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# NHS spending

## Local variations in priorities: an update



**Primary care trusts (PCTs) are in charge of spending around 75 per cent of the NHS budget in England — almost £69 billion in 2006/7 (Department of Health 2008a). Until recently there has been little systematic data available on how PCTs divide up their budgets. While the ‘postcode lottery’ of accessing drugs on the NHS continues to attract media headlines, there are more fundamental variations in spending by PCTs on different diseases and services.**

The Department of Health, through its National Programme Budget project, collects data on the amount PCTs in England spend on 23 programmes of care based on medical conditions such as mental health, circulatory problems (including heart disease) and cancer (Department of Health 2008b). This data was first made available in 2006 and was the subject of an earlier paper from The King's Fund (King's Fund 2006).

In addition to information for 2004/5 and 2005/6, data is now available on PCT spending for 2006/7. This paper provides an update on The King's Fund's 2006 paper and, as before, shows differences in PCT spending that appear to be only partially explained by the different needs of local populations. Once again this leaves unanswered questions about why PCTs reach different decisions about their spending priorities and whether spending variations have adverse effects on equity and efficiency.

This paper also looks at changes in overall PCT spending between 2004/5 and 2006/7 and examines where the extra cash allocated to the NHS went in the 23 programmes of care.

## Background

Thanks to the National Programme Budget project launched by the Department of Health in 2002, PCTs and hospitals have been collecting information on how much they spend on programmes of care, rather than just recording how much was spent on primary care staff and salaries, drugs or different types and amounts of hospital procedures.

First used by the US Department of Defense in the 1960s, programme budgeting examines how much is being spent on particular programmes or objectives, rather than on categories such as staff or facilities. This type of information makes it easier to identify how money is being used and whether it is being spent in accordance with policy objectives.




As part of the National Programme Budget project, PCTs have been collecting data on expenditure on 20 different disease areas – and in addition, on public health ('healthy individuals'), social care needs and 'other' (the majority of which covers General Medical Services but also includes NHS staff training and a 'miscellaneous' category). This data is designed to enable the government to evaluate how NHS money is being spent and whether the current allocation is in line with policy priorities. It also allows PCTs to compare their spending patterns and to question whether they are putting their available funds to the best possible use.

The latest data covers the financial years 2004/5, 2005/6 and 2006/7. This paper provides some initial analysis of the data collected so far, revealing differences in total spending by disease areas, changes over time in the shares of the total budget devoted to programmes and, importantly, variations across disease areas by PCT.

