

## Local variations in NHS spending priorities

**While the 'postcode lottery' of accessing drugs such as Herceptin on the NHS attract media headlines, there has been growing awareness of more fundamental variations in spending by primary care trusts (PCTs), the organisations responsible for purchasing the bulk of NHS care for people living in their catchment areas. This briefing builds on this by analysing newly-available data collected by the Department of Health on the amount PCTs in England spend on specific disease areas. It reveals that there are differences in spending per head that only appear to be partially explained by the different needs of their local populations, leaving unanswered questions about why PCTs reach different decisions about their spending priorities and whether spending variations have adverse effects on equity and efficiency.**

### Background

PCTs are in charge of spending around 80 per cent of the NHS budget in England (around £58 billion), yet until very recently there has been little systematic data available on how they divide up their budgets between services for different diseases.

Thanks to the National Programme Budget Project (NPBP)<sup>1</sup> launched by the Department of Health in 2002, PCTs have been collecting information on how much they spend on disease areas, 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 NPBP, PCTs have collected data since 2003 on expenditure on 21 different disease areas. This is the first time such information has been made available in this form. It 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 should also allow PCTs to compare their spending patterns and to question whether they are putting their available funds to the best possible use.

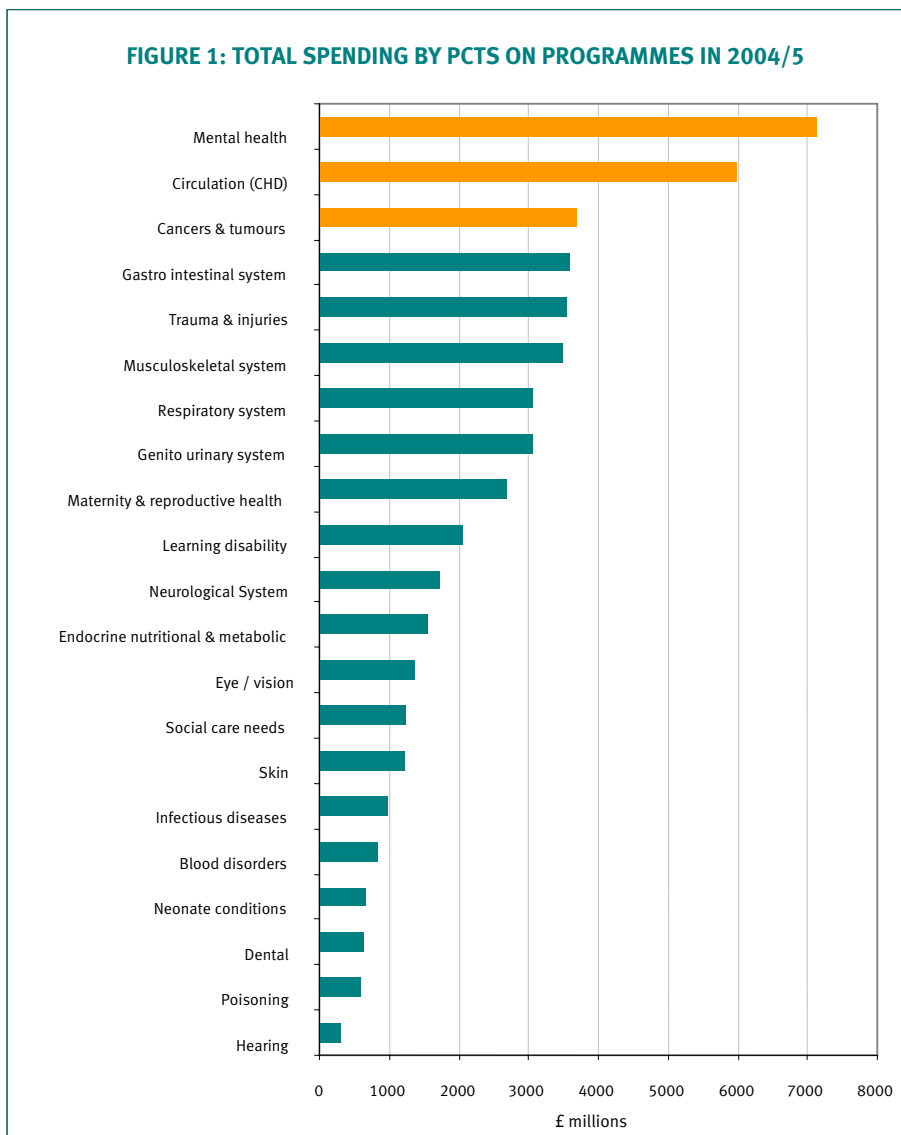
The Department of Health is currently investigating the extent to which variations in PCT spending are reflected in population health and other outcomes – so making the link between the financial

inputs to the NHS and the health outcomes. For example, do high spending PCTs achieve more in terms of reduced mortality for their populations?

The latest data covers the financial years 2003/04 and 2004/05. This briefing provides some initial analysis of the data collected so far, revealing differences in total spending by disease areas 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 the 303 PCTs that were operating at that time (see Figure 1). In 2004/05, PCTs spent almost twice as much on mental health services (which received just over £7 billion – 11 per cent of PCT spending) compared with 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. The government’s current three main priority areas for the NHS – cancer, heart disease and mental health (highlighted in Figure 1) - consume the largest shares of PCT spending.



NB: An additional category, ‘Other’ is not included in the figure. This captures around £15.5 billion of spending out of the £58 billion for 2004/5

In addition, with programme budget data available for two years (2003/4 and 2004/5), it is possible to track where a large chunk of the extra funding for the NHS in 2004/5 was spent. Spending on the government's three main health care priorities – mental health, heart disease and cancer – were the top three largest shares of the total increases in PCT spending, accounting for 9.3 per cent, 9.2 per cent and 7.7 per cent respectively). Between 2003/4 and 2004/5 all three spending areas also slightly increased their share of total PCT spend. To that extent, therefore, government priorities are being reflected in the deployment of resources to the NHS.

