



National Audit Office

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COMPTROLLER AND
AUDITOR GENERAL**

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Department of Health

Tackling inequalities in life
expectancy in areas with the
worst health and deprivation

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Department of Health

Tackling inequalities in life expectancy in areas with the worst health and deprivation

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Amyas Morse
Comptroller and
Auditor General

National Audit Office

28 June 2010

In 1997, the Government announced that it would put reducing health inequalities at the heart of tackling the root causes of ill health to create a fairer society and to reduce the costs associated with ill health.

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This report can be found on the National Audit Office website at www.nao.org.uk/health-inequalities-2010

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Summary

Context of the report

1 Inequalities in health outcomes between the most affluent and disadvantaged members of society are longstanding, deep-seated and have proved difficult to change. In the early 2000s, in England, people living in the poorest neighbourhoods, could on average expect to die seven years earlier than people living in the richest neighbourhoods and spend far more of their lives with ill health.

2 In 1997, the Government announced that it would put reducing health inequalities at the heart of tackling the root causes of ill health to create a fairer society and to reduce the costs associated with ill health.

3 The Government established the independent Acheson inquiry into inequalities in health to improve its understanding of the causes and how to tackle them. Such inequalities are due to a complex mix of social, economic, cultural and political reasons with unequal provision of healthcare responsible for only a proportion (**Figure 1**). The Department of Health (the Department) estimate that around 15 to 20 per cent of inequalities in mortality rates can be directly influenced by health interventions which prevent or reduce the risk of ill health, representing thousands of people dying earlier than might otherwise be the case.

Figure 1

The causes of health inequalities



Source: National Audit Office literature review

4 The Government's 2000 Spending Review set a target for the Department to 'narrow the health gap between socio-economic groups and between the most deprived areas and the rest of the country, in childhood and throughout life.' In 2002, the Government refined this target to reduce inequality by 2010 by 10 per cent as measured by life expectancy at birth and infant mortality (**Figure 2** overleaf). Its intention was to provide a focus for short- and medium-term action. Lead responsibility for delivering the target was vested in the Department. A Treasury-led cross-cutting review in 2002 highlighted the importance of the NHS' contribution to meeting the 2010 target and identified that health interventions, such as reducing smoking in manual groups and preventing and managing other risk factors for coronary heart disease and cancer, were more likely than other actions to help deliver the target.

5 The Department continued to develop its strategic approach to tackling health inequalities during the first half of the decade. The Department's cross-government health inequalities strategy, *A Programme for Action*, was published in 2003 and called on PCTs (PCTs) and strategic health authorities to ensure that tackling health inequalities was central to their planning and performance management systems. It included 12 cross-government headline indicators and 82 cross-government commitments. The following year the Department revised the health inequalities target to reduce by 2010, by at least 10 per cent, the gap in life expectancy between 70 'spearhead' local authority areas – a fixed group of areas with high levels of deprivation and poor health outcomes – and the population as a whole (Figure 2). The Department's focus on fixed, spearhead areas from late 2004, was seen as a practical way of focusing activity and measuring progress. Under half (48 per cent) of local authority wards with the worst life expectancy are in a spearhead area. Since 2004, there have been a large number of policy documents on health inequalities alongside annual reviews of progress which show that although life expectancy overall has improved the gap between the better off and worse off has increased (Appendix One). Internationally, England is the only country with a broad, cross-government strategy to tackle health inequalities.

The Marmot Review

6 In recognition of the need to develop a new post-2010 health inequalities strategy, the Department commissioned an independent review by Professor Sir Michael Marmot. His February 2010 report, *Fair society, healthy lives – strategic review of health inequalities post-2010*, focused on the impact of wider social determinants on health inequalities including education, employment and housing, and estimated that the additional NHS healthcare costs associated with inequalities are in excess of £5.5 billion a year. Our value for money investigation was carried out in parallel with the Marmot review, but focused on the strategic approach of the Department and the NHS in tackling health inequalities. It examines the impact of Departmental and NHS initiatives to reduce the gap in life expectancy between spearhead and non-spearhead areas and the cost-effectiveness of key health-specific interventions. It does not examine the Department's wider health inequalities programme, for example, the delivery of the infant mortality element of the health inequalities Public Service Agreement (PSA) target or cross-government commitments. Our methodology is set out in Appendix Two.

Figure 2

Tackling inequalities – targets and where key action is focused

Health inequalities Public Service Agreement (PSA) target

By 2010 to reduce inequalities by 10 per cent as measured by infant mortality and life expectancy at birth. Updated in 2004, the target was supported by more detailed targets:

“Starting with local authorities, by 2010 to reduce by at least 10 per cent the gap in life expectancy between the fifth of areas with the worst health and deprivation indicators (the spearhead group) and the population as a whole.”

“Starting with children under one year, by 2010 to reduce by at least 10 per cent the gap in mortality between the routine and manual group and the population as a whole.”¹

To monitor progress against the life expectancy target the Department of Health uses life expectancy at birth figures and all-age all-cause mortality rates. All-age all-cause mortality is closely related to life expectancy and is based on the same deaths data. It captures the mortality rate from all ages and for all causes and is adjusted for age differences between populations. It is more relevant at the local level and is used as an indicator in both the NHS’ and local authorities’ performance frameworks. The baseline against which progress is measured is 1995-97.

Other national health inequalities targets

The biggest killers in England are heart disease, stroke and cancer. The Department of Health has an Inequalities element to national targets for cancer and circulatory (cardiovascular) diseases mortality and smoking.

Action to address Inequalities in life expectancy has been focused in spearhead areas since late 2004

What are spearhead areas?

A fixed list of local authorities in the bottom fifth nationally in 1995-97 for three or more of the following five factors:

- male life expectancy at birth;
- female life expectancy at birth;
- cancer mortality rate in under 75s;
- cardiovascular disease mortality rate in under 75s; and
- Index of Multiple Deprivation 2004 (Local Authority Summary), average score.

The 70 spearhead areas map onto 62 primary care trusts.

Where are spearhead areas?

- Located in six regions – North East (33 per cent), North West (23 per cent), London (16 per cent), West Midlands (11 per cent), Yorkshire and Humber (10 per cent) and East Midlands (7 per cent).

Who lives in a spearhead area?

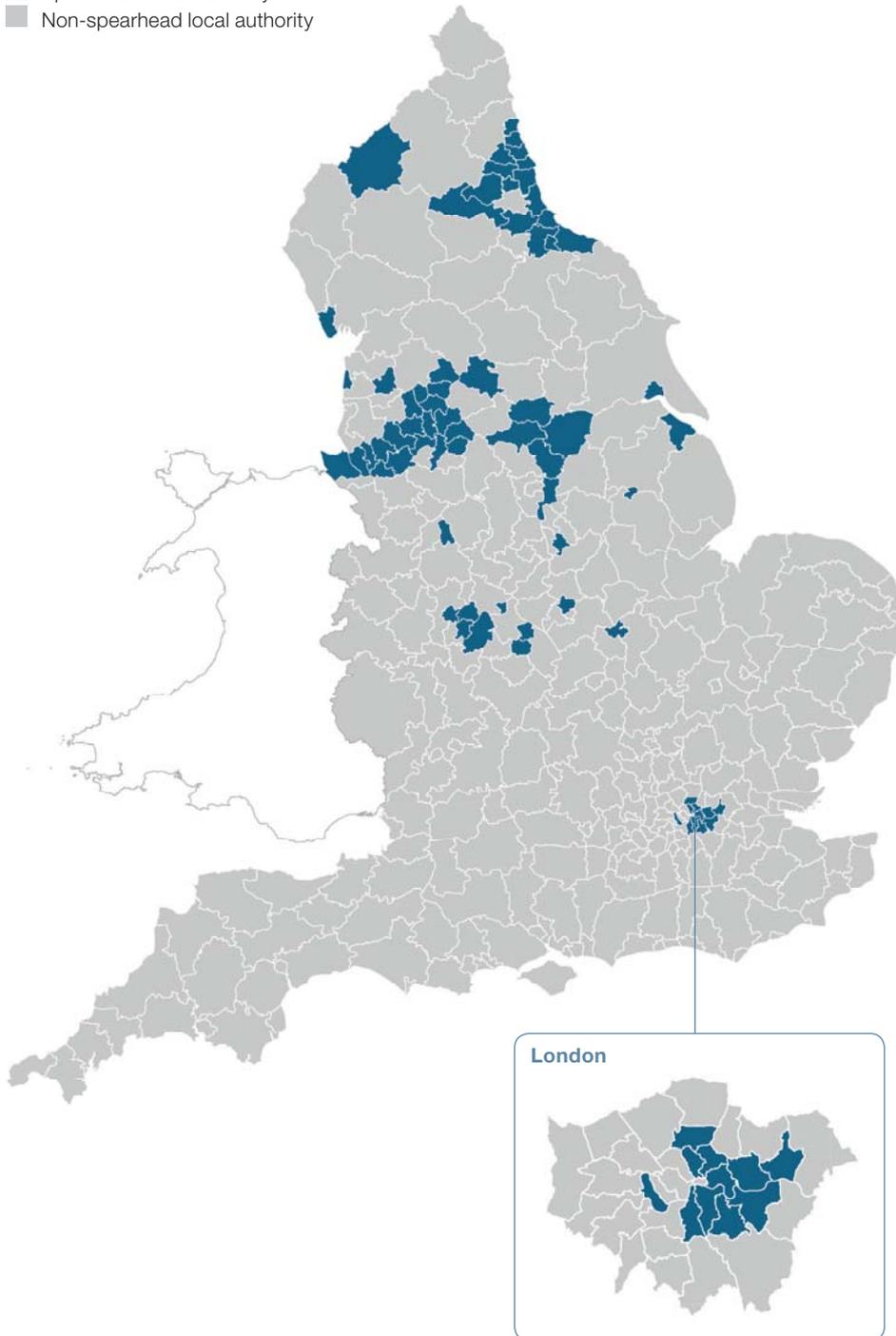
- 28 per cent of population in England; including
- 44 per cent of the black and ethnic minority population of England.

NOTE

¹ This figure shows all of the Department’s health inequalities targets and where key action for the life expectancy target is focused. Our report does not cover the infant mortality target. However, it should be noted that infant mortality contributes 5-6 per cent of the gap in life expectancy between spearhead areas and the England average. The Department’s strategy for the infant mortality target does not focus on spearhead areas, but on the 43 local authorities that face the biggest challenge in reducing infant mortality in routine and manual groups – 16 of which are not spearhead authorities.

Spearhead local authorities in England

- Spearhead local authority
- Non-spearhead local authority



Key findings

7 The gap in life expectancy between spearheads and the national average has continued to widen and the Department's 2010 PSA target to reduce the health inequalities gap by 10 per cent as measured by life expectancy at birth (Figure 3) will not be met if current trends continue. Life expectancy has improved year-on-year in spearhead areas since 1995-97 and now stands at 75.8 years for males and 80.4 years for females in 2006-08. However, life expectancy in spearhead areas has not improved as fast as the whole population and the gap in life expectancy between the two has widened since the baseline by 7 per cent for males and 14 per cent for females. Life expectancy for the whole population now stands at 77.9 years for males and 82.0 years for females. The Department also uses 'all-age all-cause mortality' as a proxy measure for monitoring progress against the life expectancy target. Progress is assessed against the change in mortality rates that the Department estimate are needed to deliver the life expectancy target (Figure 3). The Department will not meet these targets if current trends continue.

Figure 3

The Department is not on course to meet the 2010 health inequalities PSA target for life expectancy or the associated all-age all-cause mortality target

Target	Progress	On course to meet target?
Health inequalities PSA target for life expectancy		
By 2010 to reduce by at least 10 per cent the gap in life expectancy between the spearhead group and the population as a whole ¹	Males: the gap has widened by 7 per cent from 1995-97 to 2006-08	No
	Females: the gap has widened by 14 per cent from 1995-97 to 2006-08	No
All-age all-cause mortality target		
By 2009-11 to reduce the gap in all-age all-cause mortality rate between the spearhead group and the population as a whole to 98 deaths per 100,000 for males and 58 deaths per 100,000 for females ²	Males: the gap has reduced by 11.3 per cent from 142 deaths per 100,000 (1995-97) to 126 deaths per 100,000 (2006-08)	No
	Females: the gap has widened by 2.8 per cent from 75 deaths per 100,000 (1995-97) to 78 deaths per 100,000 (2006-08)	No

NOTES

- 1 The Department measures progress for both males and females because of the difference in life expectancy between the two groups. The target period of 2010 is defined as the three-year period 2009-11 and includes all deaths up to 31 December 2011.
- 2 The all-age all-cause mortality targets are estimated by the Department to be the levels required to deliver the life expectancy target.

Source: National Audit Office analysis of Office for National Statistics data

8 The 2003 health inequalities strategy lacked effective mechanisms to drive delivery against the target.

The Department considers that when the original target was set, it was seen as aspirational. Other strategies such as the 2000 cancer plan and 2007 stroke strategy¹ included levers, such as strong national and local leadership, clarity on process and robust data on the cost-effectiveness of interventions, which helped their successful implementation. The Department was not in a position to produce such a document for health inequalities at that time because the knowledge base underpinning health inequalities was still under construction. Partly as a result of this, implementation of the health inequalities strategy faced a number of challenges:

- it took time for the Department to embed health inequalities in the policy and planning frameworks of the NHS. Although included in 2003-2006 policy and planning frameworks, the decisive development was the inclusion of health inequalities as a top six NHS priority in 2006 and the introduction of a health inequalities performance indicator for the NHS, subject to scrutiny by strategic health authorities;
- PCTs lacked evidence on the cost-effectiveness of interventions to prevent or reduce health inequalities relative to their other priorities;
- it lacked an effective mechanism to drive local improvements as PCTs' commissioning of local services, a key tool for achieving greater equity in access to health services, was largely under-developed; and
- it lacked effective measures to demonstrate that the strategy was on track to deliver the 2010 target. Performance management by the Department was not based on monitoring the extent to which key interventions, that were known to address the risks to health that disproportionately affected deprived populations, were being implemented. National performance management focused instead on changes to life expectancy and mortality rates. As a result it was not clear why areas were performing well or poorly, and what action was needed to address poor performance.