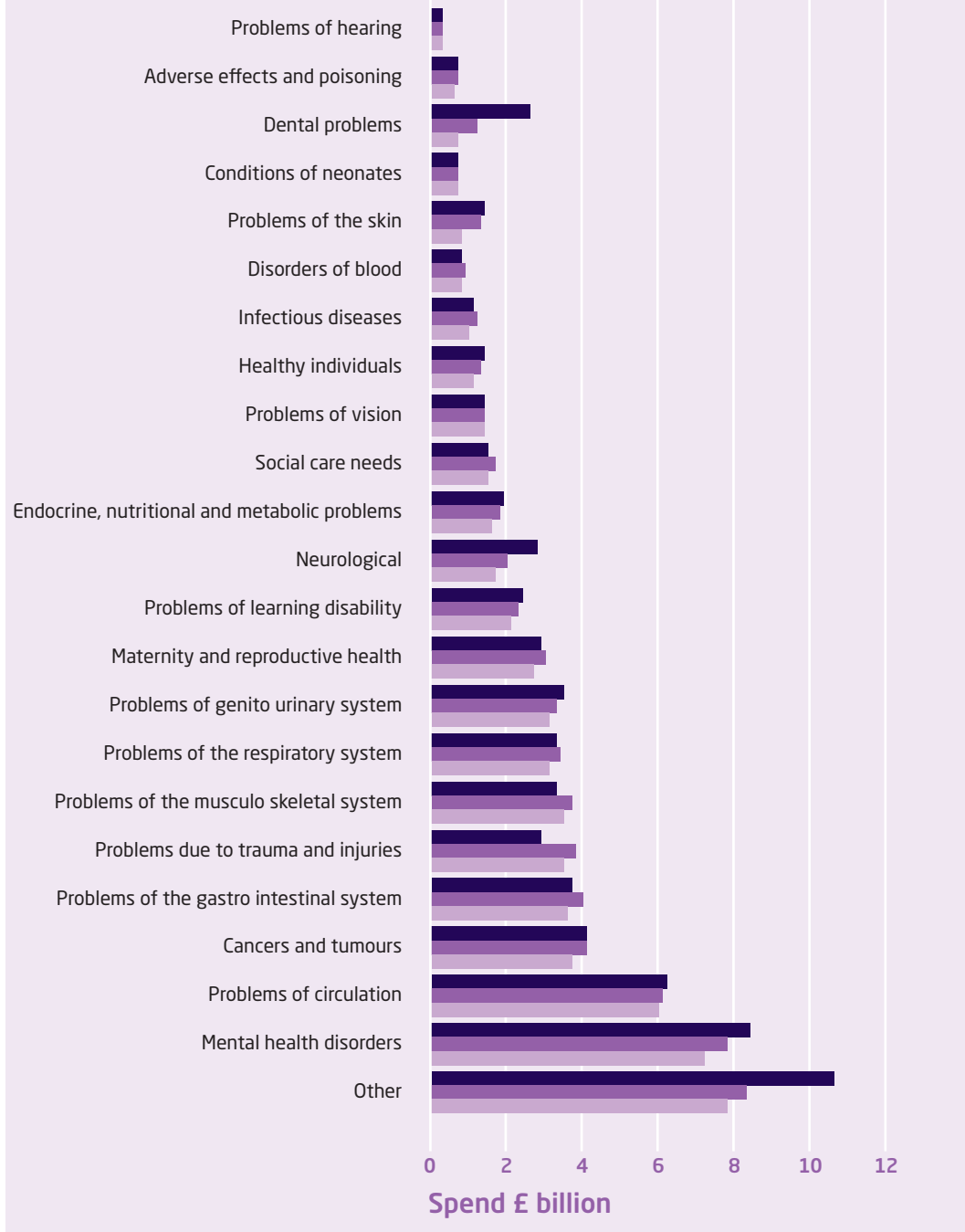
## National spending on different diseases

Analysis of the total amount spent on different diseases by PCTs provides a top-level view of the way in which the majority of the NHS budget is spent – built up from the individual spending decisions of PCTs (152 PCTs, based on new boundaries following reduction in the number of PCTs in 2006; data for previous years has been regrouped to reflect the new PCTs) and NHS trusts.

Figure 1 shows total spending for 2004/5 to 2006/7 in cash terms. In 2006/7, PCTs spent almost twice as much on mental health services (which received just over £8.4 billion – 12 per cent of PCT spending) as they did on cancer care. In part this reflects differences in the levels of need between these programmes and in part differences in the costs of providing services. However, it also reflects implicit (and, to an extent, explicit) decisions over many years about the priorities the NHS gives to different services. As was reported in the 2006 paper, the government's three clinical priority areas for the NHS of mental health, coronary heart disease and cancer continue to consume the largest share of PCT spending – 12 per cent, 9 per cent and just over 6 per cent respectively.

