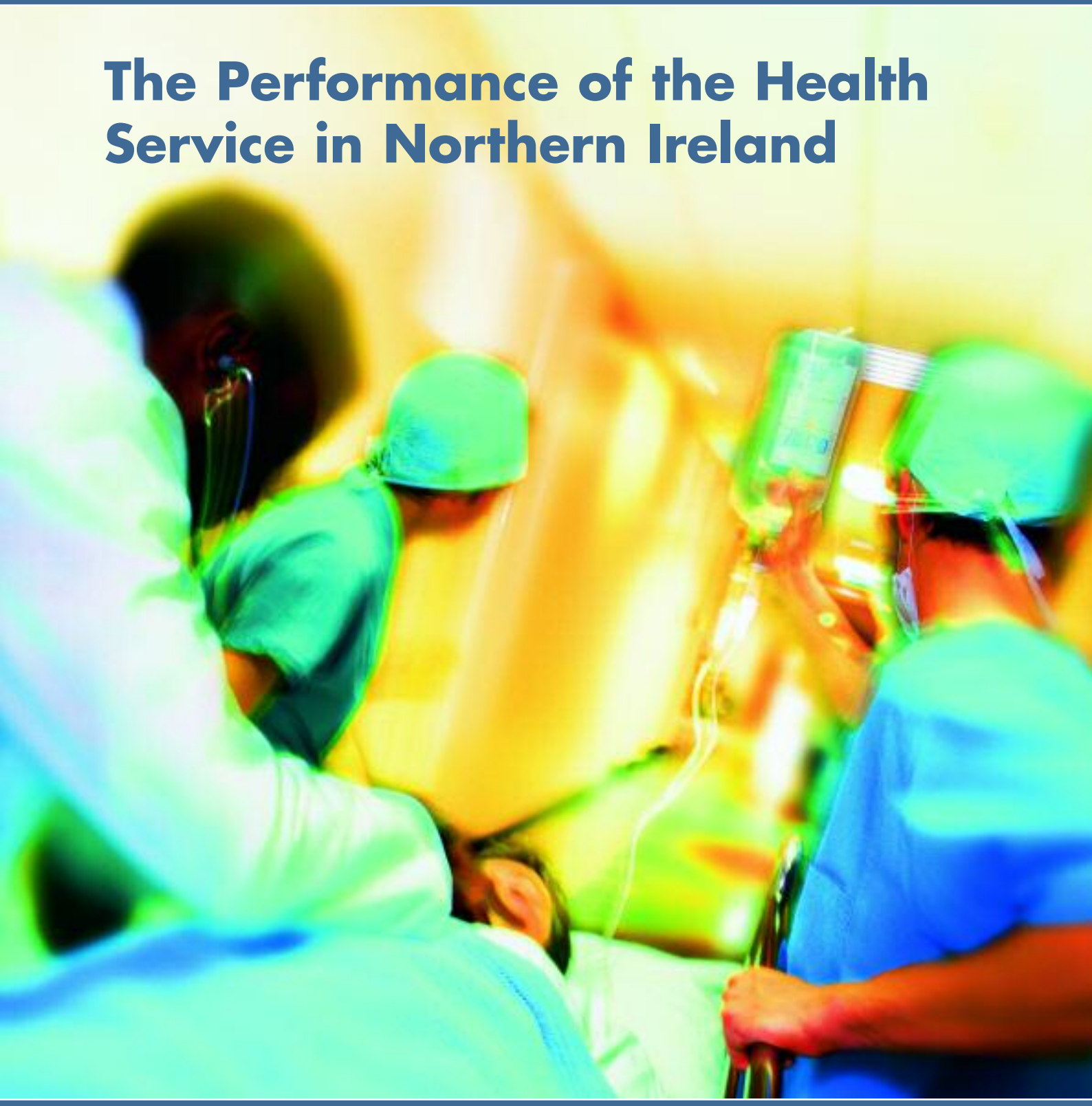
N I A O

Northern Ireland Audit Office

The Performance of the Health Service in Northern Ireland



REPORT BY THE COMPTROLLER AND AUDITOR GENERAL
NIA 18/08-09 1 October 2008

Report by the Comptroller and Auditor General for Northern Ireland

Ordered by the Northern Ireland Assembly *to be printed and published under the authority of the Assembly, in accordance with its resolution of 27 November 2007*

The Performance of the Health Service in Northern Ireland

NIA 18/08-09 BELFAST: The Stationery Office £5.00

This report has been prepared under Article 8 of the Audit (Northern Ireland) Order 1987 for presentation to the Northern Ireland Assembly in accordance with Article 11 of that Order.

J M Dowdall CB
Comptroller and Auditor General

Northern Ireland Audit Office
1 October 2008

The Comptroller and Auditor General is the head of the Northern Ireland Audit Office employing some 145 staff. He, and the Northern Ireland Audit Office are totally independent of Government. He certifies the accounts of all Government Departments and a wide range of other public sector bodies; and he has statutory authority to report to the Assembly on the economy, efficiency and effectiveness with which departments and other bodies have used their resources.

For further information about the Northern Ireland Audit Office please contact:

Northern Ireland Audit Office
106 University Street
BELFAST
BT7 1EU

Tel: 028 9025 1100
email: info@niauditoffice.gov.uk
website: **www.niauditoffice.gov.uk**

Contents

Abbreviations

BMI	Body Mass Index
CHD	Coronary Heart Disease
CVD	Cardiovascular Disease
DHSSPS	Department of Health, Social Services and Public Safety
GHQ	General Health Questionnaire
GMS	General Medical Services
GP	General Practitioner
HM	Her Majesty
ISD	Information Services Division
MGPH	Ministerial Group on Public Health
NIAO	Northern Ireland Audit Office
NIAS	Northern Ireland Ambulance Service
NISRA	Northern Ireland Statistics and Research Agency
PSA	Public Service Agreement
QOF	Quality and Outcomes Framework
UK	United Kingdom

Part One:
Introduction

Part One: Introduction

1.1 The setting of quantitative, time-limited targets by the Department of Health, Social Services and Public Safety (the Department) on behalf of patients, clients and taxpayers has been a notable feature of performance improvement efforts in the health and social care service in recent years. This Report examines some evidence of the impact of this approach, in terms of the extent to which patients and taxpayers are seeing real improvements in both public health and health and social care services in Northern Ireland. Assessing public health and health care against measurable targets in this way tracks the vital signs of our health system.

1.2. The picture that emerges is one of marked improvement in access, quality and outcomes in many areas of health and social care services but also some areas where progress may be falling short of initial expectations, particularly in relation to some public health issues. Any gaps in actual versus achievable performance can translate into illnesses that could be avoided; deaths that could be prevented; and resources that could be saved or reinvested. On the one hand, patients are waiting far less time for treatments and appointments in hospital and fewer people are dying from common conditions such as cancer and coronary heart disease. There have also been significant reductions in smoking prevalence and in unplanned births for teenage mothers. On the other hand, some groups of people continue to need more attention. For instance, too many manual workers are still smoking, some five per cent of Primary 1 school children are obese, the suicide rate (albeit an unreliable indicator of health patterns) has been climbing; and the relatively limited focus on preventative care in oral health needs to be redressed.

Objectives for Health

1.3 The overall aim of the Department is *to improve the health and well-being of the people of Northern Ireland*. In pursuing this aim, the key objective of the Department is to:

improve health and well-being outcomes through a reduction in preventable disease and ill-health by providing effective, high quality, equitable and efficient health, social and public safety services to the people of Northern Ireland.

1.4 The actions required to achieve this objective have been set down within the Programme for Government process, first established by the Northern Ireland Executive in 2001. This Report looks at the performance of the Department against the range of Public Service Agreement (PSA) health-related targets detailed in Priorities and Budget 2006-08 (the Direct Rule counterpart to the Programme for Government)[1]. A summary of these targets, and progress to date (on the basis of the latest annual report by the Department of Finance and Personnel), is included at Appendix 1.

1.5 By way of context, expenditure per head of population in Northern Ireland on health in 2007-08 was estimated by HM Treasury at £1,770 (including capital expenditure). This compares with figures of £1,676 for England, £1,919 for Scotland and £1,758 for Wales[2].

1 This Report concentrates on health PSA targets; it does not examine progress on the two targets relating to provision of personal social services in the community.
2 *Public Expenditure Statistical Analyses 2007*, HM Treasury

1.6 It is generally recognised that the need for health care resources will vary depending on the age profile of the population and the level of deprivation, with the most elderly and most deprived populations requiring most resources. A working group set up to implement recommendations following Professor Appleby's "Independent Review of Health and Social Care Services in Northern Ireland" updated a comparative needs assessment in 2007. This estimated that Northern Ireland has 16 per cent per capita higher need than England, with the figure rising to 17 per cent if private health care was taken into consideration. These findings are consistent with the Needs and Effectiveness Evaluation undertaken by the Department in 2003. While current spending levels in Northern Ireland are some six per cent higher than in England, this falls far short of addressing the higher level of need locally.

1.7 This Report is organised into the following parts:

- Part Two examines health improvement issues;
- Part Three examines outcomes for clinical priorities, such as cancer, circulatory disease and renal dialysis; and
- Part Four examines waiting times for patient care.

Part Two:
Health Improvement

Part Two:
Health Improvement

2.1 In 2001 the Northern Ireland Executive, in its Programme for Government, identified health improvement as one of its five main priorities. The Executive's latest Programme for Government sets out the plans and priorities for 2008-2011 and again among the five identified priority areas is a commitment to "promote tolerance, inclusion, **health and well-being**". In support of this priority are a number of key goals, many of which are directly related to health and social care.[3]

2.2 In 2002 the Executive launched its **Investing for Health Strategy**. This sets out an integrated, inter-departmental approach to health improvement. It also seeks to give a greater priority to prevention of ill health, rather than just its treatment. Responsibility for implementing and monitoring the Strategy lies with the Ministerial Group on Public Health (MGPH), comprising senior officials from all departments.

2.3 The Investing for Health Strategy has two high-level goals:

- to improve the health of our people by increasing the length of their lives and the number of years they spend free from disease, illness and disability; and
- to reduce inequalities in health between geographic areas, socio-economic and minority groups.

Specific targets within the Strategy complement the Department's 2006-08 PSA targets (for the latter, see Appendix 1).

2.4 In addition, in 2005 the Department consulted on a new regional strategy for health – **A Healthier Future: A Twenty-Year Vision for Health and Well-being in Northern Ireland 2005-2025**. This strategy proposes an overall framework for the development of health and social services across Northern Ireland. It takes account of strategies and policies already in existence and is intended to support and work towards the implementation of the Investing for Health Strategy.

2.5 The Department has also produced a number of other health improvement strategies on specific issues including:

- Smoking
- Food and nutrition (to combat obesity)
- Physical activity (to combat obesity)
- Mental health (suicide)
- Teenage pregnancy
- Oral health.