9 The Department's strategic direction on health inequalities was only matched by focused action, and a requirement to report that action, at the local level from 2006-07, leaving little time for these actions to have an impact before the 2010 target date.

Prior to 2006-07, the Department undertook work to better understand the drivers of the life expectancy gaps for males and females and develop more robust evidence on the interventions which could have a rapid impact. From 2006-07, a series of measures have promoted action to address health inequalities at the local level. In particular the Department:

- identified health inequalities as a top six NHS priority in 2006, alongside a requirement for PCTs to report on action taken;
- reorganised PCTs to make them more closely aligned to local authorities, which then provided a more effective infrastructure to tackle the health inequalities agenda;

- following the 2007 Comprehensive Spending Review, designated the need to “reduce the inequality gap in all-age all-cause mortality rates” as a performance indicator (‘Vital Sign’) for the NHS, and as part of this the Department required strategic health authorities to actively monitor performance against this indicator;
- in collaboration with the Department for Community and Local Government, aligned the NHS and local government’s performance management systems through the use of the all-age all-cause mortality indicator in both systems (in addition, Joint Strategic Needs Assessments and Local Area Agreements – both statutory requirements from April 2008 – have helped to identify local need and priorities for action);
- established the Health Inequalities National Support Team to provide support to spearhead PCTs and local authorities to tackle health inequalities; and
- made available an innovative support tool (the Health Inequalities Intervention Tool) which aims to help PCTs and local authorities identify the causes of death which are driving local health inequalities and quantify the impact that three key interventions can have on local health inequality gaps. Work underpinning this tool began in 2001.

10 Implementation of the three key interventions, identified in the Health Inequalities Intervention Tool, provides a cost-effective way of reducing the gap in life expectancy, but these have yet to be adopted on the scale required to close the inequalities gap. The three interventions which the Department has shown can improve life expectancy, by preventing or reducing the risk of ill-health, and which were to be implemented from 2007 are:

- increase the prescribing of drugs to control blood pressure by 40 per cent;
- increase the prescribing of drugs to reduce cholesterol by 40 per cent; and
- double the capacity of smoking cessation services.

However, progress in improving the take up of these interventions is not monitored. We estimate that it would cost about £24 million per year to implement the three key interventions – a fraction of the £3.9 billion spent by spearhead PCTs each year on circulatory and respiratory conditions.

11 The Department’s funding, other targets, and incentives are not sufficiently aligned with the health inequalities target and there is scope to make better use of these levers to help reduce health inequalities. Although the Department has devolved responsibility for delivery of the health inequalities PSA target to local organisations, there are a number of ways in which it could have better influenced service provision at PCT level. Some of these are only now starting to have an impact. For example:

- The Department has a long-standing commitment to allocate resources through a needs-based formula which aims to ensure 'equal access to healthcare for people at equal risk' and 'to help reduce avoidable health inequalities'. The formula sets the amount of overall funding a PCT should receive – its target allocation. PCTs are moved towards their target allocations over a period of time to avoid financially destabilising PCTs and to support long-term planning. This 'pace of change' is undertaken slowly, meaning the actual allocations spearhead PCTs receive do not always reflect their higher level of need. In 2010-11, 68 per cent of spearheads will still not receive their full needs-based allocations.
- In 1999, the Department introduced national targets to reduce overall mortality from cancer and circulatory diseases. In 2005, the Department added the requirement to reduce the gap in mortality rates between spearheads and the national average for cancer and circulatory disease. Whilst these targets are likely to be met, they were set too low to make a significant contribution to meeting the life expectancy inequalities target.
- Commissioning is a key tool to achieving greater equity in access to health services but PCTs were generally slow in developing robust commissioning skills. In 2007, the Department introduced the World Class Commissioning programme to drive improvements in PCTs' commissioning of health and care services. One of its stated aims being a requirement to reduce inequalities between the areas with the worst and best health.
- GPs provide the main access point to healthcare and are crucial to providing care to the neediest groups. The main lever for rewarding their activity is the Quality and Outcomes Framework which was introduced in 2004. However, it does not provide enough of an incentive to target GPs attention on the neediest groups. GPs can achieve full payment of the additional income available under this framework without covering the entire practice population and as a result the hardest to reach and most in need groups may not be helped through this framework. In addition, until 2009, payments were scaled in such a way that areas with high disease prevalence, often concentrated in deprived areas, received less remuneration per patient than those with low prevalence, and payments to practices did not fully reflect the level of illness in the practice population. By 2011, payments are expected to fully reflect the level of need with consequent redistribution of payments between practices.

12 It is not possible to identify how much money has been spent on tackling health inequalities. PCTs are not allocated funding specifically to tackle health inequalities but are required to address health inequalities from within their general funding allocations. The allocations reflect differences in health such that PCTs in spearheads now have around £1,760 per head to spend, which is about £230 more than non-spearheads. There is evidence that some of the extra money has been absorbed by funding higher hospital costs in deprived areas.

13 Despite the importance of GPs in tackling health inequalities, the Department has yet to address fully GP shortages in areas of need, and high levels of unmet need remain. One of the objectives of the NHS Plan 2000 and subsequent initiatives was to increase the availability of GPs in deprived areas. In 2008, although there were over 5,700 more GPs working in the NHS than ten years earlier, 65 per cent of spearhead PCTs had lower levels of GP coverage than the national average, when weighted for age and need. Spearhead areas have high levels of unmet need as indicated by higher than expected hospital admissions for certain conditions such as coronary heart disease and stroke and lower than expected prevalence levels recorded for these conditions. The Department is now spending £250 million of new funding to increase GP and health centre capacity, with 58 per cent of the schemes in spearhead areas.

Conclusion on value for money

14 The Department has made a serious attempt to tackle health inequalities across England, which are a long-standing, stubborn and costly problem. Whilst many of the causes of such inequalities are outside the influence of the Department, it and the wider NHS have a vital role to play in pursuing a coordinated and evidence-based programme. However, it took until 2006, more than three years from publication of its health inequalities strategy and half way through the lifetime of the PSA target, for the Department to establish health inequalities as a top six NHS priority, alongside a requirement for PCTs to report on action taken. Due to the complex nature of the problem, it also took time to develop an evidence base of the most cost-effective interventions for reducing inequalities in life expectancy, and to provide support to help PCTs implement these interventions.

15 Given the slowness in applying cost-effective interventions in spearheads on the scale required in the early 2000s, we cannot conclude that the Department's approach provided value for money up to this time. Improved uptake of these interventions is likely to have improved value for money, but there is scope for further value for money improvements with a more uniform and rigorous uptake of these interventions.

Recommendations

16 Our recommendations are aimed at maintaining a clear focus on the need to reduce health inequalities, and recognise that the Coalition Government has ended the system of Public Service Agreements. Understandably, during a period when Government and Departmental structures are undergoing considerable change, responsibility for implementing our recommendations is liable to change. We also recognise that the Department and the NHS cannot tackle health inequalities without strong partnership working across government. We have therefore identified the systemic issues that need to be tackled, and the principles underpinning each recommendation that need to be addressed. Once the new Department and NHS infrastructure is in place, we will agree with the Department how these principles might translate into specific recommendations and where responsibility for implementing them should lie.

Whatever form the new NHS performance framework and supporting infrastructure takes, commissioners will need to maintain a clear understanding of the needs of their local populations, and adopt more sensitive targeting of health inequalities initiatives so as to address those areas with the highest levels of deprivation.

- a** All future initiatives aimed at addressing health inequalities should be set so that there is clarity as to their contribution to improving health outcomes. The main processes necessary to achieve these outcomes, for example, the implementation of proven smoking cessation services and therapies to control blood pressure, should be targeted more specifically at people with the highest levels of need and their impact monitored and evaluated in a timely manner.
- b** As part of the future regulation landscape, commissioners of public health services should publish information on progress in reducing health inequalities for those sub-sets of their population with high levels of deprivation.

Greater investment in prevention is necessary if the NHS is to help tackle health inequalities now and in the future. Current estimates suggest about 4 per cent of NHS funding is spent on prevention, although individual commissioners' spending on prevention is not readily identifiable.

- c** Those responsible for commissioning services in areas with significant disadvantaged populations should develop costed proposals for how they propose to maintain or increase investment in actions to avoid the development of key conditions which increase inequalities, such as cardiovascular disease.
- d** There is a need to develop a robust and consistent methodology that will enable commissioners to identify their spend on public health, and calculate the cost-effectiveness of primary and secondary prevention activity using a standard measure, such as expenditure per weighted capitation.

There is an opportunity to introduce levers within the new NHS landscape that will help commissioners tackle health inequalities more effectively.

- e** Commissioners need practical guidance on how to overcome local barriers to identifying and managing high-risk patients which builds on current, proven, examples of best practice. Commissioners' achievements in relation to this should be published.
- f** There is a need for a mix of Quality and Outcomes Framework indicators and payment weightings to encourage a more interventionist approach among GP practices who have not engaged with their at-risk patients whilst continuing to incentivise those that have reached a good standard.
- g** Clinical interventions carried out by GPs, including implementation of the NHS Health Check, need to be targeted more effectively at those with the highest risk of premature death.

Currently, there are no mechanisms in place to hold providers and commissioners to account over whether they apply National Institute for Health and Clinical Excellence guidance on cost-effective public health interventions. Addressing variations in performance in the delivery of these interventions will help improve efficiency of prevention activity.

- h** There is a need to establish a baseline assessment of the extent of compliance with current National Institute for Health and Clinical Excellence guidance on health prevention interventions and for an accountability process to be established for evaluating future compliance.
- i** Conventional cost-benefit analysis should be applied when appraising the impact of public health interventions on reducing health inequalities.

Part One

The Department of Health's approach to tackling inequalities in life expectancy

Introduction

1.1 As a nation, we are healthier now than we have ever been and over the past decade life expectancy has improved year-on-year. However, the health of the most disadvantaged has not improved as quickly as that of the better off. Inequalities in health persist and, in many cases, have widened. In the early 2000s, in England, people living in the poorest wards could, on average, expect to die seven years earlier than people living in the richest wards and on average, spend 17 years more of their lives with a disability.

1.2 Health inequalities are the result of a complex and wide-ranging network of factors that can broadly be split into three overlapping groups: the wider determinants of health; the lives people lead and access to health services (Figure 1, page 4). Factors such as lower educational attainment or poor housing increase the likelihood of poor health outcomes and an earlier death compared with the rest of the population. Some inequalities in health are the consequence of avoidable behaviours and lifestyles whose prevalence is often linked to deprivation. At the same time mitigating factors, such as access to healthcare, are not always available to those who most need them and where available are not always accessed by the people who need them the most.

The health inequalities target

1.3 In 1997, the Government announced that it would put tackling health inequalities at the heart of its objective to tackle the root causes of ill health in order to create a fairer society and to reduce the costs associated with ill health. Sir Donald Acheson's independent inquiry on health inequalities (1998), commissioned by the Department of Health (the Department), highlighted the need for action across a broad front, including poverty, education, employment, housing and the environment – as well as through the NHS.

1.4 The Government's 2000 Spending Review set a target for the Department to 'narrow the health gap between socio-economic groups and between the most deprived areas and the rest of the country, in childhood and throughout life.' In 2002, the Government refined this target: "starting with health authorities, by 2010 to reduce by at least 10 per cent the gap between the fifth of areas with the lowest life expectancy at birth and the population as a whole."² This focus was therefore on geographical areas that might change year-on-year, depending on how their performance changed.

1.5 In 2004, the Department updated the target by introducing a relative target that focused on a fixed group of areas consisting of the local authority areas with high levels of deprivation and poor health outcomes. These ‘spearhead’ areas were fixed for the duration of the target, and the Department considered that this was a practical way of focusing activity and measuring performance:

“Starting with local authorities, by 2010 to reduce by at least 10 per cent the gap in life expectancy between the fifth of areas with the worst health and deprivation indicators (the spearhead group) and the population as a whole.”

The NHS policy environment underpinning the health inequalities target

1.6 The NHS Plan 2000³ set out the Government’s plans for investment and reform of the NHS, including the need to tackle health inequalities. Since then the Department has regularly issued policy and guidance on tackling health inequalities (see Appendix One). In 2003, the Department’s analysis found that around two-thirds of the life expectancy gap between spearheads and the country as a whole related to the contribution of cancers, circulatory and respiratory diseases.⁴ NHS interventions, such as reducing smoking in routine and manual groups⁵ and preventing and managing other risk factors for coronary heart disease and cancer, were therefore identified as actions that would be more likely than other interventions to deliver the short-term 2010 target. The Department also acknowledged, however, that tackling the social determinants of health would be crucial for a long-term sustainable reduction in health inequalities.⁶

1.7 A key publication, in 2003, was the Department’s cross-government strategy: *Health inequalities: A Programme for Action*, which aimed to reduce health inequalities through action on the wider determinants of health and NHS treatment and prevention.⁷ The plan called on primary care trusts (PCTs), their local authority partners and strategic health authorities to ensure that health inequalities were central to their planning and performance management systems and to ensure that services were more responsive to the needs of disadvantaged communities. It included 12 cross-government headline indicators and 82 cross-government commitments. The Department also devolved day-to-day responsibility for the delivery of its inequalities targets to PCTs and local authorities working with its partners with strategic health authorities responsible for performance managing the system and driving reform.