2006/7   
 2005/6   
 2004/5 

**Figure 1 Total spending by PCTs on programmes, 2004/5 to 2006/7**



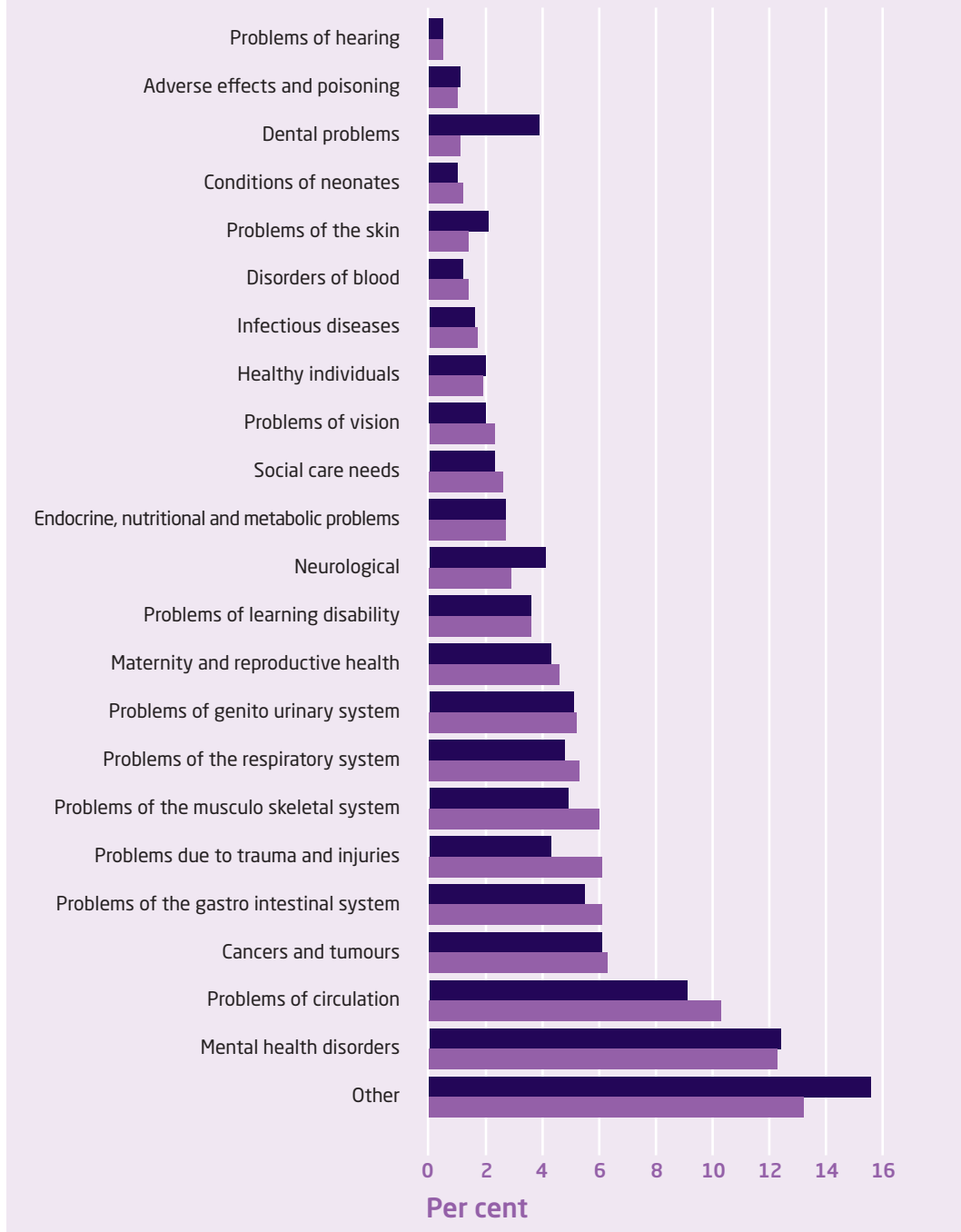
It should be noted that the apparent very large increase in spending on dental health between 2005/6 and 2006/7 is due to a change in the way that funding is allocated, and does not reflect such a significant increase in spending on dentistry overall.

'Other' is largely made up of expenditure on primary care services.

While many programmes have seen an increase in total spending, this does not necessarily mean that each programme's share of the total spend has remained the same. For example, although spending on circulatory problems increased between 2004/5 and 2006/7 (see Figure 1), the growth was so small that its share of the total spend actually fell from just over 10 per cent to around 9 per cent (see Figure 2). This is largely due to reductions in the costs of drugs such as statins rather than in the volume of care.

2006/7   
 2004/5 

**Figure 2 Percentage share of total spending by programme area, 2004/5 to 2006/7**



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### Variations in spending patterns

Analysis of spending on individual disease areas by individual PCTs reveals variations in the amount spent per head of population and the proportion of each PCT budget devoted to each disease area.

So, for example, to take the two most extreme cases – in 2006/7 the actual amount Islington PCT spent on mental health was 4.6 times per head (£474) as much as East

Riding of Yorkshire<sup>1</sup> PCT spent (£103). Such differences are evident across England in all disease areas. Spending on cancer varies 3.4-fold – Knowsley PCT spends £152 per head on cancer compared with £44 by Bedfordshire PCT, while on circulatory diseases there is a 2.4-fold variation – for example, Middlesbrough PCT spends £195 per head compared with £82 by Bedfordshire PCT.

Of course, some of this difference is to be expected. PCTs spend different amounts because their budgets are designed to reflect the particular needs of their population. Islington, for example, has health care needs assessed by the allocation system to be higher than those of West Kent.

Aside from possible data quality issues, a significant degree of the variation in the amount PCTs spend on different diseases can be explained by the following factors: the age and need profile of the population; the local cost of services; and any disparity between the amount of money a PCT actually receives and its target allocation under the resource allocation formula.