PSA Targets for Health Improvement

2.6 The Department's PSA targets for health improvement, as set out in the Government's plans for 2006-08[4], include targets to:

- increase life expectancy
- reduce the gap in life expectancy for people living in deprived areas

3 See: http://www.pfgbudgetni.gov.uk/finalpfg.pdf - page 13
4 *Priorities and Budget 2006-08*, Department of Finance and Personnel

compared to the Northern Ireland average

- reduce the proportion of adults smoking
- tackle childhood obesity
- reduce the suicide rate
- reduce the rate of births to mothers under 17 years of age
- reduce the gap in levels of tooth decay for children living in deprived areas compared to the Northern Ireland average.

Details of these targets and the Department's performance against them are set out in the following paragraphs.

Life Expectancy

2.7 The Department's PSA targets for life expectancy, as contained in the Priorities and Budget for 2006-08 (and, because they were necessarily long term, restated in the Programme for Government 2008-11), are:

- to increase life expectancy by two and three years for men and women respectively between 2000 and 2012 [using base figures of 74.8 years for men and 79.8 years for women]
- to reduce the gap in life expectancy between those living in the one-fifth most deprived areas and the Northern Ireland average by 50 per cent for both men and women between 2000 and 2012 [baseline age gap was 3.9 years for men and 2.7 years for women]

2.8 Life expectancy is the number of years a person would be expected to live if current age-specific mortality rates continued. Figure 1 shows the expectation of life at birth for selected years from 1981 to 2005. This is the average number of years a new-born baby would survive if he or she experienced the particular jurisdiction's age-specific mortality rates for that time period throughout his or her life.

2.9 The latest annual progress report for the 2004-06 period (see paragraph 1.4) shows that life expectancy had increased by 1.3 years for men and by 1.2 years for women above the baseline. Projections by the Government Actuary Department for 2012 show increases of 3.9 years for men and 2.9 years for women above the baseline. The target is therefore judged to be on track for achievement.

2.10 Progress on the target to halve the life expectancy gap between those in the one-fifth most deprived areas and the Northern Ireland average has not been so encouraging. By 2005, the gap for men had reduced only slightly from 3.9 to 3.7 years and the gap for women had similarly reduced from 2.7 to 2.5 years. This suggests the 2012 PSA target will be hard to achieve. However the Department points to a number of milestone targets which stem from the Investing for Health Strategy (see paragraph 2.2) which should contribute to reducing the life expectancy gap by 2012 in line with the target. A comparison of life

Part Two:
Health Improvement

Figure 1: Trends in life expectancy at birth, selected years, 1981-2005

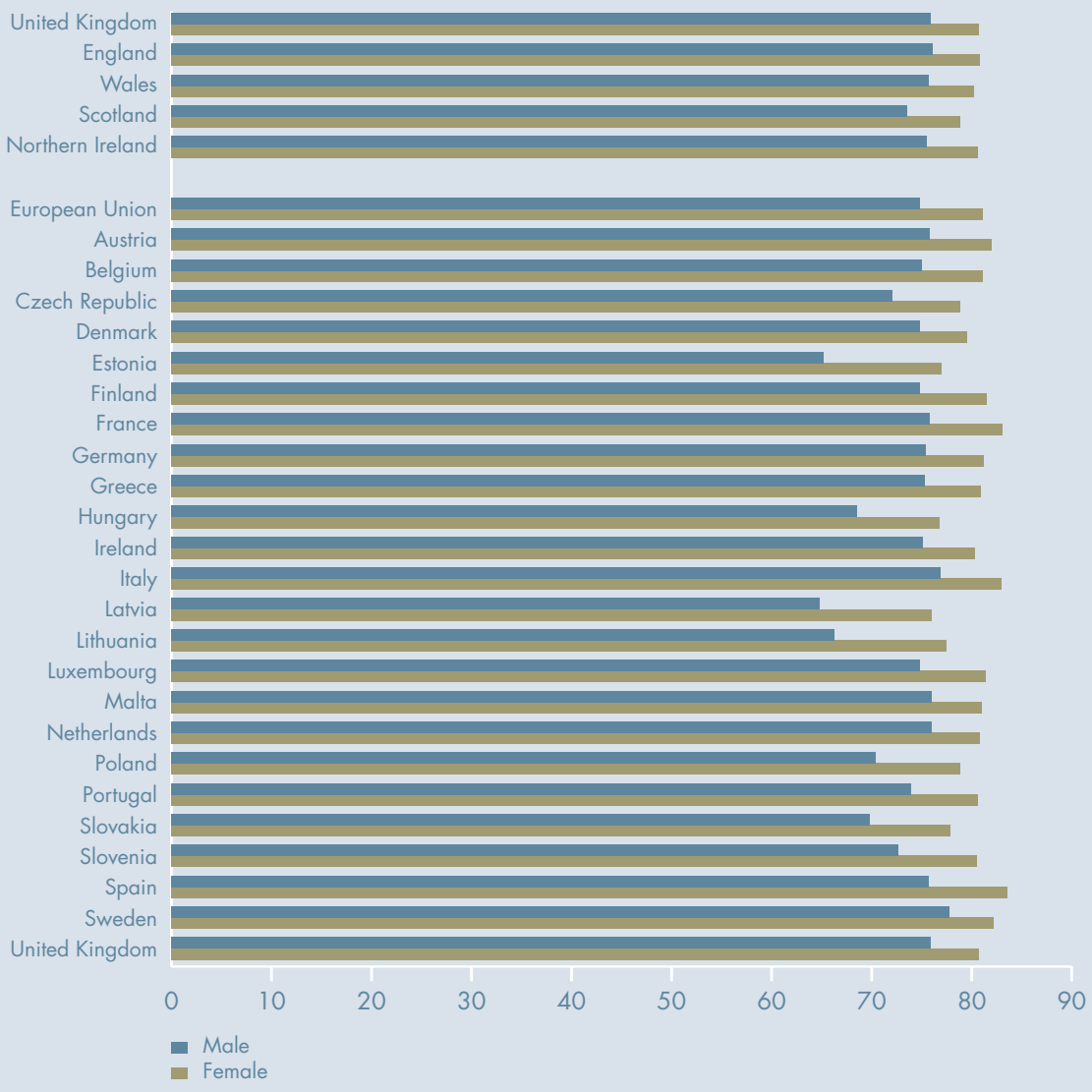
	1981	1991	2001	2002	2003	2004	2005
Males							
United Kingdom	70.8	73.2	75.7	75.9	76.3	76.5	76.9
England	71.1	73.4	76.0	76.2	76.6	76.8	77.2
Wales	70.4	73.1	75.4	75.7	76.0	76.1	76.6
Scotland	69.1	71.4	73.3	73.5	73.8	74.2	74.6
Northern Ireland	**69.2**	**72.6**	**75.2**	**75.6**	**75.8**	**76.0**	**76.1**
Females							
United Kingdom	76.8	78.7	80.4	80.5	80.7	80.9	81.3
England	77.0	78.9	80.6	80.7	80.9	81.1	81.5
Wales	76.4	78.8	80.1	80.2	80.4	80.6	81.0
Scotland	75.3	77.1	78.8	78.9	79.1	79.3	79.6
Northern Ireland	**75.5**	**78.4**	**80.1**	**80.4**	**80.6**	**80.8**	**81.0**

Source: UK National Statistics

expectancy in Northern Ireland with that of other jurisdictions in the United Kingdom shows that, while England currently has the highest life expectancy, the largest increases in life expectancy since 1981 have been observed in Northern Ireland – seven years for men and five years for women.

2.11 In 2002, the life expectancy for men in the European Union was 74.8 years and that for women was 81.1 years (Figure 2). At that time, life expectancy for men in Northern Ireland was higher than the overall figure for the European Union while life expectancy fo women, along with the rest of the United Kingdom, was lower than the overall European Union figure. While statistics show that there has been positive change in the life expectancy of the population in Northern Ireland, comparisons with Great Britain and other European countries indicate that further improvements are possible.

Figure 2: Life Expectancy at Birth: European Union 2002



Source: United Kingdom Health Statistics

Part Two:
Health Improvement

Smoking

2.12 The Department's PSA target for smoking, as set out in Priorities and Budget 2006-08 was:

- By 2011, to reduce the proportion of adult smokers to 22 per cent or less, with a reduction among manual groups to 27 per cent or less.

2.13 Smoking is the greatest single cause of avoidable illness and preventable death in Northern Ireland and figures suggest that 75 per cent of smokers do want to give up smoking[5].

2.14 In 2003, the Department published a **Five Year Tobacco Action Plan (2003-08).** This outlined three key objectives: to prevent people from starting to smoke; to help smokers to quit smoking; and to protect non-smokers from tobacco smoke. It also highlighted the impact of smoking:

- smoking claims around 3,000 lives a year in Northern Ireland
- it is responsible for one in three of all cancer deaths and 84 per cent of lung cancer deaths
- smoking is a major risk factor for coronary heart disease, strokes and other circulatory diseases, which kill two in five people here. A lifetime non-smoker is 60 per cent less likely to have coronary heart disease than a current smoker and 30 per cent less likely to have a stroke
- the total economic cost of smoking is estimated at £3.1 billion in Northern Ireland.

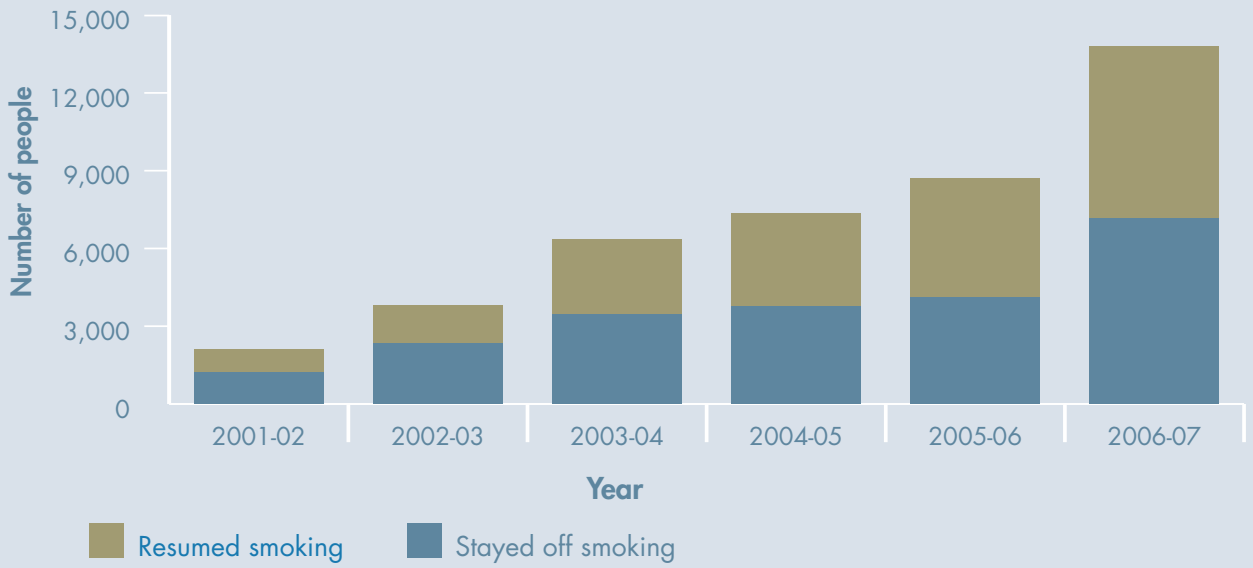
2.15 The smoke-free legislation which came into force in April 2007[6] has increased demand for smoking cessation services and had a substantial impact on the prevalence of smoking in Northern Ireland. In preparation for the introduction of the smoke-free legislation, the Department made available additional funding for pharmacy-based cessation services from 2006-07. Figure 3 opposite shows the recent increase in demand for smoking cessation services in Northern Ireland prior to April 2007.

