, walking, not smoking and not drinking alcohol all *reduce* costs on the individual compared to the more unhealthy alternatives. Alcohol and cigarette duties raise public finances (or, ideally, reduce private expenditure). Regulating pollutants or food ingredients does not have a direct consumption cost either. Therefore the economics of health improvement is not just about spending but about affecting behaviour and tackling long-term social determinants like child poverty. Discussions about how prevention should be funded should therefore be secondary to considering what approaches are justifiable and effective.

On the second question, where there is a case for preventive spending, public funding is clearly required for some interventions (such as child vaccinations). Other types of preventive activity lend themselves more to private spending, such as having a personal trainer. However there might be a case for mixed public and private or means-tested funding for some types of spending. These questions deserve further investigation.

Taking an economic approach to these questions forms an important priority for ippr's future research. This would help policymakers assess which interventions are likely to be more effective and address questions of the level and methods for funding them.

#### 5. International evidence on how healthcare is funded

This chapter presents international evidence on the composition of healthcare spending and on the drivers and effects of *private* spending, in particular of private health insurance (PHI). Since the second half of the 1980s the share of private healthcare expenditure in OECD countries has remained essentially flat. Evidence suggests that attempts to shift costs from the public to the private sector have largely proved unsuccessful (often simply adding to total health expenditure, and in some cases contributing to increasing public expenditure).

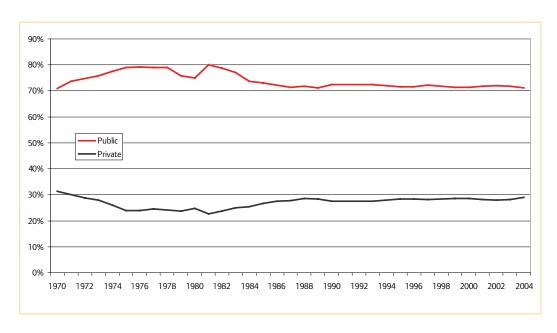
There is evidence that private insurers have higher administrative costs (per person insured and as a fraction of total cost) than public health coverage programmes, and less bargaining power over suppliers. There is also evidence that private health insurance markets lack strong competitive pressures; and finally, evidence that, in some countries, private health insurance markets have created perverse interactions with the existing public system.

#### International trends in funding healthcare

The bulk of healthcare costs in OECD countries are financed by public funds, including general taxation and social security schemes, which collectively accounted for an average of 72 per cent of total health spending in 2005 (Figure 5.1). Private sources of funds, including out-of-pocket payments, private insurance programmes, charities and occupational healthcare accounted for the remaining 28 per cent of costs.

Figure 5.1. Public and private health expenditure (percentage of total health expenditure), OECD average for available countries, 1970-2004

Source: OECD 2006



In the 1990s, the public share of health spending fell in several countries where it was relatively high (for example, Poland, Hungary and the Czech Republic), and rose in others where it was low (for example, Korea, Mexico, Switzerland and the United States), bringing both groups closer to the average trend (roughly a 70–30 per cent split between public and private sources of funding respectively).

Direct, out-of-pocket spending is a significant source of funding in many countries (average 20.2 per cent in 2005), and has remained relatively stable since the beginning of the 1990s (Figure 5.2). Behind the average, however, lies substantial cross country variation – only 6.9 per cent of French total health expenditure in 2005 was in the form of out-of-pocket payments, whereas in Mexico the equivalent figure was 51.2 per cent.

Figure 5.2. Outof-pocket payments (percentage of total expenditure on health), OECD average for available countries, 1990-2004

Source: OECD 2006

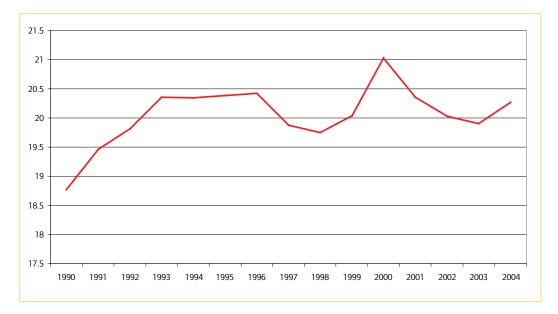
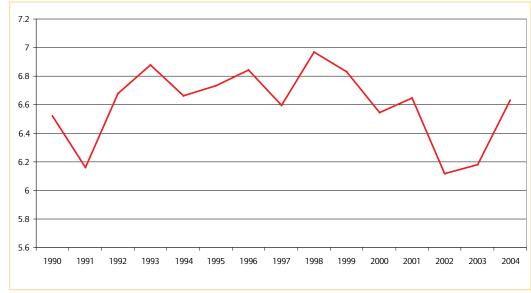


Figure 5.3: Private insurance (percentage of total expenditure on health), OECD average for available countries, 1990-2004

Source: OECD 2006



The money paid out by insurance companies on health services accounted for an average of 6.5 per cent of total health spending in 2005 (Figure 5.3). This average hides cases where it plays a much large role, including certain population groups in Germany and the Netherlands (pre-2006)<sup>8</sup>, and most of the non-elderly population in the United States, where it globally accounted for 36.6 per cent of health spending in 2005. Also, in France and Canada, private health insurance represented 10 to 15 per cent of overall spending in 2005<sup>9</sup>.

Private funding often plays a much greater role in paying for pharmaceuticals than for hospital or ambulatory care, as drugs are generally less well-covered by many publicly-financed insurance schemes (and cheaper products may be accessible without insurance). In 2005, an average of two fifths of total expenditure on pharmaceuticals and other medical non-durables was paid by private sources across OECD countries. In Canada, Poland, Mexico and the United States, more than 60 per cent of pharmaceutical expenditure was funded privately (OECD 2007a).

<sup>8.</sup> The Netherlands reformed its healthcare finance system in 2006 so that high earners are no longer excluded from the public system.

<sup>9.</sup> Note that France and Canada actually have very different PHI roles/systems. In Canada, PHI is banned from covering hospital and medical services that are publicly financed. In France, PHI pays the portion of the cost that is not covered by the public system.

None of the above graphs shows a discernable trend towards increasing private spending as a proportion of total health spending<sup>10</sup>. This is despite governments' efforts since the 1980s to control and retrench public spending across most developed market economies. As mentioned, in some economies private spending has declined as a proportion of health spending.

As outlined in the introduction, the primary question we want to address in this report is whether, as healthcare costs increase, private spending should take a greater role in financing healthcare in the future. Of the different types of private spending, private health insurance is the most likely candidate for replacing public insurance. Because of the high one-off costs and uncertainty of healthcare-related losses, out-of-pocket payments are an unlikely option for mass funding: it would be unlikely that a government would argue for shifting finance from public insurance to uninsured self-pay. Insurance tends to be more efficient than self-pay in terms of the prices that can be negotiated by bulk purchasers. Co-payment tends to be a small charge to combat moral hazard rather than a source of funding that could replace collective insurance to any significant degree. Larger co-payments (which we would define as subsidised self-pay) are likely to be insured, as in France where consumers purchase insurance to cover high co-payments.

Therefore most debate in this area focuses on the potential for an expanded role for private health insurance in the economy. The next section summarises the evidence on the role of PHI in international health economies, and the options for its expansion as a replacement for collective insurance. We draw in particular on a major 2004 OECD study addressing these questions (Colombo and Tapay 2004).

#### Private health insurance: international evidence

The international evidence suggests that public policy is the primary determinant of the role and the size of PHI arrangements in most countries (Colombo and Tapay 2004). PHI often fills gaps in coverage of individuals, services or providers not covered by public health systems. As such, the structure and regulation of public health funding and delivery systems shapes PHI markets and, to a large extent, determines their role.

In countries with universal provision (like the UK), 'supplementary' PHI provides the opportunity for some individuals to purchase additional insurance that duplicates their public entitlement, but adds some perceived benefit. In this case as well, the role and size of this market is also largely determined by public policy as demand is shaped by the perceived quality and accessibility of public care (such as waiting times, ability to exercise choice and the quality of accommodation). Regulations on the use of the private sector (tax exemption, the ability to top-up public entitlements and so on) also determine the size and role of the private sector.

In many countries the development of PHI markets has been encouraged to shift cost pressures from the public to the private sector. Three different strategies have been used:

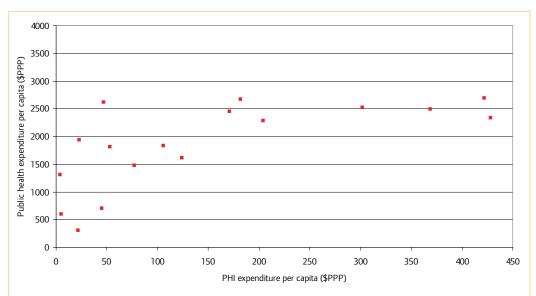
- (i) Allowing PHI to supplement (in a duplicate sense) universal public coverage (for example, Australia, Ireland, and the United Kingdom)
- (ii) Establishing income or population-based eligibility criteria for public health coverage (for example, United States), and/or permitted certain populations to opt out of public coverage (for example, Germany)
- (iii) 'De-listing' certain services from public coverage, and encouraging the development of complementary PHI (for example, dental care in the Netherlands and Australia).

<sup>10.</sup> This report focuses on private spending and does not examine the different types of public spending. However we note that there have been trends in several health systems predominantly funded by social insurance contributions to shift the burden towards general taxation (such as France, Germany and The Netherlands) (Thomson *et al* 2008).

The evidence suggests that, so far, PHI has not significantly shifted costs from the public sector (Colombo and Tapay 2004). On the contrary, it has often added to total health expenditure. In fact, as Figure 5.4. shows, a higher level of PHI spending tends to be associated with *increased* public spending, rather than reducing pressures on the Treasury.

Figure 5.4: PHI expenditure and public health expenditure (per capita, \$PPP), OECD countries, 2005

Source: OECD 2007a



Note: PHI expenditure (per capita, \$PPP) reflects money paid out by PHI companies as opposed to subscription income paid by consumers: it does not allow for the gross margins (administrative costs and profit) of PHI companies.

The OECD study provides some explanations of why PHI does not efficiently substitute public spending. In duplicate systems, PHI tends to concentrate on funding lower risk individuals and treatments, particularly elective surgery, while the cost of more complex (and expensive) care and emergency services is borne by the public system. (Higher-cost individuals, such as the elderly and those with chronic conditions, are more typically covered by public or subsidised private coverage, even in countries where PHI plays a primary role.) Furthermore, some countries have incurred significant direct costs through their attempts to shift costs from the public to the private sphere, especially when the development of PHI markets is publicly subsidised (see, for example, the discussion of Ireland and Australia in Colombo and Tapay 2004).

De-listing services from public coverage cover has also had a very limited impact in limiting public sector costs, as the typical candidates for delisting (for example, optical and dental care services) generally account for a small share of health systems' costs.

More importantly, as discussed above, future growth in healthcare expenditure is likely to be in the treatment of older people and those with chronic diseases, who are typically less well-covered by private insurance markets. (Due to the near-certainty that chronically ill and elderly subscribers would have high healthcare costs, many insurance schemes exclude them from eligibility or charge prohibitively high premiums for these groups.) Any shift to private spending, therefore, would be short-term and would not contribute to meeting the challenge of rising future costs.

The extent to which health system performance improvements can be gained from PHI markets is also limited. Various reasons have been advanced to justify this trend, as summarised below (based on arguments made by Colombo and Tapay 2004):

(i) Private insurers have higher administrative costs (per person insured and as a fraction of total cost) than do public health coverage programmes. Private insurers sustain high administrative costs in attracting and retaining insurees, providing multiple insurance plans, and negotiating multiple contractual relationships with providers.

- (ii) Private insurers have generally less bargaining power over the price and quantity and quality of care when compared with public systems, particularly single-payer ones. <sup>11</sup>
- (iii) PHI markets generally lack strong competitive pressures, and when some form of competition occurs, it has been mainly through risk selection rather than quantity/quality-price improvements. Insurers have competed by selectively offering coverage, benefit packages, and/or favourable premiums, to applicants who represent 'better risks', and have shifted the cost of certain risks onto other payers (public payers and other insurers) less able to exclude worse risk applicants (Tollen and Crane 2002, Colombo and Tapay 2004, Buchmueller and Couffinhal 2004).
- (iv) In some countries, incentives created by higher payment levels in PHI markets have encouraged providers to maintain long queues in the public system or refer patients to their own private facilities in order to sustain their private practice (Hurst and Siciliani 2003, Rodwin 1993, DeCoster et al 1998, Yates 1995, Evans 2000, Robinson 1999).

As a result, Colombo and Tapay (2004) argue that international attempts to expand PHI beyond a residual role have often made the health system more costly without a commensurate improvement in healthcare outputs. While, as discussed, higher health spending is not a problem per se, the higher spending in these examples was probably less efficient for consumers than it would have been if it had been channelled through collective funding.

International evidence also suggests that promoting the use of PHI also risks increasing public expenditure inefficiently, both directly and indirectly:

- (i) Directly, through subsidies to individuals to encourage PHI subscription.
- (ii) Indirectly, through PHI coverage of co-payments for publicly financed health services (for example, in France and the United States). This removes the intended incentives to dampen unnecessary demand see discussion on co-payments in chapter 2 (Imai *et al* 2000, Christensen and Shinogle 1997, Buchmueller and Couffinhal 2004). (When PHI is offered by employers and its cost is made partially or entirely invisible to insurees, the moral hazard costs become even larger.)

#### Case studies: the failure of healthcare cost-shifting

France: high user charges

This section draws extensively on Sandier et al (2004).

France requires people to make financial contributions towards their healthcare. The level of copayment varies for different types of treatment and individual, but on average ranges between 10 per cent of costs of hospital care and 66 per cent of dental care. People are encouraged to take out complementary private insurance to cover these charges. This has led to private spending in France accounting for a higher proportion of healthcare spending than in the UK (20.2 per cent, compared with 12.9 per cent in 2005 (OECD 2007a).

Raising these private contributions was seen as a way of controlling public spending until 1993. It might be argued that the UK should introduce higher co-payments in order to control public spending on the NHS, with individuals taking out insurance or paying out-of-pocket to make up the difference. However, the French experience suggests that this approach would fail to achieve improvements in funding efficiency of the health system.

The French system, with high co-payments met through complementary insurance, fails to control costs effectively. France has a high spend on healthcare (11 per cent of GDP in 2004 compared with

<sup>11.</sup> In the United States private insurers have been relatively ineffective in controlling costs when compared with the public Medicare programme. For a comparable set of services, growth in per enrolee payments in PHI was higher than in Medicare over the period 1970-2000, reflecting higher payment rates to providers paid by private insurers (Boccuti and Moon 2003, Levit *et al* 2004).

the OECD average of nine per cent), and this has grown rapidly since 1970. In part this is due to the difficulty of cost control for complementary health insurers, who retrospectively reimburse individuals for costs that have already been incurred. Co-payments, being relatively high, are typically met by insurance (for those who are insured) rather than by out-of-pocket spending. This reduces the impact on moral hazard. Complementary health insurers also suffer from the market failures in competition discussed in this report. As a result, despite the high cost-sharing element, France has still had a higher rate of *public* spending than the UK (nine per cent versus seven per cent of GDP), demonstrating that increased private contributions do not necessarily control public expenditure.

The system of high co-payments also fails to achieve efficient *ex-ante* insurance, leaving individuals with higher risks less well covered. As discussed, this also means that equity goals are not met, with poorer individuals under-insured.

In response to these failures, France introduced reforms in the 1990s and 2000s. In order to control costs, the role of the state was increased to set a ceiling on health insurance expenditure between different health sectors and to take responsibility for negotiating with the entire hospital sector. Gatekeeping functions have been strengthened, medical school places have been controlled and hospitals have been reconfigured. The overall effect of these reforms is that the state has taken on more of the roles that purchasers might have, moving towards a single-payer model. However, these reforms have created conflict with both doctors' unions and health insurance funds.

In order to combat the equity issues – related to concerns about health inequalities – France also introduced 'universal health coverage' from 2000 for lower income groups, filling gaps in statutory coverage (for 900,000 people), and in complementary insurance (for 4.3 million). At the same time, the system of employees' contributions from wages has been replaced by a contribution based on income, which has the character of a tax. Between 2000 and 2005, the share of private spending declined from 21.7 per cent to 20.2 per cent of total health spending. In these respects, France is moving towards a centrally financed system.

#### Germany and the Netherlands - optional and compulsory 'opt-outs'

This section draws significantly on Thomson and Mossialos, 2006.

Between 1941 and 1986, there was an optional opt-out (or opt-in) from the public insurance system in the Netherlands, leading to 30 per cent of people (mainly self-employed) not being covered by the public system. In Germany there has been a choice of public or private insurance for higher income people since 1970, with eight per cent opting out. Allowing opt-outs from public insurance is one way in which private spending could be increased in the UK health system. The aim would be to provide greater choice and competition between insurers and to control the financial burden on public finances by removing the cost of wealthy individuals. However, choice of public or private insurance has led to efficiency problems in both countries. In large part these relate to the problems of competition in health insurance discussed in this report.

Private insurers have strong incentives to select risks. This leads to risk segmentation harming horizontal equity (equal access for equal need) and fails to provide *ex-ante* insurance. Risk segmentation increases financial exposure of public insurers who are left with high risks. In Germany, therefore, those most likely to be privately insured are young single people, couples with double income and adult males in the former West Germany; consequently the public system covers a disproportionate number of women and children, older people and larger families who all face higher premiums and carry higher financial risk to the public system. By allowing wealthier, lower risks to opt out, contributions to the public system have to be collected from non-high earners from the public system, so that funding is regressive in both countries.

Evidence suggests that private insurers compete to select low risks rather than improve efficiency for consumers. Private insurers spend 14 times more on selection than on efficiency measures in the Netherlands; per capita expenditure rose 1.4 times faster in the private system compared with the public system in Germany between 1992 and 2002. Private insurers in Germany and the Netherlands spent three times as much on administration than public insurers. Policyholders are effectively locked in and unable to move to a more efficient insurer.

These problems got progressively worse in the 1990s as private premiums rose and more older people moved to the public system, increasing the public finance pressures. Both Germany and the Netherlands have attempted to regulate the system to address adverse selection and protect the finances of the public scheme. The Dutch government went so far as to remove the element of choice by compulsorily excluding high earners from public healthcare in 1986. In this case public cost control (not choice) was the main objective. Higher income citizens were then required to take out private insurance. However, this strategy still led to continued inefficiencies in the health system. Restricting access to the public system even for higher earners means that some 'disqualified' people faced barriers to access to healthcare, for example older people or those with pre-existing conditions.

As discussed, private insurance tends to be more expensive than public funding – Dutch private insurance premiums were 20 per cent higher than public insurance contributions. While public healthcare expenditure might be reduced by making 'opting out' compulsory, total health expenditure is likely to rise and the costs of public insurance for higher risks are distributed among fewer (non-high income) earners. Regulating the system to address horizontal equity issues becomes very complex, with cross-subsidies and restrictions on opting out, until the system begins to resemble a collectively funded insurance scheme. The equity in finance issues were not solved by this approach in the Netherlands, which was still regressive in the 1990s.

In response to these problems, both Germany and the Netherlands have reached the conclusion that a compulsory health insurance is the most effective solution. In 2006 the Dutch government ended the two-tier system and introduced a compulsory universal scheme. The experiences of these countries demonstrate the likelihood that increasing private expenditure by allowing – or requiring – higher earners to opt out is likely to fail to shift costs from public to private funding, and are likely to reduce healthcare funding efficiency.

#### **Conclusions**

We are led to conclude that private spending (and insurance in particular) cannot efficiently substitute public spending as healthcare costs rise. However, as we have argued, if it is managed efficiently then private spending, including private health insurance, has a valid secondary role to play in the health system.

# Conclusions to chapters 2-5

The economic theory and international evidence reviewed in the preceding four chapters indicate that total healthcare spending is likely to continue rising – and that this should not necessarily be viewed as a problem. In terms of meeting the healthcare funding challenge, evidence and theory do not support the case for expanding private spending as the solution. The theoretical problems with the efficiency of privately-funded health markets that lead to government intervention in funding healthcare in the first place are still relevant. International evidence suggests that expanding private financing does not reduce pressure on public budgets and is likely to reduce the efficiency of the health economy for consumers.

It should be emphasised that this discussion has focused on the potential role as a *primary* source of healthcare funding. Private spending still plays a valid role by allowing individuals to meet their preferences more fully; by allowing them to purchase relatively cheap health products which they are unwilling to buy insure for; as a moral hazard mitigation instrument; and as a comparator for the publicly-funded system.

This leaves a challenge for policymakers as to how else to fund the rising costs of healthcare. The discussion above suggests that, if as a society we value extra spending on healthcare (and this is likely to be the case) then the most efficient way of doing so will continue to be through a single collective insurance pool, such as the NHS.