However, once the effects of these legitimate reasons for variations in spending are taken into account, some stark differences remain in the amount of resources different PCTs spend on different diseases. Adjusting the raw spending figures for need (using the Department of Health's need index used in part to determine the size of PCT budgets each year) and also for PCTs' distance from their target allocations, it is possible to account for some of the variation in PCT spending. It should be noted that the adjustment for need is based on an overall needs index and not on disease-specific needs.

**So, in the case of the mental health example used above, adjusting for need and other factors reduces a 4.6-fold gap between Islington PCT and East Riding of Yorkshire<sup>1</sup> PCT to a 2.9-fold gap (£332 and £114 respectively).**

**For cancer the gap using the example above reduces to 2.2-fold (Knowsley PCT spending £118 per head, compared with £53 by Bedfordshire PCT). Ealing PCT is the lowest spending at £47 per head. For circulatory diseases, using the example above the gap reduces to 1.7-fold (Middlesbrough £167 per head, compared with £97 by Bedfordshire PCT). Southwark PCT is the lowest spending at £76 per head). Such variations have remained relatively unchanged since 2004/5.**

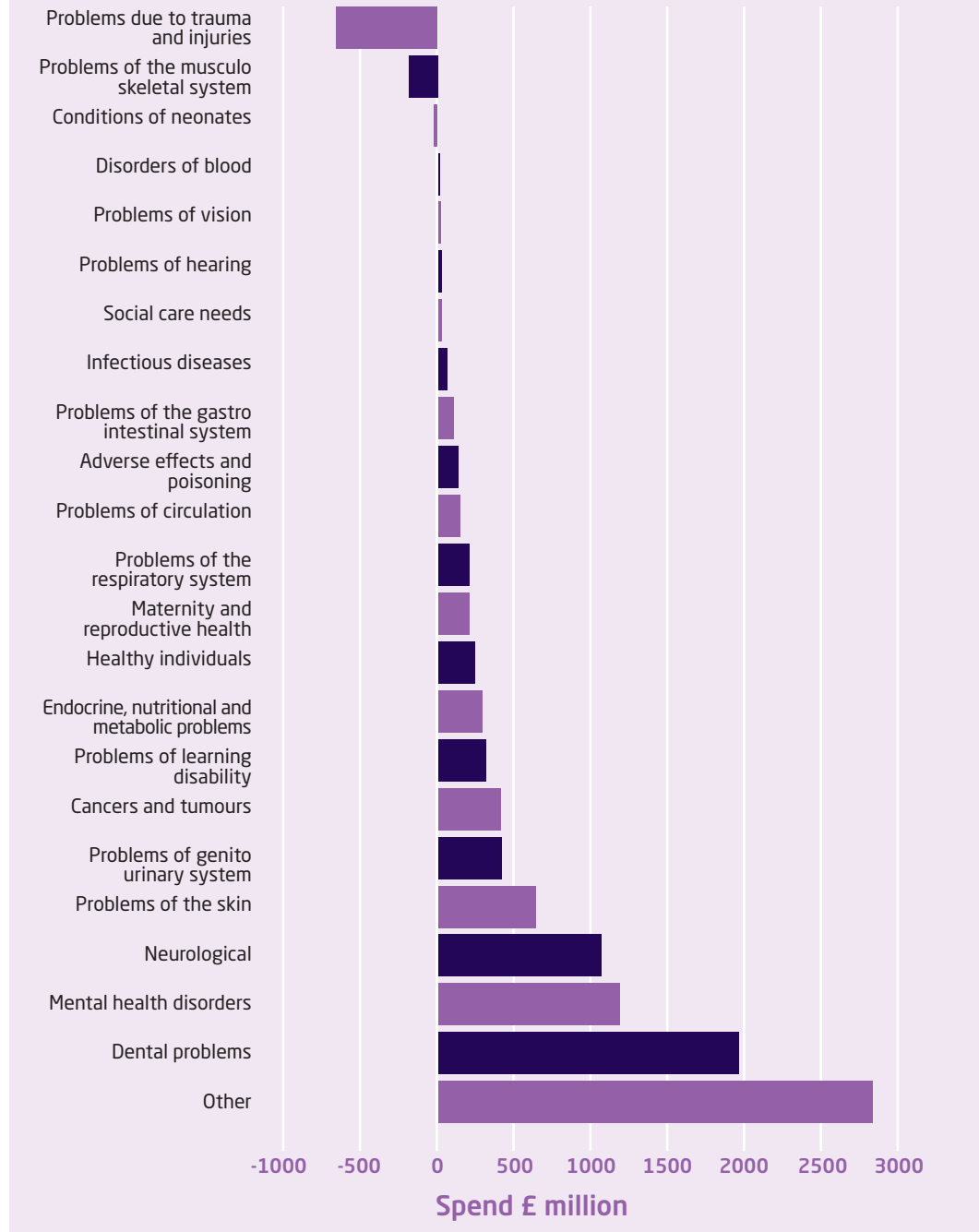
However, while spending variations persist overall, this does not necessarily mean that the spending of individual PCTs in specific areas remains constant over time. Depending on the programme, high-spending PCTs in 2004/5 are not necessarily high spending in 2006/7. For example, in 2004/5 Camden PCT spent the most per head on cancer services but in 2006/7 it was 140th out of 152 PCTs. Changes in PCT spending (and possibly changes in their ranking) will arise for a number of reasons. For example, changes in local priorities given to different programmes and changes in clinical decisions in different PCT areas. However, some of the changes may also reflect problems with the quality and accuracy of the data.