2.16 In relation to the target to reduce the proportion of adult smokers to 22 per cent or less by 2011 (now tightened to 21 per cent under the 2008-11 Programme for Government), the latest performance information indicates that the Department is making good progress, with data indicating that the proportion of adult smokers had fallen to 23 per cent at the end of March 2008. Figure 4 provides a breakdown of smoking statistics which shows that smoking prevalence has declined to an equal level among men and women; smokers make up 23 per cent of adults in each sex according to the data for 2007-08. The equivalent data for England, Scotland and Wales will not be released by the Office of National Statistics until early next year.

2.17 Progress continues on the target to reduce levels of smoking among manual groups to 27 per cent or less by 2011 (now tightened to 25 per cent under the 2008-11 Programme for Government). The data for

5 NISRA Continuous Household Survey 2006-07
6 The Smoking (Northern Ireland) Order 2006

Figure 3: Number of people registering with the smoking cessation services, 2001-02 to 2006-2007



Source: Department

Figure 4: Percentage of adult population (age 16+) who smoke

	1992-93 %	1994-95 %	1996-97 %	1998-99 %	2000-01 %	2002-03 %	2004-05 %	2006-07 %	2007-08 %
Males									
England	29	28	28	29	29	27	26	23	N/A
Wales	32	28	28	29	25	27	24	19	N/A
Scotland	34	31	33	35	30	29	29	25	N/A
Northern Ireland	**31**	**29**	**31**	**28**	**26**	**27**	**27**	**25**	**23**
Females									
England	27	25	27	26	25	25	23	21	N/A
Wales	33	27	27	27	24	27	22	20	N/A
Scotland	34	29	31	29	30	28	22	25	N/A
Northern Ireland	**29**	**27**	**27**	**29**	**28**	**26**	**25**	**26**	**23**
All Northern Ireland	**30**	**28**	**29**	**29**	**27**	**26**	**26**	**25**	**23**

Source: UK Statistics General Household Survey 2005; NISRA Continuous Household Survey 2006-07

Part Two:
Health Improvement

Figure 5: Prevalence of cigarette smoking by socio-economic group, 1983 to 2007-08

Socio-economic Group	1983 %	1990-91 %	1994-95 %	1996-97 %	1998-99 %	2000-01 %	2002-03 %	2004-05 %	2006-07 %	2007-08 %
Professional	17	16	19	13	12	10	15	13	10	12
Employer, manager	29	25	18	23	22	17	25	21	18	17
Intermediate non-manual	23	26	21	20	21	18	18	17	16	16
Junior non-manual	28	30	24	26	26	23	23	26	22	21
Skilled manual	39	34	29	32	32	30	27	28	28	28
Semi-skilled manual	39	41	39	39	39	36	35	36	35	31
Unskilled manual	48	42	36	40	34	39	31	44	40	35
Armed forces etc	19	23	22	23	22	27	28	23	28	23
ALL	**33**	**32**	**28**	**29**	**29**	**27**	**26**	**26**	**25**	**23**

Source: NISRA Continuous Household Survey 2006-07

2007-08 shows that, while smoking continues to be relatively common in this section of the community – particularly among semi-skilled and unskilled manual workers (Figure 5) – their prevalence of smoking is now 30 per cent; the 2006-07 figure was 33 per cent.

2.18 The targets for smoking reduction have to be viewed in the context of a steady downward trend in the habit over recent years. However, while acknowledging current progress, we consider that meeting the target for manual groups will continue to be challenging and will require sustained attention over the coming period. The Department will, for example, need to explore innovative ways of persuading manual workers to participate in smoking cessation services.

Obesity

2.19 The Department's PSA target, as set out in Priorities and Budget 2006-08, is:

- to stop the increase in levels of obesity in children by 2010.

2.20 Obesity is defined as someone having a body mass index (BMI) of 30 or more. BMI is calculated by dividing a person's weight in kilograms by the square of their height in metres. Figures from the Health and Social Wellbeing Survey 2005-06[7] showed that 25 per cent of men and 23 per cent of women were obese. In terms of childhood obesity, the Survey calculates obesity levels in two ways, the International approach and the United Kingdom approach, each method giving very different results (see Figure 6). The Department told us that there is no consensus as to which is preferable.

7 *Health and Social Wellbeing Survey*, NISRA, 2007

Figure 6: Child Obesity Levels, Northern Ireland, 2005-06

	International Approach			UK Approach		
	Age 2-10 %	Age 11-15 %	Total %	Age 2-10 %	Age 11-15 %	Total %
Male	10.2	3.8	7.7	19.3	22.0	20.3
Female	9.0	5.0	7.4	16.2	13.9	15.2
All children	9.6	4.4	7.6	17.9	18.1	18.0

Source: NI Health and Social Wellbeing Survey 2005-06

Figure 7: Fit Futures Priorities for Action

Priority Area	Issues / Action required
Develop joined-up healthy public policy	• address disjointed approach to promotion of physical activity, sport and leisure • address conflicting policies sometimes being promoted by government departments and agencies in relation to food policy and the food industry
Provide real choice	• food industry should respond to introduction of controls on advertising and promotion of foods to children • food industry should introduce agreed nutritional signposting system • create demand for healthy options through public sector food procurement • tackle barriers to healthy food • opportunities for active play should be available and accessible
Support healthy early years	• extend healthy schools programme to early years settings • establish common standards for nutrition and physical activity in these settings and monitor compliance
Create healthy schools	• integrate health improvement planning into school development planning • develop active schools programme
Encourage development of healthy communities	• community based approaches such as Health Action Zones
Build an evidence base	• systematic surveillance of obesity levels, nutrition and activity levels

Source: Fit Futures: Focus on Food, Activity & Young People, 2005

Part Two:
Health Improvement

For this reason, Northern Ireland data is presented in both ways which allows comparisons to be made with other countries on a like-for-like basis.

2.21 In response to the childhood obesity issue, a cross-departmental taskforce was established by MGPH (paragraph 2.2) in August 2004 to examine options for preventing the rise in levels of children who are overweight and obese in Northern Ireland. Analysis commissioned as part of that process found that levels of obesity in children living in Northern Ireland were increasing year on year and that 4.5 per cent of boys and 6.9 per cent of girls were obese in Primary 1[8]. The Department told us that more recent data show that the level of obesity in Primary 1 has declined slightly since 2003-04 from 5.7 per cent of the age group to a still high 5.1 per cent in 2005-06. The *Young Hearts* study of 12 and 15 year olds living in Northern Ireland also reported that levels of overweight and obesity had increased by over half in the ten years from 1990 to 2000.[9] The taskforce reported in December 2005[10] and identified six priority areas for action (see Figure 7).

2.22 An implementation plan for Fit Futures was issued for consultation in early 2007. This set out a range of key tasks and target dates under the six priority areas. An Obesity Prevention Steering Group, led by the Department, was set up in February 2008 to oversee implementation (and also to develop an adult obesity strategy).

2.23 Data on current levels of childhood obesity in Northern Ireland are being collected through the School Nursing Service, with BMI measurements for Year 8/9[11] pupils now being made. Data will also be obtained from the next Health and Social Wellbeing Survey which is due to be run in 2009-10.

2.24 The proportion of obese children demonstrates the scale of the problem. This is a serious concern, as obesity reduces life expectancy and increases the risk of a wide range of medical conditions. It is crucial that strategies to reduce obesity are based on a clear understanding of their cost effectiveness and that they are targeted on those sections of the population where their potential impact can be most positive. The Department told us that Fit Futures, which contains a range of activities that seek to reduce and prevent childhood obesity, was the result of an extensive engagement process and a full review of the evidence base. As Fit Futures is implemented, the Department will continue to evaluate relevant actions to ensure they are effective, and they are targeting the groups on which they can have the greatest impact.

Mental Health and Suicide

2.25 The Department's PSA target for mental health, as set out in Priorities and Budget 2006-08, is:

- to reduce the standardized suicide rate by 10 per cent by 2008.

2.26 Northern Ireland has a higher incidence of mental health problems than other parts of the United Kingdom, as measured by the

8 *Analysis of data from the Northern Ireland child health system on the height and weight of children in Primary One,* Unpublished, DHSSPS.
9 *Ten year trends for fatness in Northern Irish adolescents: the Young Hearts Projects, repeat cross-sectional study.* International Journal of Obesity, 29, 579-585, 2005.
10 Fit Futures: Focus on Food, Activity and Young People, Report to the Ministerial Group on Public Health, December 2005
11 Years 8 and 9 are the first two years of post-primary school.

Figure 8: Percentage of population with a high GHQ-12 score, Northern Ireland, England and Scotland*

Sources: Northern Ireland Health and Social Wellbeing Survey 2005-06, Health Survey for England 2003 (Department of Health) and Scottish Health Survey 2003 (Scottish Executive)

* figures for Wales not readily available

GHQ-12 score[12] (see Figure 8). Factors such as poverty and community conflict which affect mental wellbeing are more prevalent in Northern Ireland.

2.27 In 2003, the Department published a mental health strategy[13] covering the five years to 2008. The Strategy advocates a range of actions in four main areas – policy development, raising awareness, improving knowledge and skills, and preventing suicide. A multi-agency implementation group is taking forward the action plan. The Strategy's target was to reduce the proportion of people with a high GHQ-12 score to 19.5 per cent by 2008 – this has already been achieved, although levels in Northern Ireland remain higher than in Great Britain.

2.28 Mental health, and in particular suicide prevention, have been highlighted recently through the work of the Bamford Review[14] and the publication of a Suicide Prevention Strategy and Action Plan[15] in October 2006. The suicide strategy complements both the Investing for Health Strategy and the mental health strategy.

