

# Health inequalities in Scotland



 AUDIT SCOTLAND

Prepared for the Auditor General for Scotland and the Accounts Commission  
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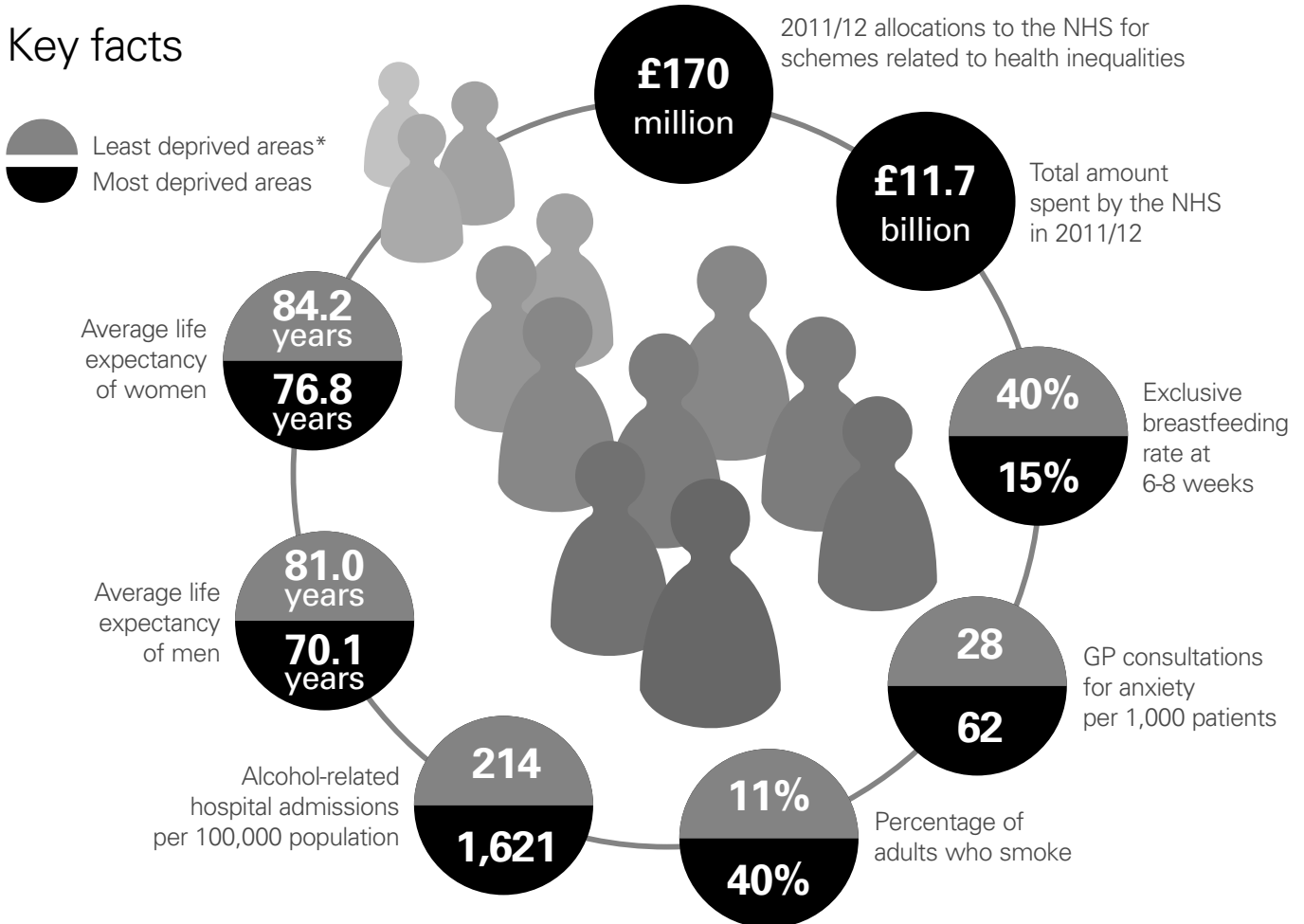
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# Summary

## Key facts



\* These comparisons refer to people living in the one-fifth most deprived and one-fifth least deprived areas.

There are significant and long-standing health inequalities in Scotland. The public sector can make better use of its resources to address these challenges.

## Background

**1.** Tackling health inequalities is challenging. Health inequalities are influenced by a wide range of factors including access to education, employment and good housing; equitable access to healthcare; individuals' circumstances and behaviours, such as their diet and how much they drink, smoke or exercise; and income levels.<sup>1</sup>

**2.** Given the complex and long-term nature of health inequalities, no single organisation can address health inequalities on its own. Community Planning Partnerships (CPPs) are responsible for bringing all the relevant organisations together locally and for taking the lead in tackling health inequalities.<sup>2</sup> Many public sector bodies and professionals contribute to reducing health inequalities; it is not just the responsibility of health services. Councils have a major role through their social care, education, housing, leisure and regeneration services. The voluntary sector also has a role in reducing local health inequalities.

**3.** There have been long-term increases in average life expectancy in Scotland and considerable improvements in overall health. However, there are still significant differences in life expectancy and health depending on deprivation, age, gender, where people live, and ethnic group. More data is available about the links between deprivation and health inequalities so we are able to provide more comment on deprivation in this report.

**4.** Reducing health inequalities will help increase life expectancy and improve the health of people in disadvantaged groups. It could also bring considerable economic benefits. For example, if the death rate in the most deprived groups in Scotland improved then the estimated average economic gains would be around £10 billion (at 2002 prices); and if the death rate across the whole population fell to the level in the least deprived areas, the estimated economic benefit for Scotland could exceed £20 billion.<sup>3</sup> These are conservative estimates as they relate only to differences in life expectancy and do not include other health inequalities.

**5.** Tackling the problems most commonly associated with health inequalities would also help to reduce the direct costs to the NHS and wider societal costs. For example, the Scottish Public Health Observatory has estimated that a one per cent reduction in smoking prevalence would save around 540 lives a year; reduce smoking-attributable hospital admissions by around 2,300; and reduce estimated NHS spending on smoking-related illness by between £13 million and £21 million.<sup>4</sup>

**6.** In 2007, the Scottish Government established a Ministerial Task Force for Health Inequalities to identify and prioritise practical actions to reduce the most significant and widening health inequalities. The Task Force published its report, *Equally Well*, in June 2008. This considered the evidence for health inequalities in Scotland and identified a range of priorities where action is most

needed to tackle health inequalities, including: children's early years; tackling poverty and increasing employment; physical environments and transport; and access to health and social care services. The report also included recommendations for the Scottish Government, NHS boards, councils and other public sector bodies. The Task Force published a review of *Equally Well* in 2010 which examined progress since the publication of *Equally Well* and made more recommendations for addressing health inequalities. The Task Force reconvened in November 2012.

**7.** Reducing health inequalities has been a priority for successive governments in Scotland with the introduction of major legislation supporting this aim, such as the ban on smoking in public places and minimum pricing for alcohol. The Scottish Government's 2012/13 spending review reiterated its commitment to addressing health inequalities, and in 2011/12 it allocated around £170 million to NHS boards to directly address health-related issues associated with inequalities.<sup>5</sup>

**8.** Shifting resources from dealing with the consequences of health inequalities to effective early intervention and access to preventative services is essential to tackling health inequalities.<sup>6</sup> The Scottish Government's policies prioritise preventing social problems rather than reacting to them but our previous work has highlighted that shifting resources will be challenging for the public sector, particularly in the current financial climate.<sup>7 8 9</sup>

1 *The Spirit Level*, R Wilkinson and K Pickett, Bloomsbury Press, 2009.

2 All council areas have a CPP to lead and manage community planning. CPPs are required to engage with communities, report on progress, and publish information on how they have implemented their duties and how outcomes have improved as a result. CPPs are not statutory committees of a council, or public bodies in their own right. They do not directly employ staff or deliver public services.

3 These estimates are based on a pro-rata comparison with estimates produced for the Marmot Review of health inequalities in England ('The economic benefits of reducing health inequalities in England and Wales', S Mazzucco, S Meggiolaro and M Suhrcke, background paper for the Marmot Review, January 2010).

4 *ScotPHO Smoking Ready Reckoner – 2011 Edition*, Scottish Public Health Observatory, June 2012.

5 *Scottish Spending Review 2011 and Draft Budget 2012-13*, Scottish Government, September 2011.

6 *Equally Well*, Scottish Government, 2008; *Equally Well Review 2010*, Scottish Government, 2010; *Fair Society, Healthy Lives*, Marmot Review, 2010.

7 *Report on preventative spending*, Scottish Parliament Finance Committee, 2011.

8 *Report of the Commission on the future delivery of public services*, 2011.

9 *Review of Community Health Partnerships*, Audit Scotland, 2011; *Commissioning social care*, Audit Scotland, 2012.

## About the audit

**9.** Our audit aimed to assess how well public sector organisations are working together to tackle health inequalities. Given the scale and complexity of the problem, we have not examined in detail the impact of wider policies such as education, employment and housing on reducing health inequalities. Instead we have focused on how bodies work together to identify need, target resources and monitor their collective performance in reducing health inequalities. In this report, we:

- outline the scale of health inequalities and the effects on specific groups of people
- estimate how much the public sector spends on reducing health inequalities, although information on this was limited
- look at the quality of evaluations
- review how well CPPs ensure that there is a coordinated focus on health inequalities
- look at whether access to health services is equitable for all groups within the population, particularly people living in deprived areas.

**10.** Evidence for this audit is based on an analysis of national and local strategies and evaluations; finance and performance data; interviews with Scottish Government officials, NHS and council staff, academics and other relevant professionals; a review of CPP annual reports; and focus groups with a range of staff. We also visited five *Equally Well* test sites to review their progress to date. Further details of our methodology are set out in Appendix 1.

Appendix 2 lists members of our Project Advisory Group, who gave

advice and feedback at key stages of the audit, and Appendix 3 presents a summary of progress against national strategies for improving health and addressing health inequalities.

**11.** This report is structured into four parts:

- Health inequalities in Scotland (Part 1)
- Spending on reducing health inequalities (Part 2)
- Local health services for reducing health inequalities (Part 3)
- Effectiveness of approaches to reducing health inequalities (Part 4).

**12.** In addition to this report, we have also published a range of accompanying documents on our website:

- a detailed analysis of the extent of health inequalities across a range of indicators
- a report on our focus groups with CPP managers, Community Health Partnership (CHP) managers and frontline staff
- a checklist for CPPs to help improve their approach to addressing health inequalities
- a checklist for non-executive and elected members to assess how well health inequalities are being addressed in their local areas.<sup>10 11</sup>

## Key messages

- Overall health has improved over the last 50 years but health inequalities remain a significant and long-standing problem in Scotland. Deprivation is a major factor in health inequalities, with people in more affluent areas living longer and having significantly better health. Health inequalities are highly localised and vary widely within individual NHS board and council areas. Children in deprived areas have significantly worse health than those in more affluent areas.
- The Scottish Government takes account of deprivation, rurality and remoteness, and other local needs in allocating funding to NHS boards and councils. However, it is not clear how NHS boards and councils allocate resources to target local areas with the greatest needs.
- The distribution of primary care services across Scotland does not fully reflect the higher levels of ill health and wider needs found in deprived areas, or the need for more preventative healthcare. Patterns of access to hospital services also vary among different groups within the population, with people from more deprived areas tending to have poorer access and outcomes.
- Reducing health inequalities requires effective partnership working across a range of organisations. However, there may be a lack of shared understanding among local organisations about what is meant by 'health inequalities'

<sup>10</sup> CHPs are responsible for coordinating a wide range of primary and community health services in the local areas, including GP services, general dental services, community-related health services and mental health services. We use the term CHP in this report to refer to both health-only structures and Community Health and Care Partnerships (CHCPs) which are integrated health and social care structures. The Scottish Government plans to integrate adult health and social care services, and to replace CHPs with Health and Social Care Partnerships.

<sup>11</sup> [www.audit-scotland.gov.uk](http://www.audit-scotland.gov.uk)

and greater clarity is needed about organisations' roles and responsibilities.

- National policies and strategies which aim to improve health and reduce health inequalities have so far shown limited evidence of impact. Changes will only be apparent in the long term but measures of short-term impact are important to demonstrate progress towards policy goals. Many initiatives to reduce health inequalities have lacked a clear focus from the outset on cost effectiveness and outcome measures. This means that assessing value for money is difficult.
- Current performance measures do not provide a clear picture of progress. CPPs' reports on delivering their Single Outcome Agreements (SOAs) are weak in the quality and range of evidence used to track progress in reducing health inequalities, and differences among SOAs means that a Scotland-wide picture is hard to identify.

### Key recommendations

The Scottish Government should:

- introduce national indicators to specifically monitor progress in reducing health inequalities and report on progress.

The Scottish Government and NHS boards should:

- review the distribution of primary care services to ensure that needs associated with higher levels of deprivation are adequately resourced
- include measurable outcomes in the GP contract to monitor progress towards tackling health inequalities, and ensure

that the Quality and Outcomes Framework is specifically designed to help reduce health inequalities.

The Scottish Government and CPPs should:

- ensure that cost effectiveness is built into evaluations of initiatives for reducing health inequalities from the start
- align and rationalise the various performance measures to provide a clear indication of progress in reducing health inequalities.

CPPs should:

- ensure that all partners are clear about their respective roles, responsibilities and resources in tackling health inequalities, and take shared ownership and responsibility for actions aimed at reducing health inequalities
- build robust evaluation, using all available data and including outcome measures and associated costs, into local initiatives aimed at reducing health inequalities
- include in SOAs clear outcome measures for reducing health inequalities which demonstrate impact, and improve the transparency of their performance reporting.

NHS boards should:

- monitor the use of primary care, preventative and early detection services by different groups, particularly those from more deprived areas. If this identifies systemic under-representation of particular groups, NHS boards should take a targeted approach to improve uptake
- monitor the use of hospital services by different groups

and use this information to identify whether specific action is needed to help particular groups access services.

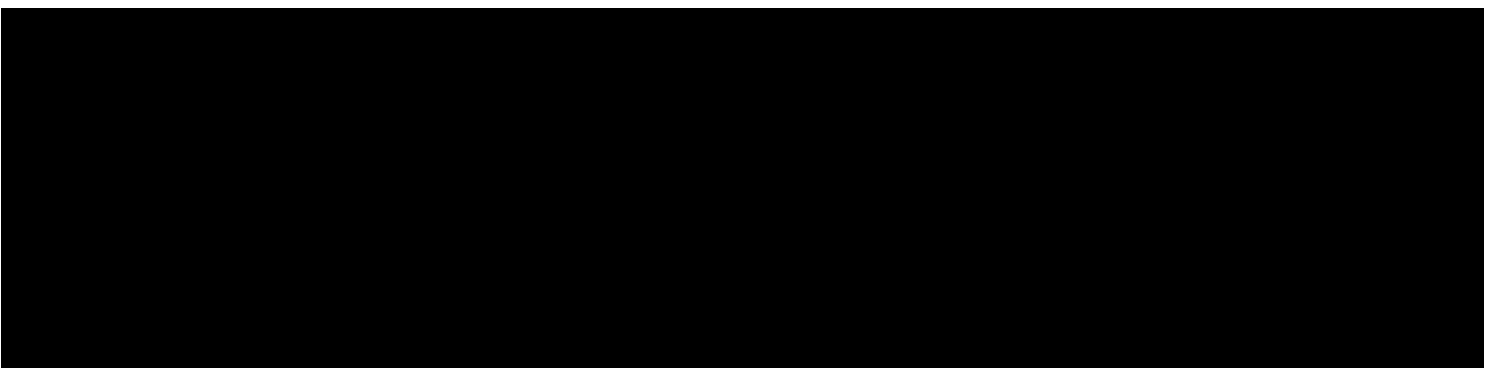
NHS boards and councils should:

- identify what they collectively spend on reducing health inequalities locally, and work together to ensure that resources are targeted at those with the greatest need.

# Part 1. Health inequalities in Scotland



The health of people in Scotland continues to improve but significant inequalities remain.





**Key messages**

- Overall health has improved over the last 50 years but deep-seated inequalities remain. Deprivation is the key determinant of health inequalities although age, gender and ethnicity are also factors. Health inequalities are highly localised and vary widely within individual NHS board and council areas.
- Children in the most deprived areas have significantly worse health compared to children living in the least deprived areas. They are more likely to have a lower birthweight, poorer dental health, higher obesity levels and higher rates of teenage pregnancy. They are also less likely to be breastfed, which is associated with a healthy start in life.
- There is a mixed picture of progress in tackling health inequalities. For some indicators, such as deaths from coronary heart disease, inequalities have decreased but other indicators, such as healthy life expectancy, mental health, smoking, and alcohol and drug misuse, remain significantly worse in the most deprived parts of Scotland.