1.8 The Department's Policy and Planning Framework for 2003-2006⁸ called for health inequalities to be placed at the centre of service planning and implementation. These calls were repeated in the planning framework for the NHS for 2005-2008.⁹ The crucial development came in the 2006-07 NHS Operating Framework, when addressing health inequalities became a top six NHS priority and spearhead PCTs were obliged to report on progress they were making in reducing health inequalities through local delivery plans.¹⁰ In 2008, performance in reducing health inequalities became one of the Department's key performance indicators for the NHS (known as Vital Sign indicators) with performance explicitly managed by strategic health authorities.¹¹

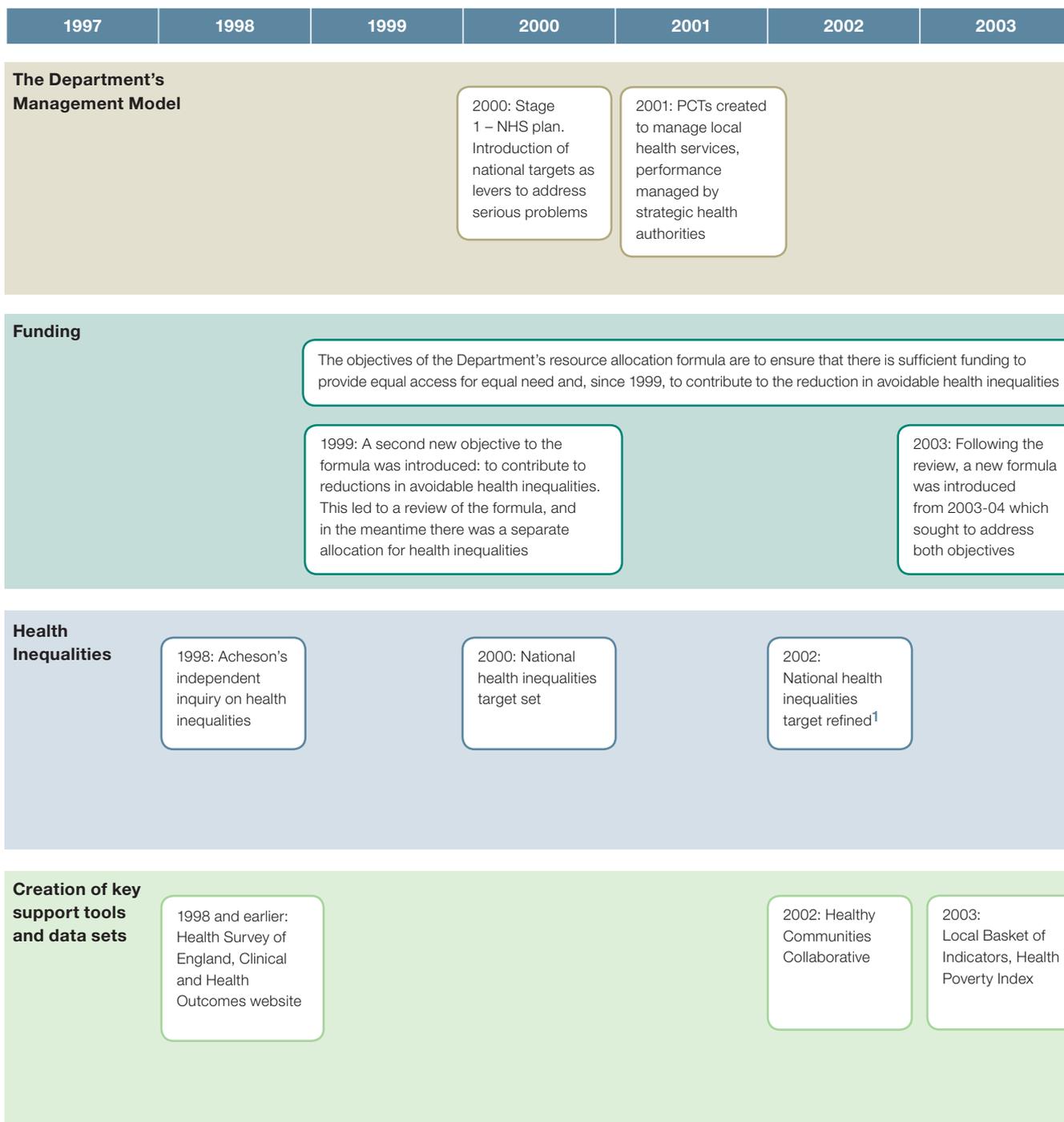
During the initial years of the health inequalities strategy the Department was also focused on implementing its NHS reform agenda

1.9 Departmental and NHS action to tackle health inequalities took place against the background of the NHS reform agenda (**Figure 4** overleaf). While addressing health inequalities was one of the reasons for the creation of PCTs, for the first few years after publication of the cross-government strategy on health inequalities the Department and PCTs were focused on implementing the NHS reforms envisaged in the NHS Plan 2000. These included reducing waiting times and implementing the comprehensive pay modernisation agenda.¹² Furthermore, in July 2005, the Department announced that, with effect from 1 July 2006, the number of strategic health authorities would be reduced from 28 to 10 and that from October 2006, PCTs would be reconfigured and reduced to around 150. These fundamental changes disrupted the priority which PCTs gave to tackling health inequalities.

There are risks in tackling health inequalities through a focus on reducing the gap between spearhead areas and the population as a whole

1.10 Following the change in focus of the health inequalities target, since April 2005, Government action has been focused on spearhead areas, made up of 70 local authorities and, following the PCT reorganisation (paragraph 1.8 above), 62 NHS PCTs which largely map onto them (Figure 2). The Department's decision to concentrate efforts in selected areas was seen as being a relatively straightforward way of directing action at the problem and measuring outcomes. Over half (52 per cent) of the local authority wards in the bottom quintile for life expectancy are outside of spearhead areas. The risk with this approach is that disadvantaged groups and areas outside these target areas do not benefit from the support offered to the same extent.

Figure 4
The devolved delivery of health services and tackling health inequalities, 1997-2009



NOTE

1 The 2004 spearhead target is based on a group of areas which are fixed for the duration of the target period, whereas the 2002 target was based on a quintile of areas which changed annually on the basis of annual statistics.

2004	2005	2006	2007	2008	2009	2010
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2004: Stage 2 – NHS improvement plan and Choosing Health. Introduction of bottom-up incentives such as choice and competition, payment-by-results and commissioning (splitting up purchasers and providers)

2006: Number of PCTs reduced from 303 to 152 and strategic health authorities from 28 to 10

2007-08: Stage 3 – Introduction of the 'vital signs' set of national and local priorities for 2008-09 to 2010-11, as part of its 2008-09 NHS Operating Framework

2009: In 2009-10 and 2010-11 PCT allocations were further adjusted such that 15 per cent of the target allocation are based on a new, separate health inequalities formula

2004: Health inequalities included in 2004 planning guidance

2005: Creation of spearhead areas

2006: Health inequalities became a top six NHS priority

2008: Health inequalities became a NHS vital signs tier 2 indicator

2004: National health inequalities targets updated¹

2004: Health Equity Audit Self-assessment tool

2005: *Tackling health inequalities – what works*

2006: Health Profiles, Neighbourhood Statistics

2006: National Support Team for Health Inequalities

2007: Health Inequalities Intervention Tool (for spearhead areas), Prevalence models, Programme Budgeting, NHS Comparators

Health Inequalities Intervention Tool extended to all areas in 2008 and updated in 2010

1.11 The Department's wider strategic objectives include increasing national life expectancy as well as narrowing the gap between spearhead areas and the England average. However, there is a tension between the former and the health inequalities target as, historically, actions to improve life expectancy generally improve life expectancy faster in more affluent areas as people in higher socio-economic groups are more likely to take up health initiatives, thereby widening the health inequalities gap.

1.12 There is also a risk that spearheads could improve their position largely because of improvements in the outcomes of the more affluent groups within their population rather than the more deprived groups, as more affluent groups are generally more likely to access new health initiatives. To guard against this, 80 per cent of spearhead PCTs told us that they had targets in place to reduce the gap between the least and most deprived areas within their PCT.¹³ Typically these targets relate to life expectancy or mortality rates. Our analysis suggests that for a number of key primary care indicators they have been successful in reducing internal health inequalities gaps, with the exception of smoking rates.¹⁴

1.13 The Marmot review of health inequalities in 2010, concluded that tackling health inequalities was a matter of social justice with real economic benefits and savings, and that this required action not just on the health of the most disadvantaged but also across the wider social determinants of health. Nevertheless, the review estimated that the additional NHS healthcare costs associated with inequality are well in excess of £5.5 billion per year and identified actions that the NHS should be taking to reduce them.¹⁵

Part Two

Performance against national targets

2.1 This part of the report examines current and projected performance against the national targets to address inequalities in life expectancy. It covers progress against the health inequalities PSA target for life expectancy and associated all-age all-cause mortality, and the inequalities element to national targets for cancer and circulatory disease (or cardiovascular disease) mortality, and smoking.

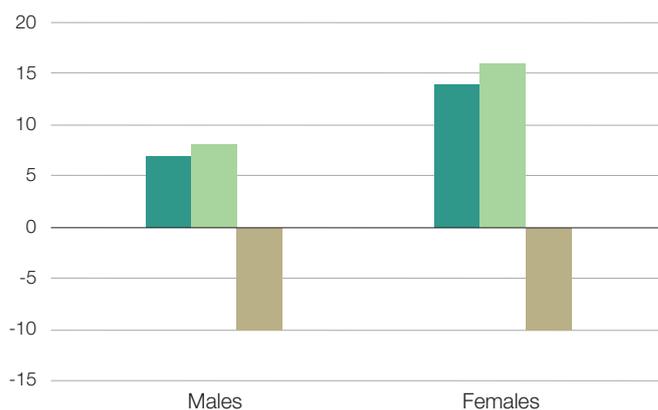
The Department will not meet their health inequalities PSA target for life expectancy if current trends continue

2.2 The Department will not meet the target to reduce the gap in life expectancy between the spearhead group and the population as a whole by at least 10 per cent by 2010 if current trends continue (**Figure 5** overleaf). Life expectancy has improved year-on-year in spearhead areas since 1995-97 and now stands at 75.8 years for males and 80.4 years for females in 2006-08. However, the gap in life expectancy between the spearheads and the whole population has widened over the last 11 years by 7 per cent for males and 14 per cent for females.

2.3 Only 12 spearheads (17 per cent) are on track to narrow their own life expectancy gap with England by 10 per cent by 2010 for both males and females (**Figure 6** on page 23), while over half (53 per cent) are off track for both. Progress in reducing the life expectancy gap shows strong regional variations (**Figure 7** on page 24). Only spearhead PCTs in London have, as a group, reduced the life expectancy gap for both males and females since the baseline.

Figure 5

The Department is not on course to meet the 2010 health inequalities PSA target for life expectancy

Increase in gap between spearheads and England average (%)

- Change in gap from 1995-97 baseline to 2006-08 (increase)
- Change in gap by 2010 based on trend since baseline (increase)
- 2010 Target (reduction)

Source: National Audit Office analysis of Office for National Statistics data

The Department will not meet its inequalities target for all-age all-cause mortality if current trends continue

2.4 The Department also uses changes in the rate of all-age all-cause mortality as a more straightforward way of measuring progress in health inequalities at the local level. This indicator forms part of both the NHS' and local government's performance management systems.¹⁶ The Department has estimated that in order to achieve the target for inequalities in life expectancy, the gap in all-age all-cause mortality between the spearhead group and the England average needed to reduce from 142 deaths (the 1995-97 baseline) to 98 deaths per 100,000 for males and from 75 deaths to 58 deaths per 100,000 for females. Despite a fall in the absolute gap for males, the Department will not achieve this if current trends continue (**Figure 8** on page 25).

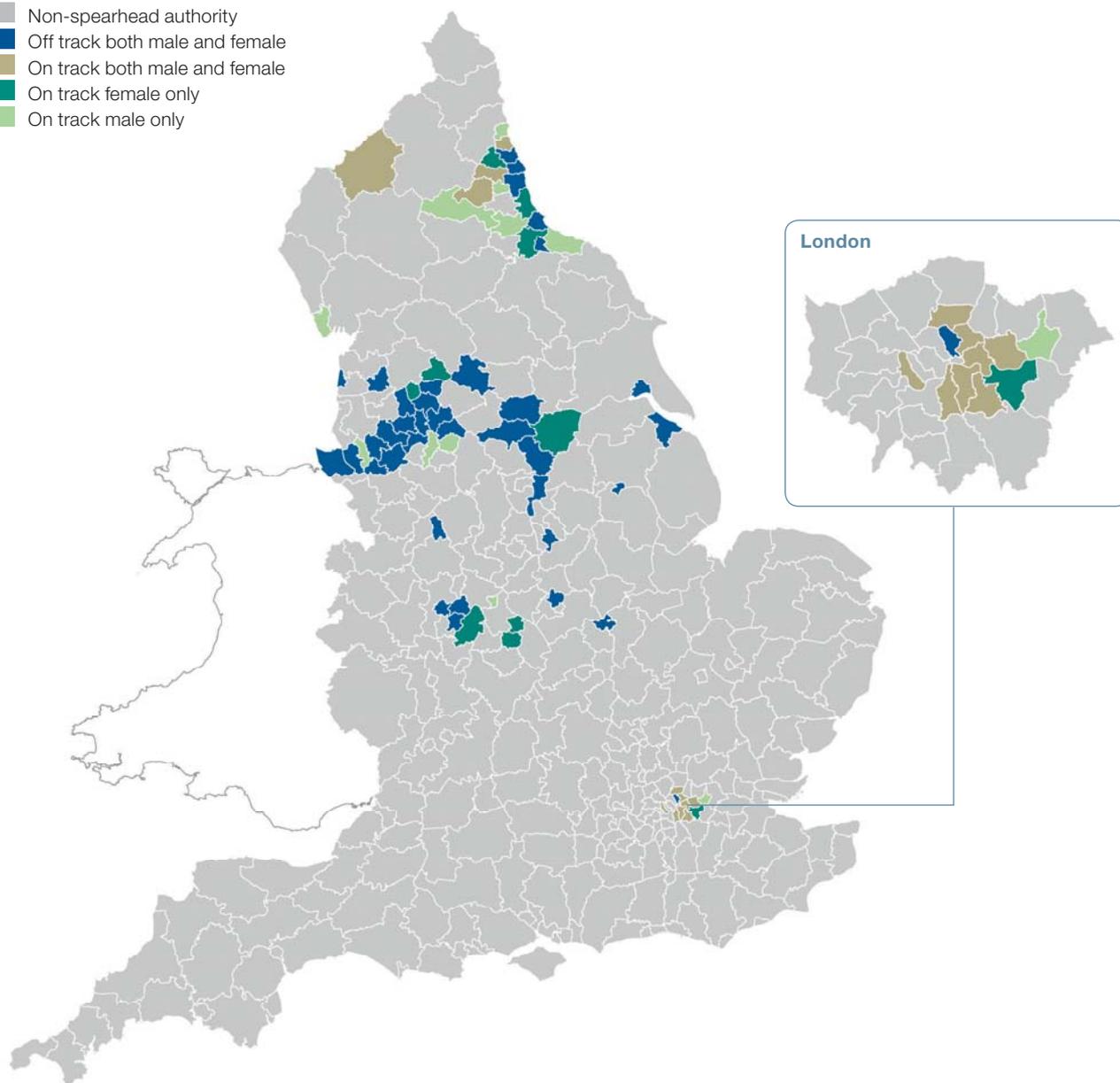
2.5 Spearhead PCT performance in reducing their all-age all-cause mortality gap varies widely (**Figure 9** on page 25). In order to meet the target, spearhead PCTs have more challenging planned performance levels than non-spearhead PCTs. In 2008, 78 per cent of non-spearhead PCTs achieved their planned performance for this indicator against only 34 per cent of spearheads.¹⁷ Meeting the national target requires a step change in performance by spearheads. Paragraphs 4.5-4.17 identify key areas where spearhead PCTs could be delivering this step change in performance, and where funding could be released to fund the additional activity.