#### The challenge of raising collective funding for healthcare

The need to increase collective funding of healthcare presents a significant political problem. While the focus of this report is on the role of private spending, in this box we discuss some of the issues relating to raising collective funding to meet the projected future demand for health spending efficiently.

Willingness to pay higher taxes is obviously limited. In the short term, as ippr has argued before (Rankin *et al* 2007), there needs to be a more honest debate about rationing so that the limitations of what can be demanded within finite resources are better understood. These findings also re-emphasise the need to bear down on productivity across the health economy and to improve preventive care.

But on the other side of the equation, as a society we need to continue to debate and reassess the value we place on healthcare spending. The theory predicts that demand for healthcare spending is likely to continue to rise as economies get richer and the marginal benefits of other types of consumption decline more quickly than those of healthcare. Therefore, we need to find ways of meeting that demand efficiently through the collective risk pool. To illustrate this, the projections of the Wanless report (2002, updated in Wanless *et al* 2007) suggest that the demand for public spending on healthcare is likely to increase by between £58bn and £88bn by 2022/23.

In recent years, public spending on healthcare has increased rapidly (at an average of 7.4 per cent per annum), following a National Insurance Contribution rise in 2002. However, the most recent Comprehensive Spending Review slowed the pace of annual growth in NHS budgets to four per cent between 2007-08 and 2010/11. Following the Wanless projections, even with these rises there is likely to be a shortfall in healthcare funding of between £6.5bn and £16.3bn by 2012/13 (ippr calculations based on Wanless *et al* 2008 and HM Treasury 2008, based on 2012/13 estimated prices). In the longer term, therefore, governments will need to increase public funding if they want to continue to meet demand for healthcare efficiently.

It may be that, when asked to pay higher taxes, the voting and taxpaying public places a lower value on the perceived benefits of increases in general total public spending (including healthcare) than it places on the benefits of increases in healthcare spending specifically. For example, health was the most popular choice for priority public spending among respondents to the 2005 British Social Attitudes Survey (NatCen 2007). In this case, there may be a case for some form of separation of collective healthcare spending from general public spending. This would have the advantages of (i), allowing healthcare spending to expand according to the increased value that society places on it,

without the same constraints that apply to people's willingness to pay higher general taxation, and (ii), reducing the need to trade off increasing healthcare spending against other types of public spending in every budget round.

There may be a range of options for implementing such a separation. At one extreme would be the creation of an NHS insurance scheme that was separate from the national taxation system (along the lines of some continental social insurance systems). This was rejected in the interim Wanless report (2001) as an over-complicated solution with limited benefits. Indeed, the problems with social insurance funding models are evident on the continent where health systems have struggled with deficits and have moved towards increased tax-funding (for example, in France, Germany and the Netherlands [Thomson *et al* 2008]).

The Government's willingness to revisit the funding system may increase as healthcare spending continues to grow (as predicted) but the ability to raise funding through the current tax-based system reaches a limit. A simpler approach, without changing the funding model so fundamentally, would be to separate the 'NHS contribution' on payslips and tax returns. True hypothecation of healthcare taxes carries its own risks, however, including administrative costs, tying the healthcare budget too closely to earnings fluctuations and potentially undermining public willingness to pay other, less popular but necessary, taxes. See the Commission on Taxation and Citizenship (2000) for a discussion of these arguments.

On the other hand, if there is little substantive economic difference between the two models (tax funded or social insurance) then perhaps the key challenge is for political debate, and cannot be solved by a technical policy fix.

For our part, ippr will continue to stimulate and engage in the debate about health spending. Another potentially fruitful area for further research would be to examine the potential for partially pre-funding the public healthcare system (introducing an investment-based component into the system). As the bulk of healthcare expenditure is associated with the elderly, funding healthcare raises issues of lifecycle redistribution that run parallel to those underlying the funding of old age pensions. It is debatable whether or not the current arrangement whereby public healthcare is financed by taxes paid by working-age individuals purely on a 'pay-as-you-go' basis is the most appropriate one. It would seem useful to explore the effects of a move towards a mixed system of funding healthcare that would encompass both 'pay-as-you-go' and pre-funded elements.

As discussed, both economic theory and evidence suggest that the privately-funded sector plays a valid, if residual, role in health economies. As we have emphasised here, it is important that policymakers prioritise efficiency as a key aim. As such, it is also important that efficiency is promoted in private healthcare too. While the majority of healthcare policy – particularly in the UK – focuses on the publicly-funded sector, improving the contribution of private spending should not be neglected. The rest of this report focuses on exploring the role of privately-funded healthcare in the UK.

# 6. Private spending: 'self-pay' for hospital treatment

This chapter examines the issue of patients paying for their own hospital care – 'self-pay', a phenomenon that is at a relatively stagnant level due to improving access to NHS services. This is offset by a growing market for cosmetic surgery and treatments, driven by cultural and technological factors. These trends of self-pay stagnation and cosmetic growth are likely to persist if NHS targets to reduce waiting times are achieved.

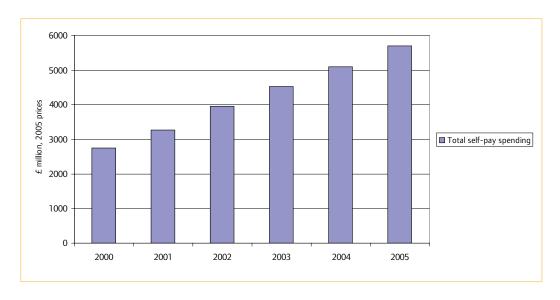
Self-pay plays a valuable role, allowing people to purchase extra comfort and convenience, albeit at high prices. Self-pay also allows people to purchase treatments not provided by the NHS. This is not problematic as long as the public entitlement is of high quality.

If the NHS were to give 'rebates' to individuals who had paid for their own care, the NHS budget would suffer cash losses. However, patients should be allowed to purchase additional treatments that are not offered by the NHS. The marketing and sales of self-paid-for private healthcare should be regulated to protect consumers.

Given that out-of-pocket payment for treatment is both the largest and fastest growing sector in the private spending health economy, we will look in depth at this type of spending first.

In 2005, an estimated £5,701 million was spent on out-of-pocket payments for healthcare (excluding medical products). This includes self-payment for non-hospital treatments like dentistry, which is dealt with in a later chapter. Total self-pay grew by an average of 14 per cent per annum between 2000 and 2005, nearly doubling in that period (in real terms).

Figure 6.1.
Total self-pay
spending,
2000-05
Source: ippr
calculations based
on OHE 2007 and
Laing & Buisson
2006



Unlike the NHS or private insurance spending, by its very nature data on out-of-pocket spending is more difficult to collate. It is made up of millions of individual transactions made with thousands of providers. Note that our estimates for total expenditure through self-payment were obtained as the difference between total expenditure on private healthcare treatment, and the sum of private health insurance claims, health-cash plans claims, and self-insured medical expenses schemes' claims. Other small categories of funding may be included in this residual. The robustness of our estimates is thus dependent on the quality of this data.

In terms of analysing the determinants and impacts of self-pay treatment there is little academic research in this area. There are questions in official surveys such as the British Household Panel Survey that record whether respondents purchase private health insurance, but they do not record whether they self-paid for treatment.

We have attempted to bring some of this data together in this report. The headline figures again mask a variety of trends within the sector. This chapter focuses on self-pay spending on hospital treatment.

The following chapters examine private dentistry and general practice, two other major areas for self-pay (and some insurance).

## Trends in self-pay for hospital treatment

A large proportion of self-pay for healthcare is in the hospital sector, with individuals paying for an operation or test. Table 6.1 summarises the available data for this category in 2005.

Table 6.1. Self-pay hospital income, 2005 (£ million)	
NHS-provided	245
Private-provided	510
of which non-cosmetic	390
cosmetic	130
Total	755

Note: We are reliant on analysis provided by Laing & Buisson of private and NHS hospital income. Total hospital self-care spending would also include consultants' fees, mental health services, rehabilitation, fertility regulation and screening. These categories are not broken down by source of funding (private health insurance versus self-pay) so we can only analyse self-pay for hospital treatment using hospital income as a sample.

Source: Laing & Buisson 2006

The size of the *privately-provided* self-pay sector was estimated at £510m in 2005 (Laing & Buisson 2006; again this is based on hospital income only, not including consultants' fees and so on). In revenue terms, self-pay treatment (as a share of total private hospital income) increased sharply between 1998 and 2002 (peaking at 22.5 per cent), since which it has dipped and levelled off at 19 per cent of independent hospital revenue in 2005. As we discuss below, this reflects rapid reductions in NHS waiting times, offset by rising demand for cosmetic treatment.

Private healthcare is also provided in *NHS hospitals*. Around £245 million<sup>12</sup> was received by NHS hospitals from chargeable overseas patients and self-pay patients<sup>13</sup>. Total (PHI-funded and self-pay) NHS private patients income has been increasing since the 1970s, but as a share of the total private pay market it peaked in the late '90s, since which it has fallen to 10.1 per cent of all private treatment. This was due to 'the exclusion of many NHS private pay units from insurers' hospital networks in the late 1990s and a downturn in non-cosmetic self-pay demand in the 21st century' (Laing & Buisson 2006: 101). Privately paid treatment in NHS hospitals has actually fallen in real terms since 2003–04 due to slow-downs in the private healthcare market and restrictions on the expansion of private provision by NHS Foundation Trusts (Laing & Buisson 2006).

For all self-pay treatment, access to financial resources is necessary. Wider access to credit (linked to home ownership) and willingness to take on debt has helped fund the expansion of this type of spending (some private hospitals have even launched their own credit cards, for example). Improved information on self-pay has also stimulated this market, with insurers and self-pay brokers offering advice to consumers (Laing & Buisson 2006).

The interaction of supply and demand may be complex for self-pay treatment. Often the decision to purchase private treatment will be influenced by the advice of the consultant who will also be the private supplier. Supplier-induced demand may therefore also be a factor in this sector.

<sup>12.</sup> This includes patients treated on ordinary NHS wards as part of NHS consultants' private lists plus private patient activity in 73 dedicated Private Patient Units (Laing & Buisson 2006). The total NHS private income was estimated at £408 million in 2005 (ibid). Laing & Buisson estimate that about 40 per cent of NHS private patient income comes from private medical insurance, leaving £245m as the residual. 13. While we would like to exclude overseas patients from this study, it was not possible to separate them from the data. Overseas patients accounted for 4.5 per cent of UK independent medical/surgical hospital revenue in 2005 (Laing & Buisson 2006). We do not have data breaking down NHS private income by UK and non-UK patients, although we know this is high for some private patient units (ibid).

There is a lack of publicly available data to analyse the social and economic characteristics of patients who are paying out-of-pocket for private treatment (as has been possible for private medical insurance subscription), and we recommend this as an area for further research.

## **Analysis of self-pay**

Self-pay for hospital treatment may fall into a number of conceptually distinct categories. There are different trends within these categories, in particular with respect to the rise of cosmetic treatments, as the following sections will explore (although, unfortunately, the data is insufficient to provide a narrative chart of trends).

#### Supplementary/duplicative self-pay

This includes out-of-pocket spending on operations and procedures that are also available on the NHS. In these cases, patients are offered private treatment often by their NHS consultant in order to avoid the NHS wait or to enjoy the non-clinical benefits of private treatment. This supplements or duplicates the care offered by the NHS.

For supplementary self-pay treatment, an important demand factor is the relative perceived quality of NHS care, in particular speed of access. Where quality and access to NHS treatment is perceived to be lower than the standard that middle class consumers value, there is likely to be increased demand for supplementary self-pay treatment. This has been studied more extensively in the demand for private medical insurance where the data on who is spending is available. But in theory the incentive for a patient faced with a long NHS wait to pay for private treatment themselves is stronger than the incentive to purchase medical insurance in advance of any medical problem being diagnosed. The recent slow-down in demand for non-cosmetic self-pay treatment is seen to reflect the decrease in long waits for NHS treatment.

#### **Complementary self-pay**

This includes self-payment for treatment that would not be available on the NHS: for example, treatments or tests that have not been approved by the National Institute for Health and Clinical Excellence (NICE) or those that are otherwise not offered by the local Primary Care Trust. It also includes private treatment for patients who have not been offered a procedure on the NHS because their doctor does not think they are clinically appropriate, for example because their age means an operation is unlikely to be successful. In this regard, self pay can complement NHS services by filling in gaps in provision (although there are restrictions on mixing NHS and private spending, as discussed below).

Unfortunately, there is no data which separates supplementary and complementary self-pay spending. However, the total self-pay for non-cosmetic hospital treatment in the private sector and the NHS was about  $\pounds$ 635 million in 2005 (Laing & Buisson 2006).

The UK private healthcare market is normally characterised as supplementary, providing services that are also available on the NHS. However, the creation of the National Institute for Health and Clinical Excellence (in 1999) has led to more explicit priority setting (or rationing by cost effectiveness). So the nature of the private healthcare market is changing. The development of new technologies at very high cost (and low marginal cost-effectiveness) will be a factor in the private (complementary) payment for such treatments where individuals can afford it.

#### Cosmetic self-pay

This includes cosmetic treatment that is not clinically necessary but is desired by a patient. While these treatments are delivered in clinical environments, they are not healthcare in the sense of meeting a health need, improving physical or mental functioning or relieving pain.

This form of self-pay treatment has grown particularly fast. Laing & Buisson estimated the size of the cosmetic hospital treatment market as £150m in 2006, an increase of 89 per cent in three years. (Note that the estimates for cosmetic hospital treatment for 2005 changed by £9m between Laing & Buisson 2006 and 2007a.)

Table 6.1 Cosmetic procedures: estimates of UK market size, 2003-06				
	2003	2004	2005	2006
Cosmetic surgery				
- market value	£69m	£99m	£121m	£150m
- value growth		42%	22%	24%
- volume growth (@ 4% inflation)		38%	18%	20%
Source: Laing & Buisson 2007a				

The above data is for regulated procedures in hospitals only. A market report on the wider cosmetic surgery industry estimated that spending in this area doubled between 2005 and 2007, exceeding a total value of £900 million and is predicted to break £2 billion by 2011 (Mintel 2007a; these figures take a broader definition than Laing & Buisson and are not reflected in the data referred to elsewhere in this report). The number of operations increased from 300,000 in 2005 to 577,000 in 2007. This market size exceeds the total estimates of self-pay hospital treatment, reflecting the increase since their latest data plus the inclusion in the Mintel report of some cosmetic dental procedures and non-invasive procedures. Rising particularly quickly, for example, are non-invasive techniques such as Botox and collogen fillers. Mintel highlights cultural factors in stimulating the demand for treatment (ibid).

These figures illustrate the extent to which cosmetic treatment is growing while traditional hospital self-pay treatment is declining. While total hospital self-pay doubled over the five years 2000-05, total spending on cosmetic treatments doubled in just two, from 2005-07, suggesting that self-pay spending on cosmetic treatment is an important factor in rising total self-pay.

#### Insured liability patient income

Included in the total figures for self-pay is treatment for accidents or injuries for which a third party has been held liable. However, current data on sources of private spending do not separate out this source of funding so it is not possible to estimate its size and trends.

#### Future projections of self-pay treatment

Looking to the future, Laing & Buisson's research for the Healthcare Commission makes projections on the basis of NHS waiting time targets and the provision of 'free choice' of hospital by the end of 2008. The market researchers predict that demand for self-pay treatment (including cosmetic surgery) will continue to stagnate and fall in volume terms until 2009:

Table 6.2. Projected self-pay spending in acute independent sector hospitals in England, 2006–12 (£ million)						
2006	2007	2008	2009	2010	2011	2012
205,000	202,000	198,000	195,000	197,000	199,000	201,000
Source: Laing & Buisson 2007a						

#### Impact of self-pay on health system objectives

As mentioned, individual self-payment for treatment plays a significant role in the health economy, yet its impact on health system objectives has not been extensively researched (compared with insurance).

The size and total growth of this sector suggests that it plays a valued role for the individual. It allows the consumer to purchase services that may be more responsive to their individual preferences. Complementary self-pay treatment allows some consumers to access services that the public sector does not provide, filling some gaps in provision.

The availability of the option to self-pay to fill gaps in provision also puts pressure on the public sector to improve its standards, adopt new technologies and innovate. In this sense, it plays a valuable role alongside other sources of pressure on the public healthcare system. For further discussion of this, see Chapter 3.

Self-pay also provides a mechanism by which patients who are not eligible for private insurance (for example, people with existing chronic conditions or above a certain age) can access private healthcare if they wish to and can afford to do so.

Private self-pay also allows for the provision of non-clinically necessary treatment, particularly cosmetic treatment, which is valued by individuals but not seen as a service that should be funded collectively. This is not a gap in healthcare per se, since there is not an unmet clinical need. In terms of health policy we argue that this should not be included in the discussions of healthcare finance, but at present it is included in official estimates of healthcare spending. The inclusion of these figures makes the private sector look like it is playing a bigger role, and growing faster, than is really the case. However, since the total size of cosmetic spending is still small as a share of total private spending, this effect should not be overstated.

In terms of functioning of the market, the private self-pay sector is in theory a relatively inefficient form of healthcare financing. The individual consumer has very little information with which to choose a supplier, either on quality or on price. Compared with either an insurer or an NHS commissioner, the bargaining power of the individual is virtually non-existent. Although data on prices in the private sector are not transparent, BUPA estimated in its evidence to the Competition Commission that it obtained discounts of 25-35 per cent from hospitals' 'rack rates' (Laing & Buisson 2006). The information gap suffered by individual self-paying patients is improving, with increasing amounts of information and providers of self-pay brokerage.

The ability to pay for private healthcare out-of-pocket is not equally distributed. While access to private insurance is restricted by income, access to self-pay treatment is restricted by access to wealth (which is more unequal). A range of financial products have been introduced in recent years making self-paid-for care somewhat more accessible to middle-class patients than it was before. As long as a well-funded, high-quality public service is available, the impact of self-pay on equity is less of a problem. However, if paying for treatment out-of-pocket is a necessary condition of accessing adequate care, then the impact on equity – and efficiency – will be problematic.

Another problem with the self-pay market is the potential it provides for consultants to distort the allocation of public resources. In the private health insurance market, patients are either subscribers or not before they have a treatment need. In the self-pay market patients may be persuaded by their consultant to self-pay for private treatment. There is a potentially perverse incentive, then, for NHS consultants to increase their private income by extending their NHS waiting times. This was found to be a problem by researchers in the 1990s who found that areas with more private hospitals also had longer NHS waiting lists, and that consultants who did the most private work were less productive for the NHS (for example, Audit Commission 1995). We discuss this further in Chapter 12 when looking at the interaction of public and private funding.

## Policy discussion around self-pay

### Regulating sales and measuring quality

While the provision of private healthcare is regulated by the Healthcare Commission, the sales are more lightly regulated. There are particular concerns, raised by the consumer group Which?, about the aggressive marketing of cosmetic treatments by clinics (BBC 2008). Patients were not being provided with adequate professional advice about the risks of treatment, for example, and were being pressured to sign on the dotted line. These concerns could also apply to private (non-cosmetic) healthcare, if, for example, consultants are exaggerating the NHS waiting times or healthcare providers are claiming they are safer than the NHS.

There are also risks that self-pay patients are not able to make informed choices based on the relative quality of different providers. Private patients might believe that private healthcare is higher quality or

safer than NHS care, and this belief is encouraged by private sector marketing. However, there is a lack of comparative quality information to back up this claim. There is a need for better information for consumers on the relative quality of care provided by different providers. This should be comparable with information on the quality of publicly-funded treatment so that consumers are able to make informed choices. Where there are safety concerns, these should be investigated by the Healthcare Commission.

#### **Taxation**

An anomaly currently exists in the taxation of private healthcare in the UK. Private health insurance is taxed via the Insurance Premium Tax (IPT) at a rate of 5 per cent. Exemption from IPT for private health insurance for over-60s was removed in 1997. This tax was worth an estimated £150 million to the Treasury in 2005.

Self-paid private healthcare (not purchased through insurance), however, is exempt from VAT (apart from non-clinical cosmetic treatment). This anomaly does not make sense from an economic viewpoint, since it creates a bias against insurance, and means that the state is effectively providing a tax-subsidy for self-paid private healthcare. Whereas VAT is excluded for some food, children's clothes and so on because they are 'essential items', private supplementary healthcare (in the UK) would generally be defined as a luxury. It would therefore make sense to remove this anomaly and charge VAT on private healthcare, at least at a comparable 5 per cent rate.

As discussed above, there could be an argument for exempting self-pay for complementary private healthcare treatment – that is, for services that the NHS does not provide; where there are significant gaps in NHS provision, for example non-cosmetic dentistry; or for individuals such as foreign visitors who are not eliqible for NHS healthcare.