**13.** Health inequalities are linked to a range of factors that are complex and interrelated. For example, genetic factors and poor housing can have a major effect on an individual's health over time, and these are likely to be exacerbated by harmful behaviours such as smoking, alcohol misuse and a lack of exercise. Public services in Scotland can address some of these factors, for example by improving social housing or access to sports facilities. Broader UK and global factors, such as the current economic downturn, also play a part.

**14.** Health and life expectancy generally worsen as deprivation levels increase. For example, the incidence of low birthweight and lung diseases are both higher in deprived areas, with the latter linked to higher rates of smoking in more disadvantaged groups. But other conditions such as high blood pressure and high cholesterol are not so directly associated with deprivation although they are risk factors for major illnesses that are strongly linked to deprivation, such as cardiovascular disease.<sup>12</sup> Binge drinking is more common among men living in the most deprived areas, but levels of

weekly alcohol consumption vary across the whole population and are not linked to deprivation. There are also gender differences in terms of inequalities; for example, women living in more deprived areas are more likely to be obese, but this pattern is less evident among men.

**People in deprived areas have lower life expectancy**

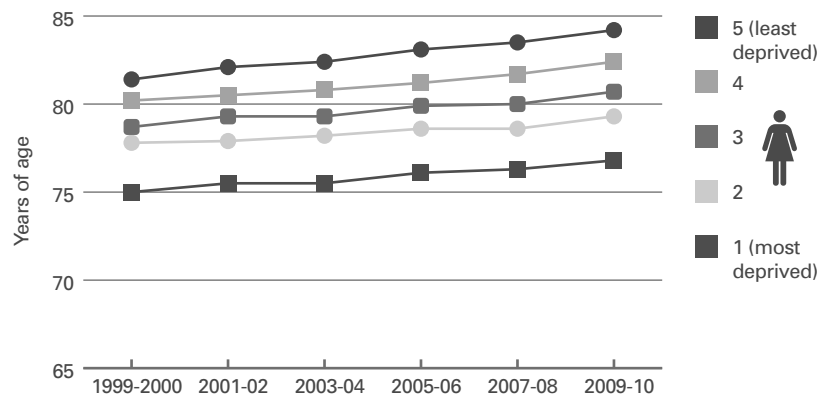
**15.** Overall life expectancy has increased in Scotland in recent years but continues to be closely associated with deprivation (Exhibit 1). Between 1999-2000 and 2009-10, the average

**Exhibit 1**

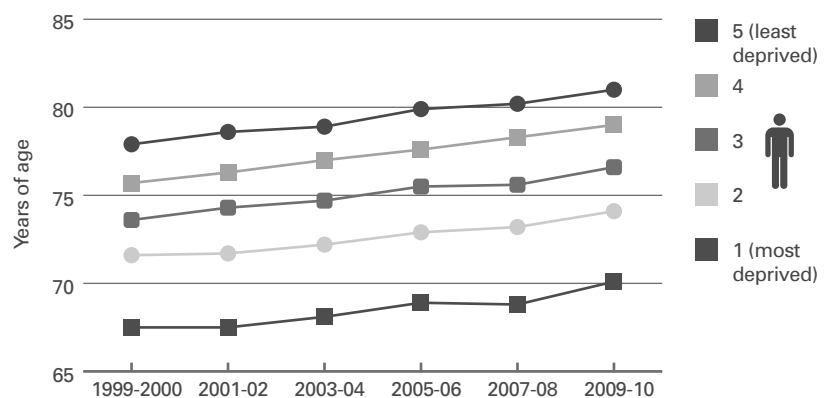
**Average life expectancy at birth, 1999-2000 to 2009-10**

Average life expectancy has increased but people in the least deprived areas still live longer than people living in the most deprived areas, and the gap has increased for women.

**Females**



**Males**



Source: Scottish Public Health Observatory, 2012

12 *Inequalities in health in Scotland: what are they and what can we do about them?*, S Macintyre, MRC Social and Public Health Sciences Unit, 2007.

life expectancy of men living in the least deprived areas remained around 11 years higher than in the most deprived areas but the corresponding difference for women increased from around 6.5 years to around 7.5 years. Life expectancy can vary widely within individual NHS board and council areas. For example, between 2006 and 2010, the average life expectancy among males in the most deprived areas of Renfrewshire was around 66 years which was nine years less than in the rest of Renfrewshire.<sup>13</sup>

**16.** Women tend to live longer than men but have more years living in poorer health. In 2009-10, average healthy life expectancy for women was around 2.5 years higher than for men, although this difference has fallen in recent years.<sup>14</sup> Between 1999-2000 and 2007-08, healthy life expectancy increased by around three years for men (from 65.1 to 68.0) and over two years for women (from 68.2 to 70.5).<sup>15</sup> The average healthy life expectancy of people living in the least deprived areas in 2009-10 was around 18 years higher than people living in the most deprived areas.<sup>16</sup>

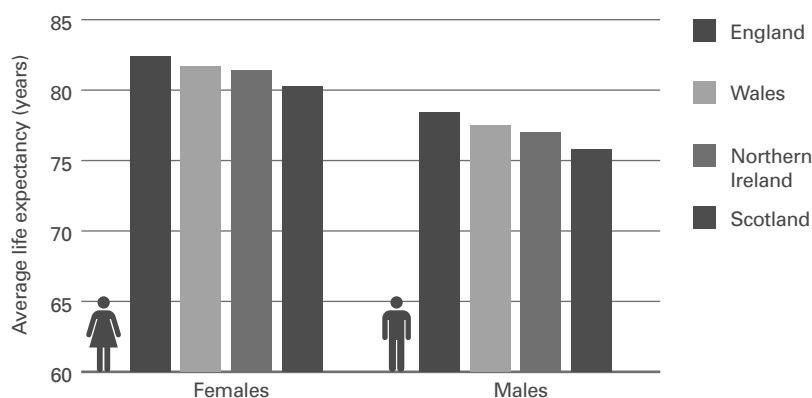
**17.** People living in rural areas live on average two to three years longer than people in urban areas and can expect to live in good health for an average of six years longer. This may be partly due to rural areas generally having lower levels of deprivation than urban areas.<sup>17</sup>

**18.** Although average life expectancy and healthy life expectancy in Scotland have increased, average life expectancy is lower than in other parts of the UK (Exhibit 2). Average healthy life expectancy is lower than the UK averages for both men and women.<sup>18</sup> Both life expectancy and

## Exhibit 2

### Life expectancy at birth in the UK, 2008–10

Average life expectancy in Scotland is lower than in the other UK countries.



Source: Office for National Statistics, 2012

healthy life expectancy are lower in Scotland than in many Western European countries.

### Deprivation is most concentrated in the west of Scotland

**19.** All NHS boards and councils in Scotland have areas of deprivation but the west of Scotland, especially Glasgow and its surrounding areas, has high levels of deprivation and consequently accounts for a significant proportion of health inequalities in Scotland.<sup>19</sup> Deprivation and life expectancy vary widely between CHPs in different parts of Scotland, and between CHPs within NHS board areas (Exhibit 3).<sup>20</sup>

### Health inequalities vary widely within local areas

**20.** There are wide variations in both deprivation and health inequalities in smaller geographical areas within individual NHS board or council areas. To assess variation within one council

area, we compared deprivation and an indicator of health inequalities (rate of hospital admission for drug misuse) across the 21 electoral wards within the Glasgow City Council area (Exhibit 4, page 10). To further examine the variation within an individual electoral ward, we also compared deprivation and health inequalities within one ward – Glasgow Shettleston (Exhibit 5, page 10). Our analysis shows that both deprivation and health inequalities can vary widely among small local areas.

### Children in deprived areas have poorer health

**21.** Children's early years are a major determinant of their future health.<sup>21</sup> Children living in the most deprived areas of Scotland experience significantly worse health outcomes than children living in the least deprived areas (Exhibit 6, page 11).

<sup>13</sup> *Life Expectancy in Scottish Council Areas split by Deprivation, 2005-2010*, National Records of Scotland, October 2011.

<sup>14</sup> Healthy life expectancy is the number of years people can expect to live in good health.

<sup>15</sup> Healthy life expectancy data from 2009/10 is not comparable with earlier years owing to a major change in methodology.

<sup>16</sup> This comparison refers to people living in the one-fifth most deprived and one-fifth least deprived areas.

<sup>17</sup> Scottish Public Health Observatory, 2011.

<sup>18</sup> *Health Expectancies at birth and at age 65 in the United Kingdom, 2008-2010*, Office for National Statistics, August 2012.

<sup>19</sup> Deprivation tends to be concentrated in small local areas and it can be difficult to see the pattern of local deprivation by looking at just the NHS board or council level. In this report, we have used CHP areas where possible to provide a more detailed analysis of the effect of deprivation.

<sup>20</sup> We have presented data for CHPs as we present data in Part 2 of this report to compare local deprivation level and indicative funding allocations by CHP.

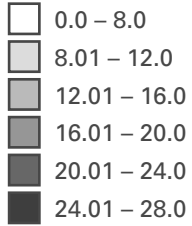
<sup>21</sup> *Early Years Framework*, Scottish Government, 2008. The Scottish Government defined early years as pre-birth to eight years old.

### Exhibit 3

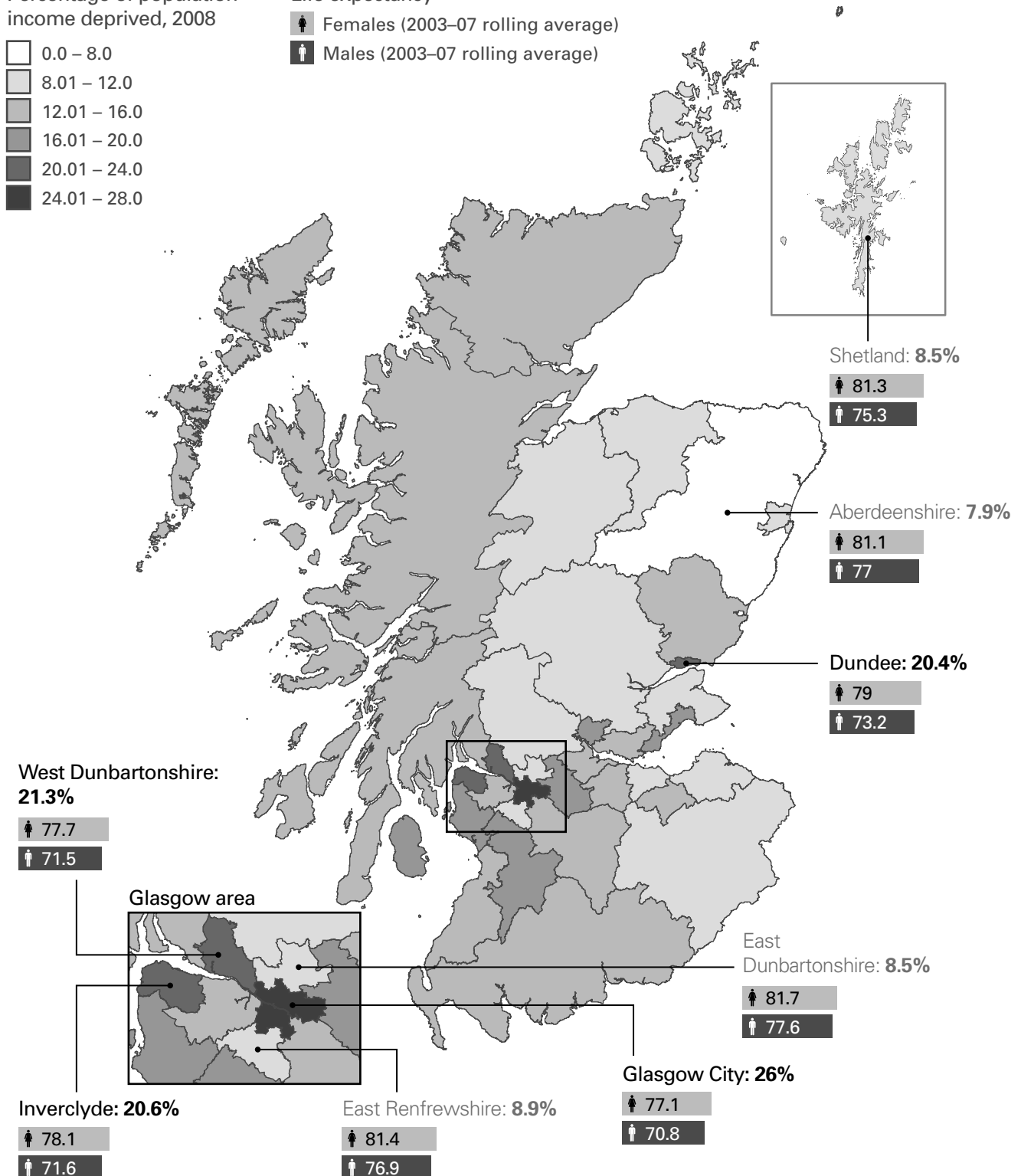
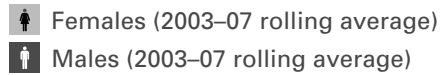
#### Deprivation and life expectancy in CHPs

The west of Scotland experiences higher levels of deprivation and lower life expectancy compared to most other parts of Scotland.

Percentage of population income deprived, 2008



Life expectancy



Note: We have presented comparisons for the four most deprived and four least deprived CHPs in Scotland. © Crown copyright and database rights 2012, Ordnance Survey licence number 0100050061. Source: Audit Scotland, 2012

**There is a mixed picture of progress in tackling health inequalities**

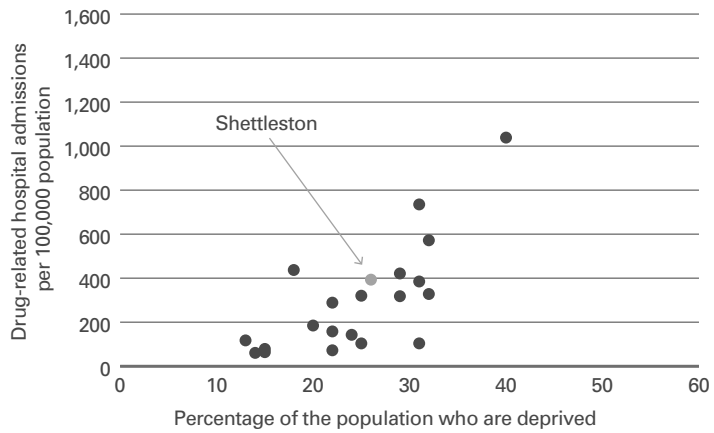
**22.** Scotland faces major challenges in tackling a range of deep-rooted health problems, and the inequalities associated with them. We reviewed a range of health indicators to look in detail at the extent of health inequalities related to them and progress made in reducing them (Exhibit 7, page 12). These indicators are all linked to deprivation and some are linked to other factors such as gender and ethnicity. Health inequalities have decreased for some indicators, but they have either remained the same or worsened for others.

**23.** Since 2008, the Scottish Government has published an annual report setting out progress against a range of long-term indicators of health inequalities.<sup>22</sup> The most recent report, published in 2012, shows that the gap in health inequalities has not narrowed for these indicators apart from indicators for low birthweight and alcohol-related deaths. These measures give an indication of progress but the Scottish Government has not set out timescales or numerical targets to measure progress against these long-term indicators.

**Exhibit 4**

Variation in deprivation and rate of hospital admissions for drug misuse by electoral ward in Glasgow, 2005

There are higher rates of drug-related hospital admissions among people from more deprived wards.

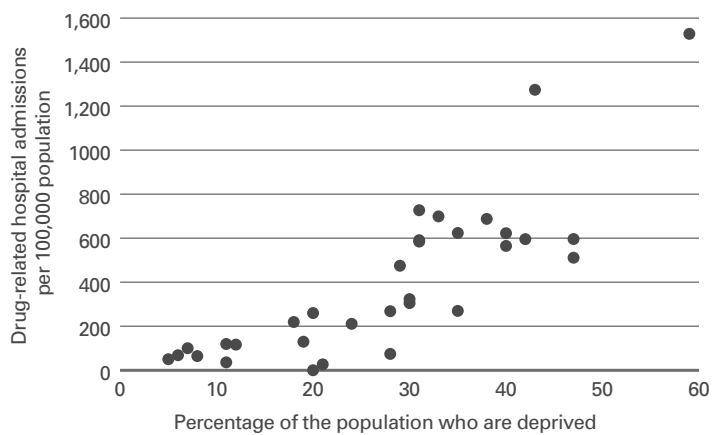


Source: Audit Scotland analysis of Scottish Neighbourhood Statistics

**Exhibit 5**

Variation in deprivation and rate of hospital admissions for drug misuse within the Glasgow Shettleston electoral ward, 2005

There are higher rates of drug-related hospital admissions among people from more deprived small areas.