2.29 The suicide prevention strategy has identified some significant variations within the overall suicide rates in Northern Ireland: the rate is more than three times higher for men than women; the rate is almost twice as high in deprived areas; and the rate is around 20 per cent higher in urban areas compared with rural areas. The very high rates in deprived urban areas push up the rates for

12 General Health Questionnaire (GHQ-12) assesses levels of depression, anxiety, sleep disturbance and happiness in the population. A GHQ-12 score of 4 or more - a 'high GHQ-12 score' - indicates a high level of psychological distress.
13 *Promoting Mental Health, Strategy and Action Plan* 2003-08, DHSSPS
14 The Review was initiated by the Department in October 2002 to look at law, policy and provision affecting people with mental health needs and learning difficulties. It has published a series of reports since 2003.
15 *Protect Life – A Shared Vision, Strategy and Action Plan 2006-2011*, DHSSPS October 2006

Part Two:
Health Improvement

urban areas as a whole: North and West Belfast have suicide rates of almost twice the Northern Ireland average. While the need for further research is widely acknowledged, influencing factors are likely to include economic deprivation and the impact of community conflict.

2.30 A cross-sectoral group has been established to advise on the implementation of the suicide strategy, and earmarked funding of £1.9 million in 2006-07 and £3 million in 2007-08 was made available towards its implementation. Some £1.8 million of the latter amount has been specifically allocated to the four Health Boards to support interventions at community level. A number of pilot projects are in place across the four Board areas; these will be evaluated to determine which interventions are successful. In addition, arrangements are in place to ensure that all GP practices will in the near future have a professional trained in depression and suicide awareness.

2.31 Between 2000 and 2004, there were around 150 registered deaths per year from suicide in Northern Ireland. The numbers increased markedly in 2005 to 213 and there was another significant rise to 291 deaths in 2006 (see Figure 9). The latest available figures are for 2007 and these show a decrease to 242 deaths (see Figure 9). However, it is too early to determine whether the reduction points to a longer downward trend, or that it will meet the PSA target of a ten per cent reduction in suicide by 2008. The Department believes that, as suicide becomes less stigmatised through improved awareness and support, more deaths may well be registered as suicide. This could contribute to an increase in the

Figure 9: Deaths from suicide in Northern Ireland 1996-2007

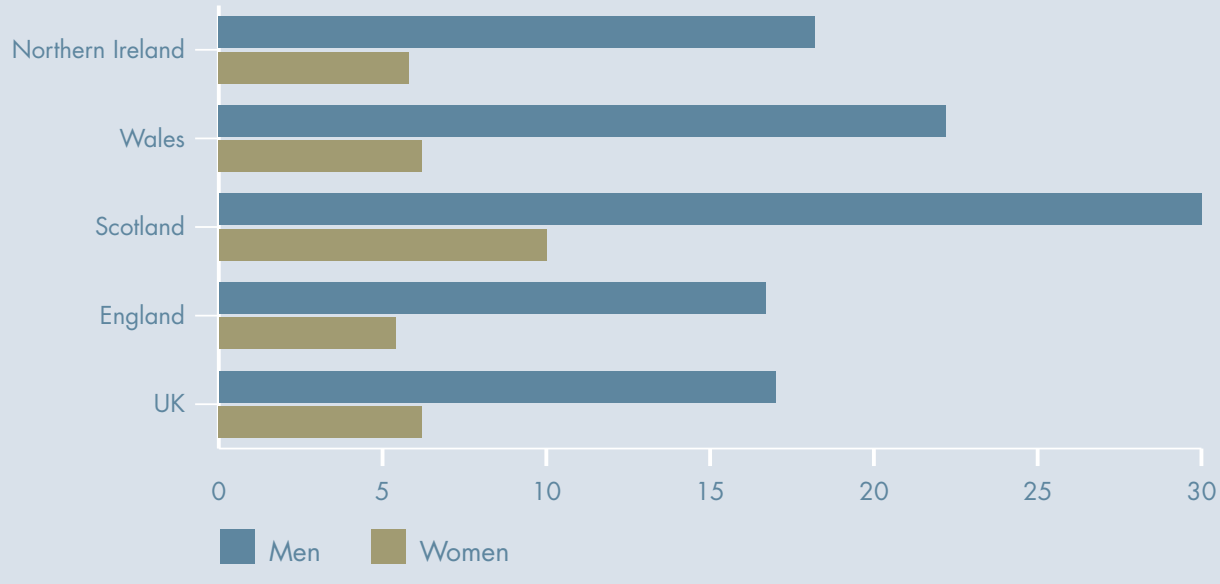
Source: NISRA Mortality Statistics for Northern Ireland

number of deaths recorded as suicide and, therefore, prolong the period before which a consistent reduction in numbers becomes apparent.

2.32 Comparative data available suggest that suicide rates in Northern Ireland are greater than in England but lower than in Wales and Scotland (see Figure 10).

2.33 Within the area of mental health, the incidence of suicide has been of great concern. It is usually the tragic end point of various possible pathways, influenced by mental ill health, psychological, socioeconomic, interpersonal and genetic factors. As such, pinpointing factors that have contributed to the increase in the suicide rate in recent years is not easy. Likewise, while the relative impact of different strategies on suicide is important for planning, it is difficult to estimate. Clearly, the Department faces a stern challenge in ensuring that its strategy and action plan can achieve a sustained reduction in suicide rates. This is likely to require additional work into risk assessment methods and the tailoring of interventions for vulnerable populations. The Department acknowledges that achieving the aim of the Protect Life – A Shared Vision NI Suicide Prevention Strategy to reduce the suicide rate in NI will be an ongoing challenge. The Strategy contains several actions including those targeted at specific groups within the population, and research into the risk factors.

Figure 10: Comparative suicide rates (deaths per 100,000), 2002-04



Source: National Statistics

Part Two:
Health Improvement

Teenage Births

2.34 The Department's PSA target in relation to teenage births is:

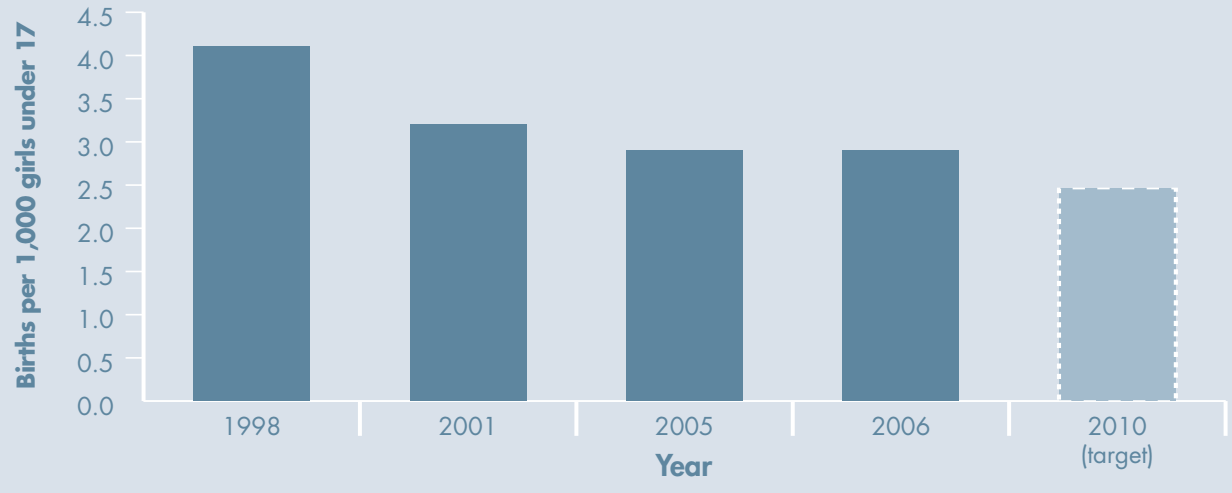
- by 2010, to achieve a 40 per cent reduction in the rate of births to teenage mothers under 17 years of age.

In 2002, the Department published a Teenage Pregnancy and Parenthood Strategy and Action Plan 2002-07, with the aim of helping to reduce the number of unplanned births to teenage mothers. It identified 21 actions required in areas such as policy development, information and education, improved services, improved training and research.

2.35 Figure 11 shows that the birth rate for girls under 17 fell to 2.9 births per 1,000 girls in 2006. This is a 29 per cent reduction from the base year of 1998 and suggests that the 2010 PSA target should be achievable.

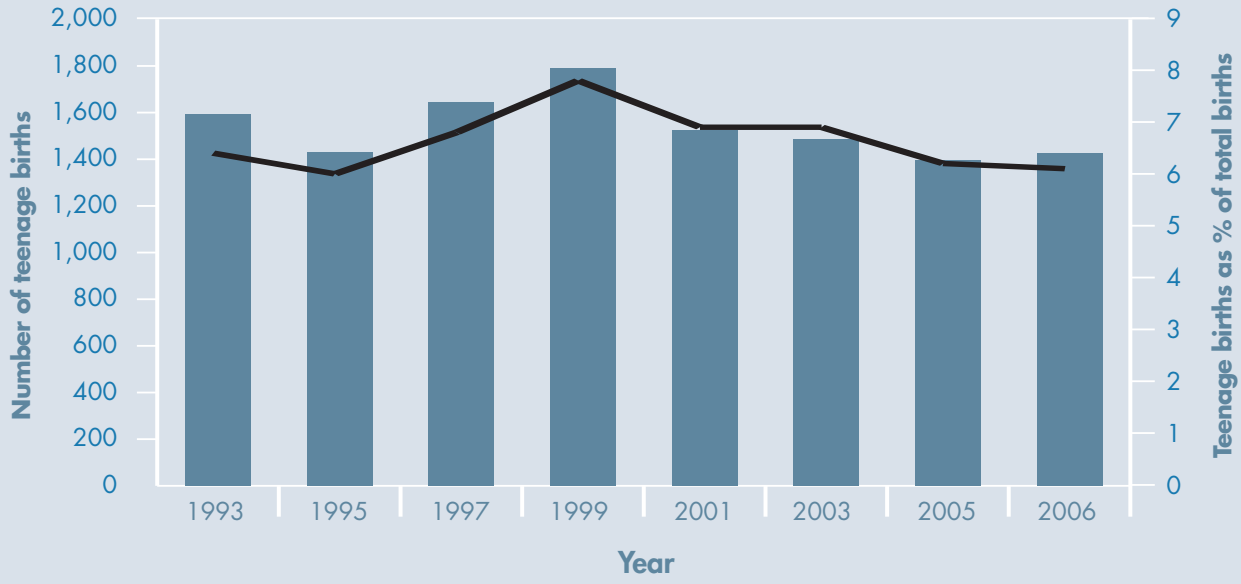
2.36 In total terms, there were 1,427 births to teenage mothers (aged 19 and under) in 2006 in Northern Ireland. This represented a 20 per cent decrease from a high of 1,791 teenage births in 1999 (see Figure 12). Teenage births comprised 6.1 per cent of total births in 2006, down from 7.8 per cent in 1999. In comparative terms, Northern Ireland had a teenage birth rate 17 per cent lower than the overall UK figure for 2005.