Figure 6

Only 12 spearhead areas are on track to narrow their own life expectancy target for both males and females

Local authority by spearhead type

- Non-spearhead authority
- Off track both male and female
- On track both male and female
- On track female only
- On track male only

**NOTE**

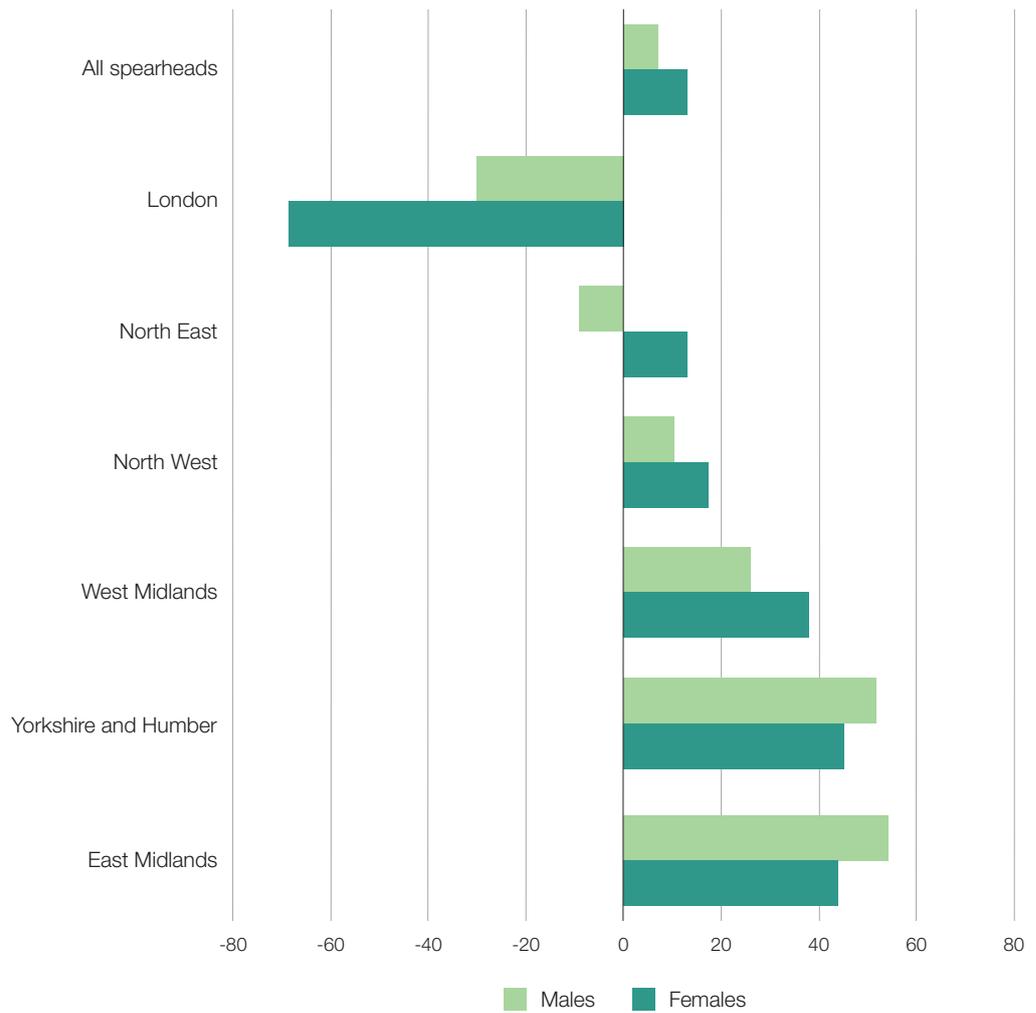
- 1 'On track' means the local authority is on course to narrow its life expectancy relative gap by 10 per cent by 2009-11, from the 1995-97 baseline, based on data up to 2006-08.

Source: National Audit Office analysis of Office for National Statistics data

Figure 7

Only spearhead PCTs in London, as a group, have reduced the life expectancy gap for both men and women since the baseline, 1995-1997

Percentage change in the life expectancy gap for spearhead areas between 1995-97 and 2006-08, by region

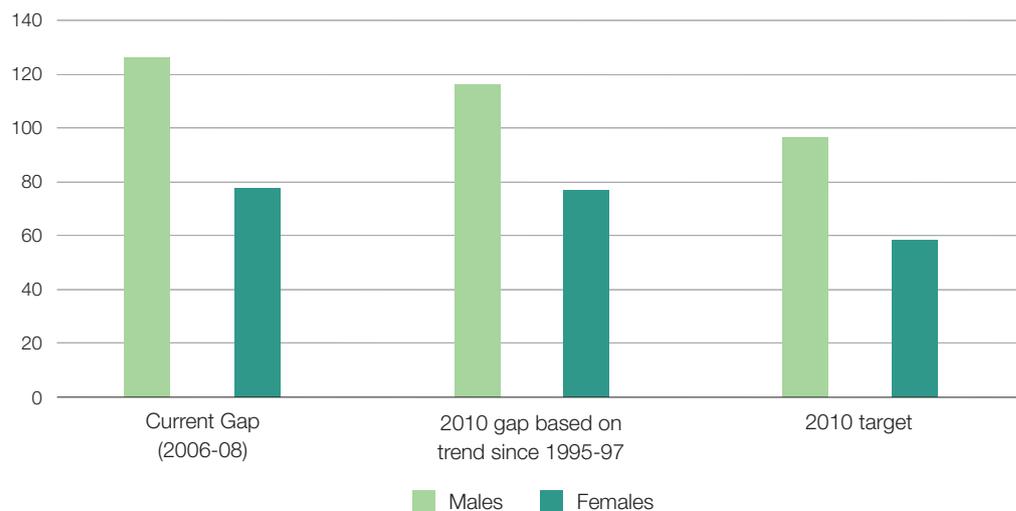


Source: National Audit Office analysis of Office for National Statistics data

Figure 8

The Department is not on course to meet the inequalities element of the all-age all-cause mortality target

Gap in all-age all-cause mortality rate (gap in age standardised mortality rate per 100,000 population between the spearhead group and England)

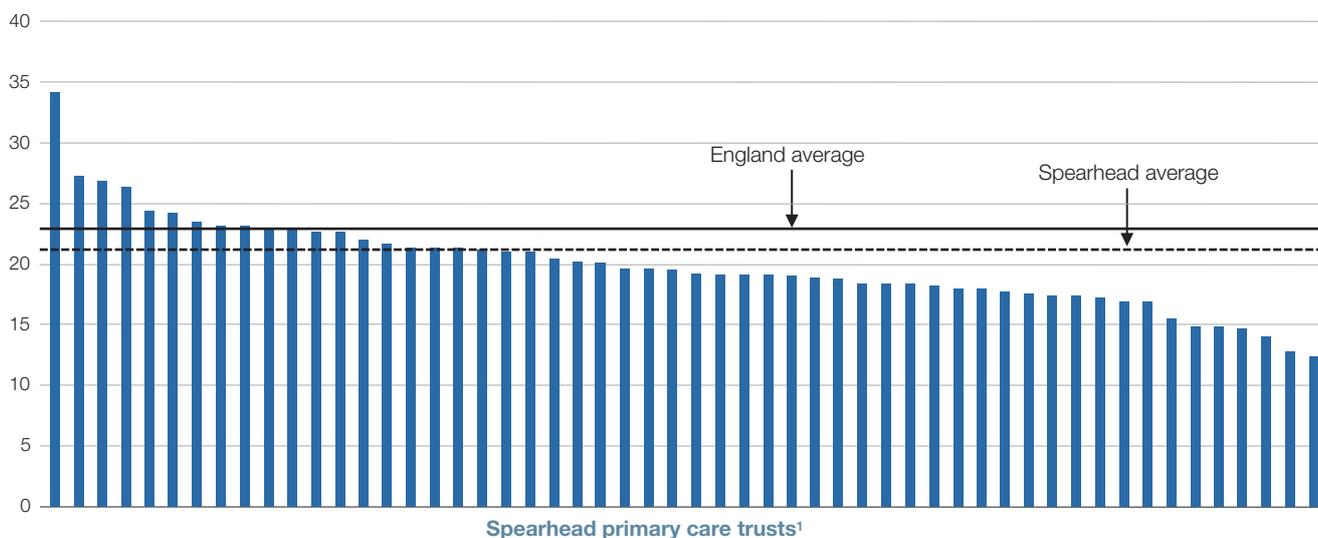


Source: National Audit Office analysis of Office for National Statistics data

Figure 9

Spearhead primary care trust performance in reducing their all-age all-cause mortality gap varies widely (between 1995-97 and 2006-08)

Percentage reduction in mortality rate



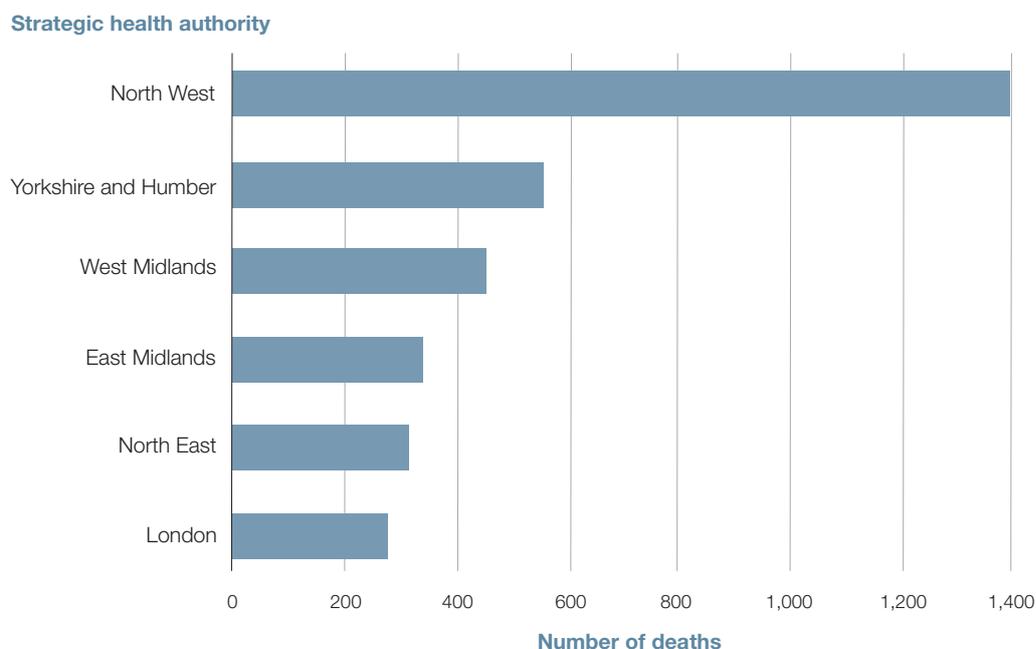
NOTE

1 Eight spearheads are excluded from this graph because of a lack of baseline data due to primary care trust reconfiguration in 2006.

Source: National Audit Office analysis of Office for National Statistics data

2.6 Modelling undertaken by the Department indicates that approximately 80 to 85 per cent of variation in PCTs' all-age all-cause mortality performance can be explained by its association with socio-economic factors that are outside the control of PCTs, such as the local level of income deprivation, educational attainment, median income, socio-economic class and ethnicity.¹⁸ Work carried out by the Government Office of the North West estimated that, in 2007, mortality rates in excess of the target level among spearhead PCTs were equivalent to some 3,335 excess deaths across the country (**Figure 10**).

Figure 10
Deaths attributable to the gap between current mortality rate and the 2010 target in spearhead areas



NOTE

1 Excludes spearhead PCTs who are on target, where some 600 deaths have been avoided, mostly in London and the North East.