#### **Double payment**

There is a recurring debate relating to private patients – those who are self-paying and those who are privately insured – about whether it is fair that they pay 'twice' for their services: once when they pay for their private treatment, and again when they pay for NHS treatment through taxation. Although of course their NHS contribution insures them for a wider range of risks than they can pay for privately (for example, emergency and critical care), there is an element of duplication. This led to the proposal in the most recent general election in the UK by the Conservative Party that patients going private be entitled to a rebate worth 50 per cent of the NHS price of their operation (BBC 2003). This policy was dropped by David Cameron following the Conservatives' election defeat.

From a purely economic point of view there is some rationality for the latter proposal. If the rationale for public funding is to correct market failures in healthcare, then in theory, allowing people to take NHS funding and top it up in the private sector could be seen as improving efficiency.

However, there are practical financial and political considerations. Empirically, the extent to which patients paying for private treatment do reduce costs for the NHS is questionable, as will be discussed in Chapter 12. From a practical point of view, allowing private patients to claim a rebate from the NHS towards their private care would create an instant loss of cash from the NHS budget (King's Fund 2005). Those patients who are currently paying for private care are also currently paying into the NHS, in effect cross-subsidising other patients' care. To rebate their NHS 'entitlement' would remove that subsidy and require either higher contributions from other tax payers or reductions in the overall NHS budget.

#### 'Top-up' private purchases for NHS patients

Should NHS patients be able to self-pay for additional treatments – to 'top-up' their NHS care with additional private treatment? High profile cases have attracted significant media attention and stimulated much debate in the policy world (see for example Mitchell 2008, Moore 2008). These cases normally feature patients who want access to drugs not provided by the NHS, and in turn want the ability to pay for such extra treatment out of their own pocket.

Under current NHS rules patients are not allowed to supplement their treatment and combine private

and public healthcare. Department of Health (DH) guidance states that: 'A patient cannot be both a private and a NHS patient for the treatment of one condition during a single visit to a NHS organisation' (DH 2003: 10). The application of this rule has led to cases in which patients who self-fund for treatments that are excluded by the NHS are then denied access to any NHS treatment for that condition (see Mitchell 2008, Moore 2008).

These rules are currently being challenged by cancer patients who wish to purchase drugs that have not been approved by NICE but who are under threat of being denied the rest of their NHS treatment package as a result. Campaigning organisations like Doctors for Reform (Charlson *et al* 2007) and the public law barrister, Nigel Griffin QC (2006) have argued that it is unlawful to deny NHS treatment to patients who complement their care by purchasing additional treatments. However, both the Government and local NHS Trusts (for example, Richards *et al* 2001) have argued that allowing patients to top up their treatment would undermine the NHS principles of equity.

A number of factors have combined to push the salience of top-ups as an issue for the NHS:

- New drugs and treatments exist. A new generation of cutting-edge drugs, particularly for the
  treatment of cancer, have become or will soon be available. These drugs are more likely to be
  personalised to the individual patient meaning they are likely to work in more specific cases,
  but not be effective for a majority of patients. They are also more expensive than current
  treatments. It is likely in some cases that they have the potential to be effective for individuals,
  extending life by months. These drugs may fail the kind of cost-effectiveness tests that NICE and
  commissioners apply. However, individual patients may consider them valuable.
- Patients are more informed than they once were. The creation of a more explicit rationing process and the emergence of new, high-cost drugs have coincided with the increasing availability of information about new treatments and more willingness of patients to challenge medical decisions. Information about new treatments is available in the media and the internet before it is even licensed. This is not always high quality information. Concerns have been raised about drug companies marketing new treatments to doctors and patients when their effectiveness is questionable. However, policymakers should embrace the new world of more informed and demanding patients, particularly since patient empowerment can lead to improved outcomes and engagement in health (Farrington-Douglas and Allen 2005).
- Patients have more access to assets. The capacity of patients to self-pay for elements of their
  healthcare has increased as asset-holding has spread (in particular home-ownership), and access
  to lump sums of wealth has increased. Some patients have always had access to such financing,
  of course, and have been able to make the decision to opt out of the NHS and finance private
  treatment.
- There is more explicit rationing by the NHS. Since the introduction (since 1999) of NICE assessments of new and existing treatments, the NHS has become more explicit about the need to prioritise which treatments should (and should not) be funded according to explicit cost-efficiency criteria. There is now a more defined group of services that the NHS does not provide. These include drugs and devices that have either not yet been assessed by NICE, or have been assessed and recommended for exclusion from the NHS package (the final funding decision being taken by local PCTs). This already existed with treatments like some IVF therapy, osteopathy and scans where the NHS does not fund all desired treatments (as well as non-health-related cosmetic treatment) (Moore 2008).

The combination of these trends – new treatments, more informed patients, access to assets and explicit rationing – creates a real pressure for the top-up issue to be addressed.

<sup>14.</sup> Note that this guidance is for consultants rather than for hospitals to prevent them from 'pushing' NHS patients onto their private lists (see Chapter 12), but has been interpreted as applying to the NHS in general.

<sup>15.</sup> There is no nationally defined package of entitlements, allowing flexibility for the NHS locally to take its own decisions on priority-setting. The NICE process provides a list of what is excluded.

## Problems with the current system

While policymakers should be cautious about arguments based on ideology or self-interest, there are compelling arguments about new drugs and the need for a more sustainable solution for non-NICE approved treatments. While the numbers of patients affected may be relatively low at present, these trends indicate that the issue will increase in the future. There are a number of problems thrown up by the current position of the NHS, about which policymakers should be concerned:

- Patients who decide to top-up their treatment can be denied access to the rest of their NHS
   care package. Interpreted strictly, the guidance allows NHS providers to deny patients the NHS
   package of care because they have purchased an additional treatment (this has been threatened,
   for example, by South Tees Hospitals NHS Trust [BBC 2007]). This can be seen as undermining
   the universalist principle that everyone should have equal access to NHS services according to
   need
- The current policy is applied inconsistently in different areas. There is evidence of geographical inconsistency, as some patients have won (out of court) their battle to mix private and public treatment (Lilley 2008). There is also inconsistency between topping up hospital treatment and other types of care. The credibility of the current strict ruling is further damaged by the fact that local PCTs often reverse their decisions to refuse to fund a particular treatment following individual campaigns, by citing particular special circumstances.
- Other types of top-up exist in the health system. There are examples of mixing private and public funding streams to access superior drugs and treatments within the NHS, including patients paying for private tests to reduce waiting times for NHS surgery, purchasing private prescriptions from NHS GPs for Viagra, purchasing infusion pumps or interferon beta for use in NHS treatment (Richards *et al* 2001). In some areas, for example maternity, mothers can 'top up' for a private bed within their NHS care package.
- Inconsistencies could undermine the credibility of NICE and NHS processes. Faced with a high profile local campaign and the alternative of denying NHS care to a patient who purchases a non-NICE approved treatment, or providing the additional non-NICE approved treatment for free, PCTs may be opting for the latter when decisions are appealed. This has opportunity costs for other patients, and undermines the whole purpose of cost-effectiveness assessments. It also opens up the system to patients with the sharpest elbows. This situation reflects the fact that the NHS's approach to topping up has not changed to reflect the new system of NICE approval and more transparent PCT decision-making.

We argue that some form of priority-setting or rationing of NHS resources is necessary – and desirable for efficiency and equity reasons. The rules of the NHS should reflect the fact that it offers equitable access to effective promotion of health and provision of healthcare that the public value, within constrained resources and competing priorities.

## Founding principles?

It should be noted that there is some debate about what the 'founding principles' of the NHS have to say about private payments for additional treatments. Richards *et al* (2001), reporting on the proceedings of an NHS ethics committee that rejected a request to top up treatment, quote the founding principle as being to ensure 'the best that science can do is available for the treatment of every citizen at home and in institutions, irrespective of his personal means' (Beveridge 1942, quoted in Richards *et al* 2001: 563). That quote, however, implies an NHS that did not have to ration treatment. On the other hand, Musgrove (2000: 845) argues that the Beveridge's vision was that 'the duty of the state includes leaving the individual free to provide more protection and more care than that guaranteed by public insurance... not preventing people from rising above [the] minimum'.

This uncertainty about the 'founding principles' reflects the fact that there has never been a theoretically precise definition of 'equity' in the NHS. The system has always 'got by' with a vague understanding of the values that are shared at the time. As new challenges arrive – such as highly expensive drugs and technologies, or more informed consumers – there may be a need for the interpretation of equity to continue to evolve.

Not allowing top-ups can reduce efficiency of allocation processes. There is a basis in economic
theory for allowing patients to top up publicly-funded healthcare. As has been discussed in this
report, publicly-funded healthcare inevitably sets a limit on the package based on the average
value placed on healthcare spending. If individuals value a particular treatment more highly than
the median value reflected by the NHS, then allowing them to purchase that treatment would
improve efficiency.

## Risks associated with allowing top-ups

Although the status quo raises problems, there is no simple solution on access to non-NICE-approved drugs. Allowing patients to top up the NHS package raises tough questions, particularly for those who are concerned with equity and solidarity.

Top-ups could threaten equity principles of the NHS. From a social justice point of view, having
two patients with similar needs receiving different levels of treatment could be seen as
contravening the principles of equity of access embodied in the NHS.

However, if you are going to have explicit rationing – which, from an efficiency and equity point of view we argue is necessary – then some patients will inevitably purchase the 'excluded' treatments privately. It could be argued that the definition of equity relates to access to cost-effective treatments, rather than to an unlimited package. (Allowing topping up would also mean that more people could access additional treatments than if they had to pay for all their care, but this would not be the policy objective.) Rather than encouraging people to go private, this solution would enable all patients to access the NHS package of care equitably. Patients who topped up their treatment would not be choosing to exit the NHS risk pool into a supplementary system. Disqualifying them NHS care could be seen as harming the NHS principles of universalism and equity of access.

Nevertheless, even if private care cannot be prevented, there would still be ideological equity concerns about the NHS actively facilitating different levels of care. This could damage the solidaristic principle of all citizens having absolutely equal entitlements, even if in reality this is not realistic.

Allowing people to purchase top-ups could lead to a 'two-tier NHS'. A longer-term concern
about this proposed change is that it would be perceived as creating a 'basic core' NHS package
with a system of co-payments or means-testing for high-quality care. Some people who argue for
top-ups do have such a system in mind.

For the reasons outlined above relating to collective funding through a single insurance plan, we would not wish to see such a system develop. This report argues for a high-quality universal and equitable healthcare system funded collectively. The aim of NICE is to ensure NHS funding is spent most effectively and efficiently, rather than to cut back on healthcare entitlements. The NICE-approved NHS package should expand and improve the quality of care for patients, rather than retreat to a 'basic core' service. At present, NICE approves more treatments than it rejects, a trend we expect to continue as NHS funding carries on rising. However, creating the framework for a 'free' and a 'charged' level of care could make it easier to go down the route of a two-tier NHS in the future.

Of course, a two-tiered system already exists in the UK, with patients who 'go private' often receiving higher quality (clinical or non-clinical) services (although the actual comparative quality of private treatment is not measured). There are even two tiers within NHS providers, where private 'pay beds' and private patient units are available for privately insured or self-paying patients who may enjoy shorter waits, more intensive staffing and treatments unavailable on the NHS. Indeed it could be argued that preventing top-ups makes enhanced private care more expensive so that the cost of accessing the higher tier is much higher.

• Allowing top-ups may create false hope and encourage people to purchase ineffective treatments. One significant risk of relaxing the rules on purchasing additional, non-NICE-

approved treatments is that it could facilitate or encourage patients to spend their life savings on very expensive treatments that may not be effective. This could even harm patients if it offered them false hope that the additional treatment would 'save' their life, when in fact it could only extend it by a matter of weeks with a range of side-effects. Allowing top-ups could feed a worrying trend of medicalising the end-of-life experience for patients with terminal diseases, who could suffer and die slowly in hospital rather than spend their last weeks with loved ones at home. This argument has been made by, for example, Dr Gill Morgan, then Chief Executive of NHS Confederation (Moore 2008).

• Encouraging drug-related campaigns. Top-ups could provide a greater opportunity for consultants and drug manufacturers to promote new treatments that might not necessarily be in patients' best interests.

## A way forward?

The problems that are driving top-ups up the public agenda are likely to grow in the future unless they are addressed by policymakers. If policymakers fail to engage in this debate, they will not be able to solve these issues.

The debate is currently polarised between two opposing paradigms. One side, from an individual, rights-based standpoint, argues that people have a right to spend their money as they wish as long as it does not hurt anyone, and that threatening to deny them the rest of their NHS care is unfair. On the other hand, a consequentialist stance views any blurring of the no top-up rule as leading to a nightmare scenario of charging for high-quality services and the retrenchment of the public system to a poor-quality core, reversing the equity principles of the NHS.

In focusing in particular on a specific range of treatments under explicit circumstances we believe that there is room for a middle way between the extreme perspectives. There is a case in principle to allow those who want to pay for drugs that are marginally effective but fall outside the cost-effectiveness threshold for the NHS to do so. Maintaining would-be private patients within the NHS, this system could enhance the political sustainability of the publicly-funded universal health system. (Although the NHS funding model is not currently under threat this situation may change.) However, even a limited relaxation of the rules on mixing private and public funding would need to be managed carefully.

We argue that private spending is generally an undesirable way of providing access to the majority of healthcare (for economic and social justice reasons). Therefore it should only be the policy solution of last resort rather than a preferred way of funding healthcare more generally. Any move towards a free 'basic core' and charged-for 'high-quality extended' system or multi-tiered NHS should be avoided.

Finally, it is important to note that any changes in this area will not solve the healthcare funding challenge. In terms of the primary question of this report – whether private spending can substitute public spending as healthcare costs increase – we again emphasise that the level of spending from top-ups would be anticipated to be marginal in the context of total healthcare spending. For efficiency and equity reasons, top-up payments are not a desirable method of funding the core healthcare package.

The current political impasse is not helpful and ignores the long-term trends outlined above. A review should be established that examines the system in the round. It would look at the possibility of relaxing NHS rules for patients who wish to top up their NHS care with specific treatments that are not available from the state. Such a review could consider the following options:

Examine which categories of drugs might be suitable for top-ups. One option would be for
NICE to provide advice, as part of its recommendations on a new treatment or guidance on best
practice, over which treatments should be eligible for top-up provision. For example, treatments
that were of high risk to patients and of little proven clinical effectiveness could be rejected as
unsuitable for top-up provision. Effective but expensive treatments that failed NICE approval or
PCT commissioning mainly on cost grounds (for example, for being less cost-effective than
alternatives) could be deemed suitable for top-ups.

- Examine the information requirements for patients to make decisions on top-ups. One option would be to require patients to obtain a second opinion before allowing them to purchase the additional treatment. Where appropriate, independent information and support in decision-making including patient decision aids could be made available.
- Examine whether top-up charges could be introduced for older, less cost-effective treatments. As ippr has argued before (Rankin *et al* 2007), NICE's role should also be expanded to assess the relative cost-effectiveness of existing treatments (this is part of its remit but, due to limited capacity, NICE has tended to focus on assessing new treatments). This would enable the NHS to decide whether to 'disinvest' in old, cost-ineffective treatments an important condition for achieving better value from NHS resources (see, for example, Wanless 2002). Top-ups could help to advance this agenda, with NICE setting out what the cost-effective treatment is that the NHS should provide, but with patients remaining free to pay a top-up for additional, non-approved treatments. An alternative approach would be for co-payments to be higher for services that have lower value drawing on the concept of 'value-based insurance design' as discussed in Chapter 10
- Examine how equity concerns could be mitigated. In order to make sure that the provision of top-up care did not harm general NHS provision, all additional costs of treatment would have to be met by the private funder, including (where feasible) funding for treatment of side-effects and complications, as well as NHS overheads. Equity concerns could also be mitigated by requiring patients who top up their NHS care to pay an additional 'equity premium' that could be redistributed back into the NHS.
- Improve trust in NICE processes and PCT decision-making. In particular, the NICE assessment
  process needs to carry the trust of the public so that it does not exclude from the free NHS
  package (and add to a top-up package) treatments that are valued and that taxpayers would be
  willing to fund.

PCTs also need to make local commissioning decisions more transparent and accountable (see Rankin *et al* 2007). As highlighted above, there are geographical inconsistencies between exception committee decisions about whether patients can receive a non-NICE approved treatment. This could become more visible when some patients are receiving treatment as a top-up while others are receiving it fully-funded, raising questions about the consistency in criteria for decisions.

Moving forward on these issues will be difficult for national politicians, considering the polarised positions. In the current political climate, no party would want to be perceived as threatening the values of the NHS. However in a more devolved NHS, it may be possible for local NHS Trusts and PCTs to engage local populations in debate about the question of topping up and to develop their own solutions to the difficult but important questions that are raised by this emerging issue.

## Summing up

This chapter has described the main trends in spending on private hospital care by the individual. Spending on treatment otherwise unavailable on the NHS, particularly cosmetic treatment, has risen. In contrast, the traditional self-pay market has flattened, probably as a result of comparative improvements in the NHS.

Projections for the future of these sectors are largely dependent on the performance of the NHS. If improvements in access to NHS hospitals continue, the market for non-cosmetic, self-pay, private healthcare is likely to continue to decline as a share of the health system.

From a policy perspective, this discussion has thrown up some challenges. In particular, the shift since the introduction of NICE from an NHS that claims to provide all treatments to one that explicitly excludes non-cost-effective treatments requires a new approach to patients who pay for private treatments that are excluded from the NHS package. In order to maintain the NHS as a universal service, patients should not be denied treatment on the basis that they have purchased an additional treatment, but this should be managed carefully to protect the principles of the NHS.

## 7. Private spending on dentistry and general practice

The main focus of this project is on mainstream healthcare. The dental market is generally separated from the rest of the NHS, reflecting differences in the economic characteristics of this market. Therefore we have not conducted a full study of the dental care market here but we highlight the trends and touch on some of the issues in this chapter.

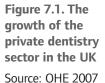
Uptake of private dentistry doubled between 2001 and 2005, mainly paid for out of individuals' own pockets. This increase has been driven by poor access to NHS care and increasing demand for cosmetic treatments. Private GPs, however, are a niche market centred on the City and West End of London and attempts to expand private primary care have not succeeded.

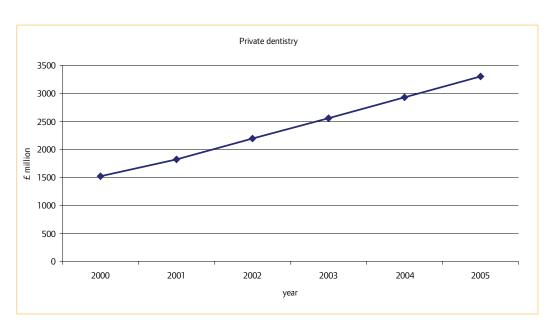
The dentistry market has had problems due, particularly, to a lack of information for consumers and constraints on supply, leading to problems with the way private dentistry interacts with the NHS. Meanwhile, NHS GPs, which are accessible to the great majority, limit the demand (and supply) for private care.

We recommend that policies are implemented to improve the private dental market, in particular by increasing supply so that both private and NHS demands can be met. Rather than expanding private supply, accessible GP care should continue to be a core element of the NHS.

## Trends in spending on private dentistry

Dentistry has been an area of significant growth in private healthcare spending, with the amount of private dentistry almost doubling in the five years from 2001to 2005. Data from Laing & Buisson for 2006 suggest that about 88 per cent of private dentistry is paid for out-of-pocket, with 12 per cent channelled through dental insurance or capitation plans (based on dental premium income in 2006 as a proportion of estimated total private dental spending. The recent NHS Dentists' contract also increased public spending on dentistry). We discuss private dentistry as a whole in this section.





Some of the factors affecting self-pay hospital care also apply to dentistry as there are supplementary, complementary and cosmetic elements to self-pay in this sector.

For some patients, self-payment for dentistry is a consumer choice similar to the decision to purchase supplementary private hospital treatment, in that they prefer the access and non-clinical benefits of private provision. However a study by the Office of Fair Trading (2003) found that the rapid growth was due to other factors.

First, there has been an increase in demand for services not otherwise available on the NHS -

particularly cosmetic treatments such as teeth whitening. This market structure has contributed to a burgeoning cosmetic dentistry market worth £519 million in 2007 (Mintel 2007b). Factors such as cultural pressures for an aesthetically 'perfect' smile, consumer willingness to take on debt and greater disposable incomes among older people have driven the growth of this market, as well as new providers in beauty salons offering teeth whitening. It is not clear that this part of the dental market should be included in data on healthcare spending if it does not reflect clinical need, however.

Second, the rise in private dentistry is due to the retreat of many dentists from providing NHS-funded treatment. Recent surveys have found that many patients go private because they cannot find a dentist in their area that is registering NHS patients (see for example Which? survey reported in BBC 2008).