Figure 11: Birth rate for girls under 17, 1998 to 2006



Source: Department

Figure 12: Births to mothers aged 19 and under in Northern Ireland 1993 to 2006



Source: NISRA

2.37 The figures above show that the PSA target on births to mothers under 17 is on course for achievement and the interim target on teenage births contained in the Department's strategy has been achieved two years early.

Oral Health

2.38 The Department's PSA target for oral health is:

- by March 2008, Boards and Trusts should reduce the difference in decay levels in 5-year old children in the fifth most deprived wards in each Community Trust area and the NI average by 20 per cent (base year 2003-04).

2.39 The oral health of Northern Ireland's population is the worst in the United Kingdom, particularly among children. While there have been improvements in the oral health of the population as a whole, there has been little improvement in disease levels over the past 10 years in children under five. Figure 13 shows that dental decay is much higher among five year old children in Northern Ireland compared with England. Northern Ireland also fares poorly when compared with the Republic of Ireland. Part of the explanation for the relatively poor oral health is lifestyle choices. The average Northern Ireland household spends more money per week on cigarettes, confectionery and sugared soft drinks than any other part of the United Kingdom.

Part Two:
Health Improvement

Figure 13: Percentage of five year old children who have experienced dental decay, 1983-2003

Source: 2003 UK Children's Dental Health Survey

2.40 In the past the Republic of Ireland had worse dental decay rates than Northern Ireland, but due to an extensive programme of water fluoridation, the Republic has managed to reverse this trend and now has some of the lowest decay rates in Europe. The Department's Oral Health Strategy[16] attempts to close the oral health gap with Northern Ireland's neighbours and to improve the quality of life by:

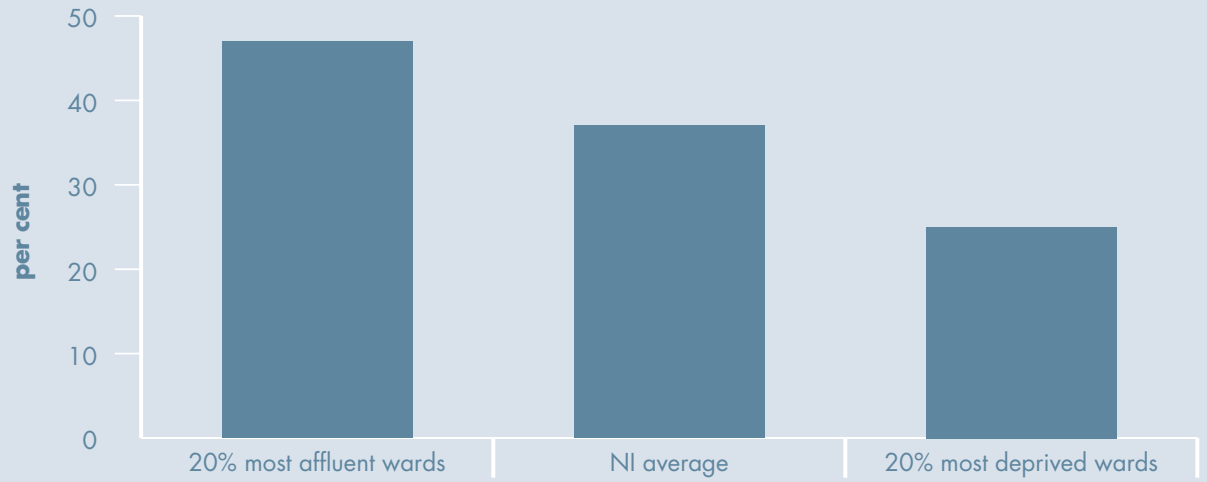
- improving the oral health of the Northern Ireland population; and
- reducing inequalities in oral health.

2.41 Fluoridation of water supplies is internationally recognised as the most cost-effective and equitable way of improving dental health, and its effectiveness and safety is endorsed by all reputable health bodies including the World Health Organisation. The Oral Health Strategy recommends that the Department should work in partnership with other stakeholders to examine the feasibility of fluoridating Northern Ireland's public water supply.

2.42 The Oral Health Strategy states that one strong influence on levels of dental decay is social deprivation. Children living in the 20 per cent most deprived wards in Northern Ireland are almost twice as likely to have dental decay as children from the 20 per cent most affluent wards (see Figure 14). The Department has provided funds to Trusts to implement an evidence-based dental caries reduction programme targeted at children up to five years of age in the most socially deprived areas of Northern Ireland,

16 *Oral Health Strategy for Northern Ireland*, DHSSPS, June 2007

Figure 14: Percentage of Year 8 children without experience of tooth decay, 2002



Source: Primary Dental Care Strategy, DHSSPS, September 2006

as a means of reducing this gap. The schemes include the provision of fluoride toothpaste to the children concerned.

2.43 In November 2006, the Oral Health Strategy consultation document was complemented by the publication of a further strategy document[17] aimed at reforming primary dental care services. In spite of examples of good practice, the Department's view was that the current system was no longer fit for purpose and was in need of reform. The new strategy, therefore, aims to provide a clearer focus on disease prevention, includes provisions to ensure better access to services, stresses the need for local commissioning and introduces a new remuneration system for dentists. According to the British Dental Association (Northern Ireland)[18] more than two thirds of high street dentists in Northern Ireland believe that they are not able to spend sufficient time with individual patients to be able to take a more preventative approach. The Department is negotiating a new contract with the British Dental Association, which will have a clear focus on preventative care.

2.44 Decay levels are measured by the number of decayed, missing and filled teeth – the dmft index. In the base year 2003-04, the Northern Ireland average index for five year old children was 2.09, rising to 2.67 for the 20 per cent most deprived wards – a difference of 0.58. If the target reduction is achieved, the difference should be no more than 0.46 by March 2008. Achievement of

17 *Primary Dental Care Strategy,* DHSSPS, November 2006
18 *Survey of Dentists,* British Dental Association, January 2006.

Part Two:
Health Improvement

the target will only be known when the level of decay is measured later in 2008. An evaluation of evidence-based caries reduction programmes is also underway.

2.45 The Primary Dental Care Strategy has proposed a fundamental shift in the way in which dentistry should be provided in Northern Ireland and this should help to reverse the dynamic in the system which encourages dentists to carry out as many activities within as short a time as possible. The new arrangements will also improve access to health service dentistry, which has been problematic in some parts of Northern Ireland. This provides an opportunity for better management of public money, meeting patients' health needs and transforming the region's poor oral health. The Department told us that negotiations on a new dental contract are ongoing with the Dental Practice Committee of the British Dental Association. It is the intention of the Department to ensure that there is a strong emphasis on preventative care in the new dental contract thus shifting the focus from treatment to prevention of dental disease. The Department is also working with Manchester University to undertake a research programme in developing workable preventative arrangements in a high street dental setting. A research bid has been submitted to the Health Technology Assessment[19] Programme and the outcome is awaited.

Satisfaction with Health Services

2.46 The Department's PSA target in relation to public satisfaction with health services is:

- to increase the proportion of the public who are satisfied or very satisfied with health and social care in Northern Ireland from 78 per cent in April 2004 to 80 per cent in March 2008.

2.47 The latest public attitudes survey[20], carried out in 2006 and reported in June 2007, shows that the overall level of satisfaction with health and social care services in Northern Ireland stands at 82 per cent. The PSA target has therefore been exceeded ahead of time. Satisfaction levels of 95 per cent or more were reported for outpatients, day surgery, GP, pharmacy and dental services. The survey also highlighted the impact of Investing for Health and its associated policies. Over half of those surveyed had improved their diets and almost half had increased their level of exercise.

2.48 We acknowledge the generally positive findings of the Department's survey but we note that it also highlights scope for improvement: for instance, during a stay in hospital, patients ranked better hospital food and increased hospital cleanliness as the top two areas for suggested service improvement. We would expect that the

19 The Health Technology Assessment programme is part of the National Institute for Health Research. It produces independent research information about the effectiveness, costs and broader impact of healthcare treatments and tests for those who plan, provide or receive care in the NHS.

20 *Public Attitudes to Health and Social Services in Northern Ireland (2006)*, Social and Market Research for DHSSPS(NI), 2006.

survey results will help to support continued improvement in the health service in Northern Ireland. The Department told us that in 2008, rather than undertake another full quantitative public attitudes survey, it is carrying out in-depth qualitative work on the key issues arising from the previous survey. The fieldwork has been completed and the draft report is undergoing Departmental consideration. The final report is expected to be published later in the Summer 2008.

Part Three:
Improving Clinical Outcomes

Part Three:
Improving Clinical Outcomes

3.1 The Department's main priorities for the improvement of clinical outcomes, as reflected in the Priorities and Budget 2006-08, are:

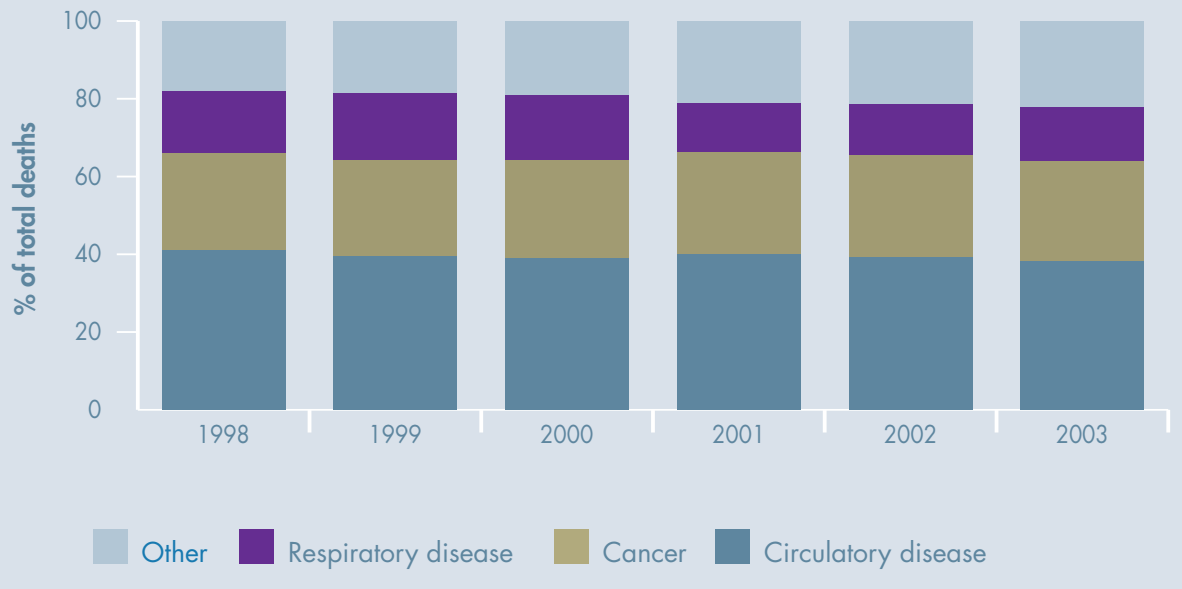
- between 2000 and 2010, to reduce the death rate from circulatory diseases by at least 20 per cent in people under 75
- by 2010, to increase the five year cancer survival rates for the main cancers by 5 per cent (using diagnoses in the years 1993-95 as the baseline
- by March 2007, to increase renal dialysis provision by 30 per cent above the 2004 baseline.