Source: National Audit Office analysis of Government Office for North West data

The Department is on course to deliver its other national inequalities targets

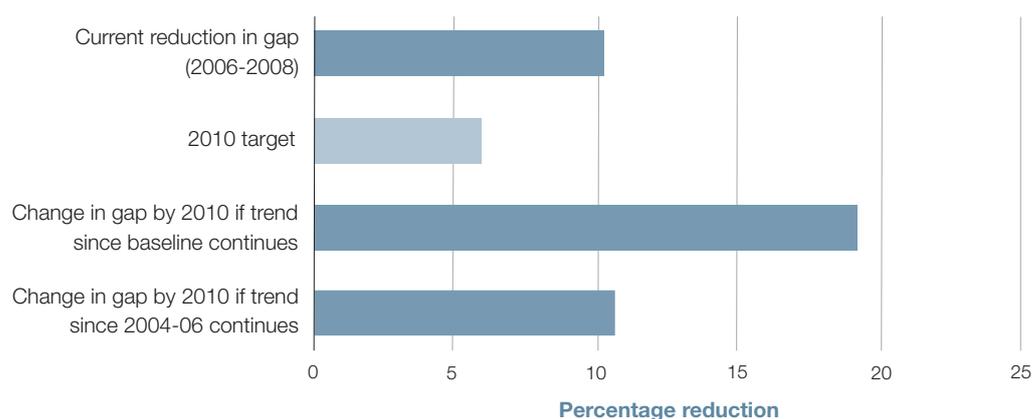
2.7 In 2002, the Department also set national PSA targets to reduce mortality rates by 20 per cent for cancer and 40 per cent for circulatory diseases, for people below 75 years of age. In 2005, the Department included separate targets for spearheads to reduce the gap between the spearhead group and national averages for cancer and circulatory disease mortality by 6 and 40 per cent respectively by 2010. If current trends continue the Department should achieve these targets (**Figure 11**).

Figure 11

The Department is on course to meet inequalities targets for cancer and cardiovascular (circulatory) disease mortality if current progress is maintained

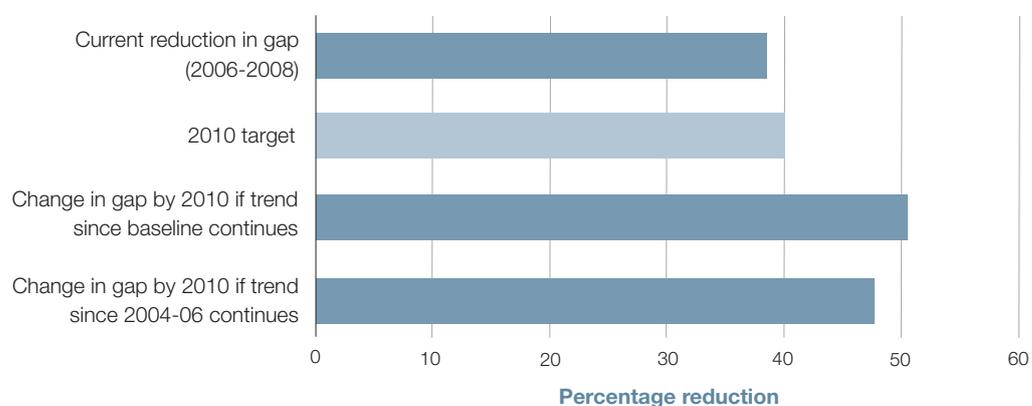
Cancer

Reduction in the mortality gap between the spearhead group and the England average



Circulatory disease (cardiovascular disease)

Reduction in the mortality gap between the spearhead group and the England average



Source: National Audit Office analysis of Office for National Statistics data

2.8 Cancer and circulatory diseases mortality are major contributors to the gap in life expectancy. However, the inequalities elements of these mortality targets do not align with the life expectancy target because the former measures the absolute gap whereas the latter measures the relative gap and they were set too low to make a significant contribution to meeting the life expectancy inequalities target. Despite mortality rates for cancer and circulatory diseases reducing year-on-year, the percentage reduction since the baseline year (1995-97) is smaller in spearheads than non-spearheads – 1.1 per cent smaller for cancer and 1.8 per cent smaller for circulatory diseases. As a result the improvement in the health outcomes of spearheads indicated by these mortality targets has not translated into a similar improvement in performance against the life expectancy inequalities target.

2.9 Smoking is a major cause of cardiovascular disease and is the biggest single avoidable cause of death, accounting for some 83,000 deaths a year.¹⁹ The Department has an overall PSA target to reduce adult smoking rates to 21 per cent or less by 2010, but with a target reduction in prevalence among routine and manual groups to 26 per cent or less. The overall smoking rates target has already been met; and the target for routine and manual groups appears to be on course to be met, with prevalence of 29 per cent in 2008.

Part Three

Ability of the Department of Health to influence change

3.1 Although the Department has devolved responsibility for delivery of the health inequalities PSA target to local organisations, there are a number of measures that it can use to influence service provision and help PCTs to reduce health inequalities. This part of the report examines how the Department has used such measures, including: funding; technical support to PCTs; support to help PCTs become better commissioners of services; and incentives for GPs to reach out to the neediest groups.

It is not clear how much has been spent on tackling health inequalities

3.2 PCTs are not allocated funding to specifically tackle health inequalities; rather they are expected to use their resource allocations to address this issue. The Department believes that this approach is likely to lead to better results given the complexity and wide-reaching nature of the determinants of health inequalities.

3.3 In 2006-07 and 2007-08, the Department separately identified a total of £552 million within PCT resource allocations intended for public health prevention measures in disadvantaged areas in connection with the *Choosing Health* White Paper. These amounts are now included in PCTs' overall allocations. PCTs are free to use their revenue allocations to meet the healthcare needs of their populations in line with national and local priorities.

3.4 In addition to PCT allocations, the Department spent £34 million in 2008-09 and £21 million in 2009-10 on central support for the PSA target through initiatives such as the Health Inequalities National Support Team and funding to promote healthier lifestyles in local communities. Spearheads have also benefited from the majority of the Department's £250 million access fund (see paragraph 4.4).

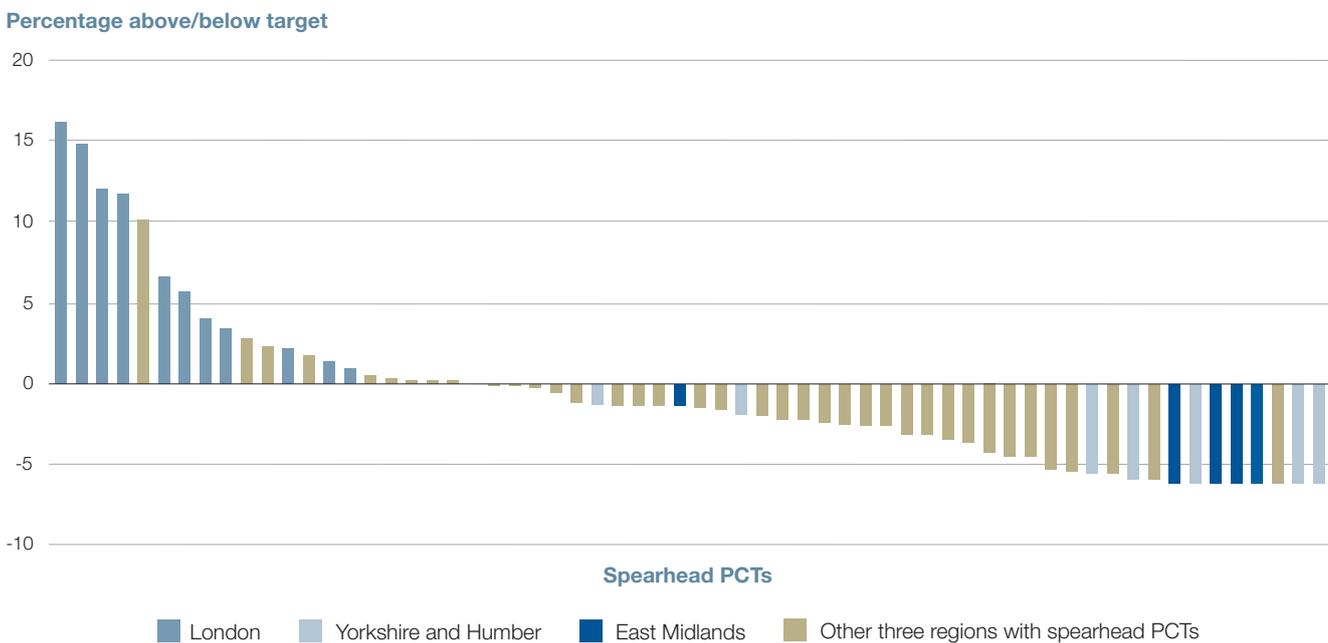
3.5 However, as a result of the varied ways in which the health service can effect health inequalities, the Department cannot say how much has actually been spent on tackling health inequalities.

Many spearhead PCTs do not receive their full needs-based funding allocations

3.6 The Department has a long-standing commitment to allocate resources to PCTs through a needs-based formula which aims to ensure ‘equal access to healthcare for people at equal risk’. Ministers introduced a second objective in 1999 ‘to help reduce avoidable health inequalities’.

3.7 The formula sets the amount of overall funding a PCT should receive – its target allocation. PCTs are moved towards their target allocations over a period of time to avoid financially destabilising PCTs and to support long-term planning. This ‘pace of change’ has been undertaken slowly, meaning that the actual allocations spearhead PCTs receive do not always reflect their higher levels of need (**Figure 12**). There are also considerable regional variations; the spearhead PCTs who are funded above their target level are almost exclusively in London, while spearhead PCTs in East Midlands and Yorkshire and Humber are furthest below target.

Figure 12
Many spearhead PCTs are below target allocation for funding, 2010-11



Source: National Audit Office analysis of Departmental data

3.8 The 2009-10 and 2010-11 funding formula includes a health inequalities formula, which aims to target funding at those areas with the worst health outcomes more transparently than previous formulas. The Department has confirmed that, although the health inequalities formula has been applied to approximately 15 per cent of the total allocation, it is not straightforward to determine how much funding this redistributes across PCTs due to the influence of other elements of the formula on target allocations, such as age-related need. In addition, it will take time before the impact of this element of the formula is felt in terms of the actual allocations PCTs receive due to the slow rate of pace of change.

3.9 The application of a new funding formula in 2009-10 resulted in some spearhead PCTs falling further below their target allocations. PCTs will be moved back towards their target allocations over time, however, in 2010-11, 68 per cent of spearhead PCTs will not receive their target allocations, representing a net underfunding of £423 million (an average of 1.3 per cent below target). Spearheads now have around £1,760 per head to spend, which is about £230 more than non-spearheads. In 2010, the Audit Commission noted that some of the additional resources directed to spearhead areas appears to have been spent on other key health issues such as funding higher hospital costs.²⁰

The Department has introduced a range of support tools to help PCTs and local authorities

3.10 From 2003, the Department began to introduce tools in support of the target which were designed to help PCTs and local authorities measure and monitor the extent of local inequalities (see Figure 4, pages 18-19). However, the Department accepted that their efforts needed to be better targeted, hence the refocusing of the life expectancy target on spearheads from 2005. Among the wider support offered to spearhead PCTs two of the tools which they identified as the most useful were the Health Inequalities National Support Team and the Health Inequalities Intervention Tool, both of which were introduced in 2007, some five years after the national target was set. The innovative Health Inequalities Intervention Tool took time to develop. Extensive work to identify key interventions began in 2001 and to date some 30 interventions have been analysed.

3.11 The Department established the Health Inequalities National Support Team in February 2007, to work with spearhead PCTs and local authorities. By September 2009, the Team had visited 56 of the 62 spearhead PCTs to promote the success factors for delivery and share good practice to help achieve the target. The vast majority (94 per cent) of PCTs that had been visited, reported that the visit had been useful. Once all spearheads have been visited, the Department has decided that the Team will focus its efforts on working closely with the 13 spearheads²¹ which together constitute some 40 per cent of the current all-age all-cause mortality gap in terms of lives lost.

3.12 Our survey found that although support tool usage by PCTs is generally high, the usefulness of the tools is more variable. Most PCTs reported that the support offered, in its entirety, met most of their requirements to help tackle health inequalities, although 36 per cent reported that it did not meet many or any of their requirements. Many PCTs suggested that, to better meet their needs, some rationalisation and co-ordination of materials was needed, for example, bringing them together on one website.

3.13 The Department introduced an intervention tool aimed at all PCTs in 2008. This tool aims to assist deprived populations outside spearheads.

Commissioning health services has an important role to play in tackling health inequalities

3.14 Commissioning in the NHS is the process of deciding what health and care services are needed, acquiring them and ensuring that they meet requirements. It is a key vehicle to achieve greater equity in access to, and quality of, health services. Since 2001, responsibility for commissioning has been vested predominantly in PCTs. The Department introduced practice-based commissioning in 2004 with the aim of getting GPs and other primary care professionals involved in commissioning services for their patients. A recent review found that although practice-based commissioning provides an opportunity for GPs to commission initiatives to encourage their practice populations to adopt healthier lifestyles, it has not so far provided incentives to do so and few services that aim to prevent ill health have been commissioned using practice-based commissioning.²²

3.15 In 2007, the Department introduced the World Class Commissioning programme to drive improvements in PCTs' commissioning of healthcare services. The Department intended that the programme would be of considerable help in addressing health inequalities within its broader objectives because it places great emphasis on assessing local needs and prioritising investments to deliver long-term improvements in health outcomes. In the first round of the World Class Commissioning assurance process, completed in April 2009, spearhead PCTs scored on average 1.5 out of 4 for 'prioritising investment' and 1.8 for 'assessing local needs,' both slightly better than non-spearheads. One of the programme's aspirations is for PCTs to be able to identify patients within their population who are most at risk and to intervene with them before a crisis point is reached. This is proving challenging for PCTs because of the need to share patient data across a number of organisations and IT systems.