These two factors are linked: as demand for private dentistry (including supplementary and cosmetic treatments) has risen, dentists have been able to reduce their NHS provision and concentrate on more highly-paid private work. In this sense, the decision to go private is not a consumer choice but a forced option in order to access care. Rising demand for private dental insurance signals a longer-term exit from the NHS for more patients (rather than a one-off purchase) (Laing & Buisson 2007b).

In this situation, private dentistry is filling gaps in NHS care, even though officially dentistry is covered by the NHS.

This trend towards privately-funded dentistry may represent an illustration of the problems created by constraints in the supply of medical staff. As the demand for self-paid treatment increases, dentists are able to charge higher fees for private work. This makes publicly-funded work relatively less attractive for dentists, accelerating their withdrawal from the NHS market, and pushing more patients into the private sector.

## Analysis of private spending on dentistry

These trends are worrying from an equity point of view, since patients who are unable to pay for private care and who cannot access an NHS dentist may be foregoing treatment. (The high copayments for dentistry may also put off patients who are not exempt. This will be discussed in the section on co-payments, below.)

It may also be problematic for efficiency reasons. As discussed in the first part of this paper, because of information asymmetries – consumers lacking information to make informed choices, for instance comparing prices of different providers or judging quality of care – privately-funded healthcare markets are likely to be inefficient. The review by the Office of Fair Trading into private dentistry concluded that the private dentistry market was not working well for consumers (OFT 2003). Problems with the market included information asymmetry as described above, and restrictions on supply: the trading by professions that are complementary to dentistry (for example, dental hygienists or therapists) is restricted, as are the governance and activities of dental providers.

The increasing demand for privately-funded dental care, in the context of constrained supply of professionals, has led to increasing costs of dental treatment, with consumers paying more individually than they would if the care were funded through single purchaser. Public commissioners are competing for dentists' labour in the same pool, so if dentists can earn more doing private work they may be able to turn down NHS patients. The state is left having to compete with an inefficient, overpriced private sector.

Despite this overall pessimistic analysis of the dental market, the dental health story is actually very positive. Due to improvements in diet, preventive self-care (brushing with fluoride toothpaste) and water fluoridation, the incidence of dental health problems among children in England has fallen by 80 per cent since 1973, and child tooth decay is now the lowest in Europe (DH 2007a). This will take some time to feed through to adult dental care need, however.

#### Policy options for private dentistry

The failure of the private dental market is apparent in its rising costs and access problems, suggesting a need for new policies. The Office of Fair Trading made a number of recommendations, which were

largely accepted by the Government in its response (Department for Trade and Industry 2003). They included provision of patient information leaflets, strengthened professional and external regulation and deregulation of corporate dental bodies. In terms of the interaction between private dentistry and the NHS, there have been recent changes to the NHS dental contract aimed to improve access to NHS dentists in areas where dental practices no longer accept NHS patients (DH 2007a).

We have not been able to assess the success of these policy developments, but note that there are strong reasons for the market to be monitored, both for the benefit of private consumers and for NHS patients who are affected by private market developments.

## Trends in private general practice

There remains a relatively small market for self-pay general practice, estimated to be around £450 million per year by Laing & Buisson (2006). Private general practices exist in a small number of locations, primarily in the City and West End of London, providing self-pay consultations to predominantly wealthy younger patients (and some high-value patients whose employers pay for them) for a set price, with additional fees for a private prescription or referral to another private provider. Attempts to open a wider range of private general practitioners (GPs) in areas outside London have been attempted but have failed to establish a market.

The private and public separation is stricter in general practice than in secondary care. Private GPs cannot refer to NHS treatment or provide NHS prescriptions. NHS GPs are prevented by NHS contracts from providing private consultations to patients on their NHS list, so the supply of private GPs is very limited.

The demand for private general practice is also constrained. Private sector GPs do not offer a major improvement on the free NHS GP service (compared with, say, a reduction by several months in waiting time for private secondary treatment on NHS secondary treatment). Private 'walk-in' centres have also not appealed to a mass market, largely due to the provision and access to NHS-developed free walk-in centres, sometimes at similar locations. Laing & Buisson (2006) provides a description of these trends and a more detailed analysis of the market and its constraints.

Private-pay general practice is supplementary, duplicating the coverage of publicly-funded general practice rather than filling gaps. Patients may pay for general practice for convenience and access, for example late or weekend opening or to avoid waiting, or having on-demand access to home visits. The fact that the market is centred on the City and West End of London reflects the niche nature of demand. However, Laing & Buisson note that employer-paid-for GP services are rapidly growing, a matter which will be discussed in the section on employer spending on health and wellbeing (below).

## Policy options for private general practice

The restrictions on NHS-contracted GPs that prevent them from doing private work have been challenged (particularly by doctors' internet blogs). In the context of the current debate about not being able to easily access NHS GPs outside normal 9-5 working hours, it is argued that freeing up these restrictions would allow GPs to provide a private out-of-hours service to people who find it hard to take time off from work. Since the seriously ill, elderly and parents express preferences for day-time surgeries, it is argued, those who demand out-of-hours services have relatively low needs and represent a middle-class desire for convenience rather than need. Allowing people to pay for this convenience could be efficient, it is argued. It could also increase the total resources going into general practice.

However, to the extent that out-of-hours primary care is a core health service, it should be funded publicly. The high public value of general practice is reflected in the resources already allocated to it. Public consultations find that access to a GP is a key concern of the public in relation to the NHS. Reasonable access to a doctor outside working hours should not be seen as a supplementary extra, funded by private individuals. Given that one of the GPs' arguments for not extending opening hours is the constraints on capacity (there being a limited number of GP hours available), the provision of extra private appointments could lead to a reduction in services for publicly-funded patients (as is evident in the effect of expanding private dentistry on access to NHS dentists). As has been evident

with dentists (and at times with some hospital consultants), GPs might restrict their NHS work, by reducing opening hours or making appointments more difficult to obtain, in order to encourage more patients to move to their private practice.

Therefore we conclude that the constraints on mixing public and private primary care should be maintained to ensure overall value for money for consumers. The provision of extended opening hours within the NHS GP contract is currently a subject of negotiation. Providing accessible primary care services through the public sector, rather than as a supplementary element paid for privately, should be the objective.

## Summing up

The trends in private dental care are similar to those elsewhere in the healthcare sector – again with a growing cosmetic segment, but also a rising private dentistry market driven by gaps in access to NHS dentistry. The future of private dentistry is less certain as new reforms to NHS dentistry are bedding in; recent data suggest that patients are increasingly turning to cash plans for private dentistry, implying further acceptance by many patients that the private sector will be their main source of funding in the future.

In terms of general practice, there does not seem to be a major potential for privately-funded primary healthcare

## 8. Out-of-pocket spending on medical products

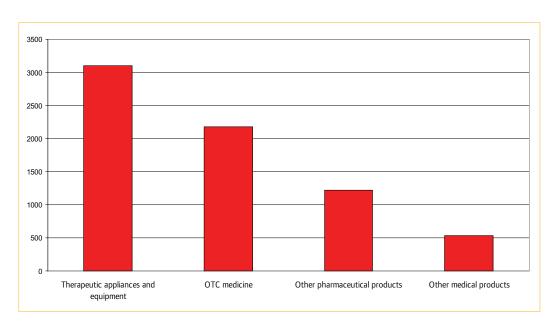
Most discussion about healthcare finance centres on treatment of acute conditions in hospitals where there are unpredictable risks of individuals incurring very high costs. However, a large segment of private healthcare is purchased on the high street. This includes spending on spectacles – which we have not studied – and on medicines bought 'over the counter' ('OTC') at relatively low cost, usually for minor ailments.

This is a large sector: 'medical products' (including spectacles, medicines and hearing aids) comprise a large sector of over £6 billion, of which OTC medicines are £2 billion. (However, the OTC market has plateaued in recent years.) The success or otherwise of the OTC market has consequences for consumers' pockets, for the burdens of treating minor ailments in the NHS, and for the productivity and wellbeing of individuals.

Access to OTC is currently equitable across society except for the bottom social grade. Pharmacies can reduce pressure on GPs for minor ailments, and government has encouraged this through public education and deregulation. ippr recommends that government continues to encourage the use of community pharmacy. The range of drugs available OTC should be increased safely. Competition should be encouraged, with information for consumers on different brands and generic alternatives.

Figure 8.1 shows that the self-paid-for medical products market is split into sub-categories. The therapeutic appliances market is the biggest sub-sector, worth £3 billion per year, with spending on over-the-counter (OTC) medicines around £2 billion. There is a relative lack of academic research in this area. There is more debate around the role of the OTC market, so our analysis focuses on that sector.

Figure 8.1: UK private expenditure on medical products (2006), £ millions, current prices
Source: Office for National Statistics 2007; PAGB 2007

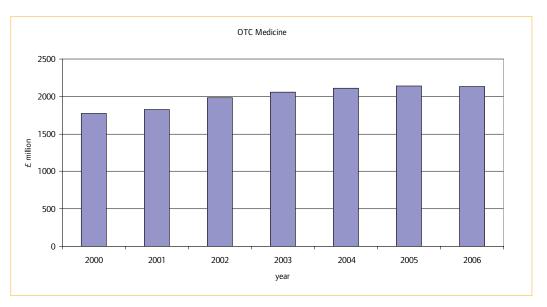


#### Trends in over-the-counter medicine

The OTC market is worth just over £2 billion per year. In 2006, 930 million packs of OTC medicines were bought (compared with 825 million NHS prescriptions) (PAGB 2007). In the treatment of minor ailments, therefore, OTCs are an important part of healthcare provision.

The OTC medicines market has grow fairly slowly in the last five years, at an average of 3.1 per cent per annum after inflation, although that trend has been relatively stable in recent years, showing little growth since 2003.

Figure 8.2.
Spending on
over-the-counter
medicines
Source: OHE 2007,
ippr estimates



OTC spending differs from general healthcare spending in an important way. Despite also being largely unpredictable at the individual level, the price of OTC medicines, unlike for example emergency hospital care, is generally not high enough to justify acquiring insurance to pay for it. Expecting consumers to pay themselves for OTC medicines that are only a few pence or pounds does not lead to market failure for most consumers (although there are problems for lowest income groups, as discussed below). There is potential for healthy price competition between different brands of the same product. Some of the extreme differences in information provision that characterise, for instance, complex emergency surgery, do not apply, since patients can obtain information easily and even try out different medicines without significant risks.

## Impacts on the health system from over-the-counter medicine

The privately-paid-for OTC market can in fact be more efficient than the publicly-funded pharmaceutical sector (for equivalent treatment of minor ailments). The transaction costs incurred in the process of fulfilling a publicly-funded prescription include the GP consultation, the pharmacy fees and administrative costs. A recent Parliamentary Answer showed that increases in pharmacy profits from dispensing NHS prescriptions exceeded an agreed cap by £300 million in 2005-06 and £511 million in 2006-07 (Carvel 2008).

The difference in this category of private healthcare spending is evident in the fact that income does not hinder access for most socio-economic groups although there is a drop-off for Social Grade E.

Table 8.1. Use of over-the-counter medicines by social grade					
	Social grade				
	AB	C1	C2	D	E
Proportion of respondents who used OTCs to treat a health problem in last two weeks	27%	26%	26%	24%	18%
Source: PAGB 2007 (based on 1996-97 data)					

However, this also means that lower social classes are likely to spend a greater proportion of their income on OTC medicines, which reinforces the importance of ensuring that this market operates in a competitive way. It also suggests there may be justification for subsidising low-income patients to access OTC drugs.

It is argued that the use of OTC medicines reduces the burden on GPs of seeing patients with minor ailments. The trade association for manufacturers of over-the-counter medicines and food supplements, the Proprietary Association of Great Britain (PAGB), commissioned analysis estimating that 51 million GP consultations are for minor ailments alone at a cost of £1.5 billion a year (PAGB

2007). Greater use of the home medicine cabinet and the pharmacist as a first stop in treating minor ailments has the potential to reduce costs to the NHS and contribute to Wanless's desired scenario of people being fully engaged with their own health (Wanless 2002). Therefore, encouraging people to self-pay in the OTC market has become part of the Government's strategy for improving efficiency of the health service.

There is a balance needed in the OTC market between harnessing the investment and communication role of OTC branded manufacturers and ensuring value for money for consumers/patients. Generic medicines can often be cheaper than branded products. Yet branded OTCs are still popular due to product advertising, loyalty and a lack of information about potentially cheaper generic alternatives. On the other hand, generic manufacturing companies do not invest in product research and development or marketing of drugs that contribute to encouraging people to self-care.

## Policy options for over-the-counter medicine

There has been significant government effort to increase self-care. The NHS has promoted the use of the community pharmacy via advertising and information for patients. There have been pilot projects to subsidise the costs of OTC medicines for patients who are exempt from prescription charges. The number of NHS-contracted community pharmacies has increased since 2005/06, reversing a trend of decline from 2000. There has been deregulation of sale points as well, with supermarkets and local shops selling OTC drugs and providing dispensing services, and the retail price mechanism was abolished in 2001, leading to 'price wars'. A more streamlined system for 'delisting' drugs from prescription-only to OTC status has also been introduced (Key Note 2005, 2008).

Market Intelligence company Key Note's reviews of the OTC market are optimistic from a consumer's point of view about the impact of these changes on competition between products and between retailers, which have led to price wars as pharmacists and supermarkets have fought to defend or increase their market share (ibid).

There is clearly a benefit to consumers – particularly those from lower socio-economic groups – in ensuring healthy competition between OTC medicines without penalising brand manufacturers for research and development and marketing where those provide a social benefit. There is no defensible argument for uninformed competition, however, so information for consumers on medicine options, including generic medicines, should be provided where there is such competition. This comparative information should be provided by pharmacists routinely, and should be made available on the internet, for example by the NHS Direct website.

Other policies relating to OTC spending revolve around encouraging better utilisation of community pharmacy, in particular to reduce the need for people to take up GPs' time with consultations for minor ailments that could be treated at home or through the pharmacy. Pilots of 'minor ailment schemes' have been introduced in some areas, allowing pharmacists to provide a specific range of OTC medicines free at the point of need to people who are exempt from NHS prescription charges. The recent White Paper on Pharmacy (DH 2008) announced the Government's plan to extend minor ailment schemes across the country.

The aims of minor ailment schemes are to encourage greater use of self-care rather than GPs for minor ailments and in particular to combat the barrier presented by the cost of OTCs for low-income groups (who are currently less likely to use OTCs). However, as discussed it is efficient for most people – including many groups who are exempt from prescription charges such as older people who are not poor or students – to self-pay for OTC medicines. There would be a risk that there would be a deadweight loss to the NHS if it subsidised the costs of OTC medicines for people who were already willing to purchase them privately and self-care without visiting their GP. Therefore it will be necessary to ensure that the scheme targets those who do not currently self-care.

Nevertheless, the aim of encouraging people to self-care for minor ailments (and long-term conditions) with self-paid OTC medicines, subsidised where necessary, remains a desirable objective from both the point of view of efficient use of NHS resources, and to improve health literacy and outcomes for patients.

The Government's recent White Paper also includes wider plans to encourage community pharmacies to become healthy living centres delivering preventive healthcare, including screening and healthy lifestyle advice. As discussed in Chapter 4, this raises questions about how preventive interventions are funded, including the role of private spending.

## 9. Private health insurance

The number of people covered by private health insurance (PHI) has recently been stable (reflecting NHS improvements) with a small shift towards corporate insurance. PHI companies' subscription income and gross margins have been rising.

ippr does not argue for an increased role for private health insurance (PHI) to fund core healthcare. Mainstream healthcare should be collectively funded for efficiency and equity reasons. However, although PHI plays only a residual role in the UK health system, it has a valid function, enabling individuals to meet their preferences more fully than the public system can alone.

To the extent that this function is important (and given that government's aim is to pursue competitive markets throughout the economy), policymakers should be concerned to ensure that the PHI market operates efficiently for consumers. If NHS entitlement is high quality, PHI can improve responsiveness as a residual sector. However, there are problems with the efficiency of the PHI market. PHI should not be seen as a way to shift spending away from the public sector. The PHI industry should address competition problems and the market should continue to be monitored by regulators.

This chapter discusses the efficiency of this sector, and recommends how it could be improved.

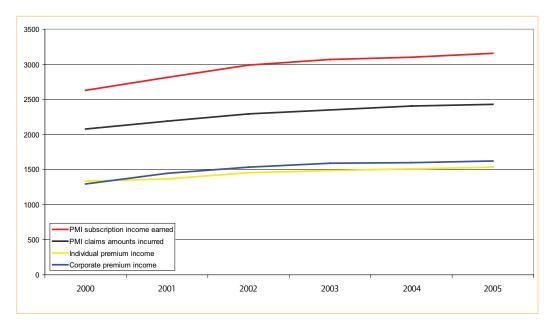
## Trends in private health insurance (PHI)

Private health insurance accounted for 2.81 per cent of the entire UK health economy in 2005 (measured as the share of PHI subscription income in total, public and private, healthcare expenditure), down 0.79 percentage points compared with its share in 2000. It represented approximately 17.5 per cent of total private spending on health in the UK. Around 6,536,000 persons were covered by PHI at the end of 2005 (10.9 per cent of the UK population).

There is no discernable trend in the absolute number of persons covered by PHI or in the share of the UK population covered since the beginning of the 1990s. There has been a very moderate shift within the PHI market since the turn of the millennium, with employer-purchased PHI rising in comparison with individually-paid insurance (51 per cent corporate and 49 per cent individual in 2005 [Laing & Buisson 2006]).

However, although numbers covered have been fairly level, the financial size of the sector has been increasing. PHI subscription income increased on average by 3.7 per cent per annum between 2000 and 2005 in real terms. Subscription income rose 0.5 percentage points faster then the aggregate claims incurred by private health insurers (Laing & Buisson 2006).

Figure 9.1: UK
Private health
insurance
subscription
income and
claims, 20002005, (£ millions,
2005 prices)
Source: Foubister et al 2005, Laing &
Buisson 2006



A large body of research has explored the drivers of PHI demand (see Foubister *et al* 2005 for a good review). Although the literature is still marked by controversy on both methodologies and results, there seems to be a set of general principles that stand out in a relatively clear manner in systems where PHI plays a role that is duplicate (as in the UK). If waiting times are high and/or perceived treatment quality of the public system is low, PHI is perceived to be necessary for timely, high-quality medical treatment. As such, demand for PHI will be driven by middle and higher income groups (see, for example, Nolan 2006). If waiting times are low and perceived quality is high in the public system, demand for PHI shifts towards non-clinical features such as 'convenience' of access to treatment, and 'hotel-like features' of medical facilities; as a consequence, PHI tends to concentrate among higher income groups only, Figure 9.1). Aggregate gross margins of PHI companies have increased by 5.6 per cent on average between 2000 and 2005, after inflation. These margins include administrative costs, remuneration and profit – it is not possible to determine whether all or some of these elements have increased.

A large body of research has explored the drivers of PHI demand (see Foubister *et al* 2005 for a good review). Although the literature is still marked by controversy on both methodologies and results, there seems to be a set of general principles that stand out in a relatively clear manner in systems where PHI plays a role that is duplicate (as in the UK). If waiting times are high and/or perceived treatment quality of the public system is low, PHI is perceived to be necessary for timely, high-quality medical treatment. As such, demand for PHI will be driven by middle and higher income groups (see, for example, Nolan 2006). If waiting times are low and perceived quality is high in the public system, demand for PHI shifts towards non-clinical features such as 'convenience' of access to treatment, and 'hotel-like features' of medical facilities; as a consequence, PHI tends to concentrate among higher income groups only.

## **Analysis of PHI**

As we made clear in Chapter 5, PHI markets cannot be seen as an efficient primary source for funding healthcare. We also found that PHI markets can, nevertheless, play an important role in the healthcare economy where efficiently funded and provided, high-quality public healthcare is available. To the extent that PHI only provides a supplement to a good quality, accessible public system, it can be seen as a valid secondary source for healthcare funding, improving the allocative efficiency<sup>16</sup> of the health economy without necessarily harming equity of access to high-quality healthcare in the public system.

However, if PHI is a necessary requirement for obtaining access to timely, adequate medical treatment (when waiting times, clinical quality and/or degree of coverage of the publicly-funded health system are poor), PHI can impose damaging effects on equity.

If PHI, as a residual supplementary funding stream, is to fulfil the function of improving responsiveness, then it is desirable to ensure the market works as efficiently as possible for consumers. The theoretical literature and empirical evidence presented in Chapter 5 about PHI markets indicate that there are problems in ensuring that the market works competitively for consumers. These problems revolve around the information asymmetries leading to adverse selection (see chapter 4) and a lack of price competition between PHI providers..