## Variations in spending patterns

However, analysis of spending on individual disease areas by individual PCTs reveals very large 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, Islington PCT spent seven times per head (£406) as much as Bracknell Forrest PCT (£56) on mental health services in 2004/05. Such differences are evident across England in all disease areas. Spending on cancer varies four-fold, on circulatory diseases three-fold, and on musculoskeletal problems eight-fold.

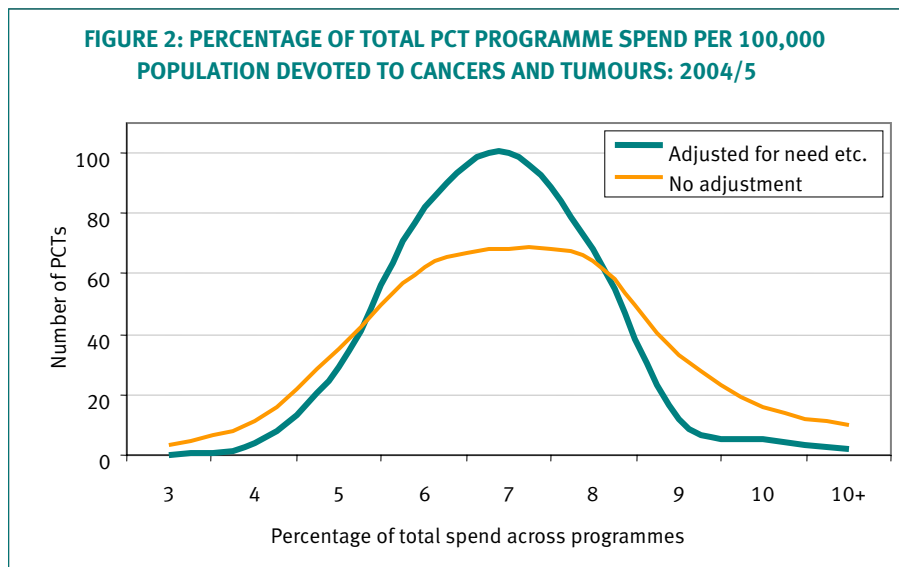
Of course, some of this difference is to be expected. PCTs spend different amounts because their budgets are designed to reflect the particular needs of their population. Islington, for example, has needs assessed to be around 40 per cent higher than the national average (the second highest in England), whereas Bracknell Forest is assessed to be 20 per cent below the average (nineteenth lowest in England).

The amount of money allocated by the Department of Health to each PCT is based on a weighted capitation formula that takes into account not only the need for health care, but also PCT population size, age structure, and variations in the cost of providing services in each PCT. For example, an area with a relatively high proportion of elderly people and an above-average level of health needs will be given a greater amount of money than an area that is relatively young and has low levels of ill health. The key objective of the formula is 'to secure equal opportunity of access to healthcare for people with equal risk'.<sup>2</sup> Adjusting the money actually allocated to each area in order to comply with the formula is a gradual process: some PCTs' budgets are currently below their 'target' and some above.

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 are taken into account*, some stark differences remain in the amount of resources different PCTs spend on different diseases. So, in the case of mental health, adjusting for need reduces a seven-fold gap between Islington PCT and Bracknell Forest PCT to a four-fold gap (£259 and £66 respectively).

The same is true for the amount spent on cancer and tumours across England (*see* Figure 2). In 2004/05, without any adjustment for differences in needs and so on, there was considerable variation in the amount PCTs spent on this type of care (the orange line in the figure). When spending is adjusted for factors such as age, cost and distance from target allocations (the blue line) there is less variation, with more PCTs moving towards the average of around 7 per cent of their total spend. However, there is still a considerable amount of variation left unexplained by the adjustment. So, even after taking into account known population differences in PCTs, the proportion spent on cancer still ranges from 3 per cent to over 10 per cent of their overall budgets.



Again, differences – although slightly reduced – persist across other disease areas even after adjusting for need, age and cost differences between PCTs.

### What questions are raised by this new information?

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 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,<sup>3</sup> does the £7 billion spend represent an under-investment or does it imply inefficiencies in the use of resources?

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.

But it is important to note that PCT 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 latest report from the Chief Medical Officer<sup>4</sup> makes 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.

The questions raised by these data are timely, given the government’s latest guidance on effective commissioning and the role of PCTs in securing maximum value for money, for patients and for tax payers.

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<sup>1</sup><http://www.dh.gov.uk/PolicyAndGuidance/OrganisationPolicy/FinanceAndPlanning/ProgrammeBudgeting/fs/en>

<sup>2</sup> Department of Health (2003), *Resource Allocation: Weighted capitation formula*, 31/05/03, p 8.

<sup>3</sup> For example, Department of Health (2005), *The National Service Framework for Mental Health Five Years On*. Available online at: [http://www.dh.gov.uk/PublicationsAndStatistics/Publications/PublicationsPolicyAndGuidance/PublicationsPolicyAndGuidanceArticle/fs/en?CONTENT\\_ID=4099120&chk=CKJpKk](http://www.dh.gov.uk/PublicationsAndStatistics/Publications/PublicationsPolicyAndGuidance/PublicationsPolicyAndGuidanceArticle/fs/en?CONTENT_ID=4099120&chk=CKJpKk)

<sup>4</sup> Department of Health (2006), *On the state of the public health: Annual report of the Chief Medical Officer 2005*. Available online at:

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