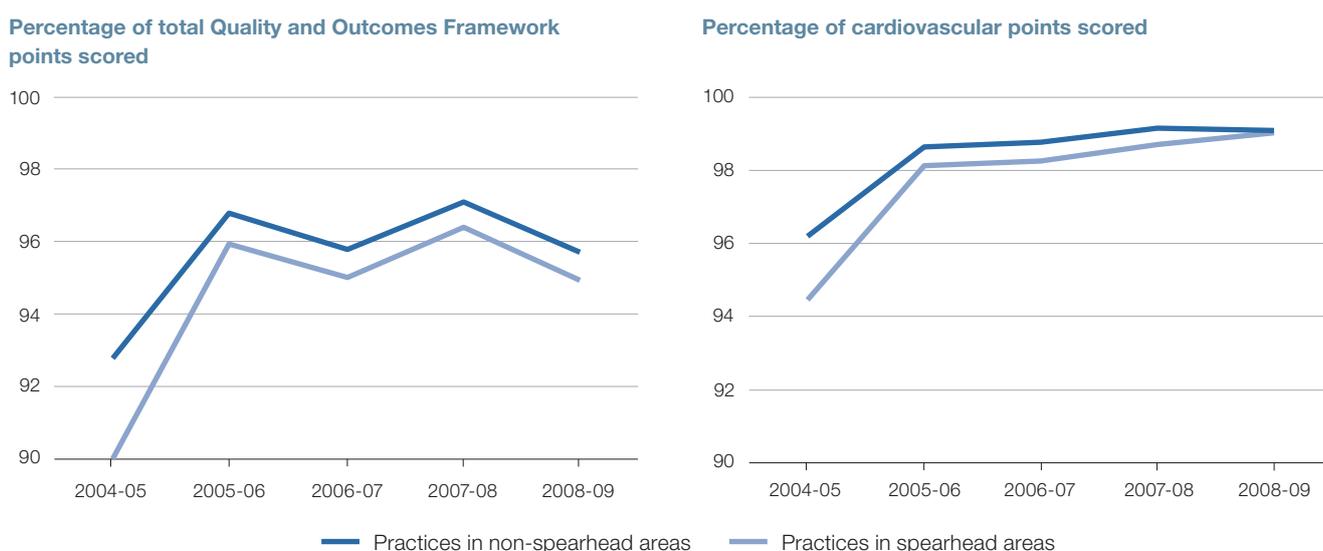
GPs' performance in spearhead areas has improved but those most in need are not necessarily being helped

3.16 GPs provide the main access point to healthcare and are crucial to providing care to the neediest groups. The Quality and Outcomes Framework, introduced in 2004 as part of the General Medical Services contract for GPs, aims to link financial incentives to the quality of care provided by practices for a range of chronic conditions. The framework was not designed specifically to address health inequalities, but it can incentivise behaviour to improve outcomes through the promotion of secondary prevention for conditions such as coronary heart disease and cancer. There are 134 framework indicators; 86 of these are clinical indicators for 20 chronic areas. Practices are rewarded based on the proportion of eligible patients covered, up to a maximum threshold which varies between 50 and 90 per cent.

3.17 When the Quality and Outcomes Framework was introduced there were clear gaps in achievement between spearheads and non-spearheads on a number of indicators, but these gaps have now largely disappeared (**Figure 13**), indicating that the framework improved care in spearhead areas. Generally, improvements in scores have slowed markedly; probably due to general achievement of maximum payment levels. Our survey showed that, as a result, 53 per cent of spearhead PCTs are incentivising their GPs to exceed framework target ceilings.

Figure 13

Gaps between spearhead and non-spearhead PCTs in the quality of care as measured by Quality and Outcomes Framework data have reduced with time



NOTE

¹ The percentage of total Quality and Outcomes Framework points scored is taken from all 146 Quality and Outcomes Framework indicators. The percentage of cardiovascular points scored is taken from 12 cardiovascular Quality and Outcomes Framework indicators.

Source: National Audit Office analysis of Quality and Outcomes Framework data

3.18 However, the maximum payment for a particular clinical indicator is possible without covering all registered patients and as a result the hardest to reach and most in need groups may not be helped through this framework. Some registered patients can be excluded from the calculation through the process of 'exception reporting'. Some 'exceptions' are for clear-cut clinical or administrative reasons – they were not registered or diagnosed within appropriate timescales or treatment would increase risk. Other, more general, exceptions are known as 'discretionary'. For example, of the 288,000 patients in England who were excepted from the indicator covering control of high blood pressure in 2008-09,²³ unpublished Departmental data indicates that 48 per cent were excepted for 'discretionary' reasons.²⁴

3.19 In addition, prior to 2009, the framework payment system scaled payments in such a way that areas with high disease prevalence, often concentrated in deprived areas, received less remuneration per patient than those with low prevalence, and payments to practices did not fully reflect the level of illness in the practice population. The Department and the British Medical Association have agreed that payments will reflect the level of need by 2011, with consequent redistribution of payments between practices, which will incentivise GPs to reach out to those in the practice population with unmet needs.

Part Four

Ability of the NHS to influence change

4.1 Spearhead PCTs can influence change by improving access to services, improving the health of those most at risk from conditions that are the big killers and through joint working with local authorities. This part of the report covers these issues.

The Department has yet to address fully GP shortages in areas of need, and high levels of unmet need remain

4.2 Research indicates that increasing the number of primary care clinicians and access to primary care services, in areas with the greatest health need is one of the most effective ways of improving the population's health and reducing health inequalities.²⁵ The number of GPs in areas with the greatest health needs has increased in recent years but GP levels, weighted for age and need, are still lower in deprived areas (**Figure 14** overleaf). In 2008, 65 per cent of spearhead PCTs had GP levels, weighted for age and need, below the England average and 48 per cent were more than 10 per cent below the England average.

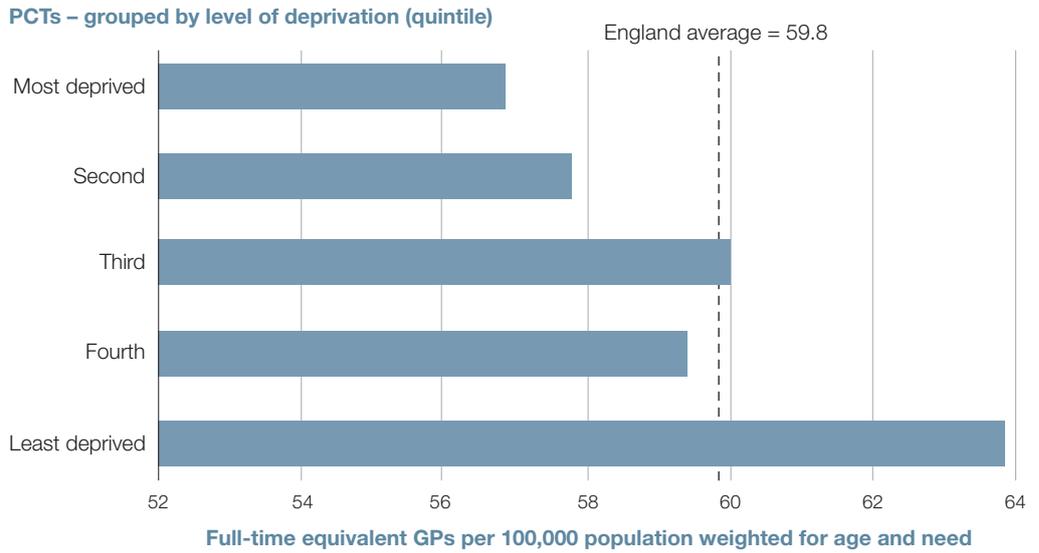
4.3 In addition, other indicators also suggest high levels of unmet need in access to effective prevention and primary care in spearhead areas. For example:

- the percentage of spearhead PCTs with higher than expected hospital admissions is greater for a number of conditions, such as coronary heart disease and stroke, than for non-spearhead PCTs (**Figure 15** overleaf); and
- the prevalence of a number of key conditions, incentivised under the Quality and Outcomes Framework, is substantially below prevalence estimates extrapolated from national surveys (**Figure 16** on page 37).

4.4 In 2007, the Department announced a £250 million access fund to establish 112 new GP practices in the areas with the fewest primary care clinicians and the greatest health needs and to develop over 150 GP-led health centres to supplement existing services.²⁶ In 2008, the Department also asked PCTs to work with GP practices and other partners to ensure that at least half of their practices offer extended opening outside core hours. In July 2009, over 75 per cent of practices were offering extended opening hours with little variation between spearhead and non-spearhead practices. The Department expects that by the end of 2010, 152 new GP practices and health centres will have opened in spearheads as part of the access fund.

Figure 14

There are less GPs, weighted for age and need, in deprived areas



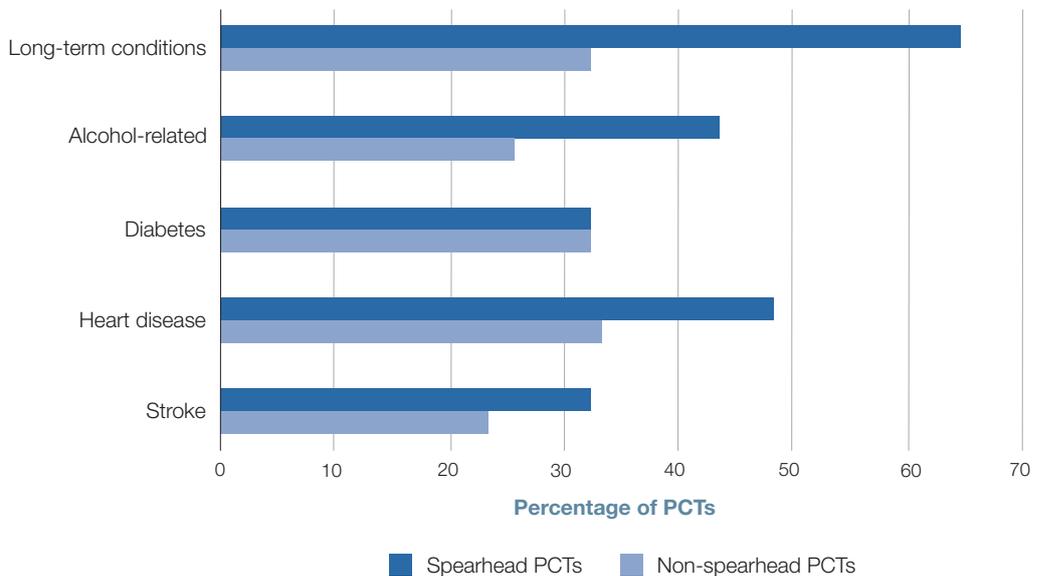
NOTE

1 The GP population figures from September 2008. The weighted populations used Office for National Statistics 2007 mid-year population estimates. Age and need weightings were based on the method used for the Department's 2008-09 PCT revenue allocations for primary medical services. Area deprivation was measured by the Index of Multiple Deprivation 2004.

Source: National Audit Office analysis of Departmental and Office for National Statistics data

Figure 15

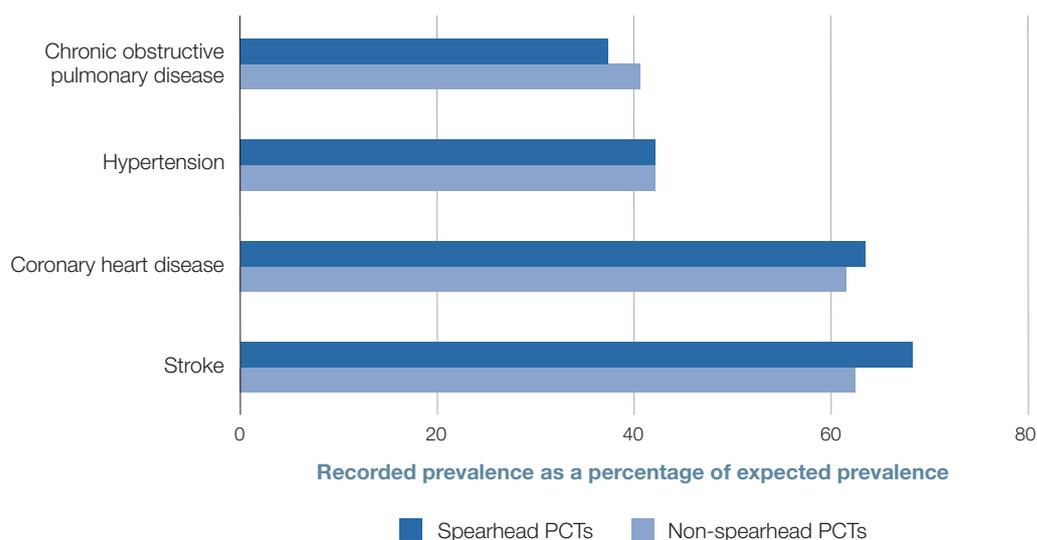
Unmet need – a large number of spearhead PCTs have higher than expected hospital admissions for a number of conditions



Source: National Audit Office analysis of Office for National Statistics data

Figure 16

Unmet need – a lot of people expected to have key health conditions are not recorded on GP registers

**NOTE**

1 Recorded prevalence data is taken from Quality and Outcomes Framework data. Expected prevalence data is taken from model-based disease prevalence data available on the Association of Public Health Observatory's website.

Source: National Audit Office analysis of Quality and Outcomes Framework and Public Health Observatory data

PCTs have focused on a number of key interventions to help them improve their performance against targets

4.5 The Department and the National Institute for Health and Clinical Excellence²⁷ (NICE) guidance²⁸ identified three key interventions that will be most effective in driving down the rate of premature deaths in deprived areas cost-effectively:²⁹

- increasing the number of smoking quitters through smoking cessation services;
- improving control of blood pressure through prescribing anti-hypertensives to patients at risk of or already diagnosed with cardiovascular disease; and
- reducing cholesterol levels through prescribing statins to patients at risk of or already diagnosed with cardiovascular disease.

4.6 Since 2006, guidance on the costs and benefits of these key interventions has been published by NICE.³⁰ Spearhead PCTs can model the impact of increasing the use of these particular interventions on their life expectancy gap using the 2007 Health Inequalities Intervention Tool³¹ and over 90 per cent of spearhead PCTs have made use of this tool. We estimate that it will cost approximately £24 million per year to implement these interventions in spearheads, based on doubling smoking cessation services and increasing the prescribing of statins and anti-hypertensives by 40 per cent, which public health consultants consider is a realistic target to achieve. To put this in context, spearhead PCTs spent £3.9 billion treating circulatory and respiratory conditions in 2007-08. The Department launched a new version of the Tool with additional interventions in 2010.