In the UK market some of the problems predicted by economic theory appear to be present. The PHI market is highly concentrated (three companies represent three-quarters of the market). There have recently been sharp increases in prices: between 2000 and 2005, average increases in real premiums were three per cent in the corporate market and six per cent in the individual market. This has been accompanied by 'downgrading', either by restricting cover or increasing excesses, and movement

towards lower cost plans in the individual market. Gross margins (administrative costs plus profits) have recently reached higher levels: 23.5 per cent in 2003, their highest level since the late 1970s (see Foubister *et al* [op cit] and Laing & Buisson [2006 and other years]). These facts suggest that there is a potential lack of effective price competition between PHI companies, with a small number of dominant competitors, rising prices, rising margins and higher margins in the individual sector where purchasers have less bargaining power.

## Policy discussion around private health insurance

The UK's PHI market has a complicated recent history of regulatory developments. In the mid-1990s the Office of Fair Trading (OFT) expressed concern about the information disclosed to consumers in the individual segment of the PHI market and, in particular, about difficulties in comparability between products (OFT 1996). The OFT called for better transparency in the way products are presented (developing a 'benchmark' or 'core terms' so as to enable straightforward comparison among products), but the effort failed to elicit significant changes. It was followed by a second report containing detailed recommendations regarding product presentation and by a threat of comprehensive regulation (OFT 1998a, 1998b).

Before a proper assessment of the impact of these initiatives was made, responsibility for regulating the PHI market was transferred to the General Insurance Standards Council (GISC; the insurance industry's self-regulation body) and, as of 2005, to the Financial Services Authority (FSA). Self-regulation by the Association of British Insurers has also led to some new voluntary guidance for the industry.

The FSA's general principle is that consumers should take responsibility for their decisions provided they have access to appropriate and sufficient information so that they can make an informed decision. It aims at ensuring that products are fully transparent for customers, complexity of insurance coverage is minimised, all information about cover and claims is disclosed, and that customers have adequate mechanisms for making complaints (Laing & Buisson 2006). The FSA's latest thinking is that the UK PHI market is not sufficiently different from other insurance markets for it to justify special regulatory treatment.

#### International regulatory efforts

In some health systems around the world PHI has a much more significant role than in the UK, and therefore problems in those markets are more apparent and politically sensitive than they are at home. In these systems, 'light' regulation (in the sense that health insurance is not considered as a special high risk product) of the sort advocated by the FSA has been deemed inappropriate for eliciting effective competitive behaviour and more proactive policies options have been adopted (for example, in Australia) or are being discussed (for example, in the United States).

In 1976 the new Australian government decided to create Medibank Private, a publicly owned, private health insurance company, offering private health cover for hospital and ancillary services, to promote competition in the industry. It quickly became Australia's largest private health insurer, covering nearly three million people and representing about 30 per cent of the private health insurance market.

In the US, health insurance premiums have risen four times faster than wages in the past six years and have been accompanied by co-payments and deductibles (Kaiser Family Foundation and Health Research and Educational Trust 2006). Both Barack Obama and Hillary Clinton have proposed to establish a new public plan to compete alongside private insurance plans in the market, should they win office.

It should be noted that community-rated insurance plans may not be able to sustain community rating when they are competing with commercial insurers (although they may lower profit margins). For example, community-rated plans in the US had to introduce risk rating in order to survive in the face of commercial insurer entry into the market [thanks to Tom Foubister and Sarah Thomson for pointing this out].

Arguably, the need for regulation is greater in those countries where PHI plays a more dominant role. Some would even argue that, since in many OECD countries with universal health coverage PHI is primarily purchased by high-income groups, the market failures are tolerable. Moreover, there are some European-wide restrictions on the extent to which member countries can intervene in domestic health insurance markets. (However, as Mossialos and Thomson [2004] point out, there is little evidence of Europe-wide competition to justify this restriction on domestic regulation.)

Regulators should continue to monitor the market to gauge the effectiveness of their light-touch approach.

## **Conclusions on private health insurance**

PHI will continue to play an important residual role in the UK health economy, with a valid contribution to efficiency objectives, by improving responsiveness to individual preferences and providing a comparator for the public system.

There may be developments in the future PHI market, depending in particular on government policy decisions. For instance, if the rules were changed to allow NHS patients to purchase additional treatments outside the public package then a new market for 'top-up insurance' could develop. Already some health insurers are developing such products in anticipation of such a change. For example, Western Provident Association has begun marketing a product to insure for cancer drugs that are excluded from NHS treatment.

In order for the Government and the public to have confidence in the ability of private health insurance to take advantage of such opportunities as they develop, the sector must ensure that it is genuinely offering a good deal for consumers. At present, the regulator has chosen to downplay the risks in the PHI market. This provides an opportunity, and a responsibility, for the UK PHI industry to take steps to improve competition and efficiency, for example through initiatives through their industry body, the Association of British Insurers.

## 10. Co-payment for NHS services

Co-payments are NHS charges direct to the individual for particular services such as prescriptions and dental care, as well as for non-clinical services including car parking and use of telephones in hospital. In 2002-03 the NHS charged patients £1.5 billion a year, rising slightly faster than total NHS spending (but still less than 2 per cent of total NHS funding). There are many exemptions so less than 15 per cent of prescriptions are charged for.

Some estimates of healthcare spending include NHS charges as part of the public sector, presumably because the funding goes into the NHS pot. However, from the point of view of this project, NHS charges are paid by the individual upfront for a particular service rather than as a contribution to a prospective risk pool, and are therefore a way that individuals pay privately.

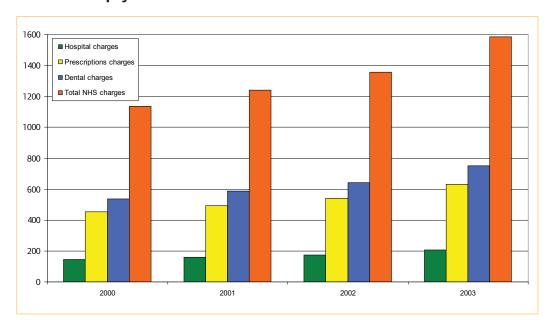
ippr contends that co-payment should be used to reduce unnecessary demand, rather than to raise funding. However, some NHS charges are not consistent with these aims and in some cases may be deterring legitimate demand (for example, high dental or hospital parking charges). The Government is committed to reviewing NHS charges and should ensure that they are set to counter moral hazard. The risks of introducing new charges for A&E or GP visits are likely to outweigh the benefits.

This chapter reviews the economic rationale for co-payments and assesses the extent to which NHS charges meet this rationale.

## Trends in co-payment

Figure 10.1.
Breakdown of NHS charges (2000-2003), £ million, 2005 prices

Source: Laing & Buisson 2007a



NHS charges reached £1.5 billion in 2003, £500 million up from  $2000^{17}$ . Average growth between 2000 and 2003 was in the region of 12 per cent per annum after inflation, 2 percentage points higher than the growth of total NHS income, thus slightly increasing its weight from 1.85 per cent in 2000 to 1.95 per cent in 2003 of the NHS budget. The distribution has remained fairly static with hospital charges representing 13 per cent of total charges, prescription charges 40 per cent and dental charges 47 per cent.

There are extensive exemptions for some co-payments for particular groups including children, pensioners, pregnant women, people on low incomes and people with certain long-term conditions

<sup>17.</sup> Accurate and consistent data on co-payments are hard to find, with discrepancies between different sources based on different definitions. Therefore we only have comparable data up to 2003.

(although the exemptions are inconsistent between charges). Some types of prescription – notably for contraceptives – are also exempt. These exemptions mean that about 85 per cent of prescriptions are not charged.

### **Economic rationale for co-payments**

There is a substantial literature and debate around co-payment, including an ippr pamphlet published in 2004 discussing the use of co-payments across public services (Robinson 2004).

As previously mentioned in Chapter 1, health insurance, including social insurance such as the NHS, creates a moral hazard problem – people are likely to use more services when they are insured than they would do had they contracted for services before they knew what diseases they would have (Arrow 1965, Pauly 1968, Zeckhauser 1970, Spence and Zeckhauser 1971, Kotowitz 1987). Consumption of health services beyond the socially desirable level is likely to occur as people may become lax about their health (expecting the insurer to pay for their care if they need it), and they do not bear the marginal cost of care when they eventually consume it.

Co-payments reflect a compromise between the inefficiencies associated with moral hazard and the benefits of reduced risk associated with insurance. They should be large enough to deter moral hazard. But they should also be small enough to avoid harming the benefits of risk reduction associated with insurance, to ensure no one fails to receive healthcare treatment because of lack of financial resources to pay the charges, and to prevent a situation in which imperfectly informed consumers choose not to consume medical care when, were they well informed about the ramifications of their medical situation, they would have made a different choice (Barr 2001).

Reflecting this economic rationale, co-payments are widespread in the OECD (mainly for pharmaceutical drugs and, in many countries, outpatient care), and yet the charges are usually small and/or have a ceiling on total out-of-pocket payments by any individual during a year. Robinson (2004) reviews health user charges for different healthcare services in selected European countries. Although there may be greater use of user charges in other health systems, their total contribution to resources is relatively minor – just over one per cent of total funding in Stockholm, for example (ibid: 24).

A key principle drawn from ippr's previous and current research in this area is that user charges should not just be about raising revenue. In economic theory, co-payments are commendable as a counter against moral hazard. In order to maintain the balance between combating moral hazard and ensuring access to necessary treatment, charges should conform to the following criteria:

- That they can effectively temper demand (combating moral hazard) when demand is price elastic
- That they should not risk deterring legitimate demand, particularly for the poor
- That they should not be seen as a way of funding increased costs.

A recent theme emerging from discussions in the US where co-payments (and co-insurance) are more widespread is the idea of 'value-based insurance design'. Following concerns with co-payments deterring legitimate use of high-value health services, value-based insurance plans incentivise patients to choose more cost-effective treatments (or providers). Higher value treatments would have low or no co-payment, while very low value services would require a higher co-payment by the user (for example, Bach 2008, Braithwaite and Rosen 2007, Chernew *et al* 2007). This concept was also raised for debate by the Health Select Committee report (2006) which encouraged the Government to consider the use of co-payments in the NHS to promote the use of cost-effective treatments. In certain respects, value-based insurance design resembles the proposals on allowing NHS top-ups for non-NICE-approved treatments we discussed in Chapter 6.

#### Analysis of co-payments in the NHS

A recent review by the House of Commons Health Committee (2006) discussed the issues of NHS copayments (or charges) in some detail. The report raised a number of problems, in particular that the system of NHS charges was not consistent with any theoretical rationale – such as that described

above – or evaluation of empirical evidence. Charges had historically been introduced to raise money, rather than to combat moral hazard. Exemptions were complicated and out of date – for example, exempting anyone over 60 years (regardless of income) but not exempting patients with more common modern conditions or requiring new treatments. As a result, they cited survey and anecdotal evidence that some patients were forgoing necessary treatment as a result (HoC Health Select Committee 2006).

In its response (DH 2006), the Government rejected the claim that the system of charges was 'a mess'. The Government reiterated that:

'The core philosophy of the NHS is that care is available free of charge according to need; charges for clinical treatment are only levied with statutory authority where there is a legitimate case for using charges to reduce unnecessary demand.' (ibid: 21)

However, in the same document a defence of current levels of charges is made on the basis of revenue-raising – in other words, that the cost of abolishing a charge would be disadvantageous – rather than on the basis of evidence that the current levels are the optimal level for combating moral hazard. This reflects the history of NHS charges, which were introduced in response to budgetary pressures caused by rising staff costs and expanding numbers of GPs rather than overuse of free prescriptions, and which were increased during the 1980s and 1990s again to raise revenue rather than to combat a proven moral hazard (Webster 1998). This demonstrates the points made by Robinson (op cit) about the importance of path dependency – the fact that the historical development of co-payment is very influential in limiting present policy options. Also, as Robinson points out, the distinction between revenue raising and moral hazard objectives is frequently blurred.

There are inconsistencies in the current charging system. For example, the charge for a dental check-up is now £15.50. This may be a sensible level to deter over-frequent check-ups, but not so high as to deter an annual examination (and many potentially disadvantaged groups are exempt from charges). However, an alternative approach, which could be easier to administer – if the aim is to tackle moral hazard rather than raise resources – might be to allow a free check-up once a year but to charge for higher frequency visits. For more complex treatment including fitting bridgework or dentures, the co-payment is set at £189. But there is unlikely to be a moral hazard problem for this type of treatment, which would only be considered if it were clinically necessary. It is unlikely that there are many patients who frivolously demand bridgework fitting on a regular basis. On the other hand, the fee is high enough to deter many patients (who are not exempt) from undergoing necessary treatment.

A similar argument could be made that, since prescriptions are only available with the signature of a doctor on the basis of clinical need, there should be no moral hazard argument for a charge in this area. There are, however, weaknesses in the gatekeeping principle in that patients may exert pressure on their doctor for a prescription, so the charge could be defended as a further tool in gatekeeping treatment. Charging may also emphasise the value of the drug to the patient and reduce the chances of their receiving a prescription for a course of treatment that they do not intend to concord. However, it is not evident that the charge succeeds in effectively reducing waste – since a (conservatively) estimated £100 million of prescription drugs are dispensed and not used each year, suggesting the charge does not create a stronger sense of value on the treatment (House of Commons Committee of Public Accounts 2008). Nor does it succeed on the grounds of not putting off legitimate healthcare demands, as the surveys and anecdotes cited by the Health Select Committee suggest.

Finally, there is evidence that hospitals have increasingly turned to patient charges – notably for car parking and bedside telephones – as a form of revenue. Again, while some charges to cover costs and to deter the use of the hospital car park by shoppers may be justifiable, a more efficient approach might be to issue parking permits for genuine visitors and to fine anyone without one. If charges are applied, they should not be set with the specific purpose of raising revenue. In

particular, parking charges may deter patients with legitimate need from accessing care, or may reduce welfare by preventing hospital visits. While minor issues from a health system funding point of view, these trends can have a deleterious effect on many patients' experience and perceptions of the NHS.

## Policy discussion around co-payment

Co-payments designed to mitigate moral hazard should theoretically be introduced at the point of demand (which is determined by patient behaviour), rather than the point of referral (which should be determined by clinical need). As discussed, the current system of co-payments does not reflect a consistent application of their economic justification. The natural experiment created by the phasing out of NHS charges in Wales will provide a fertile ground for evaluating the impact of co-payments on demand.

At first sight, presentations by individuals for GP appointments and at Accident and Emergency could appear to be a logical point at which to require co-payments. In theory, charges could be introduced to ensure that unnecessary use were deterred. This would bring new risks, however. There are already real difficulties in encouraging people to access care so that early interventions can be made before a health problem has worsened. Charging at the point of access could exacerbate those difficulties by deterring legitimate utilisation, particularly for poorer groups, as has been demonstrated by evaluations of co-payments such as the RAND Health Insurance Experiment (see discussion in Bach [2008] and Braithwaite and Rosen [2007]).

A more sophisticated approach might be to charge patients who waste NHS resources by missing appointments or by using A&E (which brings an increased workload for staff there and greater cost) when their needs might be better met by their GP. In both examples, however, there may be more effective policies to tackle the causes of waste. For example, providing more convenient GP access might reduce both missed appointments and inappropriate A&E attendances. NHS-sponsored research found that defining an 'inappropriate' A&E attendance is difficult in practice, and that public education and provision of GP services in A&E settings may be more effective solutions (Cooke *et al* 2004).

Regarding existing co-payments, ippr endorses the view of the HoC Health Select Committee (2006) that the current system of co-payments in the NHS is inconsistent with the application of economic theory. It would also be worth further investigating how value-based co-payments could be incorporated into the NHS – where patients might be charged for less cost-effective treatments (as long as the cost-effective treatments were still available free at the point of need).

In its response to the Health Select Committee, the Government committed to reviewing the system of charge exemptions and to fund research into public attitudes to charges, the extent to which charges affect use of healthcare services and health outcomes, and the extent to which they reduce excessive demand (that is, combat moral hazard) (DH 2006). This commitment should be fulfilled, and should consider the issues discussed in this chapter. A review of co-payments could also be an opportunity to begin a debate about top-ups for non-NICE-approved treatments.

## 11. Employer spending on health

As well as the role of private spending in funding healthcare as traditionally defined, we are also interested in other types of spending on health and health improvement and in this chapter focus on employer spending on health. ippr has repeatedly argued that health policy should focus beyond narrow definitions of healthcare, often dominated by hospitals, and consider the factors that affect health outcomes and social wellbeing. Therefore, while we argue that private spending will not provide easy solutions to healthcare funding problems, it has the potential to play a significant role in meeting the public health challenges of the 21st century.

There are potential benefits to the economy, NHS and public health from employer spending on health but currently this is constrained by a lack of guidance and good evidence of cost effectiveness. Spending by employers on occupational health has been rising fast (to £400 million in 2007) driven by awareness of the costs of sickness. Some employers also invest in preventive health in the workplace. However, still only a minority of workplaces have access to occupational health services.

The Government needs to remove barriers to expanding employer spending by improving evidence and guidance. There is potential for better collaboration between the NHS and employers to improve health in the workplace, including cofunding of preventive interventions.

While our discussion of private health insurance (PHI) touched on the role of corporate insurance, noting that employer spending on PHI is over £2 billion per year, there are wider activities undertaken by employers that can affect health outcomes. Employer spending on improving employee health has been a less-developed market. But it is not an insignificant market and has the potential to play an important role in public health improvement. This has recently attracted the attention of policymakers, although the exact direction of policy is not yet clear.

## Trends in employer health spending

There are different ways in which employers can spend on employee health. In general, these are divided into three types, as illustrated in the diagram below, commissioned from PricewaterhouseCoopers as part of a Government-sponsored inquiry into working age population health (Black 2008).



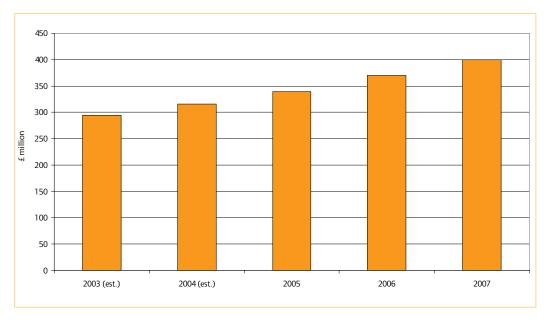
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In terms of employer spending, the best data relates to occupational health (OH) which focuses in particular on managing ill health, including advice and early intervention to reduce sickness absence. Analysis by research company MBD values spending on OH at just under £400 million in 2007, a rise of 8 per cent on 2006, which was preceded by a rise of 9 percentage points from 2005. The market has been growing faster than the economy, with has risen between 6 and 9 per cent since 2003 (MBD 2007).

Figure 11.1.

Spending on occupational health in the UK (£m)

Source: MBD 2007, and ippr estimates



However, the extent to which this spending meets the needs of the workforce (or employers) is limited. Health and Safety Executive-commissioned research showed that only 15 per cent of all British firms provided basic occupational health support, and only 3 per cent provided comprehensive support (HM Government 2005). NHS Plus, the publicly-owned occupational health service for NHS Trusts and small and medium enterprises (SMEs) notes that despite growth, significant inroads have not been made into the problem of access to OH for SMEs (NHS Plus 2008).

MBD notes that much of this growth has been driven by *public sector* employers spending more on OH. According to our definition this would be counted as private spending, since it is not healthcare spending from the collective risk pool but is private to those employees who are covered.

The factors affecting the growth of the market include a growing cost – or rather a growing awareness of the cost – borne by employers due to poor health of employees. For private companies, and for public organisations with quasi-commercial incentives, the decision to spend income on employees' occupational health – rather than higher wages – should theoretically be a rational one. Spending an extra pound on employee health should generate improved productivity at a faster rate than spending it on higher wages or more staff in order for there to be sufficient incentive for an employer to make that occupational health investment.

The business case for spending on occupational health has been highlighted by the Confederation of British Industry, which estimated the direct cost of workplace *absence* in 2006 at £13.4 billion, with indirect costs such as impacts on quality and customer satisfaction bringing the total cost to over £20 billion (CBI 2007, with health warnings about the reliability of the data). There are also wider productivity costs of employee ill-health from employees who are not absent but are still unwell: Bramley-Harker *et al* (2006) conclude that the latter productivity cost is likely to be greater than that of absence, but harder to measure. It should be remembered that not all of these costs can realistically be eliminated by spending on occupational health.

In practice the decision to invest in occupational health rather than wages (or other employment costs) is often constrained by limited information. The growth of the market is enabled by the level of knowledge of employers of the potential cost-benefit of occupational health spending. MBD's prediction of continued growth (by 34 per cent between 2007 and 2012) is based on 'the increasing awareness of occupational health issues' (MBD 2007). The reverse is also true – a survey of employers by Norwich Union found that a lack of guidance and information was a significant barrier for 43 per cent of small businesses against spending on employer health (Norwich Union 2008). This finding is confirmed by Black who states that 'the reason health and wellbeing initiatives are not more numerous in the workplace today is the lack of a well-developed business case as to why businesses should invest in them' (2008: 53).