## What questions are raised by this new information?

Many of the questions raised by this new data are similar to those raised in 2006. In terms of the total amount spent by PCTs, the programme budget data provides some insight into how central government spending priorities are interpreted at local level. Broadly speaking, the government's emphasis on reducing deaths and ill health in three priority areas – cancer, coronary heart disease and mental health – do seem to be reflected in spending locally. However, the figures might imply some further questions about the overall effectiveness of spending in certain areas. For instance in mental health, given the known deficiencies in the quality and availability of both inpatient care and psychological therapies (Department of Health 2005), does the £8.4 billion spend represent an under-investment or does it imply inefficiencies in the use of resources?

With three years' worth of data, it is interesting to see the priorities on the ground for the extra £9 billion spending available to PCTs in England between 2004/5 and 2006/7. This cash increase of 16 per cent was not spread evenly across all programmes. For many programmes the cash rise was much smaller and, allowing for inflation, represented a real reduction in spending.

**Figure 3 Share of total increase in PCT spending by programme, 2004/5 to 2006/7\***



\* Total cash increase in PCT spending in England 2004/5 to 2006/7 = £9.31 billion.

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In terms of the variations in spending between PCTs, the working assumption behind the allocation formula has been that, once the total amount has been calculated and allocated to each PCT, the PCT's individual spending patterns would be broadly in line with local need. Indeed, it may be that each individual PCT has good reasons for spending different amounts on different disease areas, compared with the national average. However, to understand this properly, there needs to be a better understanding of the link between spending (the financial inputs) and health outcomes. It may be, for instance, that an area that spends an above-average proportion of its budget on cancer and tumours has better than average survival rates. Or it may be that the above-average spend represents a higher level of unrecognised need, which the PCT has to compensate for by spending less in another area. If this is the case, it suggests that the weighted capitation formula may be insensitive to some dimensions of need, by disease and by area. On the other hand, high-spending PCTs may, at the margin, achieve little more in terms of health benefits than lower-spending PCTs – suggesting that resources would be better spent on other programmes.

Progress on links between spending and health outcomes has been made in the last few years – for example, research carried out by economists at the University of York has quantified the links between spending and outcomes (Martin *et al* 2007). In addition, from April 2009 the NHS will embark on an ambitious programme of collecting health data from patients themselves, enabling the NHS and the public to see how NHS care affects people's quality of life – not just whether patients live or die.

Although the National Programme Budget project data is presented in terms of spending by PCTs, it is important to note that such spending is not wholly determined by PCTs themselves. The programme budget data used here will in large part reflect the myriad individual clinical decisions that health care professionals take every day – decisions over which PCTs exercise little control. As the 2006 report from the Chief Medical Officer (Department of Health 2006), and more recently the new Cancer Reform Strategy (Department of Health 2007) made clear, there are large, and largely unexplained, variations in clinical practice which, taken together, are likely to explain an as yet unquantified amount of the variation in PCT spending.

Tackling unjustified variations in spending will first require much more effort in understanding why variations occur – and persist – and second, determined efforts to change spending patterns to produce a more efficient and fairer NHS.

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