3.2 Circulatory diseases and cancer are two of the main killers in the United Kingdom, accounting annually for around 38 per cent and 26 per cent, respectively, of all deaths.

Circulatory Disease

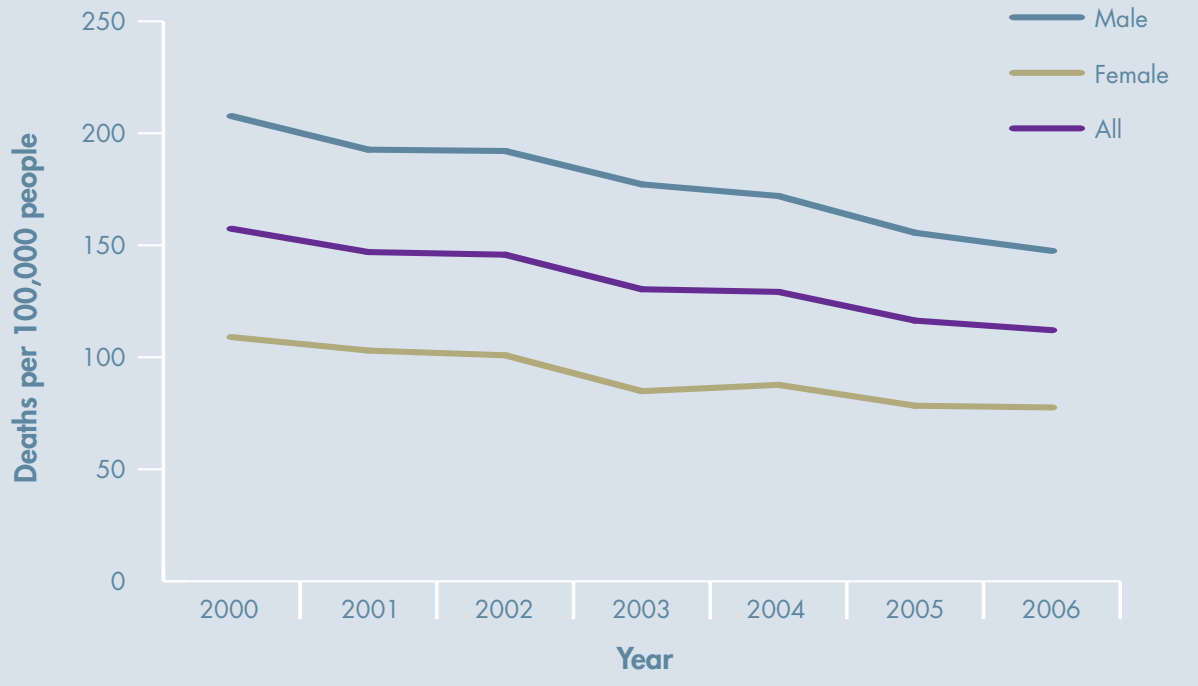
3.3 Circulatory, or cardiovascular, disease (CVD) comprises mainly coronary heart disease and stroke. As shown in Figure 15, CVD is

Figure 15: Main Causes of Death, UK, 1998-2003



Source: National Statistics, Annual Abstract 2005, figures analysed by NIAO

Figure 16: Death rate for circulatory disease, 2000 to 2006, all people aged 15-74



Source: Department

the main cause of death in the United Kingdom. Around half of these deaths are from coronary heart disease (CHD) and about a quarter from stroke.[21] Figure 16 shows that the death rate from circulatory disease in Northern Ireland has decreased by 28 per cent between 2000 and 2006. The PSA target of a 20 per cent reduction by 2010 has therefore been well exceeded.

Coronary Heart Disease

3.4 Figure 17 shows comparative age-standardised death rates from CHD since 1990. In 2005, Northern Ireland had the second highest rate, behind Scotland, for women dying from CHD, but for men, Northern Ireland had the second lowest rate behind England. In Northern Ireland, men are around three times more likely to die of CHD than women. Overall, the trend is significantly downwards, with Northern Ireland showing the greatest reduction for both men and women.

21 *Coronary Heart Disease Statistics,* British Heart Foundation 2004

Part Three:
Improving Clinical Outcomes

Figure 17: UK age-standardised death rates from CHD per 100,000 population, 1990-2006

	1990	1992	1994	1996	1998	2000	2002	2004	2005	2006	Difference
Males aged 35-74											**%**
England	377	349	307	281	252	218	192	167	155	N/A	-59
Wales	427	379	344	318	278	246	225	180	179	N/A	-58
Scotland	481	458	408	371	332	289	246	221	213	N/A	-56
Northern Ireland	**483**	**437**	**380**	**338**	**302**	**250**	**216**	**194**	**175**	**166**	**-66**
Females aged 35-74											
England	137	127	109	99	89	73	65	54	49	N/A	-64
Wales	154	142	127	112	97	88	79	69	59	N/A	-62
Scotland	201	182	160	140	129	109	96	81	75	N/A	-63
Northern Ireland	**177**	**168**	**153**	**127**	**107**	**89**	**78**	**65**	**60**	**59**	**-67**

Source: Office for National Statistics, General Register Office for Scotland and NISRA, as published by the British Heart Foundation

3.5 Figure 18 shows that the death rate from CHD in Northern Ireland has been substantially higher than most other countries and, in particular, France and Japan. On the positive side, however, it does have one of the largest downward trends, both for men and women, in CHD mortality over the period shown.

3.6 Whilst the number of deaths from CHD has been declining, the number of people living with the disease is rising. This imposes high social costs, including impaired quality of life and reduced economic activity. While the Department does not publish data on the number of people diagnosed with CHD, under the Quality and Outcomes Framework (QOF) of the General Medical Services contract the total number of GP-registered patients with CHD is recorded. This shows that in 2006 almost 76,000 people were registered as suffering from CHD, around 1,000 more than in 2005 – an increase which may be partly explained by improved recording of information under QOF. Moreover, while CHD can affect anyone, research[22] has shown that electoral wards in Northern Ireland with the highest death rates from CHD are also those with the highest levels of deprivation.

3.7 In 2005, the Department commissioned an independent review[23] of cardiology and cardiac surgery in Northern Ireland which reported in late 2006. It made

22 *Tackling Equality and Targeting Social Need: Health and Care Statistics.* L. McWhirter Occasional Paper Number 19, 2002, Northern Ireland Statistics and Research Agency.
23 *Needs and Effectiveness Review of Cardiology and Cardiac Services in Northern Ireland,* Deloitte MCS Limited and York Health Economics Consortium, September 2006

Figure 18: Age-standardised death rates from CHD per 100,000 population, 1990-2000, by country

	1990	1992	1994	1996	1998	2000	Difference
Males aged 35-74							**%**
Australia	275	248	217	196	171	144	-48
Canada	254	228	212	199	218	163	-36
France	106	101	94	91	85	82	-23
Germany	253	251	237	218	200	177	-30
Ireland	421	381	368	332	302	253	-40
Japan	49	46	49	58	56	54	+10
New Zealand	350	348	276	263	222	190	-46
Spain	131	131	125	128	121	113	-14
Northern Ireland	**483**	**437**	**380**	**338**	**302**	**250**	**-48**
USA	273	253	239	224	203	216	-21
Females aged 35-74							
Australia	106	93	79	69	61	52	-51
Canada	88	77	75	67	68	55	-38
France	27	26	24	22	21	18	-33
Germany	80	82	79	75	69	59	-26
Ireland	142	134	120	107	99	78	-45
Japan	19	17	18	21	19	17	-11
New Zealand	138	124	109	92	71	71	-49
Spain	37	36	34	33	32	29	-22
Northern Ireland	**177**	**168**	**153**	**127**	**107**	**89**	**-50**
USA	108	101	96	92	84	90	-17

Source: World Health Organisation 2004; NISRA

recommendations for further improvements in services. In addition, a Service Framework[24] has recently been developed for cardiovascular health and wellbeing which sets specific measurable standards for service delivery.

24 A Service Framework is a document which contains explicit standards for health and care. It sets targets, timeframes and expected outcomes.

Part Three:
Improving Clinical Outcomes

3.8 Although premature death rates from CHD for both men and women have reduced considerably, the number of people living with CHD is increasing. In public health terms, the major approaches to lowering risk factors remain the control of tobacco, reducing levels of hidden fats and calories in the diet and encouraging and extending facilities available for physical activity throughout life. Concerted action in continuing to tackle these risk factors needs to involve all relevant partners and be targeted at the areas with relatively high deprivation. The Department told us that it recognises that obesity significantly increases the risk of developing CHD and, through the Obesity Prevention Steering Group, is currently consulting with all relevant stakeholders to develop a strategy to address this problem. In addition, disadvantaged adults are one of three key target groups in the Department's Five Year Tobacco Action Plan. This Plan will be reviewed later in 2008.

Stroke

3.9 Stroke is a leading cause of disability in Northern Ireland and, along with CHD and cancer, is one of the most common causes of death. Figure 19 shows that Northern Ireland has the lowest death rate from stroke in the United Kingdom. In an international context, the UK had one of the highest death rates from cerebrovascular diseases in 2000 (see Figure 20).