Workplace regulation – both domestic and European – as well as increased litigation through 'no-win, no-fee' cases, have also encouraged the growth of the OH market. Union pressure and awareness-raising have added to growth in the public sector; the expansion of less-unionised private sector spending (and outsourcing) of OH is due to a growing corporate awareness of its benefits (Laing & Buisson 2006).

The OH market is also constrained by the capacity of the market to expand the provision of services, with MBD highlighting the 'lack of trained occupational health professionals' (MBD 2007). As mentioned, smaller companies in particular are less likely to spend resources on occupational health and report a greater unmet need for information and support to improve occupational health. There are obvious economies of scale barriers in organisations that are not big enough for a dedicated human resources function, let alone an occupational health department.

More fundamentally, another study (Bramley-Harker *et al* 2006) highlighted the market failure in occupational health which prevented the optimal level of spending from being reached. This market failure relates to the costs of occupational health falling entirely on the employer, with benefits diffused between the employer, future employers and the wider economy and society. This constrains the incentive for occupational health spending to increase, even if such spending might be of high marginal cost-benefit to the economy.

### Impacts on the health system of employer spending

As discussed, a factor in the rise of spending on occupational health has been the increased awareness of the costs of employee ill-health, and improved understanding of the potential productivity benefits of improving employee health. Workplace health initiatives can also address prevention of ill health, rather than just early interventions to reduce absence. Health and safety policies can reduce risks of accident or injury in the workplace. Employers can promote healthy behaviour through the provision of healthy diet options and exercise facilities, for example.

There are also wider benefits to the economy and society from employer spending on health. Bramley-Harker et~al~(2006) highlight the wider costs of employee ill-health – and consequently wider benefits from occupational health spending. Employers bear the costs of short-term absence; after three days employers can claim a rebate from National Insurance Contributions for statutory sick pay, creating a cost to the Exchequer. After 28 weeks, employees may become eligible for incapacity benefit, with full funding responsibility shifting to the state – at a cost of £6.6 billion in 2005-06 (ibid).

Other costs to the state include NHS treatment costs (some of which could be avoided through early occupational health intervention) and other benefits for which sick workers may be eligible. Then there are the wider social costs to the families and communities of sick workers, of worklessness and poverty. In theory, therefore, there are likely to be benefits to the NHS, social security, families, communities and wider society from spending on occupational health.

So there is some good evidence for employer spending on health being efficient. Compared with spending on supplementary Private Health Insurance, which duplicates NHS entitlements and has inefficiencies in the market, we would expect that private spending on occupational health is more efficient and can contribute to improved population health and wider economic and societal benefits. However, there are no systematic reviews or comprehensive surveys of occupational health spending across the economy. There is no study that we have identified that estimates the overall cost-effectiveness of occupational health spending at a national level.

#### **Policy discussion**

There are evident economic and social benefits achieved from occupational health spending, although there is a lack of systematic evidence of the efficiency of existing spending. The market is expanding rapidly already, with future expansion expected to take place in the medium term. From a health system and public policy perspective, the policy aim should not just be to incentivise spending on OH. This may be a route to the main aim, which is to improve the health and productivity of the working

age population. This is a much bigger agenda than this project can cover, but we will explore how policy can enable private spending on occupational health to contribute to this aim.

First there is the question of how well the existing £400 million of 'private' (including public employer) spending on occupational health is being channelled. Then there is a secondary question about the extent to which barriers to the development of this market might be reduced, so that increases in productive spending might be encouraged. However this should be in the context of a more holistic approach to improving working age health through a range of routes other than employer spending.

#### Efficiency of current occupational health spending

Although there are good examples of efficient occupational health spending, this does not mean that all spending in this sector is necessarily efficient. NERA (Bramley-Harker *et al* 2006) and PricewaterhouseCoopers (Black 2008) have both reviewed the evidence and put forward optimistic conclusions about the business case for employer spending. However, not every evaluated occupational health intervention has a positive finding. As with spending on healthcare, there is a need to better measure the outcomes – and therefore the productivity – of occupational health spending. Market analysts conclude that evidence of cost-benefits of spending, rather than lack of fiscal incentive, is the main barrier:

'The 'holy grail', which could allow massive latent demand to be released, is the development of sickness absence management systems of proven efficacy.... No occupational health provider has yet developed an approach which can offer dividends regardless of context.' (Laing & Buisson 2006: 226)

Occupational health providers should lead the development of this evidence base, in order to improve the services that they offer and to make a better business case for public policy to support this area of private spending.

To advance this aim, NHS Plus, the NHS-owned occupational health provider, has set up a research programme into clinical effectiveness of occupational health interventions, and has recommended that government fund this programme of research in the medium term (NHS Plus 2007). There may also be a case for business investment in this research effort since the benefits will accrue to businesses in the longer term.

#### Removing barriers to efficient employer spending on occupational health

Norwich Union's survey found that lack of guidance and information is an important barrier for many employers, particularly smaller employers. These information and guidance gaps are already being addressed by government policy, for example the provision of a website and helpline for small businesses. Carol Black's report recommends the improvement of guidance and information through a business-led health and well-being consultancy service (2008: 11). How this would work in practice is less clear, and it was a missed opportunity that the Department for Business, Enterprise and Regulatory Reform has not been included in this policy agenda (led by Departments for Work and Pensions and Health).

Should the Government seek to encourage companies to spend more money on healthcare in the workplace, for instance by using the tax system or providing direct incentives? At present the case for such interventions remain unproven:

- First, there is insufficient evidence of the cost-effectiveness of all occupational health spending to be able to assume a satisfactory return from public subsidy.
- Second, lower taxes or additional subsidies would have undesirable crowding-out effects on employers who are already investing in occupational health. There is a relatively good business case for many employers to invest in employee health without the need for subsidy.
- Third, tax subsidies would also create differences in the way cash benefits and in-kind benefits (such as occupational health) are treated, leading to undesirable distortions in the specific form

through which employees take their compensation from work.

• Finally, MBD's market analysis suggests the occupational health market is growing rapidly without fiscal incentives (and is forecast to grow by a third in the next five years); and that the main reason for growth is improved understanding of the cost-benefits for productivity (2007).

For these same reasons, it does not seem sensible for the NHS to sole-fund a 'Fit For Work' service, as proposed by the Black report (op cit). Current private spending on early intervention and rehabilitation would be crowded out. Black makes a general claim that there will be returns in the form of reduced benefit dependency and increased income tax receipts. But a quantitative economic case for the Government to fund this service has not yet been made.

We do not rule out the use of such measures in the future, but any such intervention from Government would have to be based on a careful analysis of cost and clinical effectiveness. While there may not at present be a strong argument for a general tax subsidy for all employer spending, there may be a case in the future for incentivising employers to invest in preventive interventions where there are fewer short-term business benefits but greater long-term gains for the wider economy and society. This would be the area where employers might need encouragement to invest, and where there would be long-term health improvement benefits.

In the first instance, for example, there are current anomalies whereby large employers building exercise facilities are not taxed (as a benefit in kind), whereas subsidies for gym membership would be. From an economic perspective, however, there are problems with removing taxes from preventive health in-kind benefits as this then distorts incentives in the way described above. Nevertheless, it seems anomalous to disadvantage small companies in this way.

From a health policy perspective, the NHS reform programme presents a new opportunity to address the relatively poor focus of the NHS on improving health – including employee health – rather than just responding to sickness. If commissioners are sufficiently incentivised to improve population health then the drive to develop commissioning to improve population health should push the development of occupational health up the NHS's agenda. This was emphasised in the 2007 Commissioning Framework which guided commissioners to work with SMEs to improve occupational health, including providing advice and support. The Framework also guides commissioners to 'encourage all local employers to use workplaces as settings for health improvement', including both occupational health and health promotion programmes (DH 2007b: 48). However, it did not made clear how commissioners should do this.

One approach would be a facilitative one, whereby Primary Care Trusts help local SMEs to overcome the lack of economies of scale by pooling their resources for a shared occupational health service. While they may not be able to afford an occupational health service on their own, small employers might be able to pay in a smaller subscription to a pooled occupational health service and health improvement interventions.

A more interventionist approach might be for PCTs and employers to co-fund employer health services. At the moment, employer and NHS funding streams tend to be separate: NHS commissioners fund health services and health improvement initiatives indirectly to improve employee health and reduce absence; separately, some employers invest in employee health, either using private provision or NHS Plus. We have not found any examples of PCTs and employers co-funding health interventions – perhaps because this would be considered charging for NHS services. However, the division of private and public funding streams for workplace health improvement initiatives may be creating a barrier to more innovative approaches.

Public-health-focused commissioners should look for synergies in these funding streams. Where there is a potential for health improvement gains, NHS commissioners could develop partnerships with local employers – particularly those smaller companies that do not have the economies of scale to develop their own occupational health capacity – to co-commission shared occupational health and health improvement services.

These services could be provided by the NHS or by independent occupational health providers, with possible sharing of risks between public and private partners. We believe these more imaginative approaches to pool interests, expertise, risks and resources should be piloted by innovative commissioners to explore the cost-benefits. There may be a risk that NHS involvement would crowd out employer investment. But we argue that this would be a more efficient approach than just subsidising or incentivising employer spending through fiscal tools, or continuing with the separation of funding streams and the missed opportunity to improve the health of the working-age population, particularly in small companies.

## Summing up

Employer spending on health improvement has the potential to play a greater role in the future. In the long term, the establishment of a baseline of working-age population health – the goal of the Government's health and work programme – will provide an evidence base from which to assess the effectiveness of particular interventions, including employer spending on health and wellbeing. From a policy point of view, occupational health is only one way of improving working-age health, including return-to-work services for the long-term sick who are not currently employed. But private spending should be harnessed as a key tool to improve working-age population health, and policies should aim to address the barriers to investment in occupational health and realise the potential benefits.

# 12. Interaction of the publicly- and privately-funded sectors

In this chapter we discuss how the privately-funded healthcare sector interacts with the publicly-funded sector to consider the overall impact of private spending on the public system and develop ways in which that interaction can be improved. Once again we should emphasise that we are discussing funding rather than ownership, so public and private sector here relate to who pays rather than who provides.

Private healthcare does not necessarily damage public healthcare. If the risks are managed and the benefits achieved, private healthcare can play a valuable role in the health system. Particular risks revolve around the use of scarce medical expertise. The main benefit of private healthcare is as a comparator for the NHS.

The interaction between private and public sector in the UK health economy is complex and a matter of debate between those who tend to be ideologically in favour of one or the other. Those who wish to promote private healthcare argue that it reduces costs on the NHS equal to the quantity of privately-funded healthcare, while those who oppose it see a similar zero-sum game in the provision of private healthcare, taking doctors away from treating 'public' patients.

The evidence base on which to evaluate these judgements is, again, relatively sparse. Some key references are over a decade years old (for example, Yates 1995); more recent evidence is inconclusive and policy innovations have yet to take effect.

The table below summarises what we believe are the key questions regarding the interaction between the private and publicly-funded sectors.

Risks to the public sector from privately-funded healthcare	Benefits for the public sector from privately-funded healthcare
Does private treatment reduce capacity for treating NHS patients?	Does private healthcare generate tax receipts for the Treasury?
Does private healthcare lead to extra costs for the NHS in follow-up care?	Does private spending reduce costs for the NHS and increase redistribution?
Does private spending reduce middle-class commitment to collective funding?	Does private healthcare maintain support for publicly-funded healthcare?
Does the private sector free-ride on the costs of training in the NHS?	Does the private sector create competitive pressure for the NHS to improve?
Does the private sector increase the price of healthcare labour?	Does the private sector reduce pressure on NHS labour costs?
Does the privately-funded sector increase capacity and diversity of supply?	Does treating private patients generate income for NHS providers?

#### Risks to the public sector from privately-funded healthcare

We first consider the potential costs or disadvantages to the publicly-funded health service of the privately-funded health sector.

#### Does private treatment reduce capacity for treating NHS patients?

There is a risk that the provision of healthcare to publicly-funded patients according to need could be reduced if consultants, of whom there is a limited supply, spend a significant proportion of their time in private practice. This substitution effect could manifest itself on two levels.

On the first level, the provision of private practice simply creates an additional constraint on the supply of public healthcare. This could be a short-term issue if in the medium term the supply of labour is flexible enough to respond to (public and private) demand. However, this is a more structural problem if the entry of specialist consultants and expansion of supply is over-constrained so that long

waiting lists emerge for public patients. This could be a problem for both privately insured and for self-pay patients. Theoretically, this can be seen as a zero-sum game effect where the prioritisation of one private patient leads to the de-prioritisation of a public patient. But it would still be a problem from an equity and an allocative efficiency point of view if there was any reduction in public supply, even if it was less than the expansion of private supply.

On the second level, a systematic perverse incentive may operate that artificially extends public waiting times. If consultants can earn more for their private practice than for their NHS work then the incentive and opportunity may exist for them to deliberately maintain long NHS waiting times and persuade their patients to self-pay in order to join the shorter private queue. This is less likely to happen for privately insured patients, since one cannot buy insurance for existing conditions. This is a non-zero sum game, where the expansion of the supply of private treatments is more than offset by a reduction in the supply of public treatments.

It is not possible to draw firm conclusions about the extent to which substitution is currently a problem. Foubister *et al* (2005: 90) conclude that 'the evidence that is available... suggests that adverse consequences are likely to outweigh any beneficial effects'. This was based on what is now relatively old data (Yates 1995, 2000), which found that private practice was taking up much higher proportions of consultants' time than was stipulated in their NHS contracts. The amount of time spent on NHS work was also lower than consultants were contracted (and paid) for, and full infrastructure costs to the NHS of private practice in NHS hospitals were not being accounted for. The opportunity costs to the NHS of private practice are increased by the fact that, unlike NHS care, private medical care is almost exclusively provided by consultants.

The criticism at the time was that private work was damaging NHS care by taking consultants away from their public patients, and that this was due to the financial incentives for consultants and the lack of managerial control over their work. At its most extreme, it was argued, consultants could have a perverse incentive to take ten-elevenths of an NHS salary and do as much private work and as little NHS work as possible, leading to widening gaps between private and NHS waiting times. Thus the Audit Commission found that the consultants who did the most private work did less NHS work than the rest (1995, cited in Williams and Buchan 2006).

Both these issues have been addressed since the data on which Yates's research was based was collected. The absolute separation of public and private work – so that consultants had to opt to work exclusively in one sector, even for the first years of consultant appointment – was rejected by doctors in the new consultant contract negotiations. But the new consultants' contract of 2003 did aim to provide managers with more tools to plan consultants' NHS commitments as well as increased pay for NHS work. An assessment by the King's Fund of the contract concluded that there was 'little sign as yet of the patient care benefits envisaged being realised,' (Williams and Buchan, 2006: x) with increased consultant earnings not matched by increases in productivity. There were levers available that were not yet being used by managers and variation between trusts in interpretation of the rules on private practice. The requirement to do extra NHS work before doing private sessions was based on an underestimate of the amount of NHS work being conducted and paying for extra NHS sessions was not always affordable (ibid).

In conclusion, the increased value of NHS work may have reduced the incentives to maximise private work but there was no evidence that NHS productivity had increased. A more recent study by Bloor *et al* (2004) found that while there were longer NHS waiting times for part time (that is, mixed public and private) consultants, their total NHS activity levels were higher than those of full-time consultants. There is still a need for better monitoring of the impact of privately-funded treatment on NHS practice and for continuing to tackle the potential perverse incentives and negative impacts of private practice on NHS work.

Probably a more significant development in tackling the perverse incentives for consultants to prioritise private work has been the significant push on NHS waiting times targets, accompanied by increases in funding. This has improved the facilities for NHS work and the resources available, as well as encouraging managers and clinicians to improve systems for prioritising patients and to equalise

waiting across and between regions. The number of consultants employed by the NHS has increased from 21,500 to 33,500 since 1997, a significant expansion in the supply of capacity. This has reduced the scope for consultants to extend their NHS waiting times above the maximum target wait, and has reduced the gap between private and NHS maximum waiting times – thus reducing the incentive for patients to pay to jump the queue.

The extent to which there is a direct substitution of private for public provision is in part determined by the flexibility of supply to increase to meet private demand without taking resources away from the public sector. This must be an important regulatory goal for the management of the mixed healthcare market.

One main constraint on the expansion of supply is the availability of specialist consultants – particularly surgeons and anaesthetists – because they take ten or more years to train and obtain the relevant experience, and have relatively high autonomy over their working practices. The entry into the medical profession and to consultant grade is controlled through self-regulation by medical Royal Colleges and the General Medical Council. Training places are determined by Workforce Confederations and Deaneries, with a mixture of bureaucratic planning and professional self-regulation. The controls on entry into the profession and consultant grades are necessary for safety reasons, but need to be balanced against the need for supply to be flexible to meet changes in private (as well as public) demand.

The expansion of supply from abroad – the principle of additionality – is one solution to this problem, and was pursued as a deliberate objective of the early waves of publicly-procured private provision. It has also been an important factor in the increases in NHS consultant numbers since 1997, as expanded training places will only feed through into new consultants in the next decade. However, there is a limit to the sustainability of this strategy in the long term as other countries also expand the numbers of doctors, as foreign doctors may decide to return home. In particular, the reliance on medical staff from developing countries may undermine the development of health services in those countries.

## Does private healthcare lead to extra costs for the NHS in follow-up care?

Another potential risk to the NHS from private healthcare stems from the externalities that the public sector may have to pick up. In general only NHS hospitals provide emergency, critical and intensive care. Therefore when private treatment goes wrong, the publicly-funded sector has to provide back-up, which may include very expensive care, reparatory surgery and rehabilitation. This is a recurring issue in media and political debates about the private sector.

Of course, treatment goes wrong in the NHS as well. Therefore patients who are treated in private hospitals as an alternative to an NHS hospital, and have to be transferred as an emergency, do not automatically constitute an 'additional' cost that the NHS would not have incurred if they had been treated in a publicly-funded hospital. However, if the risks of privately-funded treatment are higher than for publicly-funded treatment, there could be extra costs to the NHS (bearing in mind that most treatments and patients provided by the private sector tend to be lower risk than those provided by NHS hospitals). Additional risks in private treatment might be due to a number of factors, including poorer clinical governance standards – for example, less experienced surgical teams, lack of cardiac crash teams on site; higher-risk treatments being carried out that the NHS would not fund; or higher-risk patients being treated than the NHS would allow. In these scenarios, extra emergency and critical care costs might be incurred by the NHS.

Although based on data from ten years ago, a study by Williams *et al* (2001) found that in fact emergency transfer rates from private elective care to NHS hospitals were not a major burden on publicly-funded hospitals. They estimated that there were 749 emergency transfers, or about two patients per day across England – about one in every 1,000 private elective care patients. Taking into account those whose emergency care was also funded privately, this meant an estimated 524 patients, who occupied 5,618 bed days, adding up to about £2.6 million in costs to the NHS in 1999.

It is not possible to calculate how much of this cost was 'additional' - in other words, costs that would

not have been incurred if those patients were treated in the NHS in the first place. Williams *et al* could not identify a public sector comparator for the private sector transfer rate of one in 1,000. Potentially the risks in the private sector could be lower as they select less risky patients, and provide treatment more quickly, so patients would be less likely to develop other illnesses or complications (ibid).

When weighed against the bigger figures – for example, the  $\pounds$ 400 million-worth of income for the NHS from private treatment (increased from  $\pounds$ 300 million in 1999) – this is a relatively small figure. However, it would be reasonable for the NHS to monitor these costs. If the risks of private treatments provided by the private sector – and the frequency and costs of transfers to the NHS – grows, then the problem may require more robust policy solutions.

The policy options in this area include regulation of standards in the privately-funded sector. The National Care Standards Commission and now the Healthcare Commission have powers to regulate private providers, including cosmetic clinics. This should reduce some of the risks to the NHS of excessive emergency transfers. The regulator should view the management of external risks as an objective in this sector.

A more radical option would be to charge the private provider for the costs of follow-up treatment. Given the rules against mixing public and private healthcare (discussed in Chapter 2), charges could theoretically be applied for any emergency transfers to the NHS.

In terms of recouping extra costs to the NHS that would not have been incurred had the patient been treated publicly, a middle way might be to charge private providers for emergency transfers that are due to poor safety or additional risks. In cases of proven clinical negligence by private providers it might be reasonable for the NHS also to reclaim the costs of treatment. This would not require legislative change since the 2003 Health and Social Care Act allows the NHS to claim back the costs of treatment when a patient wins a personal injury pay-out (for example from their employer or a motorist who was liable for their injury).