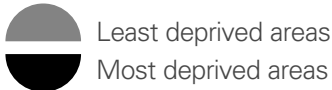


Source: Audit Scotland analysis of Scottish Neighbourhood Statistics

22 Long-Term Monitoring of Health Inequalities, Scottish Government, October 2012.

**Exhibit 6****Summary of health inequalities among children**

Children living in the most deprived areas experience significantly worse health outcomes.

**Low birthweight**

The percentage of low birthweight babies is over twice as high in the most deprived areas. In 2010, 31 per cent of babies who were born with very low birthweight were born to mothers living in the most deprived areas, compared with 13 per cent of babies born to mothers living in the least deprived areas.

13%

31%

40%

**Breastfeeding**

15%

Rates are almost three times lower in the most deprived areas. In 2011/12, 15 per cent of mothers in the most deprived areas exclusively breastfed their child at 6-8 weeks compared to 40 per cent of mothers in the least deprived areas.

**Dental health**

There have been recent overall improvements but children in the most deprived areas did not meet national tooth decay targets of 60 per cent of children with no dental decay. Fifty-four per cent of children in the most deprived areas had no dental decay in 2011, compared to 81 per cent in the least deprived areas.

81%

54%

18%

**Obesity/overweight**

25%

There is increasing prevalence of obesity among children in the most deprived areas. In 2010/11, 25 per cent of children in the most deprived areas were classified as overweight compared to 18 per cent in the least deprived areas.

**Teenage pregnancy**

per 1,000 population

Rates among under-16s are five times higher in the most deprived areas. In 2010, the rate was 14 per 1,000 population in the most deprived areas compared to three per 1,000 population in the least deprived areas.

3

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**Exhibit 7****Summary of significant health challenges and health inequalities in Scotland<sup>1</sup>**

Progress in tackling health inequalities is mixed.

<b>Coronary Heart Disease (CHD)</b>	
Overall patterns	<ul style="list-style-type: none"> <li>Between 2001 and 2010, the overall rate of death from CHD fell by around 40 per cent, from 202 per 100,000 to 129 in 2010. However, the rate in Scotland remains around a third higher than in England and higher than in most other Western European countries.</li> </ul>
Extent of inequalities <sup>2</sup>	<ul style="list-style-type: none"> <li>CHD death rates are highest in West Central Scotland and are higher among males than females, with a rate of 90 per 100,000 for women in 2010 compared to 168 for men. Death rates in the most deprived areas are over 1.5 times higher than in the least deprived areas.</li> <li>South Asians living in Scotland have substantially higher rates of heart attacks than the general population, but they also have higher survival rates.</li> </ul>
Change in inequalities	<ul style="list-style-type: none"> <li>There is some evidence that health inequalities are narrowing. Between 2001 and 2010, the death rate decreased by a third in the most deprived areas but by less than a fifth in the least deprived areas.</li> </ul>
<b>Alcohol misuse</b>	
Overall patterns	<ul style="list-style-type: none"> <li>Rates of alcohol-related hospital admissions have decreased in recent years. There was an 11 per cent fall between 2006/07 and 2010/11.</li> <li>However, there has been a long-term (30-year) increase in alcohol-related problems with alcoholic liver disease increasing fivefold, alcohol-related hospital admissions quadrupling and alcohol-related deaths trebling.</li> <li>There are higher levels of consumption and more significant health problems in Scotland compared to England and Wales. Alcohol sales are around 20 per cent higher in Scotland than in England while alcohol-related deaths are around twice as high.</li> </ul>
Extent of inequalities <sup>2</sup>	<ul style="list-style-type: none"> <li>Problems are twice as high among men than among women. One in ten of all hospital discharges for men was estimated to be attributable to alcohol compared to one in 20 for women. In 2011, there were 432 female alcohol-related deaths compared to 815 male deaths - almost twice as many.</li> <li>Alcohol-related deaths and hospital discharges are around six to seven times higher in the most deprived areas than in the least deprived areas. In 2010/11, the rate of alcohol-related discharges was 214 per 100,000 in the least deprived areas compared to 1,621 per 100,000 in the most deprived areas.</li> </ul>
Change in inequalities	<ul style="list-style-type: none"> <li>Health inequalities related to alcohol misuse are relatively stable.</li> </ul>
<b>Smoking</b>	
Overall patterns	<ul style="list-style-type: none"> <li>Just under a quarter of adults currently smoke. This has fallen from over 30 per cent in 1999. Prevalence in Scotland is generally higher than in England and Wales.</li> <li>The number of pregnant women who smoke has fallen over the past 15 years from 29 per cent in 1995 to 19 per cent in 2010.</li> </ul>
Extent of inequalities <sup>2</sup>	<ul style="list-style-type: none"> <li>Prevalence is around four times higher in the most deprived areas than in the least deprived areas. Around one in ten people in the least deprived areas smokes, compared with four in ten people in the most deprived areas.</li> <li>The percentage of women who reported smoking while pregnant is five times higher in the most deprived areas than in the least deprived areas.</li> </ul>
Change in inequalities	<ul style="list-style-type: none"> <li>Levels of smoking across the whole population are relatively stable with no significant changes between the most and least deprived areas.</li> <li>Over the past ten years, the largest reduction in the percentage of women who reported smoking while pregnant was in the most deprived areas.</li> </ul>

<b>Drug misuse</b>	
Overall patterns	<ul style="list-style-type: none"> <li>The estimated number of problem drug users in Scotland increased from around 55,000 in 2006 to almost 60,000 in 2009/10.<sup>3</sup></li> <li>The number of drug-related deaths in Scotland has been increasing and reached an all-time high in 2011.</li> </ul>
Extent of inequalities <sup>2</sup>	<ul style="list-style-type: none"> <li>Problems are higher among men than women. In 2011, men accounted for almost three-quarters of drug-related deaths with 429 deaths compared to 155 for women.</li> <li>Drug taking, drug-related harms and drug deaths are higher in the most deprived areas. In 2010/11, the rate of drug-related hospital discharges was over 16 times higher among people in the most deprived areas. More than half of drug-related deaths in 2010 were among people in the most deprived areas.</li> </ul>
Change in inequalities	<ul style="list-style-type: none"> <li>The inequalities gap for both drug-related hospital admissions and drug-related deaths are relatively stable.</li> </ul>
<b>Cancer</b>	
Overall patterns	<ul style="list-style-type: none"> <li>The overall death rate from cancer fell by 12 per cent between 2001 and 2011.</li> <li>Lung cancer levels in Scotland continue to be among the highest in the world.</li> </ul>
Extent of inequalities <sup>2</sup>	<ul style="list-style-type: none"> <li>Overall incidence is around a third higher and overall death rates are around 75 per cent higher in the most deprived areas. In 2007–11, the cancer mortality rate per 100,000 was 157 in the least deprived areas compared to 276 per 100,000 in the most deprived areas.</li> <li>The effect of deprivation on incidence and death rates varies by type of cancer: lung cancer rates are strongly linked to deprivation while breast cancer rates are not.</li> </ul>
Change in inequalities	<ul style="list-style-type: none"> <li>Inequalities by deprivation in cancer incidence are relatively stable, but the gap between the most and least deprived areas is growing for death rates from cancer.</li> </ul>
<b>Mental health</b>	
Overall patterns	<ul style="list-style-type: none"> <li>There has been little recent change in the Scottish Government's indicator of mental well-being (the Warwick-Edinburgh Mental Well-being Scale).</li> <li>The suicide rate in Scotland has been similar to or lower than the EU average since the 1980s.</li> <li>The suicide rate in Scotland has fallen in recent years but remains higher than in England.</li> <li>In 2008, the suicide rate among males in Scotland was almost double that in England and Wales, with 24.1 suicides per 100,000 population compared to 12.6 in England and Wales.</li> </ul>
Extent of inequalities <sup>2</sup>	<ul style="list-style-type: none"> <li>More than twice as many females consulted GPs for depression and anxiety than males in 2010/11.</li> <li>People in deprived areas have lower overall mental well-being and more GP consultations for depression and anxiety. In 2010/11, those in the most deprived areas had twice as many consultations for anxiety (62 consultations per 1,000 patients compared to 28 per 1,000 patients in the least deprived areas).</li> <li>Suicide rates are three times higher among men than women and over three times higher in the most deprived areas. Between 2007 and 2011, the suicide rate in Scotland was 26.4 per 100,000 in the most deprived areas compared to 7.1 in the least deprived areas.</li> </ul>
Change in inequalities	<ul style="list-style-type: none"> <li>The difference in the suicide rate between the least and most deprived areas has remained stable in recent years.</li> </ul>

<b>Obesity</b>	
Overall patterns	<ul style="list-style-type: none"> <li>Obesity in Scotland has been increasing over recent years. More than a million adults in Scotland – over a quarter of the adult population – are now obese or morbidly obese.</li> </ul>
Extent of inequalities <sup>2</sup>	<ul style="list-style-type: none"> <li>Obesity increases with age, with the highest level (38 per cent) among people aged 55-64.</li> <li>Obesity rates are higher in the most deprived areas than in the least deprived areas, especially among women. Around a third of women in the most deprived areas are classified as obese compared with less than a fifth in the least deprived areas.</li> </ul>
Change in inequalities	<ul style="list-style-type: none"> <li>The gap in obesity rates for women by level of deprivation is stable.</li> </ul>
Overall patterns	<ul style="list-style-type: none"> <li>By 2012, around 247,000 people in Scotland had been diagnosed with diabetes, an 18 per cent increase since 2007.</li> </ul>
Extent of inequalities <sup>2</sup>	<ul style="list-style-type: none"> <li>Type 2 diabetes rates increase with deprivation level. In 2008, incidence was around 2.5 per cent in the least deprived areas compared to over four per cent in the most deprived areas.</li> <li>Prevalence of type 2 diabetes is higher among some ethnic groups.</li> </ul>
Change in inequalities	<ul style="list-style-type: none"> <li>GP contact data shows no signs of an increase in the gap in inequalities by deprivation.</li> </ul>
<b>Screening</b>	
Overall patterns	<ul style="list-style-type: none"> <li>Recent annual uptake rates for breast screening and cervical screening were around 75 per cent. In May 2012, the overall uptake rate for bowel screening was around 55 per cent.</li> </ul>
Extent of inequalities <sup>2</sup>	<ul style="list-style-type: none"> <li>Uptake for bowel cancer screening is higher among women (58 per cent uptake) compared to among men (51 per cent).</li> <li>Uptake for both breast and bowel cancer screening is higher among people living in less deprived areas. For bowel cancer screening, uptake is 63 per cent in the least deprived areas compared to 42 per cent in the most deprived areas. For breast cancer screening, the uptake rates are 82 per cent and 64 per cent, respectively.</li> </ul>
Change in inequalities	<ul style="list-style-type: none"> <li>Differences between the most and least deprived areas in uptake of breast cancer screening are constant over time.</li> </ul>
<b>Unintentional injuries</b>	
Overall patterns	<ul style="list-style-type: none"> <li>In 2010/11, approximately one in nine adult emergency hospital admissions and one in seven child emergency hospital admissions were due to unintentional injuries.</li> </ul>
Extent of inequalities <sup>2</sup>	<ul style="list-style-type: none"> <li>Adults and children in the most deprived areas are more than twice as likely to die from an unintentional injury compared with those living in the least deprived areas. Between 2006 and 2010, there were 1,502 adult deaths in the most deprived areas compared to 810 in the least deprived areas.</li> </ul>
Change in inequalities	<ul style="list-style-type: none"> <li>Trend data is not yet available.</li> </ul>

## Notes:

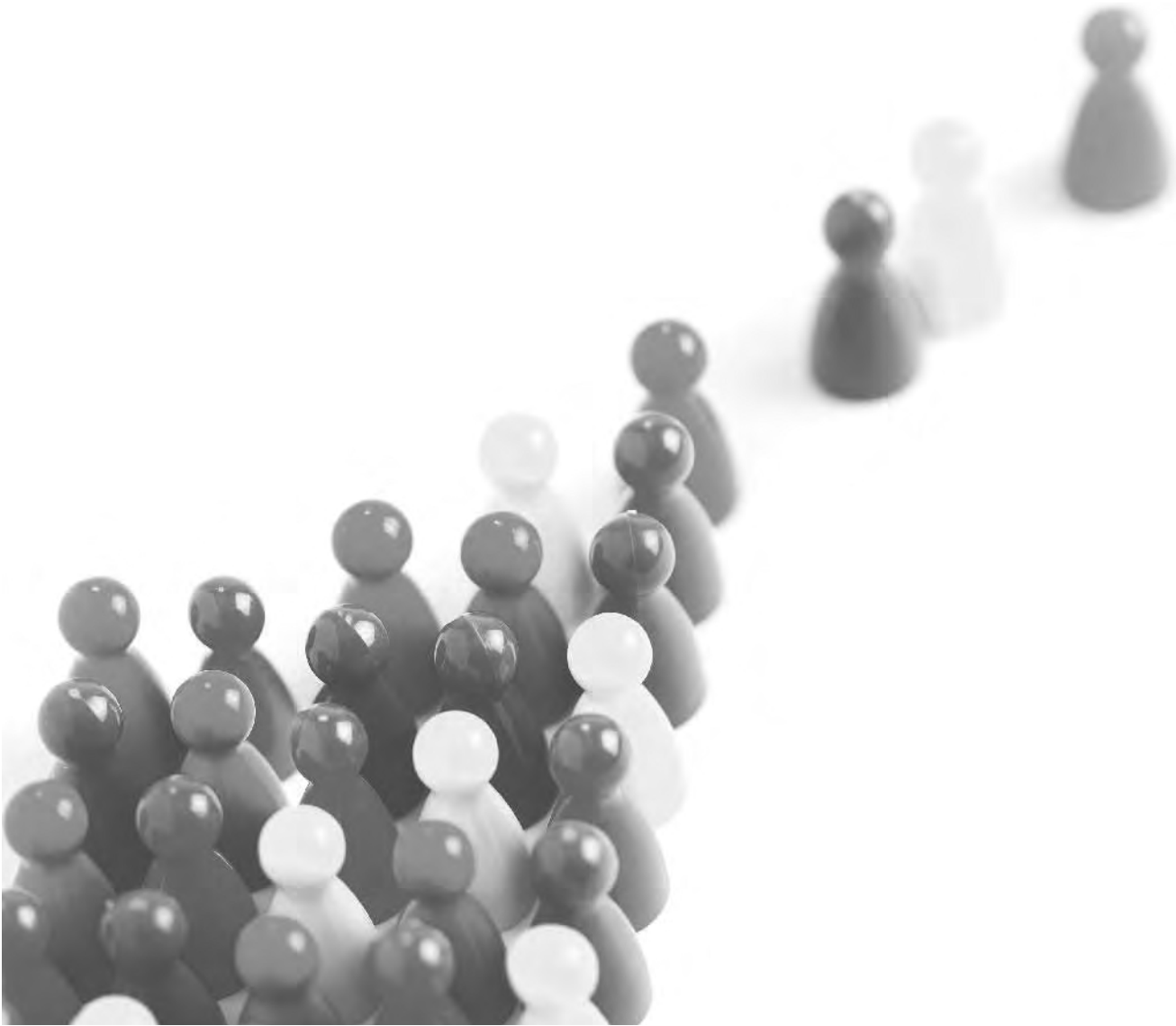
1. A more detailed analysis of these indicators is available on Audit Scotland's website: [www.audit-scotland.gov.uk](http://www.audit-scotland.gov.uk)

2. These comparisons refer to people living in the one-fifth most deprived and one-fifth least deprived areas.

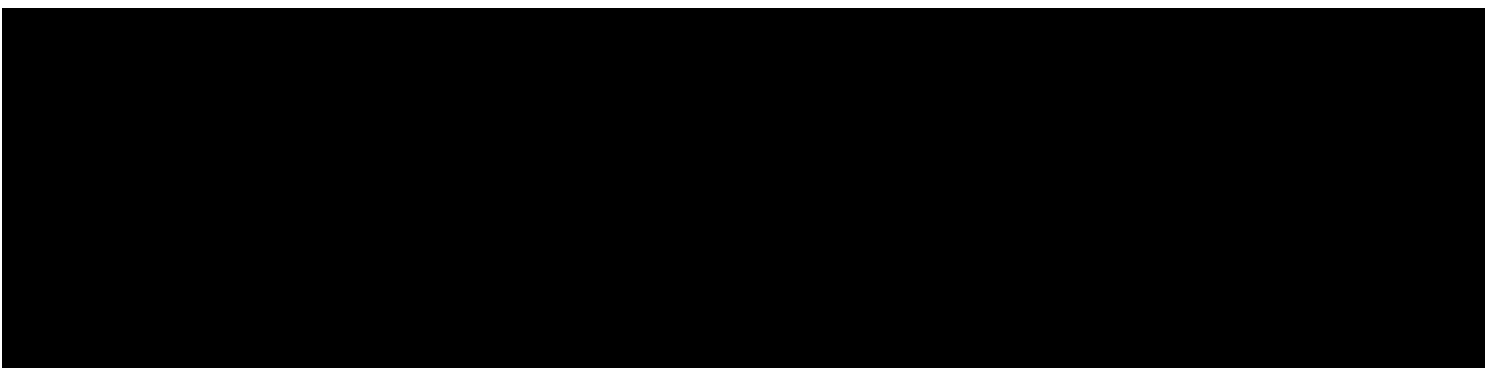
3. The 2009/10 estimates of problem drug users are for financial year, while earlier estimates were for calendar year. The change to financial year brought the estimates in line with other available information sources on drug misuse in Scotland, and to align them with the reporting format of the other UK administrations.



