



National Audit Office

Department of Health

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

Ordered by the House of Commons
to be printed on 30 June 2010

Report by the Comptroller and Auditor General

HC 186 Session 2010–2011
2 July 2010

London: The Stationery Office
£14.75

This report has been prepared under Section 6 of the National Audit Act 1983 for presentation to the House of Commons in accordance with Section 9 of the Act.

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28 June 2010

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?

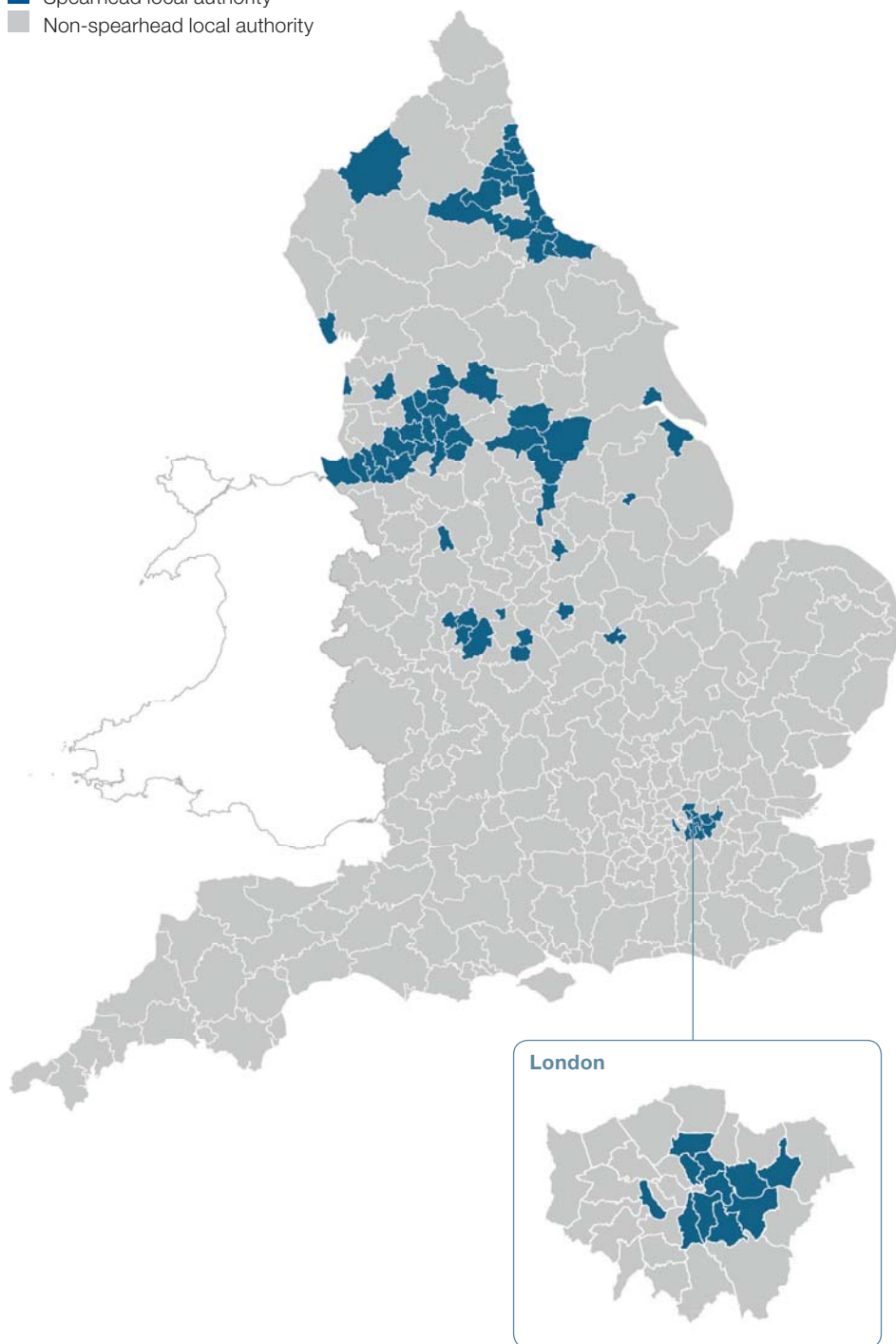
- 28 per cent of population in England; including
- 44 per cent of the black and ethnic minority population of England.

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.