In cases of good clinical standards in the private sector, but where surgery has gone wrong due to the high risk of the treatment (or the patient), the case for reimbursement for extra costs would be difficult to prove (unless the NHS had specifically denied treatment for risk reasons). The fact that this does not happen is in part due to ethical reasons – it would not be acceptable to deny emergency treatment subject to financial status. Equally, the entitlement to NHS treatment is not generally dependent on the risks the individual has taken in their lives elsewhere – costs of treating skiing injuries are not charged to the individual or their travel agent. In emergency situations, the rule of rescue generally overrides questions of personal responsibility. Therefore an individual's choice to take the risk of private surgery should not be seen as a legitimate reason for incurring the cost of treatment, unless there is proven negligence.

#### Does private spending reduce middle-class commitment to collective funding?

Another concern about private healthcare is that those who opt out of the NHS may be less willing to fund the collective risk pool. At present, as discussed, private patients still have to pay their full NHS contribution and cannot receive rebates if they buy treatment externally. But the collectively funded risk pool – with contributions from all members of society – relies on the political willingness of the rich to pay into a universal system. The concern is that private spending could reduce this commitment and lead to a break-up of the majority political commitment needed to maintain the universalist NHS. Propper and Green describe the theoretical 'snowball' scenario:

'If the wealthier receive less of their health care through the public system, their commitment to preserve the system by public tax payments may decrease. In addition, without the presence of the 'sharp elbows' of the middle classes, the quality of the public sector may fall.' (2001: 690)

At present the political climate suggests the universality of the NHS is safe, with all the main parties committed to free healthcare for all. The Conservative proposals for rebating private patients from their NHS 'entitlement' through the patient passport idea was in part blamed for their defeat at the polls in the last general election. Panel surveys suggest a continued commitment to universal

healthcare – for example, three quarters of respondents to the 2005 British Social Attitudes Survey (BSAS) opposed the idea of means-testing the NHS, and health was the most popular choice for priority public spending (NatCen 2007).

However, political opinion can be volatile and we should not assume that the NHS model will always be politically safe, particularly in an increasingly unequal and fragmented society where wealthy citizens may have little contact with the rest of society.

A study of the BSAS by the Institute for Fiscal Studies in the 1990s found that 'individual take-up of private medical insurance inhibits support for spending on the public health sector' (Hall and Preston 1998: 2). Propper and Green also cite evidence that take-up of private health insurance is linked to longer public waiting lists but emphasise that 'it is dissatisfaction with the public sector rather than the concept of public provision, which drives people to the private sector' (2001: 694). (A lack of data on private self-pay means that it is not possible to calculate the effect of self-payment on commitment to public funding, but it might be theorised that for supplementary – rather than complementary – self-pay spending there might be a similar effect.) Propper and Green conclude that 'there is less evidence that private use leads to change in attitudes' (ibid, original emphasis).

If the take-up of private healthcare increases, commitment to funding the NHS could reduce, ultimately threatening the collective risk pooling that this report recommends. But the extent to which a fall in middle-class commitment to public healthcare is likely to occur as a result of a theoretical expansion of the privately-funded sector may in reality be limited. If there were to be a 'snowball' effect of middle-class patients exiting the public health system, it would be due to declining perceived quality rather than political commitment.

## Does the private sector 'free-ride' on the costs of training in the NHS?

Another cost of private healthcare that tends to be funded by the public sector is the education and training of medical staff. The state subsidises the education of healthcare staff (of all disciplines) through universities. Training is also subsidised within the NHS, where students and graduates continue to receive supervision and courses either free (to the individual) or not fully charged. Once they have qualified as consultants, however, doctors may then work in either the public or private or in both sectors. Private hospitals do not provide training posts – private medical care is provided by consultants rather than junior doctors – and therefore it could be argued that they are receiving a hidden subsidy and not taking on the costs of training. This subsidy is in fact shared between private hospitals and medical staff, depending on the elasticities of labour supply and demand.

In fact, when similar systems for other sectors and professions are considered, this does not seem to be such a problem. Teachers who train in publicly-subsidised universities (including placements in state schools) are permitted to take their skills to the private sector. Lawyers can work in private practice or for the Crown. In the rest of the economy, the taxpayer's subsidies of education and training are not directly charged to future employers. The important consideration is to ensure that medical training is funded separately from patient care, which is generally the case in the NHS.

In policy terms, the options to reduce the costs to the NHS and the state of training appear to be limited. Attempts to tie newly-appointed doctors into working only for the NHS for the first years of their consultant career were defeated during negotiations for the consultant contract in the early 2000s. The legality of such a regulation might be questioned under European legislation on the free movement of labour. Since the medical workforce is relatively mobile, it would be likely that many newly appointed British consultants would work abroad rather than be tied into exclusive NHS contracts, and would be at an unfair disadvantage to overseas-trained consultants who could take their place in the private sector.

# Does the private sector increase the price of healthcare labour?

This discussion leads to the question of the impact of private healthcare on NHS wages. There are two arguments here which are not necessarily exclusive.

In simple economic terms, the added demand that private healthcare brings to the healthcare labour

market – and the constraints on the supply of labour – predict that the price of healthcare labour would be increased. Indeed, we argued above that increases in NHS wages were necessary to maintain consultants in the public sector.

However, it may also be argued that the existence of a private market – and the ability of consultants (and other professionals) to work in both sectors – may allow the NHS to recruit and retain staff through a combination of lower wages and non-financial rewards (for example, academic reputation, updating skills, leading research and development). This arrangement may not be possible if staff could not subsidise their basic pay with lucrative private sessions or shifts. The corollary of this argument is that if the freedoms for staff to work in both sectors were constrained, they would choose to exit the public system at the prevailing rate of pay, as Yates claims (2000).

Again, as we are dealing with the free movement of labour in a global market, there are limits to what policy may achieve. Constraints on free labour could be bypassed by consultants exiting the public system and working either privately or overseas. This also suggests the main solution to the competition for a limited labour supply, which is to ensure there is a more flexible supply through domestic training routes and through international movement of labour. Recent rulings have found that limiting access to medical posts to British-trained junior doctors – in response to union protest at competition for vacancies – is illegal; this serves the NHS's interests in constraining medical wage inflation as demand – from public and private sectors – rises.

## Benefits for the public sector from privately-funded healthcare

The risks posed by private healthcare to the NHS need to be balanced against the potential benefits. Our discussion focuses on the extent to which these benefits are real, and the policy mechanisms needed to ensure that they are maximised.

#### Does private healthcare generate tax receipts for the Treasury?

The first benefit that the privately–funded healthcare market brings is tax receipts to the Exchequer. Since the tax-break for private health insurance for the over-60s was abolished in 1997 (without significantly denting demand), the Treasury has received a 5 per cent tax on the payment of insurance premiums. In 2005 this tax was worth £150 million to the Treasury. The Government also collects income tax and National Insurance Contributions on benefits in kind including employer-paid private health insurance. NERA estimated this as being worth £541 million to the Treasury in 2000 (2001).

The delivery of private healthcare by professionals and institutions is exempt from VAT, therefore clinical self-pay is non-taxed. Cosmetic treatment that is not part of a healthcare episode is taxed (at 17.5 per cent VAT). As discussed above, the data relating to consultant fees are not broken down by source of funding so a full estimate is not possible, but VAT receipts on private hospital income from cosmetic treatment would have been worth about £20 million to the Treasury in 2005.

#### Does private spending reduce costs for the NHS and increase redistribution?

The second benefit argued to accrue to the NHS from the existence of the private sector is the reduced demand from patients who are treated privately. If a patient has a clinical need for a hip replacement and qualifies for NHS treatment, but has insurance (or chooses to go private), she will cost the NHS less than her neighbour, if he is uninsured, whose operation is funded by the state. Moreover, since she will still have paid her NHS contributions, her choice to pay privately will actually increase the amount of resources redistributed to the rest of the risk pool. Since our private patient is likely to be wealthier than her neighbour, then her choice to pay for private treatment leads to a greater progressive redistribution from rich to poor.

However, we should be wary of simply counting all private spending as a net saving for the NHS and redistribution to the rest of society. The UK private healthcare sector is a mixture of supplementary provision (duplicating or running parallel to the public entitlement), and complementary provision, providing treatments that the NHS would not provide or treating patients who the NHS would not treat. This includes non-NICE-approved treatments, but also higher risk patients or patients with lower need than the NHS would accept as clinically necessary. Thus, as we have seen, a proportion of self-

pay spending is for non-clinically-necessary cosmetic treatment. At least some private treatment is additional, rather than alternative, to treatment in the NHS.

We showed this at an international level in Chapter 1. Private healthcare spending does not simply replace public spending; it tends to add to the total without reducing the pressure on the public sector.

This has also been demonstrated at a local level in the UK. A study of GP referrals in the Trent region of England for publicly and privately-funded patients tested the hypothesis that areas with greater use of private healthcare would have less use of public healthcare (along the lines of our hip replacement neighbours). However, instead it found that the least deprived wards had both more private referrals as well as more NHS referrals than the more deprived wards (adjusting for age). The study actually found a statistically significant positive correlation between private and public age-standardised referral rates, after controlling for deprivation and practice effects (Mulvaney *et al* 2005).

This does not mean there is no reduction in NHS costs due to patients using private healthcare rather than the NHS. The Mulvaney *et al* study could not compare the referral rates with a control scenario where there was no private healthcare – the burden on the NHS of patients from wealthier wards may have been even greater without the private sector relieving some pressure. The study does demonstrate that there is likely to be significant unmet – and unidentified – need in the more deprived wards; and confirms the finding that wealthier patients are more able to negotiate referrals from GPs than poorer patients are (see also Dixon *et al* 2003).

#### Does private healthcare maintain support for publicly-funded healthcare?

We discussed above the potentially negative political consequences of private spending on commitment to public funding of healthcare through the tax system. However, Propper and Green (2001: 690) describe the theoretical benefits to the political security of the NHS of having the option to supplement public healthcare through private spending. They present an argument whereby suppressing private finance, when wealthier individuals have high demand for healthcare, would lead to increases in waiting lists for the NHS. Locking wealthier patients into the public system would reduce their satisfaction, increase their demand for private healthcare and reduce their willingness to finance a redistributive public sector. However, they do not provide an empirical evaluation of this theory.

The inverse of this argument, therefore, is that private spending provides a kind of pressure valve for the health system. Collectively, through the publicly financed health system, we value healthcare at a particular level that is reflected in the tax resources allocated to it, and in the level of rationing that we accept both through waiting times and excluded benefits (for example, non-NICE-approved treatments). However, wealthier individuals may value marginal benefits like shorter waits or improved hotel facilities at a relatively higher level, in which case permitting them to purchase private healthcare supplementary to the public system is economically efficient and politically necessary for maintaining their willingness to fund a redistributive public healthcare system.

#### Does the private sector create competitive pressure for the NHS to improve?

Perhaps the most important role that private spending on healthcare plays for the publicly-funded system is as a comparator of service levels and standards. Ironically it is the inequity that private spending represents that creates a pressure on the NHS to close the gap by improving its own standards. In recent years, this has played out in debates about waiting times, choice and new treatments.

The increases in NHS waiting times in the 1990s would not necessarily have been seen as such a problem, had it not been for the comparatively short waits for privately-funded patients. This growing gap between publicly and privately-funded access to healthcare was a key reason why extra public resources have been spent on healthcare, along with waiting time targets. The fact that individuals with resources to do so were prepared to spend money privately to improve access was a market signal that reduced waiting time is highly valued. The impetus to reduce NHS waiting was therefore as much to combat concerns about the inequity of public and private healthcare, and to respond to public

demand as expressed firstly through the private market and then through the ballot box, as it was about improving health outcomes.

If the outlet to express demand through the private market was not available, then the concerns about inequitable access would not have been raised, and the competitive improvements to the NHS would not have been pursued. Indeed, it is argued (although it is not possible statistically to confirm this) that the reductions in NHS waiting times have led to the stagnation of demand for private health insurance, as the comparative advantage has been reduced.

The debate about improving choice for NHS patients also drew on the private sector as a comparator of the standards to which the public system should aspire. Whereas NHS patients would routinely go to their local hospital at a fixed time, regardless of quality or convenience, their private sector counterparts would have a choice of providers, surgeons and appointment times. Ministers argued that choice already existed for those with the finances to pay for it, so choice should also be extended to NHS patients. Inevitably, the level of choice in the private sector is likely to be greater than that in the public sector. But the introduction of choice of hospital for elective treatment in the NHS can be traced directly to the private sector comparator. Indeed, it was a political tactic to make public services feel more like their private sector equivalents, in order to maintain middle-class commitment to public services (and the Labour party).

This logic of public sector competing with the private sector continues with debates about access to new, marginally cost-effective treatments such as cancer drugs Herceptin and Velcade. Again, the fact that some patients are purchasing these treatments privately creates pressure on the NHS to assess their cost-effectiveness and decide whether or not they should be funded publicly. Insofar as the purchase of these treatments privately signals that some patients extract significant value from them, it is important that NHS purchasers and NICE evaluators carefully evaluate whether willingness of some to pay privately can and should be translated into willingness of all to pay publicly.

Hence probably the most important role played by private spending from the point of view of the public sector is that of comparator, so that the NHS has pressure to improve its own responsiveness to demand and continuous development.

#### Does the private sector reduce pressure on NHS labour costs?

We discussed above the debate on the impact of private spending on NHS wages. While the private sector creates upward pressure on medical wages, the freedom for staff to work in both sectors concurrently provides an opportunity for NHS staff to supplement their basic wages with lucrative private work. In this way, and assuming staff are able to extract non-financial rewards from working in the NHS, the private market may allow the NHS to retain staff at a rate lower than that which would be required if the two sectors were competing directly for the same staff on exclusive contracts. In this sense, high wages in the privately-funded sector subsidise lower wages in the public sector. (As mentioned, staff are also attracted to the NHS for non-financial benefits, some of which may have costs for the NHS.)

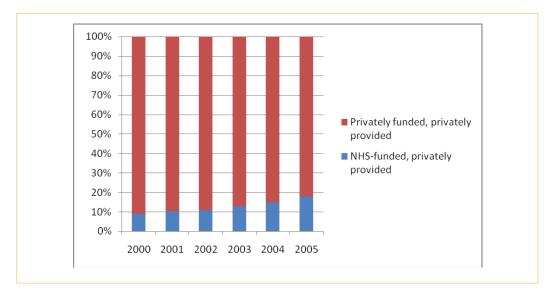
We reject the idea of exclusive NHS contracts for health staff on these grounds, and also on the practicability of constraining labour movement in a global medical labour economy.

Does the privately-funded sector increase the diversity of supply for the NHS?

From the point of view of recent NHS reforms, the privately-funded sector has played an important role by supporting an alternative system of independent sector providers. In the early 2000s, the NHS began to use private providers to reduce waiting times by using spare capacity, often by spot-purchasing individual operations. This has rapidly progressed to the situation in 2008 where, under the choice initiative, elective patients can choose any provider, public or private, that will provide their procedure at the NHS tariff. This now fulfils a wider range of objectives, including patient empowerment and contestability – the aim of creating pressure on the NHS to improve efficiency and quality by competing against private providers.

This is reflected in the sources of income for private providers, where publicly-funded patients now make up almost 20 per cent of total private sector income, as Figure 12.1 shows.

Figure 12.1: Sources of funding for private providers Source: Laing & Buisson 2006



Although this report focuses on privately-funded, rather than privately-provided healthcare, the ability of the private provider sector to take on NHS patients – especially in the early years of the NHS reform programme – depended on the pre-existing privately-funded capacity.

One major way that the NHS has used private providers has been by contracting directly with Independent Sector Treatment Centres that were built specifically for the NHS. In these cases, the dependence on capacity built up by the privately-funded sector is less obvious, although the contractors have included existing private providers.

The overall impact of the NHS's use of private providers has not been thoroughly evaluated as a whole. However, evaluations of early choice experiments that included Treatment Centres found that they had contributed to falling waiting times, and certainly the use of the private sector has increased capacity. The issue of whether it has done so efficiently is more contested. However, it can be argued that the experiment of using private providers would not have been possible in the first place had there not existed a private provider sector that was mainly funded by private patients.

## Does treating private patients generate income for NHS providers?

It must be remembered, finally, that the NHS is also a provider of privately-funded healthcare. Private healthcare is therefore a source of income, the profits from which subsidise public healthcare. The size of this privately-funded, publicly-provided sector in 2005 was over £400 million (Laing & Buisson 2006). In 1995, a NERA study estimated NHS private patient profit margins were around 17 per cent of revenue (NERA 2001). If this has remained the same, NHS profits from private patients would have been around £70 million in 2005.

The provision of private healthcare in public hospitals is another source of controversy, since it is seen by some as a contradiction of the equity principles of the NHS. For example, the debate around Foundation Trusts partly centred on the concern that as autonomous, quasi-commercial organisations they would increase their private work, and thus threatens the universal public provision for which the hospitals were intended. This led to a regulation whereby the amount of private work provided by Foundation Trusts would be capped. The level of the cap was set relatively arbitrarily (based on historical levels of activity rather than any economic criteria) and is not consistent between Trusts. Some Foundation Trusts are exploring the option of 'evading' the cap by setting up arms-length bodies to channel their private work.

Following the threat of a union-led judicial review, the Foundation Trust Regulator, Monitor, is currently reviewing its policy on this issue. As this report has argued, privately-funded healthcare plays a valid role in the health economy and does not threaten NHS values so there is no particular reason to restrict the capacity of Foundation Trusts to generate profits from this market.

The last Labour administration (in the 1970s) was more ideologically opposed to private work being

carried out in public hospitals, and went so far as to attempt to ban the provision of private pay-beds in NHS hospitals. This illustrated the unintended consequences that are likely to flow from trying to constrain the private health market. While Labour failed to ban private pay-beds, they did manage to reduce them significantly. This meant that not only did NHS hospitals lose their income from private patients, but the demand for private healthcare was met by the private hospital industry, providing the impetus for its expansion in the 1970s (Foubister *et al*, op cit).

Arguably, the unintended consequence of the attempt to stifle private pay-beds was to create a new industry that then marketed itself to increase private healthcare, and later to provide private healthcare for the NHS. NHS provision of private beds also ensures there is greater competitiveness in the private healthcare market.

Looking at this issue from a private spending perspective, whether privately-funded healthcare is delivered by private or NHS suppliers is immaterial. If there are benefits to the public providers from delivering private services, then they should be free to exploit them. Although privately-funded healthcare is not predicted to expand significantly, the market for treating foreign patients travelling to the UK for specialist treatment could grow and be profitable for some specialist hospitals, while enabling them to develop as research and teaching centres.

However, in order to ensure that the NHS continues to benefit from private patients, it must ensure that it recoups the costs plus profits from those patients. Concerns have been expressed that the infrastructure costs of NHS private healthcare are not fully reflected in prices (Yates 2000). Similarly, recent investigations have found that some private bills remain unpaid (Gainsbury 2008) – although the majority of these were for foreign patients, including those treated in emergency departments (demonstrating the practical difficulties in recouping emergency healthcare costs), rather than British private patients in planned pay-beds.

#### **Summing up**

There is no simple way to calculate the net risk or benefit to the NHS from privately-funded healthcare.

The private sector does not inevitably damage publicly-funded healthcare. But there are real risks – particularly around the use of scarce medical expertise – that need to be managed, both by ensuring that NHS contractual commitments are honoured and that the supply of labour is able to expand to meet demand.

Equally – as discussed in Chapter 1 – the existence of private healthcare can improve the health system's efficiency by allowing individuals to meet their preferences more fully. From the point of view of the public system, the existence of a parallel privately–funded sector provides an important comparator of quality and responsiveness which creates pressure on the NHS to improve.

Therefore, although we argue that privately-funded healthcare should not be seen as the solution to healthcare funding challenges, it has potential benefits that should be harnessed alongside the risks that should be managed. Whether these benefits are realised depends on the structure of the system, from the level of tax on insurance premiums to the conditions of consultants' contracts. It is important that policies are evaluated on the basis of their likely impact on the interaction between the two sectors. Achieving an optimal structure would have benefits for both sides.