# Part 2. Spending



The public sector needs to make better use of resources to help reduce health inequalities.



## Key messages

- The Scottish Government takes account of deprivation, rurality and remoteness, and other local needs in allocating funding to NHS boards and councils but it is not clear how NHS boards and councils allocate resources to target local areas with the greatest needs.
- We estimate that the Scottish Government allocated around £170 million to the NHS in 2011/12 – around 1.5 per cent of the overall NHS budget – for specific schemes to improve health and address health inequalities.
- Recent changes in quality payments to GPs have helped to provide more funding to GP practices in deprived areas. These changes mean that deprived areas should receive additional resources to help address problems related to health inequalities.

### Overall NHS and council funding formulae take account of deprivation and local needs

**24.** The Scottish Government's funding formula for the NHS is designed to take account of levels of local deprivation.<sup>23 24</sup> This formula also takes account of each board area's population size, age and gender distribution, levels of ill health and the additional costs of providing care in rural and remote areas. The Scottish

Government is phasing in the introduction of this formula to allow NHS boards to plan for any significant changes to their budgets.<sup>25</sup> There is no timescale for full implementation and some NHS boards are not yet receiving their target share.<sup>26</sup> This may affect boards' capacity to effectively tackle health inequalities in their local areas.

**25.** In 2010/11, councils in Scotland spent around £18.5 billion. The Scottish Government funds around 85 per cent of council spending through a block grant to each council, with the remainder being funded by council tax and other income streams.<sup>27</sup> The Scottish Government allocates money to councils through Grant-Aided Expenditure (GAE) according to the level of local demand for services. GAE also takes account of factors within each council area, such as the proportion of people living in deprived areas or in rural locations, which may affect the level of required funding.<sup>28</sup>

**26.** In 2010/11, councils spent around £3.6 billion on social work services, including £155 million on services for adults with mental health problems and £60 million on services for adults with substance misuse problems.<sup>29</sup> However, this does not present a complete picture of all council spending on services to reduce health inequalities.

### It is not clear how resources are targeted within local areas

**27.** The formula for allocating money to each NHS board is built up from information on small geographical

areas.<sup>30</sup> Indicative weightings have also been calculated at CHP level.<sup>31</sup> CHPs with the highest indicative weightings are remote and rural areas such as Western Isles, Orkney and Shetland, and areas with high levels of deprivation and ill health such as Glasgow and Dundee (Exhibit 8).

**28.** It is not clear whether the local distribution of resources is targeted on the areas of greatest need. The Scottish Government allocates funding to NHS boards but there is no national or local information about how NHS boards allocate these resources locally. There is significant variation in the extent to which NHS boards devolve services and budgets to CHPs, and CHPs directly manage only around a quarter of total NHS spending.<sup>32</sup> There is also no published information about how councils allocate resources locally.

### Around £170 million was allocated to the NHS in 2011/12 for schemes related specifically to health inequalities

It is difficult to track direct spending by the NHS and councils on addressing health inequalities

**29.** NHS boards spent around £11.7 billion in 2011/12 and councils spent around £18.5 billion in 2010/11 (Exhibit 9). NHS boards report their spending on a range of clinical and non-clinical services, and councils report their spending on a range of services, including services for adult mental health and substance misuse problems. However, there is no information about specific spending on addressing health inequalities.

23 The Scottish Government uses the NHSScotland Resource Allocation Committee (NRAC) formula to calculate the target percentage share of the health budget each NHS board should receive to provide Hospital and Community Health Services (HCHS) and GP prescribing. HCHS includes acute care, care of the elderly, mental and learning difficulties services, maternity services and community services. NRAC replaced the previous Arbuthnott formula. Both formulae have similar overall approaches but the NRAC formula more accurately accounts for: changes in population; the higher relative needs of the very young and very old; and the need for increased healthcare services due to levels of ill health and deprivation.

24 The Scottish Government uses the NRAC formula to allocate around 70 per cent of its total health budget. It allocates the other 30 per cent to NHS boards to provide Family Health Services (general dental, ophthalmic and pharmaceutical services) and to tackle drugs misuse and blood-borne viruses.

25 This gradual introduction means that all boards receive real-terms increases in funding each year. NHS boards below their NRAC target share will receive more money per head of population than other NHS boards until boards reach their NRAC target share.

26 *NHS financial performance 2011/12*, Audit Scotland, 2012.

27 *Revenue Funding Streams to Local Authorities*, Scottish Government, 2011.

28 *'Green Book' for Grant-Aided Expenditure, Local Government Finance Settlement 2012-2015*, Scottish Government, February 2012.

29 *Scottish Local Government Finance Statistics 2010/11*, Scottish Government, February 2012.

30 The small geographical areas used are intermediate data zones for HCHS and GP practices for GP prescribing. There are 1,235 intermediate data zones in Scotland, each with a population of between 2,500 and 6,000 people.

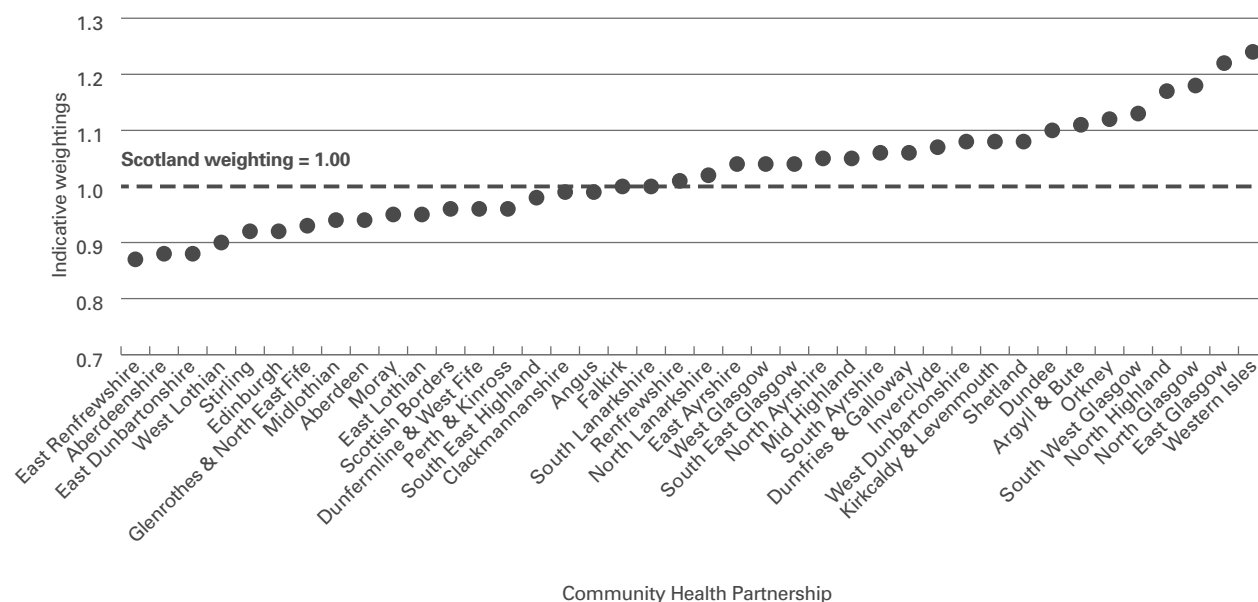
31 *Resource Allocation Formula*, NHS Information Services Division, March 2012.

32 *Review of Community Health Partnerships*, Audit Scotland, 2011.

### Exhibit 8

#### Indicative weightings for funding allocations by CHP, 2012/13

CHPs with higher levels of rurality or deprivation have higher indicative weightings for funding allocations.

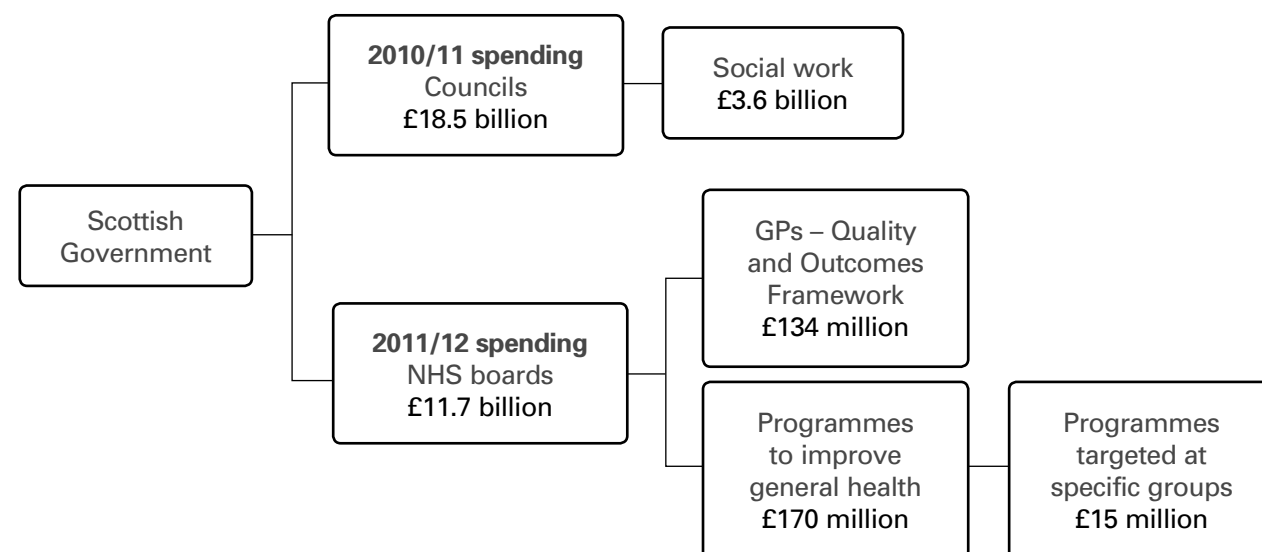


Source: Information Services Division, 2012

### Exhibit 9

#### NHS board spending (2011/12) and selected council spending (2010/11) for programmes related to health inequalities

Information about NHS and council spending makes it difficult to track direct spending on addressing health inequalities.



Source: Scottish Government

**30.** We estimate that the Scottish Government allocated around £170 million to NHS boards in 2011/12 for programmes related specifically to health inequalities (Exhibit 10). This represents around 1.5 per cent of the total health spending of around £11.7 billion. The Government's allocations included around £15 million for programmes such as *Keep Well* and *Childsmile* which are specifically aimed at reducing health inequalities by targeting specific groups within the population.<sup>33</sup> The remainder of the £170 million is spent on improving the health of the whole population.

**31.** Funding for the *Keep Well* programme up to 2014/15, and for tackling some of the other problems associated with health inequalities (including smoking, alcohol misuse and obesity) is expected to remain at the same level as 2012/13.<sup>34</sup> This will mean a decrease in real terms.

**The Scottish Government allocated an estimated £1.8 billion from 2008/09 to 2010/11 for issues related to health inequalities**

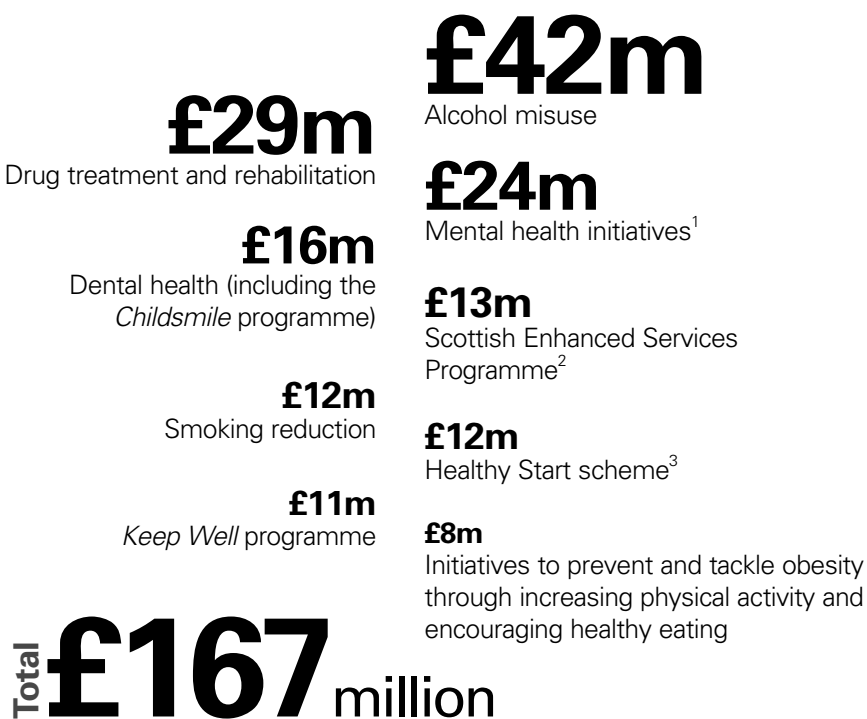
**32.** In *Equally Well*, the Ministerial Task Force set out the Scottish Government's overall funding allocations to councils and NHS boards for programmes and services which aim to address both the underlying causes and the consequences of health inequalities. The Task Force identified that the Scottish Government had allocated about £1.8 billion between 2008/09 and 2010/11 to tackling health inequalities (Exhibit 11).

**33.** The information in *Equally Well* provides an estimate of Scottish Government funding aimed at addressing issues linked to health inequalities as not all of the allocated funding was specifically for this purpose. For example, annual allocations for tackling poverty and fuel poverty accounted for around one-third of the total allocations but these initiatives have only an indirect effect in

### Exhibit 10

Scottish Government funding allocations to the NHS for tackling health issues associated with inequalities, 2011/12

The Scottish Government directly allocated around £170 million to NHS boards for schemes related to health inequalities.



#### Notes:

1. This funding is for a range of national initiatives and programmes including support for the Mental Welfare Commission for Scotland, delivery of mental health legislation and NHS targets, and support for organisations such as NHS Health Scotland.
2. The Scottish Enhanced Services Programme includes a range of services which the Scottish Government has identified as national priorities. These include child obesity services, alcohol screening and brief interventions, and flexible GP appointment sessions.
3. Healthy Start helps to provide a nutritional diet for pregnant mothers and young children in the UK, particularly those in low income families. The scheme provides fresh milk, fresh fruit and vegetables and infant formula milk and vitamins as a benefit in kind and is primarily targeted at women and children under four in families in receipt of Income Support.

Source: Audit Scotland analysis of Scottish Government data

reducing health inequalities. There was no information about whether these estimated funding allocations were targeted at areas of greatest need.