Figure 19: Age-standardised UK death rates from cerebrovascular* disease per 100,000 population, 1998-2005

	1998	1999	2000	2001	2002	2003	2004	2005
England and Wales - male	71	67	62	69	69	66	59	55
England and Wales - female	65	63	58	62	62	61	55	52
Scotland – male	94	91	91	86	85	83	78	69
Scotland – female	83	82	81	78	79	75	70	66
Northern Ireland – male	**76**	**80**	**65**	**71**	**70**	**69**	**63**	**55**
Northern Ireland - female	**70**	**74**	**65**	**64**	**66**	**62**	**58**	**51**

Source: National Statistics, ISD Scotland and DHSSPS

* this term refers to any disease affecting blood supply to the brain; the fatal outcome of a stroke is caused by blockage or rupture of a blood vessel within the brain

Figure 20: Age-standardised death rates from cerebrovascular diseases per 100,000 population, 1960-2000, by country

	1960	1970	1980	1990	2000	Difference
Males						%
Australia	156	169	116	71	50	-68
Canada	136	109	78	54	42	-69
France	157	154	112	63	44	-72
Germany	210	187	146	97	64	-70
Ireland	130	165	132	89	68	-48
Japan	351	350	212	103	78	-78
New Zealand	130	149	126	75	57	-56
Spain	158	154	142	94	59	-63
UK	**173**	**160**	**123**	**91**	**67**	**-61**
USA	145	122	77	51	46	-68
Females						
Australia	156	163	105	65	45	-71
Canada	131	94	64	43	35	-73
France	116	107	78	46	32	-72
Germany	190	155	115	77	50	-74
Ireland	142	155	127	77	61	-57
Japan	252	236	150	74	49	-81
New Zealand	144	150	116	72	53	-63
Spain	137	138	121	80	48	-65
UK	**156**	**140**	**107**	**81**	**61**	**-61**
USA	128	106	65	44	41	-68

Source: Organisation for Economic Co-operation and Development (OECD), Health Data June 2006

3.10 A multi-agency team[25] produced a blueprint for a regional stroke strategy in 2001. This was never developed into a Departmental document, but a review was initiated by the Department in 2005. The "Improving Stroke Services in Northern Ireland" consultation was launched by the Minister in November 2007. This consultation ended earlier this year and following an analysis of the responses the Minister announced an

25 The team comprised representatives of NIMAST (NI Multi-disciplinary Association for Stroke Teams), the four Health and Social Services Boards, the Department and the Chest, Heart and Stroke Association, as well as user and GP representatives.

Part Three:
Improving Clinical Outcomes

investment of £14 million on stroke services in June 2008.

3.11 All hospitals in Northern Ireland which admit stroke patients take part in a national audit of stroke provision. The latest report[26] shows that Northern Ireland out-performs both England and Wales in six of the 12 key indicators used and has the highest overall score of the three countries across the full range of indicators. Comparing Northern Ireland's performance in 2006 against the previous audit in 2004, it has improved in nine of the 12 indicators, achieved the same score in one and deteriorated in two. The stroke strategy will seek to secure further improvement.

Progress on target for circulatory disease

3.12 As outlined at paragraph 3.3, the PSA target for circulatory disease has been surpassed, and in a much shorter timeframe than planned. Further developments, such as the service framework and stroke strategy, are designed to secure continued reductions in death rates.

Cancer

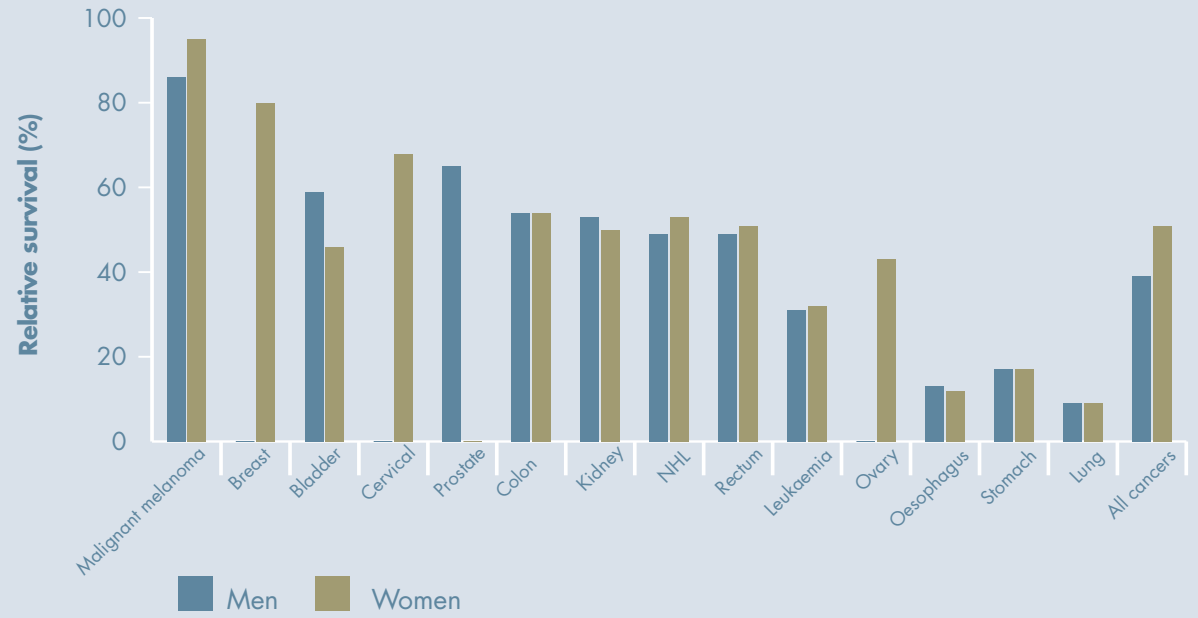
3.13 The number of people diagnosed with cancer each year in Northern Ireland is increasing. In 1993, 4,123 men and 4,276 women were diagnosed; in 2004, the figures were 4,644 and 4,662 respectively.[27] Overall, this represents an 11 per cent increase in new cases in the period. This increase reflects the ageing of the population, as cancer is more common among older people. However, when figures are adjusted for age, in line with European age-standardised rates, new cancers in men actually fell by 0.8 per cent annually and death rates decreased annually by 1.3 per cent for men and 0.8 per cent for women. Mortality statistics show that between 1993 and 2005, the number of deaths from cancer remained fairly static, increasing only slightly from 3,629 to 3,639.

3.14 The Department's target for cancer relates to the five-year survival rate for the "main" cancers. Figure 21 (based on the latest figures available, for adults first diagnosed with cancer between 1997 and 2000) shows a widely varying survival rate for different cancer types, ranging from 95 per cent (women) and 86 per cent (men) for malignant melanoma to nine per cent for both men and women for lung cancer. Overall, survival was significantly better for women than for men, with 51 per cent of women and only 39 per cent of men surviving for five years or more. This may be explained by men having more smoking and drinking related cancers, all of which have a poor survival rate.

3.15 Figure 22 compares Northern Ireland survival rates with those for England and Wales for some of the more common cancers. There are no significant patterns, with England and Wales better in some cases and Northern Ireland better in others. *Eurocare*[28], the largest population based cooperative study on survival of patients with cancer, recently reported that countries that spend more on health generally have better cancer survival rates, but that Denmark and Britain had lower survival rates than other countries that spend comparable amounts.

26 *National Sentinel Stroke Audit 2006,* Clinical Effectiveness and Evaluation Unit, Royal College of Physicians of London, April 2007
27 *Cancer Statistics,* Northern Ireland Cancer Registry, 2007.
28 *Recent cancer survival in Europe: a 2000-02 period analysis of EUROCARE-4 data,* Verdecchia et al, Lancet Oncology, DOI: 10.1016/S1470-2045(07)70246-2

Figure 21: Five-year relative survival* (%), Northern Ireland, for adults diagnosed 1997-2000



Source: Survival of Cancer Patients in NI 1993-2004, Northern Ireland Cancer Registry, October 2007

* relative survival takes into account the fact that the person may have died even if they did not have cancer; it is relative to the rest of the population

Figure 22: Five-year relative survival rates, Northern Ireland and England and Wales, for adults diagnosed 1996-99

Type of Cancer	Northern Ireland Men (%)	Northern Ireland Women (%)	England & Wales Men (%)	England & Wales Women (%)
Malignant melanoma	90	96	77	87
Breast	-	82	-	77
Bladder	68	52	64	54
Prostate	63	-	65	-
Colorectal	56	54	47	48
Kidney	55	50	45	46
Leukaemia	28	31	36	35
Lung	10	10	6	6

Sources: Northern Ireland Cancer Registry, October 2004 and Cancer Research UK, Survival Statistics

Part Three:
Improving Clinical Outcomes

The study found that the gaps have narrowed since the last survey but they remain significant.

Progress on target for cancer

3.16 The Northern Ireland Cancer Registry has published survival rates for cancer patients diagnosed in the periods 1993-95 and 1996-99. Five-year survival rates for those diagnosed in 1993-95 are being used as the baseline figures for monitoring of the PSA target (see paragraph 3.1). Figure 23 shows progress to date for some of the main cancers. The target increase for survival rates has already been achieved in the majority of cases.

3.17 In March 2007, the Department announced the development of a range of Service Frameworks (see footnote 24 at paragraph 3.7), including one for cancer services which is due to be in place by mid-2009. Consequent service improvements should help contribute to further increases in survival rates.

3.18 Effective cancer services demand that every part of the patient care pathway, from referral, through investigation, diagnosis and treatment, is properly managed to ensure timely access is consistently available to patients across Northern Ireland. As the population ages and screening, diagnosis and treatment improve, more people will get and live with cancer in the future. It is important that the implications of this in terms of associated costs and changing patterns of service use are considered sooner rather than later. The Department told us that

Figure 23: Progress on five-year cancer survival rates in Northern Ireland

Type of Cancer	Men diagnosed 1993-95 (%)	Men diagnosed 1996-99 (%)	2010 target	Women diagnosed 1993-95 (%)	Women diagnosed 1996-99 (%)	2010 target
Malignant melanoma	88.5	89.5	**92.9**	93.5	96.3	**98.2**
Breast	-	-	**-**	76.3	81.5	**80.1**
Bladder	59.0	68.3	**62.0**	37.7	51.9	**39.6**
Prostate	56.9	62.9	**59.7**	-	-	**-**
Colon	46.3	55.8	**48.6**	46.0	54.0	**48.3**
Kidney	51.5	54.7	**54.1**	53.4	49.5	**56.1**
Leukaemia	31.3	28.3	**32.9**	37.6	31.4	**39.5**
Lung	6.8	9.5	**7.1**	9.7	10.2	**10.2**

Source: Northern Ireland Cancer Registry, Cancer in Northern Ireland 1993-2001: A Comprehensive Report, 2004

Cancer Awareness Standards were introduced as a two year programme of targets from 2007-08. These targets will assure the timeliness of diagnosis and treatment, for suspected and diagnosed cancer patients. The first year of the targets in 2007-08 established the introduction of the standards for suspected cancer patients:

- 98 per cent of patients diagnosed with cancer (decision to treat) should begin their treatment within a maximum of 31 days

- 75 per cent of patients urgently referred with a suspected cancer should begin their first definitive treatment within a maximum of 62 days.

The Department announced in June 2008 that both of these targets had been achieved.

Renal Services

3.19 Established renal failure is an irreversible condition for which regular dialysis treatment or transplantation is required if the individual is to survive. If the kidneys fail the body is unable to excrete certain waste products, excess water and salts, or control the body's acidity, resulting in death. In addition, kidneys help influence haemoglobin production, blood pressure and bone formation.