# References

- Aaron H and Reischauer R (1998) Countdown to Reform: The Great Social Security Debate, New York: Century Foundation Press
- Anekwe L (2008) 'GPs resigned to the end of the NHS within a decade' Pulse 9 April 2008
- Arrow K (1963) 'Uncertainty and the Welfare Economics of Medical Care', *American Economic Review*, vol 53(5): 941-73
- Arrow K (1965) Aspects of the Theory of Risk Bearing, Helsinki: Yrjo Jahnssonin Saatio
- Arrow K and Debreu G (1954) 'The Existence of an Equilibrium for a Competitive Economy', *Econometrica*, vol 22(3): 265-290
- Audit Commission (1995) *The Doctors' Tale: The work of hospital doctors in England and Wales* London: HMSO
- Bach P (2008) 'Cost Sharing for Healthcare Whose Skin? Which Game?', New England Journal of Medicine Vol 358(4): 411-413
- Barr N (2001) The Welfare State as Piggy Bank: Information, Risk, Uncertainty, and the Role of the State, Oxford: Oxford University Press
- Baumol W (1967) 'Macroeconomics of unbalanced growth: the anatomy of urban crisis', *American Economic Review*, vol 57: 415-426
- Baumol W (1993) 'Formal entrepreneurship theory in economics: existence and bounds', *Journal of Business Venturing*, vol 8: 197-210
- BBC (2003) 'Tories unveil plans for NHS', http://news.bbc.co.uk/1/hi/uk\_politics/2964246.stm, 5 June
- BBC (2007) 'Private cancer care top-up banned' http://news.bbc.co.uk/1/hi/england/7147030.stm, 16 December
- BBC (2008) 'Cosmetic clinics "downplay risks"', http://news.bbc.co.uk/1/hi/health/7171789.stm, 7 January
- Beveridge W (1942) Social insurance and allied services, London: HMSO
- Black D (1948) 'On the rationale of group decision making', *Journal of Political Economy*, vol 56: 23–34
- Black C (2008) Working for a healthier tomorrow London: TSO
- Bloor K, Maynard A and Freemantle N (2004) 'Variation in activity rates of consultant surgeons, and the influence of reward structures in the English NHS: descriptive analysis and a multi-level model', *Journal of Health Services Research and Policy*, vol 9(2): 76-84
- Boccuti C and Moon M (2003) 'Comparing Medicare and private insurers: growth rates in spending over three decades' *Health Affairs* Vol. 22(2): 230-237
- Boston Consulting Group (2007) *Health Care Regulation Across Europe: From Funding Crisis to Productivity Imperative* Boston, US: The Boston Consulting Group inc
- Braithwaite R and Rosen A (2007) 'Linking cost sharing to value: an unrivaled yet unrealized public health opportunity' *Annals of Internal Medicine* Vol. 146(8) 602-605
- Bramley-Harker E, Hutton J, McGrath C, Frybourg J, Tremblay M and Henshall C (2006) 'Framework for describing and classifying decision-making systems using technology assessment to determine the reimbursement of health technologies (fourth hurdle systems)' *International Journal of Technology Assessment in Health Care* vol. 22(1): 10-18
- Buchanan J and Tullock G (1962) The Calculus of Consent: Logical Foundations of Constitutional

- Democracy Ann Arbor, MI: University of Michigan Press
- Buchmueller T and Couffinhal A (2004) Private Health Insurance in France, Paris: OECD
- Card D, Dobkin C and Maestas N (2004) *The Impact of Nearly Universal Insurance Coverage on Health Care Utilisation and Health: Evidence from Medicare*, NBER Working Paper No. 10365, March
- Carvel J (2008) 'Tories attack ministers over NHS drugs deal' The Guardian 31 January
- Charlson C, Lees C and Sikora K (2007) Free at the Point of Delivery: Reality or political mirage?

  London: Doctors for Reform
- Chay K and Greenstone M (2003) 'The Impact Of Air Pollution On Infant Mortality: Evidence From Geographic Variation In Pollution Shocks Induced By A Recession', *The Quarterly Journal of Economics*, vol 118(3): 1121-1167
- Chernew M, Rosen A and Fendrick A (2007) 'Value-Based Insurance Design', *Health Affairs* Vol 26(2) (2007): w195–w203 (published online 30 January 2007)
- Chetty R (2006) 'A New Method of Estimating Risk Aversion' *American Economic Review* Vol. 96(5): 1821-1834
- Christensen and Shinogle (1997) 'Effects of Supplemental Coverage on Use of Services by Medicare Enrollees', Health Care Financing Review, vol 19: 5-17
- Coats D and Max C (2005) *Healthy work: Productive workplaces: Why the UK needs more 'good jobs'*, London: The Work Foundation
- Colombo F and Tapay N (2004) *Private Health Insurance in OECD Countries: The Benefits and Costs for Individuals and Health Systems*, Paris: OECD
- Commission on Taxation and Citizenship (2000) *Paying for Progress: A new politics of tax for public spending* London: Fabian Society
- Confederation of British Industry (CBI) (2007) Attending to Absence: CBI/ AXA absence and labour turnover survey 2007: a summary London: CBI
- Cooke M, Fisher J, Dale J, McLeod E, Szczepura A, Walley P and Wilson S (2004) *Reducing* attendances and waits in emergency departments: A systematic review of present innovations London: NCCSDO
- Cutler D (2002) 'Public Policy for Health Care', in Auerbach A and Feldstein M (eds.) *Handbook of Public Economics* Vol. 4, Amsterdam: Elsevier
- Cutler D (2007) 'The Lifetime Costs and Benefits of Medical Technology', *Journal of Health Economics*, vol 26(6): 1081-1100
- Cutler D and Gleaser E (2005) What Explains Differences in Smoking, Drinking and Other Health-Related Behaviors, NBER Working Paper No 11100, Cambridge, MA: National Bureau of Economic Research
- Cutler D and Lleras-Muney A (2007) Education and health: evaluating theories and evidence NBER working paper No. W12352, Cambridge, MA: National Bureau of Economic Research
- Cutler D and Zeckhauser R (2000) *Adverse Selection in Health Insurance*, NBER working paper No. W6107, Cambridge, MA: National Bureau of Economic Research
- Cutler D, Deaton A and Lleras-Muney A (2006) *The Determinants of Mortality*, NBER working paper No. W11963, Cambridge, MA: National Bureau of Economic Research
- Cutler D, Long G, Berndt E, Royer J, Fournier A-A, Sasser A and Cremieux P (2007) 'The Value of Antihypertensive Drugs: A Perspective on Medical Innovation', *Health Affairs*, vol 26(1): 97-100
- Cutler D, McClellan M, Newhouse J and Remler D (1998) 'Are Medical Prices Declining? Evidence for

- Heart Attack Treatments' Quarterly Journal of Economics Vol. 113: 991-1024
- DeCoster C, Carriere K, Peterson S, Walld R and MacWilliam L (1998) *Surgical waiting times in Manitoba*, Winnipeg: Manitoba Centre for Health Policy and Evaluation
- Department of Health (2006) *Government Response to Health Committee's Report on NHS Charges*Norwich: The Stationery Office
- Department of Health (2007a) Dentistry Reforms: One year on London: Department of Health
- Department of Health (2007b) *Commissioning Framework for Health and Wellbeing* London: Department of Health
- Department of Health (2008) *Pharmacy in England: Building on strengths delivering the future* London: The Stationery Office
- Department of Health (DH) (2003) A Code of Conduct for Private Practice: Guidance for NHS medical staff London: Department of Health
- Department of Trade and Industry (2003) *Government Action Plan on Private Dentistry* London: Department of Trade and Industry
- Diamond P (1998) 'Symposium on the Rationing of Health Care 1: Rationing Medical Care An Economist's Perspective', *Economics and Philosophy*, vol 14(1): 1-26
- Dixon A, Le Grand J, Henderson J, Murray R and Poteliakhoff E (2003) *Is the NHS Equitable? A review of the evidence* London: LSE Health and Social Care
- Downs A (1957) An Economic Theory of Democracy, New York: Harper Collins
- Evans R (2000) Financing Health Care: Taxation and the Alternatives, HRPU Discussion Paper No. 2000: 15D, Vancouver, Canada: Centre for Health Services and Policy Research, University of British Columbia
- Evans R (2008) 'Most managers doubt 21st century NHS will stay free' *Health Service Journal* 10 January
- Farrington-Douglas J and Allen J (2005) *Equitable Choices for Health* London: Institute for Public Policy Research
- Financial Services Authority (FSA) (2007) *Insurance selling and administration: feedback on CP07/11 and final rules*, Policy Statement 07/24, London: Financial Services Authority
- Finkelstein A and McKnight R (2005) What Did Medicare Do (and Was It Worth It)? NBER working paper No. W11963, Cambridge, MA: National Bureau of Economic Research
- Fisher and Skinner (2002a) 'Geography and the debate over Medicare reform', *Health Affairs*, vol 21(2): 1-19
- Fisher and Skinner (2002b) 'Is technological change In medicine always worth it? The case of Acute Myocardial Infarction', *Health Affairs*, vol 25(2): 34-47
- Foubister T, Thomson S, Mossialos E and McGuire A (2005) *Private medical insurance in the United Kingdom*, Copenhagen: World Health Organization
- Gainsbury S (2008) 'Private patients' unpaid bills leave trusts chasing millions' *Health Service Journal* 24 January
- Getzen T (2000) 'Health Care is an Individual Necessity and a National Luxury: Applying Multilevel Decision Models to the Analysis of Health Care Expenditures', *Journal of Health Economics*, vol 19(2): 259–270
- Goldman L and Cook E (1984) 'The decline in ischemic heart disease mortality rates: An analysis of the comparative effects of medical interventions and changes in lifestyle' *Annals of Internal Medicine* Vol. 101(6): 825-836

- Griffin N (2006) Western Provident Association: National Health Service provision of high cost drugs opinion, www.wpa.org.uk/literature/counsels\_opinion.pdf .
- Hall E and Jones C (2007) 'The Value of Life and the Rise in Health Spending', *Quarterly Journal of Economics*, vol 122(1): 39-72
- Hall J and Preston I (1998) *Public and Private Choice in UK Health Insurance* London: Institute for Fiscal Studies
- Hall R (1988) 'Intertemporal Substitution in Consumption', *Journal of Political Economy*, vol 96(2): 339–357
- Haveman R (1985) *Does the Welfare State Increase Welfare?* Tinbergen Chair Inaugural Lecture, Erasmus University, The Netherlands (Kroese, Leiden)
- Heidenreich P and McClellan M (2001) 'Trends in treatment and outcomes for acute myocardial infarction: 1975-1995', *American Journal of The Medicine*, vol 110(3): 165-74
- HM Government (2005) Health, Work and Wellbeing: Caring for our future London: HM Government.
- HM Treasury (2008) Public Expenditure: Statistical Analyses 2008 London: TSO
- House of Commons Committee on Public Accounts (2008) *Department of Health: Prescribing costs in primary care* London: The Stationery Office
- House of Commons Health Committee (2006) *NHS Charges: Third report of session 2005-06* London: The Stationery Office
- Hurst J and Siciliani L (2003) *Tackling excessive waiting times for elective surgery: a comparison of policies in twelve OECD countries,* Paris: OECD
- Imai Y, Jacobzone S and Lenain P (2000) *The Changing Health System in France* Economies Department Working Paper, No. 269 Paris: OECD
- Jönsson B and Eckerlund I (2003) Why do Different Countries Spend Different Amounts on Health Care?, Paris: OECD
- Kaiser Family Foundation and Health Research and Educational Trust (2006) *Employer Health Benefits* 2006, http://kff.org/insurance/7527/index.cfm
- Key Note (2005) OTC Pharmaceuticals Market report Hampton: Key Note
- Key Note (2008) OTC Pharmaceuticals Market report Hampton: Key Note
- King's Fund (2005) *King's Fund Expresses Concern over Conservative Health Plans*, www.kingsfund.org.uk/media/kings\_fund\_2.html
- Kotowitz Y (1987) 'Moral Hazard' in Eatwell J, Milgate M and Newman P (Eds) *The New Palgrave: a Dictionary of Economics*, Vol. 3, edited by, 549-51. Basingstoke and London: Macmillan
- Laing & Buisson (2006) Laing's Healthcare Market Review 2006-2007 London: Laing & Buisson
- Laing & Buisson (2007a) *Analysis and Projections of Independent Healthcare Markets in England 2007–2012* London: Healthcare Commission
- Laing & Buisson (2007b) Rise in PMI Demand Signals Optimism London: Laing & Buisson
- Lilley R (2008) 'Comment: A Bitter Pill', Health Investor February, p. 17
- Lutz W, Sanderson W and Scherbov S (2008) 'The coming acceleration of global population ageing', Nature vol 451: 716-719
- MBD (2007) Press Release: 'UK Occupational Health Market Research Report' Manchester: MBD Ltd
- McClellan M, McNeil B and Newhouse J (1994) 'Does More Intensive Treatment of Acute Myocardial Infarction in the. Elderly Reduce Mortality?', *Journal of the American Medical Association*, vol 272(11): 859-866

- Mintel (2007a) Market in Brief: Cosmetic Surgery London: Mintel
- Mintel (2007b) Market in Brief: Cosmetic Dental Surgery London: Mintel
- Mitchell P (2008) 'Picking up the bill' Health Investor Magazine, February 2008
- Modigliani F, Ceprini M and Muralidhar A (1999) *An MIT solution to the social security crisis*, MA: Sloan School of Management, Massachusetts Institute of Technology
- Moore A (2008) 'All or Nothing: Patients are told no to private top-ups' *Health Service Journal* 14 February
- Mossialos E and Thomson S (2004) *Voluntary Health Insurance in the European Union* Copenhagen: WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies
- Mulvaney C, Coupland C, Wilson A, Hammersley V, Dyas J and Carlisle R (2005) 'Does increased use of private health care reduce the demand for NHS care? A prospective survey of General Practice referrals', *Journal of Public Health*, vol 27(2): 182-188
- Musgrove P (2000) 'Health Insurance: The influence of the Beveridge report', *Bulletin of the World Health Organisation* Vol. 78, No 6
- NatCen (2007) British Social Attitudes London: NatCen
- NERA (2001) Valuing the Independent Healthcare Sector Eastleigh: Norwich Union Healthcare
- Newhouse J (1993) Free for All? Lessons from the RAND Health Insurance Experiment, Cambridge, MA: Harvard University Press
- Newhouse J and Friedlander L (1980) 'The relationship between medical resources and measures of health: some additional evidence', *Journal of Human Resources*, vol 15: 200-218
- NHS Plus (2008) *An Introduction to the NHS Plus Project* www.nhsplus.nhs.uk/web/public/Default.aspx?PageID=42
- Nolan B (2006) 'The Interaction of Public and private Health Insurance: Ireland as a Case Study', Geneva Papers on Risk and Insurance, vol 31(4): 633-649
- Norwich Union (2008) Health of the Workplace 2 Report Eastleigh: Norwich Union Healthcare
- Obama B (2008) Barack Obama's Plan for a Healthy America: Lowering Health Care Costs and Ensuring Affordable, High-Quality Health Care for All, Barack Obama's campaign pamphlet
- Office for Health Economics (2007) *Compendium of Health Statistics 2006-2007* Oxford: Radcliffe Publishing Ltd
- Office for National Statistics (ONS) (2007) Consumer Trends 2007, London: ONS
- Office of Fair Trading (1998a) *Health Insurance: A second report by the Office of Fair Trading* London:
- Office of Fair Trading (1998b) Final Warning to Health Insurers Press release London: OFT
- Office of Fair Trading (2003) The Private Dentistry Market in the UK London: OFT
- Office of Fair Trading (OFT) (1996) Health Insurance: A report by the Office of Fair Trading London: OFT
- Organisation for Economic Co-operation and Development (2005) *OECD Health Data: Statistics and Indicators for 30 Countries,* Paris: OECD
- Organisation for Economic Co-operation and Development (2006) Projecting OECD Health and Long-Term Care Expenditures: What are the Main Drivers?, Economics Department Working Papers no. 477, Paris: OECD

- Organisation for Economic Co-operation and Development (2007a) OECD Health Data: Statistics and Indicators for 30 Countries, Paris: OECD
- Organisation for Economic Co-operation and Development (2007b) *Trends in Severe Disability among Elderly People: Assessing the Evidence in 12 OECD Countries and the Future Implications,* Health Working Papers No. 26, Paris: OECD
- Organisation for Economic Co-operation and Development (OECD) (2004) *Private Health Insurance in OECD Countries, The OECD Health Project*, Paris: OECD
- Pauly M (1968) 'The Economics of Moral Hazard', *The American Economic Review*, vol 58(3): 531-537
- Pauly M (1986) 'Taxation, Health Insurance, and Market Failure in the Medical Economy', *Journal of Economic Literature*, vol 24(2): 629-75
- Productivity Commission (2005a) Economic Implications of an Ageing Australia
- Productivity Commission (2005b) *Impacts of Medical Technology in Australia*, Progress Report, Melbourne, April
- Propper C and Green K (2001) 'A Larger Role for the Private Sector in Financing UK Health Care: the Arguments and the Evidence', *Journal of Social Policy* Vol 30(4) 685-704
- Proprietary Association of Great Britain (PAGB) (2007) *Momentum for Change for a 21st Century Healthcare and Regulatory Framework PAGB Annual Review* London: PAGB
- Rankin, J and Allen, J with Brooks, R (2007) *Great Expectations: Achieving a sustainable health system* London: Institute for Public Policy Research
- Rawls J (1971) A Theory of Justice Cambridge: Harvard University Press.
- Reinhardt U (2001) 'Can Efficiency in Healthcare Be Left to the Market?', Journal of Health Politics, Policy and Law, vol 26(5) 967-992
- Richards C, Dingwall R and Watson A (2001) 'Should NHS patients be allowed to contribute extra money to their care?' *British Medical Journal*, vol 523: 563
- Robinson P (2004) *How Do We Pay? Funding public services in Europe* Brussels and London: The Centre and ippr
- Robinson R (1999) *Healthcare Systems in Transition: United Kingdom,* Copenhagen: European Observatory on Healthcare Systems
- Rodwin M (1993) *Medicine, Money and Morals. Physicians' Conflicts of Interest,* New York: Oxford University Press
- Rosen A, Cutler D, Norton D, Hu H and Vijan S (2007) 'The Value of Coronary Heart Disease Care for the Elderly: 1987-2002', *Health Affairs*, vol 26(1): 111-123
- Rothschild M and Stiglitz J (1976) 'Equilibrium in Competitive Insurance Markets: An Essay on the Economics of Imperfect Information', *Quarterly Journal of Economics*, vol 90: 629
- Sandier S, Paris V, Polton, D (2004) *Healthcare Systems in Transition: France* Copenhagen: WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies
- Schwappach D, Boluarte T and Suhrcke M (2007) 'The economics of primary prevention of cardiovascular disease A systematic review of economic evaluations' *Cost Effectiveness and Resource Allocation*, vol 5(1): 5
- Spence M and Zeckhauser R (1971) 'Insurance, information and individual action', *American Economic Review* vol 61(2): 380-387
- Suhrcke M, Urban D, Iburg K, Schwappach D, Boluarte T and McKee M (2007) *The economic benefits* of health and prevention in a high-income country: the example of Germany, Discussion Paper SP I

- 2007-302, Berlin: Social Science Research Centre
- Sylvester R (2005) 'Tax-funded NHS "cannot go on"' Sunday Telegraph 13 August
- Thomson S and Mossialos E (2006) 'Choice of public or private health insurance: learning from the experience of Germany and the Netherlands' Journal of European Social Policy vol 16(4): 315-327
- Thomson S, Foubister T and Mossialos E (2008) *Healthcare Financing in the Context of Social Security: Report prepared for the European Parliament* Brussels: European Parliament.
- Tollen L and Crane R (2002) A Temporary Fix? Implications of the Move Away From Comprehensive Health Benefits, EBRI Issue Brief, No. 244, April, Washington, D.C.: EBRI
- Wanless D (2002) Securing our Future Health: Taking a long-term view London: HM Treasury
- Wanless D (2004) Securing Good Health for the Whole Population index London: HM Treasury
- Wanless D (2007) Our Future Health Secured? London: Kings Fund
- Webster C (1998) The National Health Service: A political history Oxford: Oxford University Press
- Williams B, Whatmough P and Pearson J (2001) 'Emergency transfers from independent hospitals to NHS hospitals: Risk, reasons and cost', *Journal of Public Health Medicine* Vol. 23, No. 4: 301
- Williams S and Buchan J (2006) Assessing the New Consultant Contract: A something for something deal? London: King's Fund
- Wilson C (1977) 'A Model of Insurance Markets with Incomplete Information', *Journal of Economic Theory*, vol 16: 167-207
- Wolfgang L, Sanderson W and Scherbov S (2008) 'The coming acceleration of global population ageing', *Nature*, vol 451: 716-719
- World Health Organisation (WHO) (2005) *The European health report 2005: public health action for healthier children and populations* Geneva: World Health Organisation
- Yates J (1995) *Private Eye, Heart and Hip: Surgical consultants, the National Health Service and private medicine* Edinburgh: Churchill Livingstone.
- Yates J (2000) Consultants' contracts, politicians' dilemmas and patients' inequity: Memorandum to Commons Health Committee London: House of Commons.
- Zeckhauser R (1970) 'Medical Insurance: a Case Study of the Trade-off Between Risk Spreading and Appropriate Incentive', *Journal of Economic Theory*, vol 2: 10-26