### Changes in payments to GPs have led to more funding to deprived areas

**34.** GPs make an important contribution to reducing health inequalities by providing advice and

primary care services. In 2011/12, the Scottish Government allocated around £710 million to NHS boards to contract services from GP practices.<sup>35</sup>

**35.** Most GPs in Scotland are paid through the UK-wide General Medical Services (GMS) contract which is made up of the following elements:

- the global sum which accounts for more than half of the total

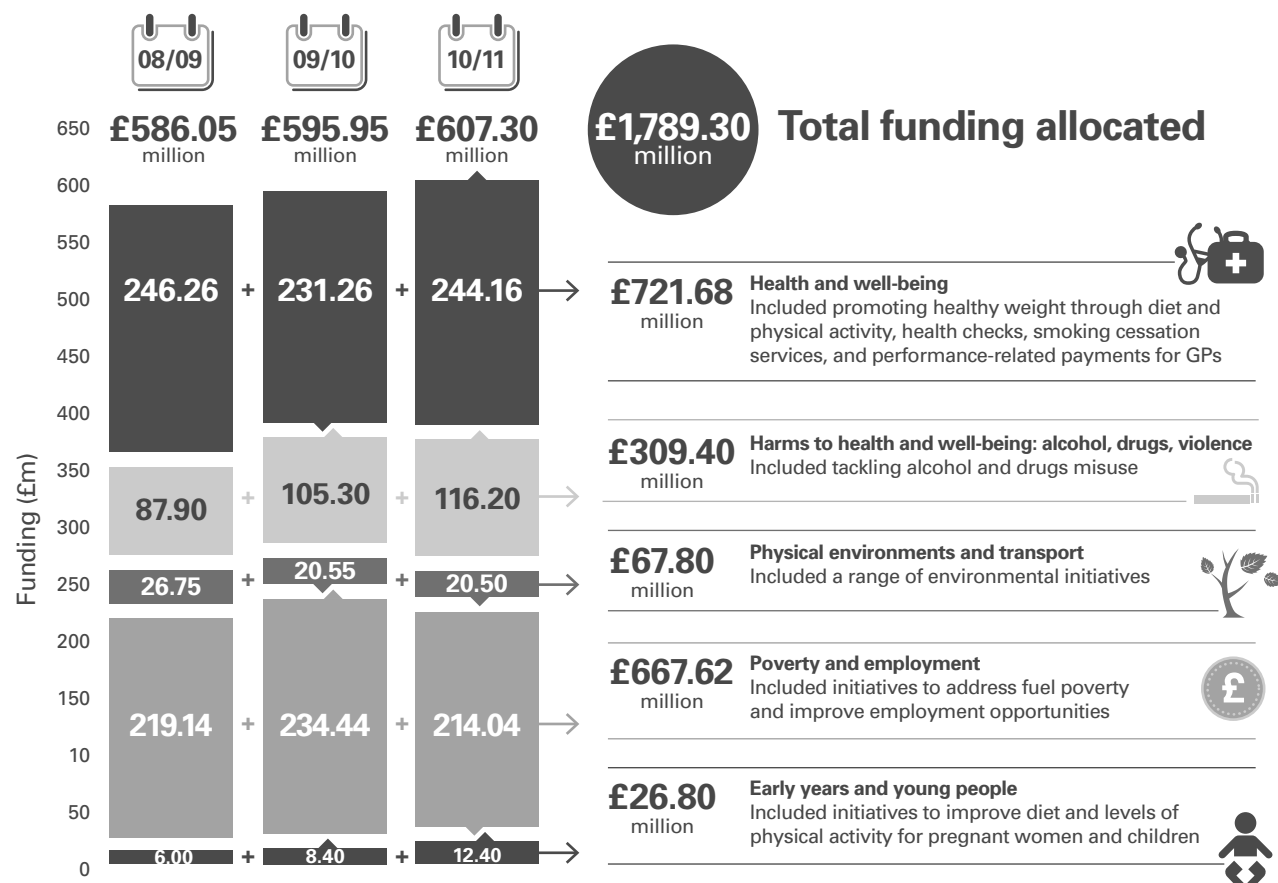
<sup>33</sup> *Keep Well* is the Scottish Government's principal national programme for tackling health inequalities. It delivers health checks to people in the most deprived areas. *Childsmile* is a national programme designed to improve the dental health of children in Scotland, and reduce inequalities in dental health.

<sup>34</sup> *Scottish Draft Budget 2013-14*, Scottish Government, September 2012.

<sup>35</sup> *Scottish Spending Review 2011 and Draft Budget 2012-13*, Scottish Government, September 2011.

**Exhibit 11****Scottish Government funding for reducing health inequalities, 2008/09 to 2010/11**

The Task Force estimated that the Government allocated around £1.8 billion between 2008/09 and 2010/11 to the public sector to help address issues related to health inequalities.



Source: *Equally Well*, Scottish Government, 2008

funding and which pays for routine services that GPs must provide. Funding for these services takes account of various patient and population characteristics including age, sex, deprivation, and remoteness and rurality

- payments for enhanced services such as health checks and immunisation programmes, which are not part of the routine services provided by GPs
- the Quality and Outcomes Framework (QOF) which provides additional funding to practices

that meet a range of quality targets, including improving the management of chronic diseases.

**36.** In 2011/12, GP practices in Scotland received around £134 million in QOF payments (just under a fifth of the total payments to GPs), and the average QOF payment to a GP practice was around £139,000.<sup>36</sup> The QOF is an important part of the GP contract and has the potential to help reduce health inequalities although it was not explicitly designed to do this. There is evidence that it has helped to reduce the gap between the most and the least deprived

areas in the management of chronic disease through better recording and monitoring of health problems. This was shown by a narrowing gap between QOF payments to practices in the most and the least deprived areas, but it is too early to say whether these improvements in management practice have led to reductions in health inequalities.<sup>37</sup>

**37.** In 2009, the system for calculating QOF payments was adjusted to better reflect the prevalence of long-term conditions in local communities. We compared the QOF payments to the 100 practices serving the most

<sup>36</sup> *Quality & Outcomes Framework of the new GMS contract*, Information Services Division, September 2012.

<sup>37</sup> *The Quality and Outcomes Framework (QOF): does it reduce health inequalities?*, National Institute for Health Research, April 2011.

deprived areas in Scotland (known as 'Deep End' practices) with other GP practices. In the three years following the change, average QOF payments per patient to Deep End practices increased by around eight per cent while the average payment to non-Deep End practices increased by around four per cent (Exhibit 12).

**38.** Changes to the GMS contract are negotiated at a UK level, but the Scottish Government has signalled its intention to move to a more Scottish-focused contract to better reflect Scottish health priorities.

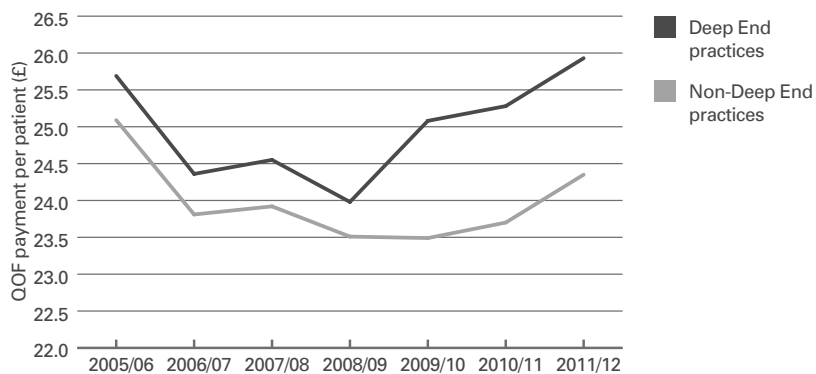
### Recommendations

- The Scottish Government and NHS boards should include measurable outcomes in the GP contract to monitor progress towards tackling health inequalities, and ensure that the Quality and Outcomes Framework is specifically designed to help reduce health inequalities.
- NHS boards and councils should identify what they collectively spend on reducing health inequalities locally, and work together to ensure that resources are targeted at those with the greatest need.

### Exhibit 12

#### QOF payments to Deep End and non-Deep End GP practices

Deep End practices received higher increases following a change in funding method in 2009.

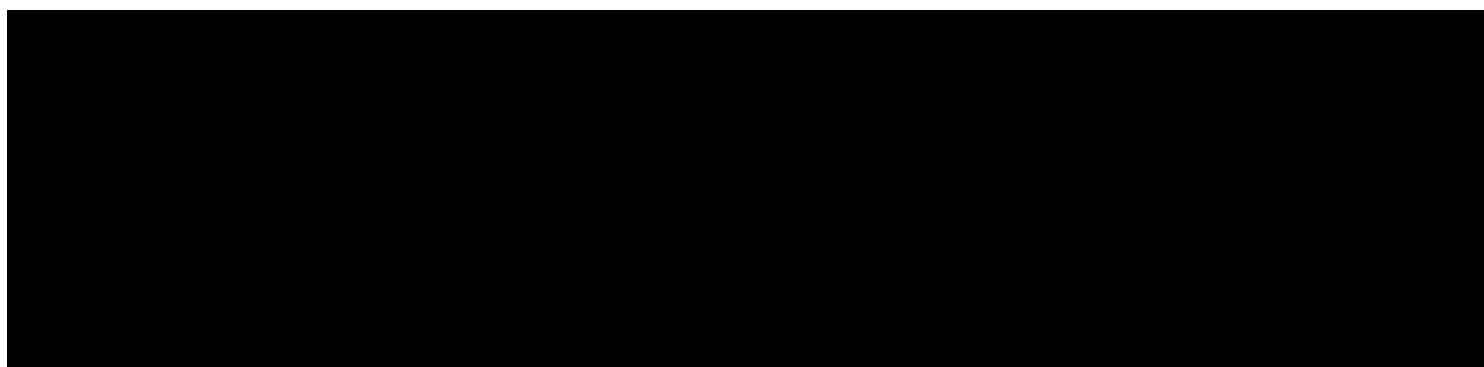


Source: Audit Scotland analysis of Information Services Division data, 2012

# Part 3. Local health services



The health service can do more to reduce health inequalities by providing better access to services for disadvantaged groups.



## Key messages

- Appropriate access to health services is an essential part of reducing health inequalities. GPs have a critical role to play in helping to reduce inequalities and in facilitating access to the whole range of NHS services including hospital care. But the distribution of primary care services across Scotland does not fully reflect the higher levels of ill health and wider needs found in deprived areas, or the need for more preventative health care. The distribution of other primary health care services, such as pharmacies, is more closely matched to need.
- Action taken to improve health can have the unintended consequence of widening inequalities if uptake by those most at risk does not increase. Patterns of access to hospital services vary among different groups within the population and people from more deprived areas tend to have poorer access and outcomes. NHS boards need to ensure that all patients get the services they need, and provide better access to services for disadvantaged communities to help reduce health inequalities.

### Better access to health services is needed to reduce health inequalities

**39.** Appropriate access to healthcare services can contribute to the prevention of poor health and better outcomes from treatment for disadvantaged groups. In May 2010, the Scottish Government published *The Healthcare Quality Strategy for NHSScotland*, which includes a commitment by the NHS to understand the needs of different

communities, eliminate discrimination, reduce inequality, protect human rights and build good relations by breaking down barriers that may prevent people from accessing the care and services that they need. However, there is evidence that people from disadvantaged communities may have difficulties accessing these services.

### GPs in the most deprived areas face significant challenges in tackling health inequalities

**40.** For most people, GPs are the initial point of contact with healthcare services. Primary care is the main focus of most efforts to reduce health inequalities, and *Equally Well* stated that: 'NHS action to reduce health inequalities starts with primary care, where more than 90% of patient contacts take place.'

**41.** The distribution of GPs across Scotland does not fully reflect levels of deprivation (Exhibit 13).<sup>38</sup> The availability of GPs is more accurately measured by whole time equivalent (WTE) rather than headcount. The NHS has published information on

the number of WTE GPs in Scotland but this did not include details of the distribution of WTE GPs across the various levels of deprivation and has not been updated since 2009.<sup>39</sup>

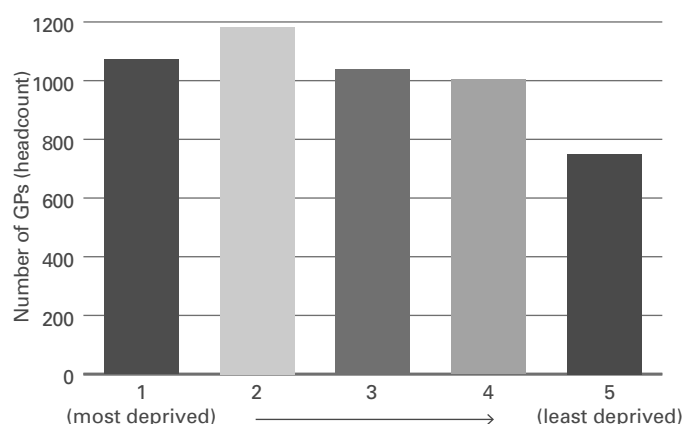
**42.** Recent findings from the Deep End project indicate that GPs working in the most deprived areas of Scotland face significant challenges in tackling health inequalities. For example, GPs in these practices reported that:

- they treat patients with higher levels of multiple health problems than GPs working in less deprived areas<sup>40</sup>
- public sector budget reductions and changes to the benefits system were increasing patients' visits to GPs and having detrimental effects on patients' mental and physical health<sup>41</sup>
- they are constrained by a shortage of consultation time with patients which limits the opportunity to provide appropriate treatment, advice and referral to suitable services.<sup>42</sup>

### Exhibit 13

#### GP numbers by deprivation in Scotland, 2012

The distribution of GPs does not fully reflect the levels of deprivation.



Source: Information Services Division, 2012

<sup>38</sup> 'GPs at the Deep End', G Watt, *British Journal of General Practice*, January 2011.

<sup>39</sup> *National Primary Care Workforce Planning Survey*, Information Services Division, 2009.

<sup>40</sup> 'Epidemiology of multimorbidity and implications for health care, research, and medical education: a cross-sectional study', K Barnett, S Mercer, M Norbury, G Watt, S Wyke and B Guthrie, *Lancet*, May 2012.

<sup>41</sup> *GP experience of the impact of austerity on patients and general practices in very deprived areas*, Deep End Steering Group, March 2012.

<sup>42</sup> 'Patient encounters in very deprived areas', G Watt, *British Journal of General Practice*, January 2011.



**43.** Audit Scotland's 2011 review of CHPs reported variable engagement between CHPs, GPs and other independent contractors owing to a lack of shared vision and priorities. The Deep End project and our focus groups of CPP managers and CHP managers also reported difficulties in getting good engagement between GPs, CHPs and councils.<sup>43</sup>

**44.** Practice nurses provide an increasingly important role in primary care, often providing services such as immunisations, blood pressure checks and programmes to help people to stop smoking. However, information about the numbers of practice nurses across different areas of deprivation is not available, so it is unclear whether their distribution matches levels of patient demand.

#### Access to other primary care services reflects higher levels of need in deprived areas

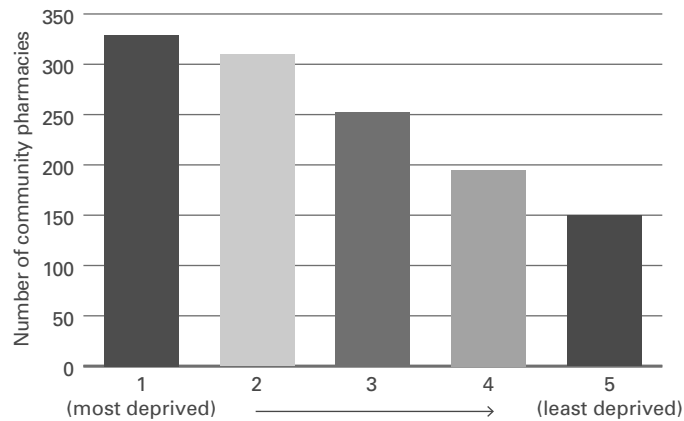
**45.** In addition to GP practice staff, other staff working in primary and community services make an important contribution to improving public health and reducing health inequalities. Community pharmacists provide a range of services, including advice and treatment for minor ailments. Pharmacists may also deliver health improvement services such as smoking cessation. Our analysis shows that the distribution of community pharmacies across Scotland varies by deprivation levels, with the highest number of pharmacies in the most deprived areas (Exhibit 14).

**46.** Dentists also have an important role to play in helping to reduce health inequalities. Information on adult oral health is generally poor, but the incidence of oral cancer is higher amongst people from deprived areas, and risk factors for poor oral health such as smoking and poor diet are higher in deprived areas. The distribution of dentists across Scotland varies by deprivation levels, with the highest number of dentists in the most deprived areas (Exhibit 15).

#### Exhibit 14

##### Distribution of community pharmacies by deprivation, 2012

There are over twice as many pharmacies in the most deprived areas than in the least deprived areas.

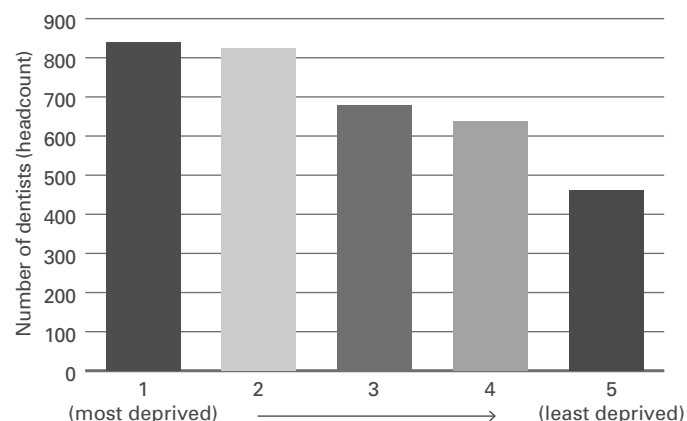


Source: Practitioner Services Division, 2012

#### Exhibit 15

##### Distribution of dentists by deprivation, March 2012

There are almost twice as many dentists in the most deprived areas than in the least deprived areas.