Interventions to reduce deaths from cardiovascular disease

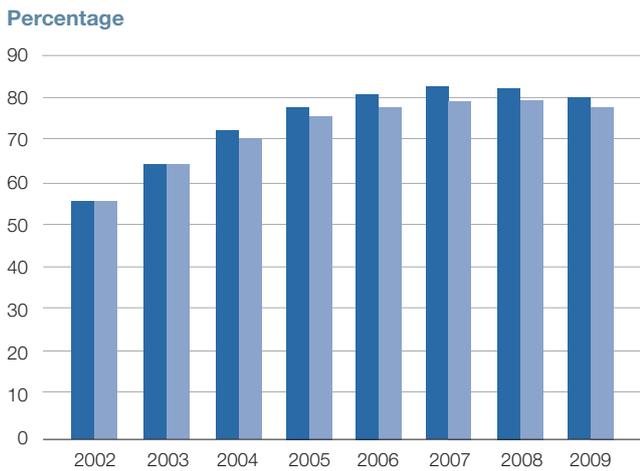
4.7 GPs are crucial in identifying those at risk from cardiovascular disease, or to stabilise the condition of those identified with this disease. The Quality and Outcomes Framework measures the extent to which GPs have identified those whose lifestyle places them at increased risk of cardiovascular disease, those with the disease, and, to a lesser extent, actions taken to reduce the risk of death. Framework achievement data indicates that gaps between spearhead and non-spearhead practices in the quality of primary care for conditions, including cardiovascular disease, have narrowed and are of now of little clinical significance (see Figure 13, page 33).

4.8 Our analysis of statin and aspirin prescribing for those at risk of, and diagnosed with, cardiovascular disease shows a consistent pattern (**Figure 17**): spearheads reach a higher proportion of the at-risk population; the gap between spearhead and non-spearhead practices increased as both improved performance after the Quality and Outcomes Framework was introduced; and, more recently, improvement levelled off or began to fall back. Increases in prescribing rates of statins since 2005-06 vary between regions but rates are similar between spearhead and non-spearhead PCTs in each region. The proportion of cheaper generic statins prescribed also varies between regions. If all spearheads prescribed the same proportion of cheaper statins as those in the top quartile in 2008-09, it would release an estimated £27 million on further prevention measures.

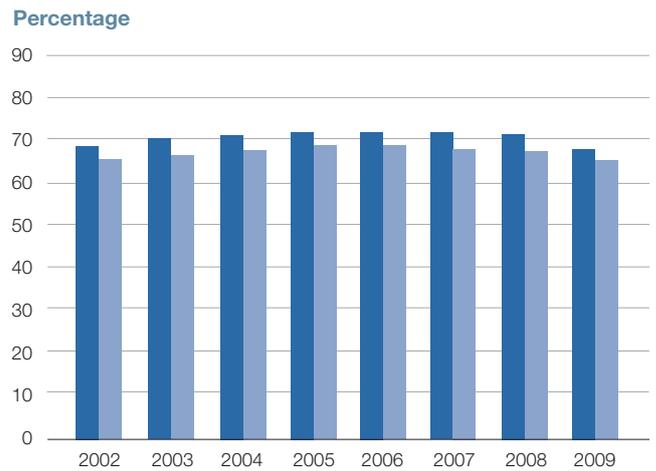
Figure 17

Performance on interventions with GP-registered patients at high risk of, or diagnosed with, cardiovascular disease has generally improved with time

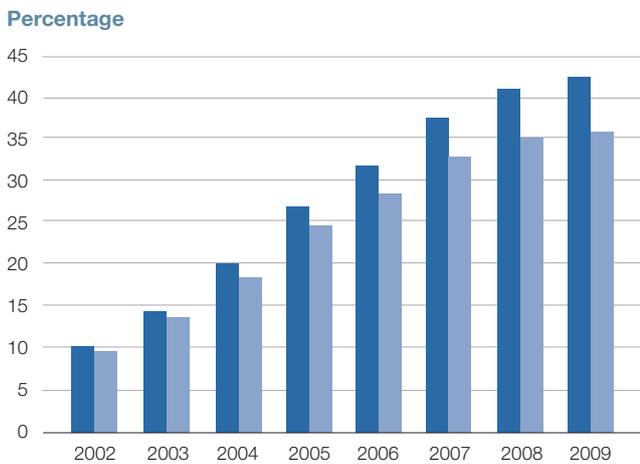
Patients with cardiovascular disease on statins



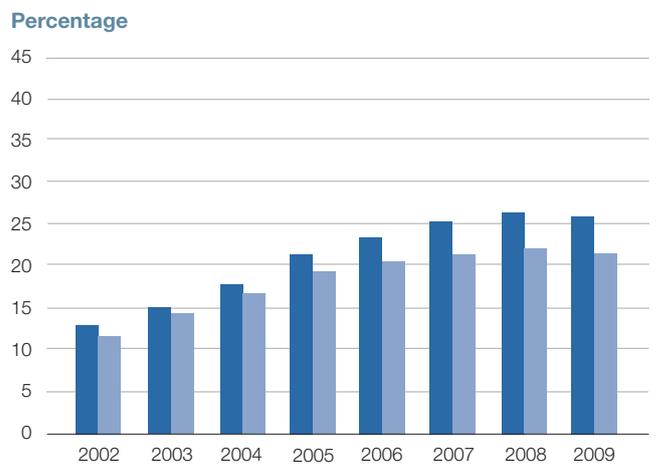
Patients with cardiovascular disease on aspirin



Patients at high risk of cardiovascular disease on statins



Patients at high risk of cardiovascular disease on aspirin



■ Spearheads ■ Non-spearheads

Source: Analysis of the QResearch database by the University of Nottingham, commissioned by the National Audit Office

4.9 Our analysis of registered patients showed that gaps between affluent and deprived groups within spearhead PCTs for six cardiovascular disease-related indicators had closed to some degree in recent years, with the exception of the percentage of those with cardiovascular disease not on aspirin.³² Our analysis of data from Lambeth indicates that in areas with large ethnic populations ethnicity is as important in control of diabetes and blood pressure as deprivation.³³

NHS Health Checks

4.10 Since April 2009, the NHS has begun to implement a programme of vascular risk assessment and management for everyone between the ages of 40-74 who has not already been diagnosed with heart disease, stroke, kidney disease or diabetes. The checks, NHS Health Checks, will assess an individual's risk of these diseases and offer a tailored package of interventions, as appropriate. By full roll-out, expected in 2012-13 (subject to the next Comprehensive Spending Review), PCTs should be inviting 20 per cent of the eligible cohort each year on a five-year call and recall basis. It is up to PCTs to decide how best to offer the check locally, for example, through GPs, pharmacies, outreach of other services or a mixture of all of these.

4.11 NHS Health Checks have the potential to make a major contribution to improving life expectancy and could, if implemented effectively, start to help address the 2010 life expectancy target. This would require spearhead PCTs to identify and offer a check to those at higher risk of vascular disease first. Without targeting, broader health inequalities could be worsened because affluent groups are more disposed to respond to opportunities for preventive self-care when offered.

Smoking cessation

4.12 NHS Stop Smoking services and primary care have made positive efforts in spearhead areas despite being faced with a more committed smoking population, but they rarely adopt the most cost-effective approach. Smoking levels are of central importance to the reduction of health inequalities because smoking kills tens of thousands each year, many of whom live in deprived areas. Work undertaken by the Care Quality Commission³⁴ indicates average smoking rates of 27 per cent in spearheads compared to a rate of 21 per cent among the general population.³⁵

4.13 Spearheads face a larger challenge because 'routine and manual' households, which contain the most committed smokers, are disproportionately represented in deprived areas. Our analysis shows that in 2008-09, success rates for people entering NHS smoking cessation programmes were lower in spearheads than in non-spearheads, 48 per cent against 52 per cent,³⁶ with 56 per cent of spearheads achieving their planned rate of successful quitters against 66 per cent of non-spearheads.³⁷ The Department issued guidance in July 2009 to encourage greater targeting of smokers in routine and manual households.³⁸

4.14 Despite the difficulties, there are indications that spearheads are making positive efforts to close the gap on non-spearheads. For example, spearheads are reaching a greater proportion of their smoking populations – in spearheads roughly 8 per cent of smokers set a quit date and 4 per cent successfully quit, against 6 and 3 per cent respectively for non-spearheads. As a result, between 2004-05 and 2008-09 the number of successful quitters in spearheads has increased sharply (29 per cent) compared to non-spearheads (4 per cent).

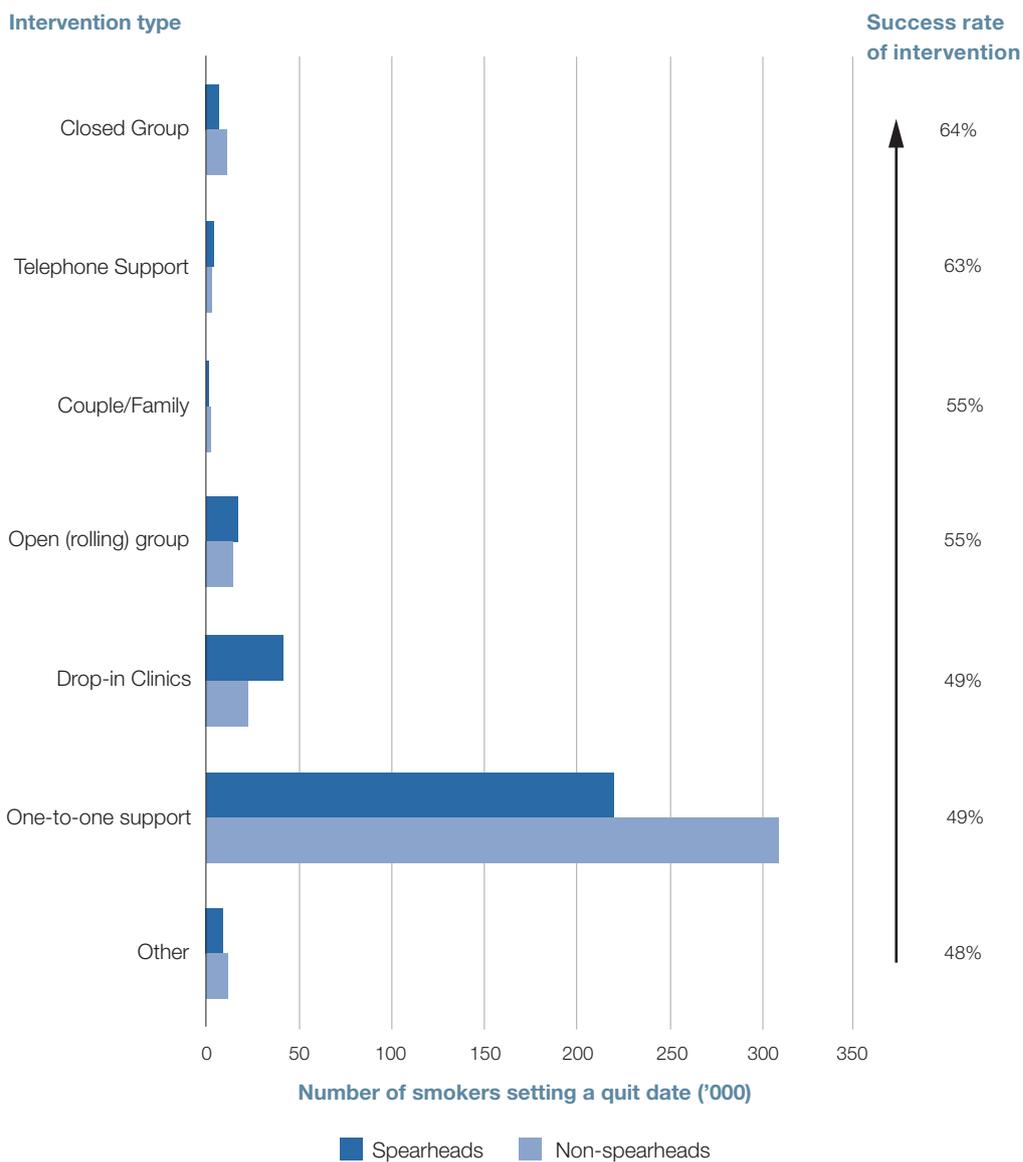
4.15 There are, however, considerable geographical variations in the approach taken by spearheads. The NHS offers a number of different types of intervention to encourage smokers to stop, but NHS commissioners largely favour ‘one-to-one’ support which has an overall success rate in terms of stopping smoking of 49 per cent, one of the least effective types of intervention (**Figure 18** overleaf). Only two per cent of smokers in spearheads are processed through the most effective and potentially cost-effective³⁹ intervention – a structured, multi-session group course with pre-arranged start and finish dates and a pre-booked client group. There are also large variations in spend per quitter between spearheads (**Figure 19** on page 43), possibly reflecting different delivery methods: the North West favours core NHS Stop Smoking services more than other regions, the North East uses primary care more and London makes more use of pharmacies.

4.16 Between 2007-08 and 2009-10, even though the average spend per spearhead PCT on smoking cessation services is expected to increase by around 47 per cent,⁴⁰ PCT and strategic health authority projections expect the number of successful four-week quitters to remain almost constant. This partly reflects the reducing impact of the 2007 Smokefree legislation and more rigorous validation of results.

4.17 Other actions taken by the Government to reduce smoking across England such as the Smokefree law or advertising restrictions will have impacted on smoking rates in spearhead areas without direct NHS involvement.