Source: Audit Scotland analysis of Information Services Division dental workforce data, 2012

**47.** Since 2007, dentists practising in the most deprived areas of Scotland have received a Deprived Areas Allowance of up to £9,000 a year.<sup>44</sup> Between 2007 and 2012, the number of dentists based in the most deprived areas more than doubled, compared to an increase of one-fifth in the least deprived areas (Exhibit 16).<sup>45</sup>

### Policies designed to improve the health of the whole population can increase inequalities

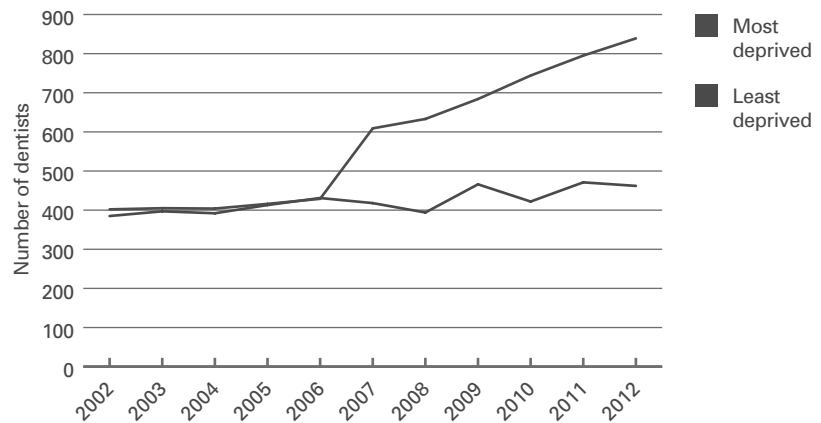
**48.** The NHS provides a range of universally available services, including cancer screening and eye tests, which aim to detect health problems at an early stage or prevent them altogether. However, there is evidence that these services may widen health inequalities if uptake is lowest among those who would derive the greatest benefits (Case studies 1 and 2).

### Better access to hospital services may help to improve outcomes for disadvantaged groups

**49.** Although primary care is the main focus of efforts to tackle health inequalities, better access to hospital services may also help to improve outcomes for disadvantaged groups. Audit Scotland's 2012 report on cardiology services highlighted research showing that patients from deprived areas receive over 20 per cent fewer cardiology treatments than expected while those from the least deprived areas received over 60 per cent more treatments than expected.<sup>46</sup> People from more deprived areas may have lower rates of treatment because they are less likely to reach hospital alive following a heart attack. This is due to people in more deprived areas having poorer awareness of the symptoms of a heart attack, and higher rates of sudden death from a heart attack for people who smoke. The report recommended that the Scottish Government and NHS boards should monitor access to procedures by different groups within

## Exhibit 16

**Distribution of dentists in the most and least deprived areas, 2002–12**  
The number of dentists in the most deprived areas increased following the introduction of the Deprived Areas Allowance in 2007.



Source: Information Services Division dental workforce statistics, 2012

## Case study 1

The introduction of free eye tests in Scotland in 2006 led to an increase in the number of people having their eyes examined. In 2005, before the free tests were introduced, around 32 per cent of people in Scotland had an eye examination, the lowest figure among the UK countries. By 2008, this figure had increased to around 35 per cent and the relative difference between Scotland and the other UK countries had reduced. However, the increase in the uptake of optometry services was lower among people with low education and those from more deprived households, resulting in increased inequality.

Source: 'Utilisation of eye-care services: An examination of the effect of Scotland's free eye examination policy', H Dickey et al, University of Aberdeen, 2012

## Case study 2

Child health reviews are available to all children but those living in the most deprived areas are less likely to have a review. Unavailability or lack of parental engagement were the most common reasons for missed reviews, but aligning the distribution of health visitors to the needs of the population is also essential to ensure children from all areas receive health reviews.

Source: 'Trends in the coverage of "universal" child health reviews: observational study using routinely available data', R Wood et al, *BMJ Open*, 2012

<sup>44</sup> *An Analysis of the Dental Workforce in Scotland: A Strategic Review 2010*, Scottish Government, December 2010.

<sup>45</sup> These data refer to General Dental Service dentists.

<sup>46</sup> *Cardiology services*, Audit Scotland, 2012.

**Exhibit 17**

**Patterns of access to hospital services**

People in the most deprived areas require greater access to hospital services.

Issue	Pattern
Diabetes	People with diabetes who live in deprived areas tend to have higher levels of hospital admissions for complications relating to their condition. For example, those living in the most deprived areas are 52 per cent more likely to have a hospital admission relating to stroke, and 57 per cent more likely to have an admission relating to ischaemic heart disease compared to those living in the least deprived areas. There is some evidence that they are also less likely to have results of clinical tests recorded. <sup>1 2</sup>
Alcohol	Patients who are admitted to intensive care units (ICUs) with alcohol-related conditions are more likely to be from deprived areas, and around twice as many admissions to ICUs are from the most deprived areas compared with the least deprived areas. Patients from deprived areas also tend to have worse outcomes after admission to an ICU, where data was adjusted for severity of illness on admission. <sup>3 4</sup>

Notes:

1. 'Socioeconomic status and diabetes-related hospital admissions: a cross-sectional study of people with diagnosed diabetes', S Wild et al, 2010.
  2. *Diabetes and the disadvantaged*, Diabetes UK, 2006.
  3. 'A national service evaluation of the impact of alcohol on admissions to Scottish intensive care units', T Geary et al, 2012.
  4. 'The effect of socioeconomic status on mortality in the critically ill: A national linkage study', N Lone et al, 2011.
- Source: Audit Scotland analysis of published information, 2012

the population to help ensure that all patients have appropriate and timely treatment. In its subsequent inquiry into cardiology services, the Scottish Parliament's Public Audit Committee called on the Scottish Government to review whether GP numbers are adequate to meet the needs of patients in deprived areas.<sup>47</sup>

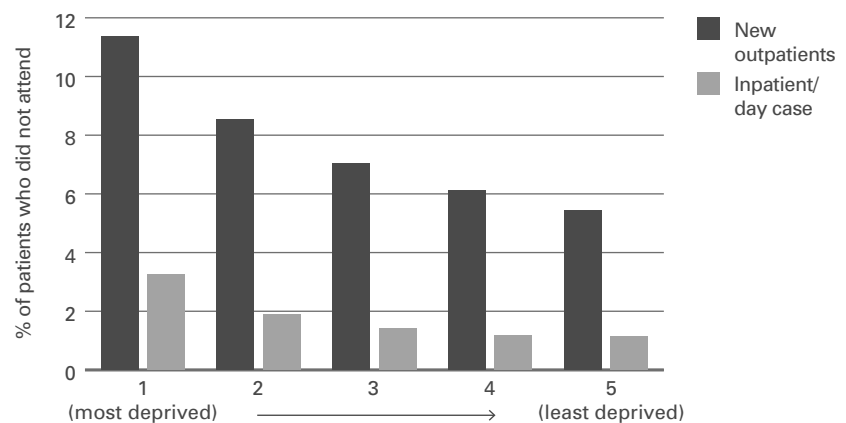
**50.** Other evidence also shows that people in the most deprived areas require greater access to hospital services (Exhibit 17).

**51.** People from deprived areas are more likely to miss hospital appointments. Analysis of waiting times data shows that in 2011/12 the percentage of patients living in deprived areas and failing to attend appointments was three times higher for new outpatients and more than twice as high for inpatients and day cases (Exhibit 18). These differences in missed appointments may be due to a range of factors affecting people in more deprived areas, such as a lack of access to transport.<sup>48</sup>

**Exhibit 18**

**Percentage of patients missing hospital appointments by deprivation, 2011/12**

Patients from the most deprived areas are more likely to miss hospital appointments.



Source: Audit Scotland analysis of Information Services Division data, 2012

47 *Cardiology Services*, Scottish Parliament Public Audit Committee, 2012.

48 *Transport for health and social care*, Audit Scotland, 2011.

## Recommendations

The Scottish Government should:

- consider introducing incentives for GPs in the most deprived areas to help increase access to GPs in these areas.

The Scottish Government and NHS boards should:

- review the distribution of primary care services to ensure that needs associated with higher levels of deprivation are adequately resourced
- regularly collect and publish information on the number of whole time equivalent GPs and practice nurses across the various levels of deprivation.

NHS boards should:

- monitor the use of primary care, preventative and early detection services by different groups, particularly those from more deprived areas. If this identifies systemic under-representation of particular groups, take a targeted approach to improve uptake
- monitor the use of hospital services by different groups and use this information to identify whether specific action is needed to help particular groups access services
- review patterns of non-attendance for hospital appointments and target action to improve attendance rates of patients living in deprived areas.

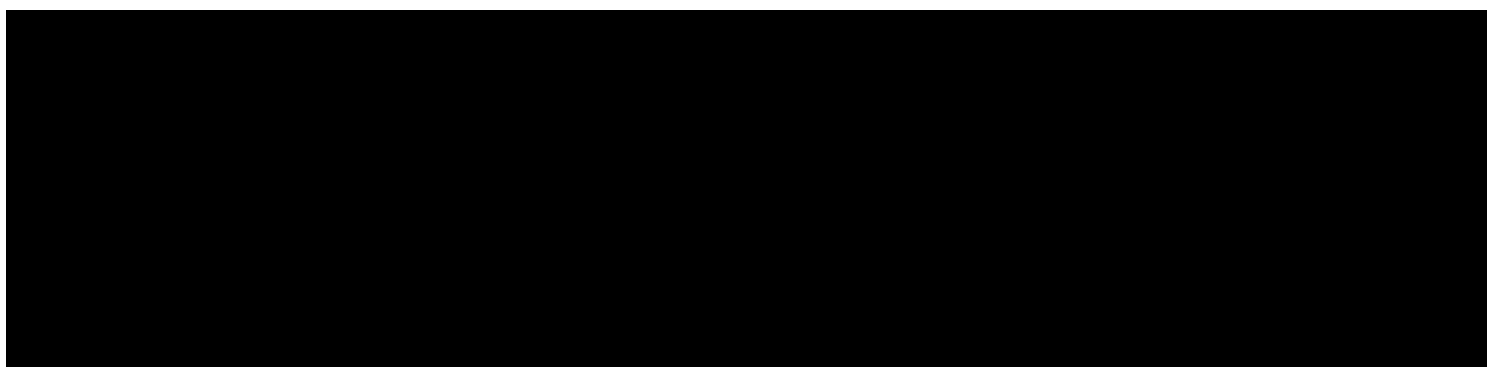
CHPs should:

- involve GPs fully in local approaches to reduce health inequalities.

# Part 4. Effectiveness



Better partnership working is needed to reduce health inequalities. To date, there is limited evidence that strategies and interventions aimed at reducing health inequalities have made a significant impact.



## Key messages

- Reducing health inequalities is challenging and requires effective partnership working across a range of organisations. CPPs need to clarify the roles and responsibilities of local organisations in tackling health inequalities, and ensure they take sufficient ownership of initiatives.
- There is evidence to show that the ban on smoking in public places has improved health, including a reduction in passive smoking and a potential link to decreased rates of premature and low birthweight babies. This may have helped to reduce health inequalities given the link between smoking and deprivation. Other national policies and strategies which aim to improve health and reduce health inequalities have so far shown limited evidence of impact. Changes will only be apparent in the long term but measures of short-term impact are important to demonstrate progress towards policy goals.
- The Scottish Government and CPPs need a more systematic approach to assessing the cost effectiveness of actions to reduce health inequalities. Changes may not take effect for a generation or more making the measurement of success in the short term difficult. However, many initiatives lack a clear focus from the outset on cost effectiveness and outcome measures. This means that assessing value for money is difficult.
- Current performance measures are a mix of process measures, such as the number of

smoking cessation services delivered, and outputs such as the prevalence of smoking among adults. CPPs' reports on delivering their Single Outcome Agreements (SOAs) are weak in the quality and range of evidence used to track progress in reducing health inequalities, and differences among SOAs means that a Scotland-wide picture is hard to identify.

### A range of factors can help to reduce health inequalities

**52.** A significant amount of research has identified a range of factors, including clear priorities and local focus, which can help to reduce health inequalities (Exhibit 19).

### Many organisations are involved in trying to reduce health inequalities

**53.** The Scottish Government and CPPs have the lead responsibilities for tackling health inequalities but a wide range of people and organisations are involved (Exhibit 20, page 30).

### Better partnership working is needed

**54.** Reducing health inequalities requires effective partnership working across a range of sectors and organisations. However, a number of Audit Scotland reports highlight challenges in joint working across organisational boundaries owing to differences in cultures, priorities, planning and performance management, decision-making, accountability and financial frameworks.<sup>49</sup>

**55.** Our focus groups involving CPP managers, CHP managers and frontline staff identified a range of issues around local partnership working aimed at tackling health inequalities.<sup>50</sup> Managers generally

felt that CPPs had helped to engage a wider range of local organisations to help tackle health inequalities than had previously been the case. CPPs had also provided a focus to link individual organisations' strategies and work towards agreed outcomes.

**56.** In some CPP areas, health inequalities were seen as a high priority, shown by the number of initiatives set up to tackle inequalities and the support received from senior managers. In other areas, however, addressing health inequalities was considered less of a priority owing to health budgets being mainly directed towards hospital care and pressure on funding for health improvement initiatives. There was also a lack of shared understanding among the various local organisations about what is meant by 'health inequalities' which could potentially hinder communication and progress at a local level.

**57.** Our focus groups highlighted the importance of involving individuals and communities in local initiatives aimed at reducing health inequalities, and of helping to engage with people and communities that were least likely to use health services.<sup>51</sup> For example, staff from the voluntary sector have trained former heroin users to engage with current users to encourage them to join a methadone programme. CPPs should work with local organisations to provide opportunities for individuals and communities to contribute to activities which may help to reduce health inequalities.

**58.** CPPs should ensure that they provide strong and supportive leadership to promote effective partnership working at a local level. Local leaders also need to clearly communicate their strategies and priorities to staff responsible for delivering services aimed at tackling health inequalities.

<sup>49</sup> *Review of Community Health Partnerships*, Audit Scotland, 2011; *Transport for health and social care*, Audit Scotland, 2011; *The role of community planning partnerships in economic development*, Audit Scotland, 2011; *Commissioning social care*, Audit Scotland, 2012.

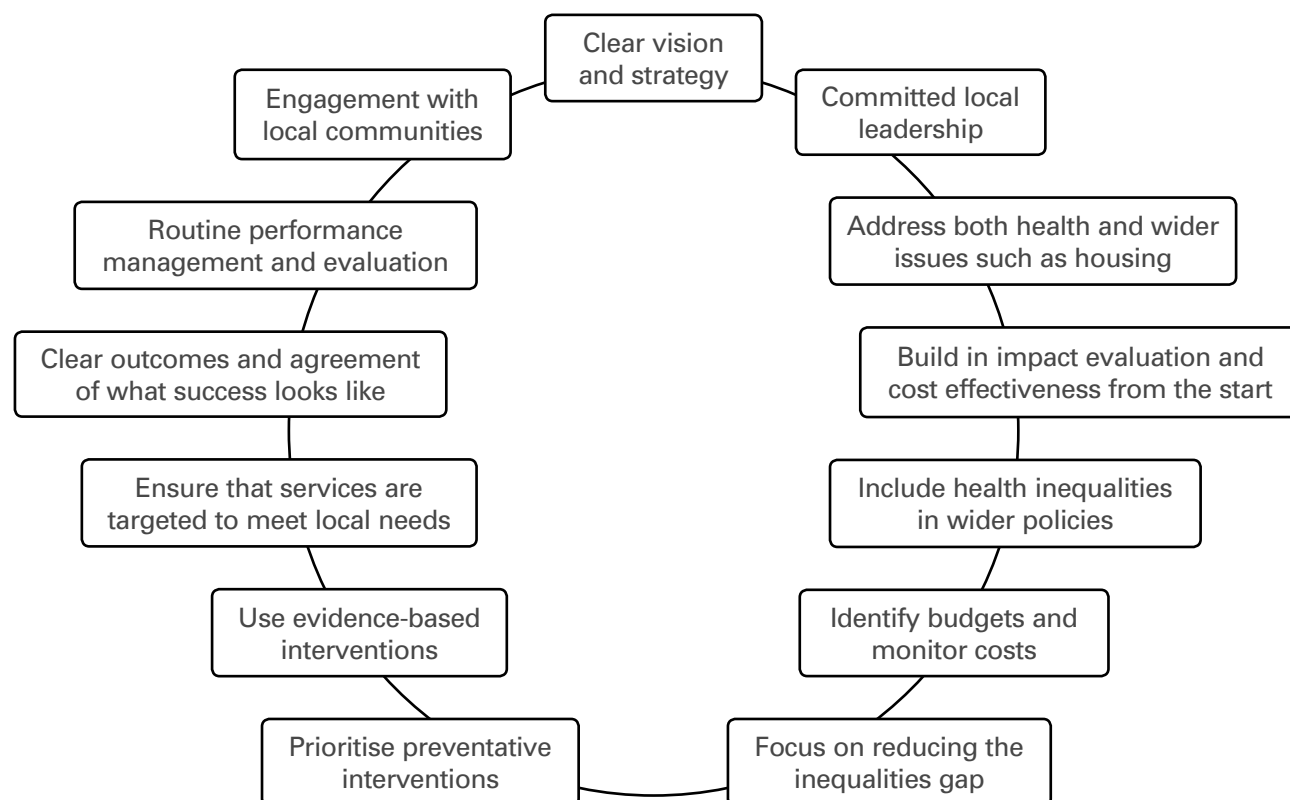
<sup>50</sup> A full report on the focus group findings is available on Audit Scotland's website: [www.audit-scotland.gov.uk/work](http://www.audit-scotland.gov.uk/work)

<sup>51</sup> These 'assets-based' approaches focus on the capacity, skills, knowledge and connections in individuals and communities.