Figure 18

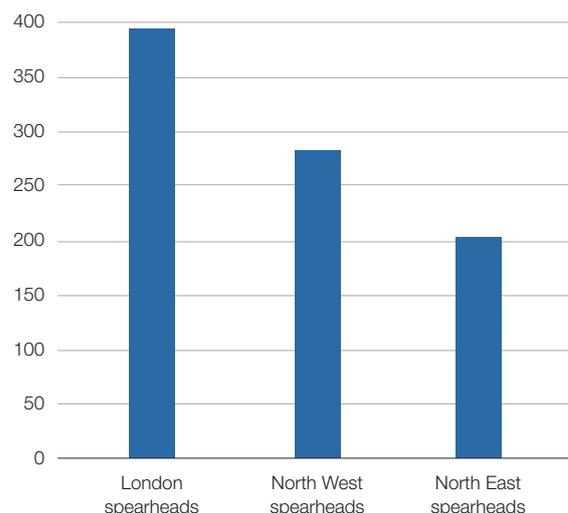
NHS commissioners largely favour one of the least effective types of smoking cessation intervention, 2008-09



Source: National Audit Office analysis of NHS Information Centre data

Figure 19

There are regional variations in spearhead smoking cessation spend per smoking quitter

Spend per smoking quitter in 2008-09 (£)

Source: National Audit Office analysis of primary care trusts' survey returns and Departmental data

Longer-term primary prevention activity has an important role to play

4.18 The Department has highlighted the role of prevention in tackling health inequalities and meeting future demographic changes.⁴¹ In 2006-07, 3.6 per cent of the total health expenditure in England was spent on prevention and public health (excluding pharmaceuticals), up from 1.9 per cent in 1999.⁴² Around two-thirds of prevention expenditure is directed towards non-communicable diseases such as cardiovascular diseases and cancer. Although they are of a lower priority in relation to the 2010 life expectancy target, topics such as obesity and alcohol are a concern because of their longer-term impacts on health inequalities. Sir Michael Marmot's review covers the issue of action to encourage longer-term prevention beyond 2010.

4.19 Since 2003-04, the Department's programme budgeting analysis has included a category for expenditure on prevention of illness and promotion of good health, including smoking cessation services. Only about two per cent of PCTs' spend is in this category, with spearhead expenditure, weighted for need, of £32 per head in 2007-08 – just under 10 per cent more than non-spearheads. Both have increased spend by about 30 per cent in the four years since spearhead creation. Despite the emphasis placed on prevention by the Department, only 10 of the 146 Quality and Outcomes Framework indicators relate to primary prevention. For example, there are no incentives for GPs to take action to help obese patients.

4.20 The evidence base on effective public health interventions is improving but is generally limited to improvements in population health. To date, few appraisals have focused on the impact of interventions on different groups within the population.⁴³

Greater partnership working is taking place to tackle health inequalities but there is no clear evidence on health outcomes

4.21 The Department sees partnership working between the NHS and local authorities as crucial to tackling health inequalities, especially some of the wider determinants of health.⁴⁴ Joint Strategic Needs Assessments and Local Area Agreements – both statutory requirements from April 2008 – are used locally to identify need and local priorities for action and the all-age all-cause mortality indicator forms part of both the NHS' and local government's performance management systems. Results from our survey of spearhead PCTs and local authorities indicate the increasing use of joint appointments across both organisations in a number of positions including directors of public health.

4.22 As yet there is no clear evidence of the effects of public health partnerships on health outcomes.⁴⁵ In part, this is because the research literature on partnerships tends to focus on process rather than outcomes. This lack of evidence does not mean that closer working does not contribute to improved outcomes, but it is likely that any such contribution will not feed through into outcomes for a number of years.

Appendix One

Tackling health inequalities – major departmental publications

Year	Title	Description
1998	<i>Independent Inquiry into Inequalities in Health Report</i>	Independent review of health inequalities by Sir Donald Acheson.
2000	<i>The NHS Plan</i>	Announced the creation of a specific PSA target to reduce health inequalities, officially announced in February 2001.
2002	<i>Tackling health inequalities: A cross-cutting review</i>	Department of Health/HM Treasury joint review to establish priorities for future action to address health inequalities.
2003	<i>Tackling health inequalities: A Programme for Action</i>	A response to the cross-cutting review which established 82 indicators for improvement across 12 departments by 2006.
2004	<i>HM Treasury Spending Review 2004</i>	Health inequalities PSA target retained but amended to measure the gap between England and spearhead local authorities from April 2005.
2005	<i>Tackling health inequalities: what works</i>	Current thinking on cost-effective interventions to reduce health inequalities.
2006	<i>NHS Operating Framework 2006-07</i>	Health inequalities named as one of the NHS' top six priorities.
2008	<i>Tackling health inequalities: status report on the Programme for Action</i>	Update on progress against the PSA target.
2008	<i>Tackling health inequalities: progress and next steps</i>	Actions to re-focus attention on achieving the 2010 target in the wake of the completion of the Programme for Action.
2008	<i>Systematically addressing health inequalities</i>	Good practice identified from early visits by the National Support Team for Health inequalities.
2008	<i>Tackling health inequalities: 2005-07 policy and data update for the 2010 national target</i>	Update on progress against the PSA target.
2009	<i>Government response to the Health Select Committee report on health inequalities</i>	Government's statement of actions across departments that address Parliamentary findings and recommendations about work to tackle health inequalities.
2009	<i>Tackling health inequalities: ten years on</i>	Actions taken in the ten years since the Acheson Report and lessons learned.
2009	<i>Tackling health inequalities: 2006-08 policy and data update for the 2010 national target</i>	Update on progress against the PSA target.
2010	<i>Fair Society, Healthy Lives - Strategic review of health inequalities in England post-2010</i>	Independent review, commissioned by the Department, of the wider social and health determinants of health inequalities and action to be taken post-2010, led by Sir Michael Marmot.

Source: National Audit Office literature review

Appendix Two

Methodology

The main elements of the fieldwork, which took place between May and September 2009, were:

Selected method	Purpose
<p>Evaluation of secondary data including</p> <ul style="list-style-type: none"> ● NHS allocation and expenditure data ● Quality and Outcomes Framework data ● Expected prevalence data for key medical conditions ● Outcomes data for key medical conditions ● Data underlying health inequalities targets 	<p>To identify performance, trends and health inequalities in</p> <ul style="list-style-type: none"> ● Funding ● Access to health services ● Prevalence of key conditions ● Outcomes for key conditions ● Key initiatives such as smoking cessation services <p>To measure progress against key targets.</p>
<p>Review of key documents including</p> <ul style="list-style-type: none"> ● Regional and local strategic documents ● Audit Commission reports ● World Class Commissioning panel reports ● Policy documents and guidelines on health inequalities and commissioning ● Evaluation reports 	<p>To identify:</p> <ul style="list-style-type: none"> ● How national policy and support arrangements have been implemented ● Key levers with the health system for addressing health inequalities ● Key issues in the delivery of programmes and policies to help tackle health inequalities ● How policy implementation in England compares with other parts of the UK
<p>Semi-structured interviews with</p> <ul style="list-style-type: none"> ● Staff from the Department of Health ● NHS staff, local authorities and other key delivery partners ● Key stakeholders with an interest in health inequalities ● Health policy staff in Scotland and Wales 	
<p>Surveys of primary care trusts (PCTs), local authorities and Local Involvement Networks in spearhead areas (see report at: www.nao.org.uk).</p>	<p>PCT survey: to establish local actions to tackle health inequalities, to evaluate support PCTs receive to help tackle health inequalities and partnership working between PCTs and local authorities. 61 out of 62 spearhead PCTs submitted a return.</p> <p>Local authority survey: to establish the role of Overview and Scrutiny Committees in helping to tackle health inequalities, to evaluate support local authorities receive to help tackle health inequalities and partnership working between PCTs and local authorities. 42 out of 70 spearhead local authorities submitted a return.</p> <p>Local Involvement Network survey: to establish community views on tackling health inequalities. 22 returns were received.</p>

Selected method	Purpose
Examination of health inequalities in one spearhead area undertaken by consultants (see report at: www.nao.org.uk).	To evaluate changes in health inequalities over time in one spearhead area, Lambeth.
Examination of patient level data in spearhead and non-spearhead areas undertaken by consultants (see report at: www.nao.org.uk).	To evaluate the effect of spearhead status on differences in health inequalities in primary care, both between spearhead and non-spearhead areas and between affluent and deprived groups.
Expert Panel	To confirm the reasonableness of our methodology, findings and conclusions.

A more detailed methodology is available at: www.nao.org.uk/health-inequalities-2010.

Endnotes

- 1 Reports by the Comptroller and Auditor General, *Progress in improving stroke care*, HC 291 Session 2009-10 and *The NHS cancer plan – a progress report*, HC 343 Session 2004-05.
- 2 The target also contained a specific objective to reduce inequalities in infant mortality.
- 3 *The NHS Plan: A plan for investment, a plan for reform*, Cm 4818-I, 2000.
- 4 Analysis undertaken by the Department, 2003. Referenced in *Tackling health inequalities: 2004-06 data and policy update for the 2010 national target*, Department of Health, 2007.
- 5 Socio-economic classification by the Office for National Statistics.
- 6 HM Treasury/Department of Health, *Tackling health inequalities: a summary of the cross-cutting review*, 2002.
- 7 *Tackling health inequalities: a Programme for Action*, Department of Health, 2003.
- 8 *Improvement, expansion and reform: the next 3 years*, Department of Health, 2003.
- 9 *National standards, local action*, Department of Health, 2004.
- 10 *Tackling health inequalities: ten years on*, Department of Health, 2009.
- 11 *Operational Plans 2008-09 - 2010-11 – national planning guidance and ‘vital signs’*, Department of Health, 2008.
- 12 Reports by the Comptroller and Audit General – *Pay modernisation: a new contract for NHS consultants in England*, HC 335 Session 2006-07; *NHS pay modernisation: new contracts for general practices in England*, HC 307 Session 2007-08 and *NHS pay modernisation in England: agenda for change*, HC 125 Session 2008-09.
- 13 See *National Audit Office survey of Primary Care Trusts and Local Authorities*, available on our website – www.nao.org.uk.
- 14 Indicators include patients at risk of cardiovascular disease, statin usage in patients with established cardiovascular disease, patients with uncontrolled blood pressure not on medication, type 2 diabetes, obesity levels and smoking levels. See *Health inequalities in primary care: effect of spearhead PCTs 2002-09*, available on our website – www.nao.org.uk.
- 15 *Fair society, healthy lives – strategic review of health inequalities in England post-2010*, 2010.

- 16 *Operational plans 2008-09 – 2010-11 – national planning guidance and ‘vital signs’*, Department of Health, 2008 and *The new performance framework for local authorities and local authority partnerships: single set of national indicators*, Department for Community and Local Government, 2007.
- 17 *The Annual Health Check 2008-09: assessing and rating the NHS*, Care Quality Commission, 2008.
- 18 Although the NHS’ interventions to improve lifestyles can also influence indirectly some of these other factors.
- 19 *Excellence in tobacco control: 10 high impact changes to achieve tobacco control*, Department of Health, 2008.
- 20 *Healthy balance: a review of public health performance and spending*, Audit Commission, 2010.
- 21 Birmingham, Bolton, Bradford, Greenwich, Hull, Leicester, Liverpool, Manchester, Newham, Nottingham, Sandwell, Sunderland and Wigan.
- 22 *Commissioning and behavioural change: kicking bad habits*, Boyce et al., Kings Fund, 2008.
- 23 BP5, the percentage of patients with hypertension in whom the last blood pressure reading (measured in the last 9 months) is 150/90 or less.
- 24 Patients may have both discretionary and non-discretionary reasons to be excepted, but only one reason is recorded.
- 25 For example, *Primary health care*, World Health Organisation, 2008.
- 26 *Our NHS, our future: Next stage review interim report*, Department of Health, 2007.
- 27 NICE provides guidance for healthcare organisations on how best to meet clinical and public health need cost-effectively in England and Wales.
- 28 *Reducing the rate of premature deaths from cardiovascular disease and other smoking-related diseases: finding and supporting those most at risk and improving access to services*, NICE public health guidance 15, 2008.
- 29 In terms of cost per quality adjusted life year.
- 30 *Hypertension: management of hypertension in adults in primary care*, PCT costing template, 2006; *Cardiovascular risk assessment and the modification of blood lipids for the primary and secondary prevention of cardiovascular disease*, PCT costing template, 2008; *Smoking cessation services in primary care, pharmacies, local authorities and workplaces, particularly for manual working groups, pregnant women and hard to reach communities*, PCT costing template, 2008.
- 31 Developed by the Association of Public Health Observatories and the Department, and available at www.lho.org.uk.

- 32 The indicators are levels of obesity, levels of type 2 diabetes, patients with uncontrolled blood pressure not on medication, patients at risk of cardiovascular disease and statin and aspirin usage in patients with established cardiovascular disease. See *Health inequalities in primary care: effect of spearhead PCTs 2002-2009*, University of Nottingham. Available on our website – www.nao.org.uk.
- 33 See *Inequalities in health due to ethnicity and social deprivation – an analysis of primary care data from one inner-city area over a three year period*, available on our website – www.nao.org.uk.
- 34 *Closing the gap – tackling cardiovascular disease and health inequalities by prescribing statins and Stop Smoking services*, Care Quality Commission, 2009.
- 35 *General Household Survey*, Office for National Statistics, 2007.
- 36 There is a strong correlation between spearhead PCTs achieving high quit rates and those targeting smaller proportions of the smoking population. Analysis carried out on our behalf by the University of Nottingham also showed that within spearheads (and non-spearheads) the inequalities gap in smoking rates between the least and most deprived areas had widened in recent years.
- 37 *The annual health check 2008-09: assessing and rating the NHS*, Care Quality Commission, 2008.
- 38 *Tackling health inequalities – Targeting routine and manual smokers in support of the PSA smoking prevalence and health inequality targets*, Department of Health, 2009.
- 39 NICE guidance, *Smoking cessation services – costing template* indicates that group work is cheaper per head than one-to-one sessions.
- 40 Based on PCT survey responses to the National Audit Office. The data from the survey have not been subject to audit and some of the information collected regarding spend may vary due to differing interpretations by PCTs responding to the survey.
- 41 *Our health, our care, our say – a new direction for community services*, Department of Health, Cm 6737, 2006.
- 42 *Prevention and preventative spending*, Health England report No.2, 2009.
- 43 *Strategic review of health inequalities in England, priority public health conditions, summary task group report*, Maryon-Davis et. al., 2008.
- 44 *Tackling health inequalities: 2007 status report on Programme for Action*, Department of Health, 2008.
- 45 *Partners in health? A systematic review of the impact of organisational partnerships on public health outcomes in England between 1997 and 2008*. Journal of Public Health, 2009.



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