**Exhibit 19**

Factors which can help to improve the effectiveness of initiatives to reduce health inequalities

A range of factors should be considered when developing initiatives to reduce health inequalities.



Sources: *Inequalities in health in Scotland: what are they and what can we do about them?* S Macintyre, MRC Social and Public Health Sciences Unit, 2007; *Health Inequalities: Progress and Next Steps*, Department of Health, 2008; *Fair Society, Healthy Lives*, Marmot Review, 2010

'Some practitioners and even managers don't know what the CPP is – it's too distant. What's happening at the CPP needs to be filtered down more effectively, in whatever format.'

Frontline staff focus group

### Greater clarity about roles and responsibilities is needed to tackle health inequalities

**59.** The focus groups of CPP and CHP managers commented on the lack of clarity about roles, responsibilities and ownership of services aimed at reducing health inequalities. In some cases, managers considered that a lack of joint working

between CPPs and CHPs led to duplication of services. These views reflect the findings of Audit Scotland's 2011 review of CHPs which found that, in some areas, cluttered partnership arrangements contributed to a lack of clarity and duplication in roles and functions between CHPs and other health and social care partnership arrangements.

'When health inequalities are described as "everyone's business", there's a danger that it can become nobody's business.'

CPP manager

**60.** Participants in our focus groups considered that, although CPPs had helped to promote tackling health inequalities through their strategic frameworks, the NHS was generally expected by other organisations to deliver all health outcomes. CPPs should ensure that NHS boards, councils and other organisations are clear about their respective roles, responsibilities and resources in tackling health inequalities, and develop and publish performance information through the SOA to demonstrate progress in tackling health inequalities in their local areas. CPPs should also ensure that local organisations, both health and non-health, take ownership and shared responsibility for actions aimed at reducing health inequalities.

**Exhibit 20****Organisations and professionals with key roles in tackling health inequalities**

A number of organisations play an important role in addressing health inequalities.

Organisation	Key roles
Scottish Government	<ul style="list-style-type: none"> <li>• Sets overall national policy, introduces legislation, publishes strategies and frameworks</li> <li>• Establishes national indicators and reports progress through the <i>Scotland Performs</i> web page</li> <li>• Agrees Single Outcome Agreements (SOAs) with CPPs</li> <li>• Allocates funding to councils and NHS boards</li> <li>• Reviews performance of NHS boards through annual reviews and performance against national targets</li> </ul>
CPPs	<ul style="list-style-type: none"> <li>• Have lead responsibility for addressing health inequalities at a local level</li> <li>• Bring together various local organisations including NHS boards, councils and voluntary organisations to plan and deliver services for local communities</li> <li>• Are responsible for monitoring and reporting performance through annual SOA reports</li> </ul>
NHS boards	<ul style="list-style-type: none"> <li>• Provide and commission a range of services to improve the health of local populations, including:               <ul style="list-style-type: none"> <li>– Health improvement initiatives, such as health protection and health promotion</li> <li>– Primary care services, including general practice, dentists, pharmacists, community nurses and optometrists</li> <li>– Hospital services</li> </ul> </li> </ul>
Councils	<ul style="list-style-type: none"> <li>• Work with local organisations to plan services to help improve health and reduce health inequalities in the local area</li> <li>• Provide a range of services relating to health improvement, including:               <ul style="list-style-type: none"> <li>– Services for tackling substance misuse</li> <li>– Education to improve literacy and promote healthy living</li> <li>– Access to resources and services, including housing</li> <li>– Initiatives to improve local economic conditions and employment opportunities</li> <li>– Facilities for recreation and sport to promote physical activity</li> </ul> </li> </ul>
CHPs	<ul style="list-style-type: none"> <li>• Work with local organisations to plan services to reduce health inequalities in local areas</li> <li>• Commission and fund voluntary and community-led activities that promote health and aim to tackle the underlying causes of health inequalities</li> <li>• Provide a range of local services, including:               <ul style="list-style-type: none"> <li>– Preventative care</li> <li>– Various actions to improve mental health and well-being</li> <li>– Drug and alcohol services (as part of local Alcohol and Drug Partnerships)</li> </ul> </li> </ul>
General Practices	<ul style="list-style-type: none"> <li>• Provide services which contribute to improving health, including:               <ul style="list-style-type: none"> <li>– Immunisation and screening services</li> <li>– Health checks and services such as alcohol brief interventions<sup>1</sup></li> <li>– Referrals to secondary care and to other services</li> </ul> </li> </ul>



Organisation	Key roles
Voluntary sector organisations	<ul style="list-style-type: none"> <li>• Provide a means of engaging effectively with communities and individuals</li> <li>• Deliver a range of services which may help to reduce health inequalities, including: <ul style="list-style-type: none"> <li>– Promoting healthy living to groups of people who may not use mainstream services</li> <li>– Supporting people to access relevant services</li> </ul> </li> </ul>
NHS Health Scotland	<ul style="list-style-type: none"> <li>• Evaluates how well national programmes are tackling health inequalities</li> <li>• Develops outcome-based approaches to planning and monitoring the performance of health improvement activities</li> <li>• Promotes the use of health inequalities impact assessment to ensure that NHS boards' policies and services do not inadvertently exclude or discriminate against groups within the population</li> </ul>
Research institutions (including universities and Glasgow Centre for Population Health)	<ul style="list-style-type: none"> <li>• Produce and collate research on the causes of health inequalities</li> <li>• Evaluate and assess policies and interventions which impact on health inequalities</li> <li>• Review and summarise evidence on the effectiveness and cost effectiveness of interventions to reduce health inequalities</li> <li>• Enhance public and policy understanding of health inequalities by engaging with national and local decision-makers, the media, students and the wider public</li> </ul>

Note: 1. An alcohol brief intervention is a short, evidence-based, structured conversation about alcohol consumption with a patient or client that seeks to motivate and support the individual to think about and/or plan a change in their drinking behaviour in order to reduce their consumption and/or their risk of harm.

Source: Audit Scotland, 2012

Plans for the integration of health and social care are at an early stage, and it is currently unclear how responsibility for tackling health inequalities in local areas will rest between CPPs and the planned Health and Social Care Partnerships.

**61.** Voluntary organisations provide a number of services which contribute to reducing health inequalities. Some participants in our focus groups from the voluntary sector suggested that the introduction of the Change Fund had improved partnership working between voluntary and statutory organisations.<sup>52</sup> Overall, however, frontline staff from the voluntary sector felt excluded from partnership working aimed at tackling health inequalities.

'From a voluntary sector perspective, much of the work into tackling health inequalities goes by without being heard about – we often feel removed from partnership working.'

Frontline staff focus group

### More effective information sharing will help to improve partnership working

**62.** Sharing information among local organisations helps to facilitate joint working. However, a lack of compatibility between information systems, and a lack of clarity about what information can be shared may undermine local initiatives aimed at reducing health inequalities. The Scottish Parliament Local Government and Regeneration

Committee has invited the Scottish Government to provide greater clarity to CPPs on what information can or should be shared, and has recommended that the Government work closely with the Scottish Information Commissioner and consider promoting formal sharing agreements between organisations.<sup>53</sup>

'A pharmacist who is undertaking health checks as part of community-based intervention is not able to email any information to the client's GP. The information has to be printed off and taken to the GP surgery because there is no secure email. This creates more work for the pharmacist and gives them little incentive to continue to carry out health checks in the community.'

Frontline staff focus group

52 The £70 million Change Fund was announced as part of the 2011/12 Scottish budget to help joint working between NHS boards and councils to provide older people's services.

53 *Inquiry into Public Services Reform and Local Government – Strand 1: Partnerships and Outcomes*, Scottish Parliament Local Government and Regeneration Committee, June 2012.

### **Equally Well test sites have improved local partnership working and helped to redesign services**

**63.** In 2008, the Scottish Government established eight *Equally Well* test sites across Scotland to try new and innovative ideas for redesigning public services to help tackle health inequalities. Each test site had a separate theme, such as tackling alcohol misuse, improving mental health, providing early years interventions, and reducing smoking levels. The Scottish Government provided £4 million to fund the sites' activities, and appointed a National Programme Manager to support and coordinate the work of the test sites. It also established a social network site to encourage sharing of lessons learned. The test sites have made some progress in redesigning services to shift the emphasis away from dealing with the consequences of health inequalities towards preventing their occurring. However, there is no evidence that they have helped to reduce health inequalities, or that examples of service redesign have helped to inform spending decisions, either locally or nationally.

**64.** National and local evaluations have reported that all the sites had made some progress in improving local partnership working and sharing lessons learned (Case study 3). These improvements were due to: ongoing support from senior managers, boards and local politicians; shared understanding of organisations' roles and contributions; engagement with service users and communities; and having clear, shared outcomes.<sup>54</sup>

**65.** There has been considerable shared learning between the test sites, and some effective local approaches have been extended to other parts of Scotland. However, the national evaluation of the test sites

### **Case study 3**

#### **Fife Test Site: Mobile Alcohol Intervention Team**

This local project aims to reduce alcohol misuse among under-16s by increasing their awareness of the consequences of alcohol misuse and providing guidance on responsible drinking. The project started in 2009 and involves a partnership between Clued Up (a voluntary substance misuse organisation which led the project), NHS Fife and the police. The project offers alcohol brief interventions to under-16s drinking on the streets on Friday nights, followed by a further assessment two to three weeks later.

The project started in Kirkcaldy and has since been extended to other parts of Fife. The success of the project relied on effective partnership working, with all organisations having clear roles and responsibilities. Clued Up and NHS Fife produced a training pack for practitioners to deliver alcohol brief interventions to young people, including a DVD showing good and bad practice. NHS Health Scotland plans to extend the use of this training pack across Scotland.

Early results showed that between April 2011 and March 2012, 94 young people received alcohol brief interventions. Of the 64 who engaged with follow-up assessments, 69 per cent said they had followed some of the harm-reduction suggestions, and 41 per cent reported that they had reduced their alcohol use. A third of these participants were retained by Clued Up for further support. The programme is currently undergoing external evaluation.

Source: Fife Equally Well Test Site

reported difficulties in transferring an approach from one area to another.

### **There is limited evidence to date of the impact of national policies and strategies**

**66.** Policies and legislation which introduce regulatory controls can contribute to reducing health inequalities.<sup>55</sup> For example, there is evidence that the 2006 ban on smoking in public places has led to improvements in health. In 1998, almost two-thirds of non-smokers were exposed to second-hand smoke but in 2010 this figure had fallen to a quarter of non-smokers.<sup>56</sup> The ban may have led to decreased rates of premature and low birthweight babies, and in the ten months

following the ban hospital admissions for heart attacks were 17 per cent lower than in the ten months prior to the ban.<sup>57 58</sup> These improvements may have helped to reduce health inequalities given the link between smoking and deprivation. The overall percentage of adults who smoke fell from 25.4 per cent in 2006 to 23.3 per cent in 2011.<sup>59</sup>

**67.** The issues underlying health inequalities are complex and many interventions are long-term, often taking a generation or longer before there are significant improvements. Successive governments in Scotland have introduced a range of strategies which aim to improve health and reduce health inequalities (Appendix 3). There is a risk that

<sup>54</sup> *Equally Well Test Sites: Evaluation*, NHS Health Scotland, May 2011.

<sup>55</sup> *Inequalities in health in Scotland: what are they and what can we do about them?* S Macintyre, MRC Social and Public Health Sciences Unit, 2007.

<sup>56</sup> *Scottish Health Survey*, Scottish Government, 2011.

<sup>57</sup> *Better Heart Disease and Stroke Care Action Plan*, Scottish Government, 2009.

<sup>58</sup> 'Impact of Scotland's Smoke-Free Legislation on Pregnancy Complications: Retrospective Cohort Study', D Mackay et al, 2012.

<sup>59</sup> *Scotland's People Annual report; results from 2011 Scottish Household Survey*, Scottish Government, 2012.

policies which aim to improve the health of the whole population may widen inequalities, and although it is too soon to assess the long-term impact of these strategies on wider health and their contribution to reducing health inequalities, measures of short-term impact are important to demonstrate progress towards the policy goals. For example, the Scottish Government uses sales data to demonstrate the short-term impact of its alcohol framework.<sup>60</sup>

### The NHS has new targets to reduce health inequalities

**68.** NHS boards report to the Scottish Government on performance through the national performance system for the NHS (HEAT), which includes targets aimed at improving health.<sup>61</sup> Two of the NHS targets due for delivery in 2013/14 – delivering agreed numbers of child healthy weight interventions and smoking cessation services – are specifically designed to help reduce inequalities, as a minimum number of services must be delivered in the 40 per cent most deprived areas. The NHS also has targets for at least 60 per cent of three- and four-year-old children at each deprivation level to receive at least two applications of dental fluoride varnish per year by March 2014, and for at least 80 per cent of pregnant women at each deprivation level to have booked for antenatal care by the twelfth week of pregnancy by March 2015.

### Some specific interventions have reduced health inequalities but better evidence about cost effectiveness is needed

There is no evidence to date that targeted national programmes have helped to reduce health inequalities

**69.** *Keep Well* is the main national programme for tackling health

inequalities in Scotland and invites all people aged between 40 and 64 living in areas of high deprivation to attend a health check.<sup>62</sup> These checks include screening for cardiovascular disease and its main risk factors such as high blood pressure, high cholesterol, smoking and poor diet. The programme costs over £11 million a year. NHS Health Scotland has evaluated *Keep Well* to assess the feasibility and challenges of delivering the programme, but there is little evidence yet of the impact of *Keep Well* on health outcomes or life expectancy as these will only be apparent in the longer term (at least ten years).<sup>63</sup> The evaluation did not cover cost effectiveness, and NHS Health Scotland has not yet determined how to evaluate the long-term impact and cost effectiveness of *Keep Well*.

**70.** Two other targeted national programmes have also yet to demonstrate effectiveness in terms of improved outcomes:

- *Childsmile*, introduced across Scotland in 2008, is a national programme designed to improve the dental health of children in Scotland, and reduce inequalities in dental health by targeting children in the 20 per cent most deprived areas. The Glasgow Dental School is overseeing a programme to evaluate the impact of *Childsmile*, including cost effectiveness.
- *Family Nurse Partnership*, introduced initially by NHS Lothian in 2010, offers intensive and structured home visits by specially trained nurses to vulnerable first-time teenage mothers from early pregnancy until the child is two years old. It aims to improve pregnancy outcomes, child health and

development, and parents' economic self-sufficiency. The Scottish Government provided around £5 million to test the programme in two NHS board areas, Lothian and Tayside, and it plans to roll out the programme across the rest of Scotland. Initial evaluation of the programme indicates that there was high enrolment and low drop-out rates, and includes some brief data on changes in behaviours, such as alcohol consumption. The Scottish Government plans to assess changes in parenting behaviours but recognises that it may not be able to determine the direct impact of the programme.

### Small-scale local interventions have demonstrated some impact but a greater focus on outcomes is needed

**71.** Some local initiatives aimed at reducing health inequalities have reported positive outcomes (*Case study 4, overleaf*), but these have only been implemented in small local areas. The Scottish Government and CPPs should ensure that, where appropriate, successful local initiatives for reducing health inequalities are rolled out more widely and receive sufficient funding. It is important to pilot new initiatives to determine whether they are effective but regular introduction of short-term local initiatives can be disruptive and will have limited lasting impact on reducing health inequalities.

**72.** Evaluations have tended to focus on process measures and outputs rather than outcomes, and have not considered cost effectiveness. CPPs need to ensure that robust evaluation, including a clear focus from the outset on cost effectiveness and outcome measures, is an integral part of local initiatives and that staff have the skills to carry out evaluations.

60 *Changing Scotland's Relationship with Alcohol: A Framework for Action*, Scottish Government, 2009.

61 The HEAT performance management system covers indicators relating to Health improvement, Efficiency and governance improvement, Access to services and Treatment appropriate to individuals.

62 In 2012, *Keep Well* was extended to include carers, prisoners, homeless people and people with substance misuse problems.

63 *Evaluation of Keep Well*, NHS Health Scotland, 2011.

## Case study 4

### Quit4u smoking cessation programme

In 2009, NHS Tayside launched the quit4u programme to increase the take-up of smoking cessation support and quit rates among smokers in deprived areas of Dundee. The programme combined structured behavioural support and drug treatment with financial incentives for each week (up to a maximum of 12 weeks) that participants did not smoke. In May 2012, NHS Health Scotland published an evaluation of quit4u which concluded that, compared with other smoking cessation services and self-quit attempts, the programme was an effective and cost-effective model for engaging and supporting smokers in deprived areas to quit. NHS Tayside extended quit4u to smokers in deprived areas in Perth and Kinross from November 2010, and in Angus from August 2011. It is also currently being tested in Glasgow.

Source: *Evaluation of quit4u: Main report*, NHS Health Scotland, 2012

### Performance measures should provide a clearer picture of progress

**73.** A range of performance information provides an indication of progress in reducing health inequalities. This includes both national and local measures, covering a range of process measures (for example, the number of smoking cessation services delivered) and outputs (for example, the prevalence of smoking among adults). The various national measures provide an indication of overall progress, but there is little detailed analysis to assess the performance of local bodies in reducing health inequalities.

### Single Outcome Agreements do not provide robust evidence of progress in reducing health inequalities

**74.** CPPs prepare Single Outcome Agreements (SOAs) and agree these with the Scottish Government. The SOA sets the strategic priorities and outcomes which councils, NHS boards and other organisations aim to achieve for their local communities.

In *Equally Well*, the Ministerial Task Force stated that accountability for delivering action and change to tackle health inequalities would be through the SOA process.

**75.** CPPs publish annual reports on their performance in delivering their SOAs, including progress against a range of outcome indicators. These indicators include measures relating to health inequalities, such as reducing the prevalence of smoking among the local population and providing services aimed at tackling alcohol misuse. We reviewed all published CPPs' 2010/11 annual reports on their performance in delivering their SOAs (Exhibit 21).<sup>64</sup> Overall, CPPs' annual reports on performance in delivering the SOA do not provide consistent or robust evidence about how well they are tackling health inequalities in their local areas and differences among SOAs mean that a Scotland-wide picture is hard to identify. CPPs need to ensure that SOAs include clear outcome measures for reducing health inequalities which demonstrate impact, and improve the transparency of their performance reporting to

allow a better understanding of how well they are reducing health inequalities.

**76.** Audit Scotland is currently carrying out audits of three CPPs in Scotland. This work will help to highlight effective practice and look at the progress CPPs are making particularly in relation to SOAs, CPP governance and leadership and the delivery of local outcomes. The audits are being carried out in the context of the 2012 review of community planning and SOAs by the Scottish Government and COSLA which made clear that effective community planning arrangements will be central to public service reform and proposed placing of formal requirements on CPPs and strengthening the duties of individual partners.<sup>65 66</sup>

### The Scottish Government should revise national performance measures to present a clearer picture of progress

**77.** The Scottish Government's long-term indicators of health inequalities present national-level data across deprivation levels. However, to allow a more detailed analysis of progress in reducing health inequalities, the Scottish Government should also publish information at a more local level (for example, by CPP area) and for other factors such as ethnicity.

**78.** The Scottish Government's *Scotland Performs* website presents information on how Scotland is performing against a range of National Indicators. A number of the current indicators, such as reducing death rates among under-75s, improving children's dental health, improving mental wellbeing and reducing the percentage of adults who smoke, aim to promote health improvements for the general population. Other indicators, such as reducing the proportion of individuals living in poverty, and reducing children's deprivation, are linked to the wider

<sup>64</sup> Stirling CPP did not publish a 2010/11 report on its SOA.

<sup>65</sup> *Review of Community Planning and Single Outcome Agreements: Statement of Ambition*, Scottish Government and COSLA, March 2012.

<sup>66</sup> *Review of Community Planning and Single Outcome Agreements: Update*, Scottish Government and COSLA, May 2012.

**Exhibit 21****Review of CPPs' 2010/11 annual reports on their performance in delivering their SOAs**

CPPs' reports do not provide consistent or robust evidence about how well health inequalities are being tackled.

- Many reports were difficult to interpret, and varied widely in their quality and accessibility (for example, some reports were over 200 pages long).
- Reports used different baseline measures, and in some reports the baselines were unclear, making it difficult to establish what progress had been made.
- Some reports included commentary on how local indicators compared with Scotland as a whole but did not include trend data to demonstrate whether local progress had been made.
- How success was defined varied widely across the reports, with some including specific targets while others simply specified a change in direction.
- Some reports did not clearly specify whether targets had been met, or gave no indication of progress.
- Reports were inconsistent in the extent to which they included HEAT targets and national indicators relating to health inequalities.
- Health indicators were often presented for the general population rather than for different population groups.

Source: Audit Scotland analysis of CPPs' 2010/11 annual reports

determinants of health and health inequalities. However, none of the current indicators specifically monitors changes in health-related measures among people in deprived areas. Since reducing health inequalities is a Scottish Government priority, it should introduce appropriate national indicators to monitor progress through *Scotland Performs*.

**79.** The range of performance measures and reporting arrangements relating to health inequalities makes it difficult to establish a clear picture of progress. CPPs need a consistent set of measures to help focus their work on improving health inequalities. The Scottish Government, CPPs

and the constituent organisations should consider ways of aligning and rationalising the current range of performance measures to present a more coherent picture of progress.

**Recommendations**

The Scottish Government should:

- develop measures of short-term impact to demonstrate the effectiveness of its strategies which aim to improve health and reduce health inequalities in the longer term
- assess the impact on health inequalities of policies which

aim to improve the health of the whole population

- continue to support shared learning among the *Equally Well* test sites and encourage the transfer of effective local approaches to other areas
- publish information at a more local level than Scotland-wide, and include factors such as ethnicity, to allow a more detailed analysis of progress in reducing health inequalities
- introduce national indicators to specifically monitor progress in reducing health inequalities and report on progress.

The Scottish Government and CPPs should:

- ensure that cost effectiveness is built into evaluations of initiatives for reducing health inequalities from the start
- ensure that, where appropriate, successful local initiatives for reducing health inequalities are rolled out more widely
- align and rationalise the various performance measures to provide a clear indication of progress
- establish a shared understanding of what is meant by 'health inequalities'.

CPPs should:

- provide strong and supportive leadership which helps to promote effective partnership working to reduce health inequalities at a local level
- involve local communities in activities which are aimed at reducing health inequalities
- ensure that all partners are clear about their respective roles,

responsibilities and resources in tackling health inequalities, and take shared ownership and responsibility for actions aimed at reducing health inequalities

- clarify with CHPs (and, over time, with the proposed integrated Health and Social Care Partnerships) the respective roles and responsibilities for reducing health inequalities
- include in SOAs clear outcome measures for reducing health inequalities which demonstrate impact
- ensure that all partners take steps to improve the sharing of information to help joint working aimed at reducing health inequalities
- improve the transparency of their performance reporting to allow a better understanding of how well they are tackling health inequalities
- ensure that robust evaluation, using all available data and including outcome measures and associated costs, are an integral part of local initiatives aimed at reducing health inequalities and that staff have the skills to carry out evaluations.

NHS boards and councils should:

- carry out health inequalities impact assessments when designing new services or redesigning existing services.

# Appendix 1.

## Audit methodology

We reviewed a range of published information to inform our audit, including:

- Scottish Government *Equally Well* documents, annual reports on long-term indicators of health inequalities, national strategies, and National Indicators and HEAT targets
- Community Planning Partnerships' 2010/11 SOA reports
- evaluations of interventions to reduce health inequalities, including *Keep Well*
- NHS Director of Public Health annual reports
- reports by Glasgow Centre for Population Health
- reports by NHS Health Scotland
- academic papers, including the University of Glasgow's GPs at the Deep End series
- other published reports, including the 2010 National Audit Office report, *Tackling inequalities in life expectancy in areas with the worst health and deprivation*.

We reviewed published and unpublished data including:

- NHS Information Services Division (ISD) data
- National Records of Scotland statistics
- Scottish Health Survey data
- ScotPHO data
- Office for National Statistics life expectancy data

- NHS Scotland Practitioner Services Division (PSD) data on community pharmacies.

We issued data requests to the Scottish Government regarding funding allocations in various topic areas. We used this information to compile an overall estimate of the total funding to NHS boards to directly address the problems related to health inequalities.

We commissioned ODS Consulting to carry out focus groups with CPP managers, CHP managers and frontline staff from 12 CPP areas to gather views on how effectively local health inequalities are being tackled. We have published a separate report on Audit Scotland's website.

We carried out our own analysis of ISD published data on QOF payments, matching it with Scottish Index of Multiple Deprivation (SIMD) information. We used this information to explore how recent changes to the GMS contract have affected QOF payments in deprived areas. Additionally, we analysed PSD and ISD data on the distribution of pharmacies and dentists, again matching the data with SIMD information.

We carried out interviews with:

- staff at five *Equally Well* test sites to discuss their progress in improving partnership working and redesigning services
- ISD staff to discuss data, and to request unpublished statistics
- Scottish Government policy staff including the Chief Nursing Officer
- directors of Public Health from six NHS boards

- staff from NHS Health Scotland, Glasgow Centre for Population Health and COSLA

- academics from Glasgow University and Edinburgh University
- representatives from the voluntary sector.

# Appendix 2.

## Membership of the advisory group

Audit Scotland would like to thank the members of the advisory group for their input and advice throughout the audit.

<b>Member</b>	<b>Organisation</b>
Dr Pauline Craig	NHS Health Scotland
Dr Ron Culley	Convention of Scottish Local Authorities
Donald Henderson	Scottish Government
Tim Kendrick	Fife Community Planning Partnership
Susan Manion	Dunfermline and West Fife Community Health Partnership
Dr Kat Smith	University of Edinburgh
Dr Diane Stockton	Information Services Division, NHS National Services Scotland
Dr Drew Walker	NHS Tayside
David Walsh	Glasgow Centre for Population Health

Note: Members of the project advisory group sat in an advisory capacity only. The content and conclusions of this report are the sole responsibility of Audit Scotland.



# Appendix 3.

## National strategies for improving health and addressing health inequalities

Strategy	Description and impact
<b>Strategies focused on addressing health inequalities</b>	
Equally Well (June 2008)	<ul style="list-style-type: none"> <li>• Considers the evidence for health inequalities in Scotland and how health and other public services might respond to factors that affect people's health.</li> <li>• The Ministerial Task Force carried out a review of <i>Equally Well</i> in June 2010. The Task Force did not expect to see changes in health outcomes since the publication of <i>Equally Well</i> as it had not been in place for long. Instead, it reviewed progress against the recommendations in <i>Equally Well</i> and made further recommendations for the Scottish Government and CPPs.</li> </ul>
Child Poverty Strategy for Scotland (March 2011)	<ul style="list-style-type: none"> <li>• The main aims of this three-year strategy are to maximise household resources and improve children's well-being and life chances. Expenditure will move more to early intervention and prevention. The Scottish Government plans to introduce a Children's Services Bill and a Sustainable Procurement Bill, both of which may help to drive improvements in child well-being.</li> <li>• Progress towards targets is reported in the annual report for child poverty strategy in Scotland. The first annual report was published in March 2012 but contained no evidence of impact to date.</li> </ul>
<b>Strategies aimed at improving health</b>	
The Road to Recovery: A new approach to tackling Scotland's drug problem (May 2008)	<ul style="list-style-type: none"> <li>• Sets out priorities and an action plan for prevention, support and recovery.</li> <li>• In May 2009, the Scottish Government published <i>The Road to Recovery: One Year On</i> which reported on progress and described future work needed to deliver changes but did not include any information about impact. The Scottish Government provides updates through its <i>Drug and Alcohol Delivery Bulletin</i>. These bulletins have reported some progress, such as a fall in self-reported drug use, and higher levels of testing for blood-borne viruses among injecting drug users, but not specifically linked to the actions in <i>The Road to Recovery</i>.</li> </ul>
Better Cancer Care: An Action Plan (October 2008)	<ul style="list-style-type: none"> <li>• Sets out actions to reduce the number of people who develop cancer and to support people with cancer. The Scottish Cancer Taskforce was established to oversee the delivery of the plan.</li> <li>• The Scottish Government published a progress report in December 2010 which highlighted separate action plans to reduce smoking, alcohol misuse and obesity, as well as early detection through screening programmes. However, it contained no information about the impact of the Cancer Plan to date.</li> </ul>
Achieving Our Potential (November 2008)	<ul style="list-style-type: none"> <li>• Sets out a new approach to tackling poverty in Scotland</li> <li>• The Scottish Government published a report in 2011 which considered the evidence around financial capability, affordable housing, education and childcare. The report also included recommendations for future work, but contained no evidence about impact.</li> </ul>
Early Years Framework (December 2008)	<ul style="list-style-type: none"> <li>• Seeks to maximise positive opportunities for children and address the needs of those children whose lives are constrained by poverty, poor health, poor attainment and unemployment.</li> <li>• The Scottish Government published a progress report in 2011 which outlined progress against a range of short- and medium-term indicators. This described a range of processes and actions since the framework was published but there was little information about outcomes.</li> </ul>

Strategy	Description and impact
Changing Scotland's Relationship With Alcohol: A Framework for Action  (February 2009)	<ul style="list-style-type: none"> <li>• Contains plans to use legislation to achieve shorter-term goals and to effect cultural change for longer-term goals. Actions will involve the health service, local councils, the alcohol industry, police and the voluntary sector.</li> <li>• A monitoring and evaluation group was set up to oversee evaluation of the outcomes. In March 2011, its first annual report described baseline trends for alcohol consumption, affordability and alcohol-related harms. In June 2012, a report on the impact of the quantity discount ban on off-trade alcohol sales found a small decline in off-trade sales in Scotland since the ban, but this reduction was also seen in England and Wales where there was no ban. Further data is required to determine if this is a clear trend. Future annual reports will give further information on impact and relevant trends over time.</li> </ul>
Towards a mentally flourishing Scotland  (May 2009)	<ul style="list-style-type: none"> <li>• In August 2012, the Scottish Government published its mental health strategy for Scotland, which reported on progress towards meeting commitments in <i>Towards a mentally flourishing Scotland: Policy and Action Plan 2009-12</i>. There are 36 specific commitments to be delivered over the period to 2015 covering mental health improvement, prevention, care, services and recovery. The strategy highlights achievements so far including a fall in the number of psychiatric readmissions and in the suicide rate.</li> </ul>
Preventing Overweight and Obesity in Scotland: A Route Map Towards Healthy Weight  (February 2010)	<ul style="list-style-type: none"> <li>• Outlines the various actions which central government, local councils and the NHS will take to prevent and manage obesity in Scotland.</li> <li>• The Scottish Government published an action plan in March 2011 (updated in September 2011) and a set of 16 indicators which it will use to monitor progress in tackling obesity. The plan includes milestones for achieving specific aspects of the strategy, and the Government plans to update the indicators every year.</li> <li>• The Scottish Government established a Joint Obesity Ministerial Group to oversee the implementation of the strategy and report on progress towards milestones and indicators. There is no evidence of impact to date.</li> </ul>
Diabetes Action Plan 2010: Quality care for diabetes in Scotland  (August 2010)	<ul style="list-style-type: none"> <li>• Contains a wide variety of actions, including preventing diabetes, treatment and supporting people to help them to self-manage their condition. There are separate actions aimed at improving the care of people from black and ethnic minorities.</li> <li>• The Scottish Government has yet to report on progress.</li> </ul>

Source: Audit Scotland, 2012

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