3.20 In 2002, the Department carried out a major review of renal services in Northern Ireland[29] which has formed the basis for service development up to 2010. In 2002, there were 92 haemodialysis stations operating at four sites in Northern Ireland, providing a total of almost 1,500 dialysis sessions per week. However the review calculated that by 2010, there would be a need for 230 dialysis stations. Following the 2002 report, additional capacity was added at the four existing dialysis sites – Belfast City Hospital, Tyrone County Hospital, Antrim Area Hospital and Daisy Hill Hospital – and an interim unit established at the Ulster Hospital, with 12 dialysis stations in operation until the opening of the new purpose built renal unit at the site in November 2006. The report further recommended the need for a new dialysis unit at Altnagelvin Hospital, which opened in late 2005 with 16 dialysis stations. In addition, it stated that to meet the predicted growth in patient numbers, two further units would be required by 2010. Figure 24 shows there has been a 47 per cent increase in the number of haemodialysis stations in use since 2002. A further 46 new stations are planned by 2010.

29 *Renal Services Review,* DHSSPS, November 2002

Part Three:
Improving Clinical Outcomes

Figure 24: Provision of haemodialysis stations in Northern Ireland 2002 and 2007

	No. of stations 2002	No. of stations 2007	% increase
Belfast City Hospital	40	43	8
Ulster Hospital	0	*24	-
Antrim Hospital	16	22	38
Tyrone County Hospital	18	*24	33
Altnagelvin Hospital	0	*16	-
Daisy Hill Hospital	18	22	22
Total	**92**	***151**	***64**

Source: Department

* not all stations are in use at three locations. The total number of stations in use is 135 so the % increase over 2002 is 47%

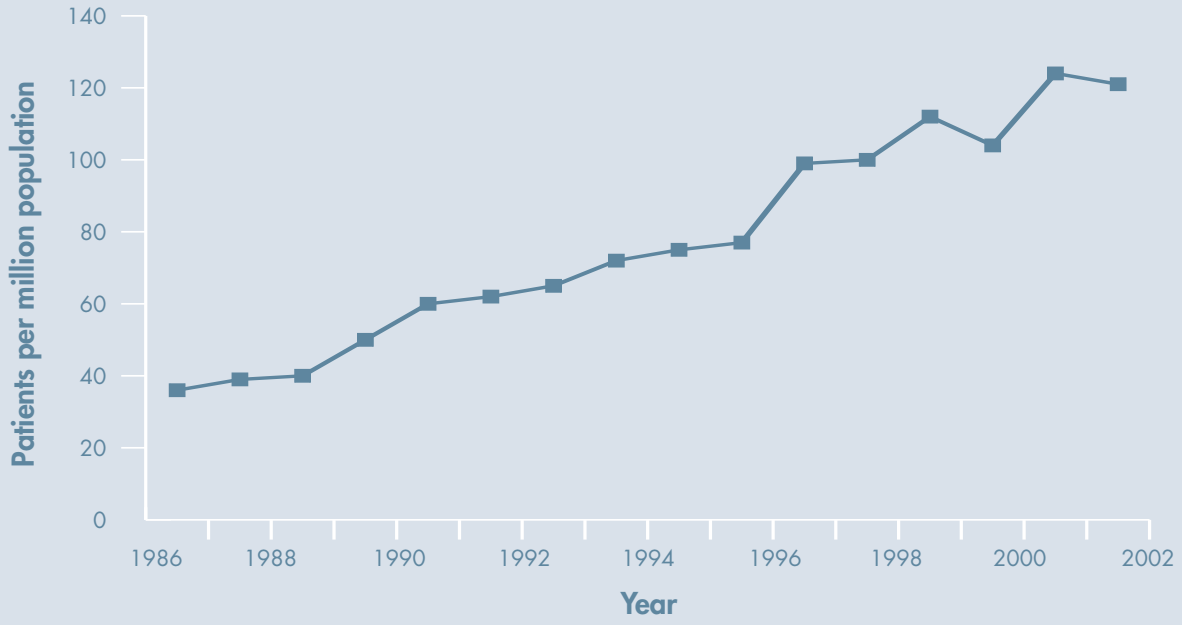
3.21 The review predicted that the number of people with end-stage renal failure in Northern Ireland would double between 2002 and 2012, continuing a significant upward trend (see Figure 25). As well as being a symptom of an ageing population, the increase is due to a rise in the numbers of people with diabetes and high blood pressure, which can lead to kidney disease.

Progress on target for renal services

3.22 At March 2004, the total baseline figure for dialysis patients being treated was 654. The Department's PSA target was that, by March 2007, it planned to increase renal dialysis provision by 30 per cent above the 2004 baseline (see paragraph 3.1). However, in practice the demand for dialysis services has been lower than that forecast in the 2002 review: currently 790 patients are receiving hospital-based haemodialysis, peritoneal dialysis or home dialysis – an increase of some 20 per cent against the forecast increase reflected in the PSA target of 30 per cent. In practice, all renal patients needing dialysis services are receiving them and as a result the target has been achieved.

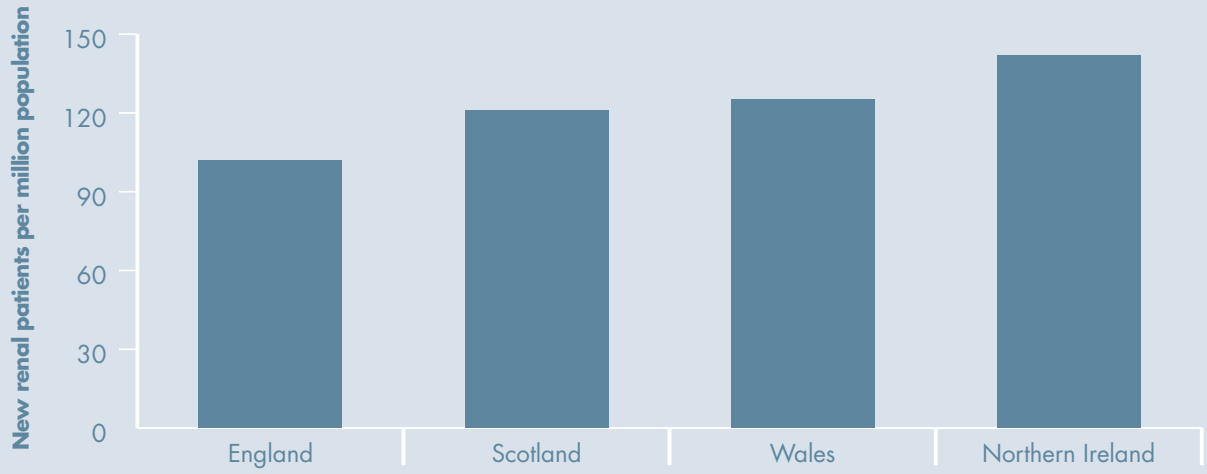
3.23 Treatment rates for established renal failure are higher in Northern Ireland than in the other United Kingdom countries (see Figure 26). In terms of transplants, the performance in Northern Ireland lags significantly behind both the other United Kingdom countries and the wider health community (see Figure 27).

Figure 25: New patients (per million population) with end-stage renal disease beginning treatment at dialysis units in Northern Ireland 1986-2002



Source: Renal Services Review, DHSSPS, 2002

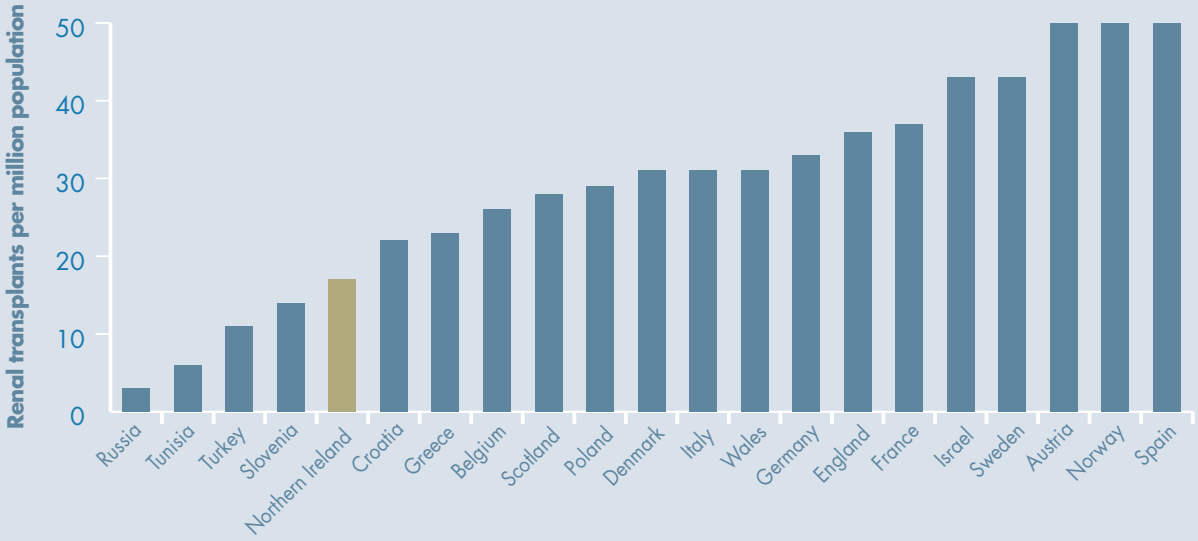
Figure 26: Renal Treatment Rates



Source: European Renal Association/European Dialysis and Transplant Association, Annual Report 2005

Part Three:
Improving Clinical Outcomes

Figure 27: Renal Transplants



Source: European Renal Association/European Dialysis and Transplant Association, Annual Report 2005

Part Four:
Waiting for Care

Part Four:
Waiting for Care

4.1 The Department's PSA targets in relation to a range of waiting times, as reflected in the Priorities and Budget 2006-08, were:

- a maximum waiting time for inpatients and day cases of 12 months from April 2006 later revised to a maximum of six months by April 2007 and 21 weeks by March 2008
- a maximum waiting time for outpatients of six months by April 2007 and 13 weeks by March 2008
- by March 2008, all patients who request a clinical appointment through their GP to be able to see an appropriate primary care professional within two days
- by March 2007 the Northern Ireland Ambulance Service (NIAS) to respond to 75 per cent of life-threatening calls within eight minutes, later revised to 70 per cent for March 2008.

Inpatient, day case and outpatient waiters

4.2 Figure 28 shows that there has been a steady decline in recent years in the number of people waiting to be admitted to hospital as inpatients or day cases. The changes in the number of outpatients waiting has been more dramatic: while the number of outpatients waiting had increased significantly up to 2005-06, data for 2006-07 and 2007-08 demonstrate a significant reversal of this trend.

Figure 28: Total number of patients waiting for treatment, 2000-2008

Source: Hospital Statistics, DHSSPS. Figures analysed by NIAO

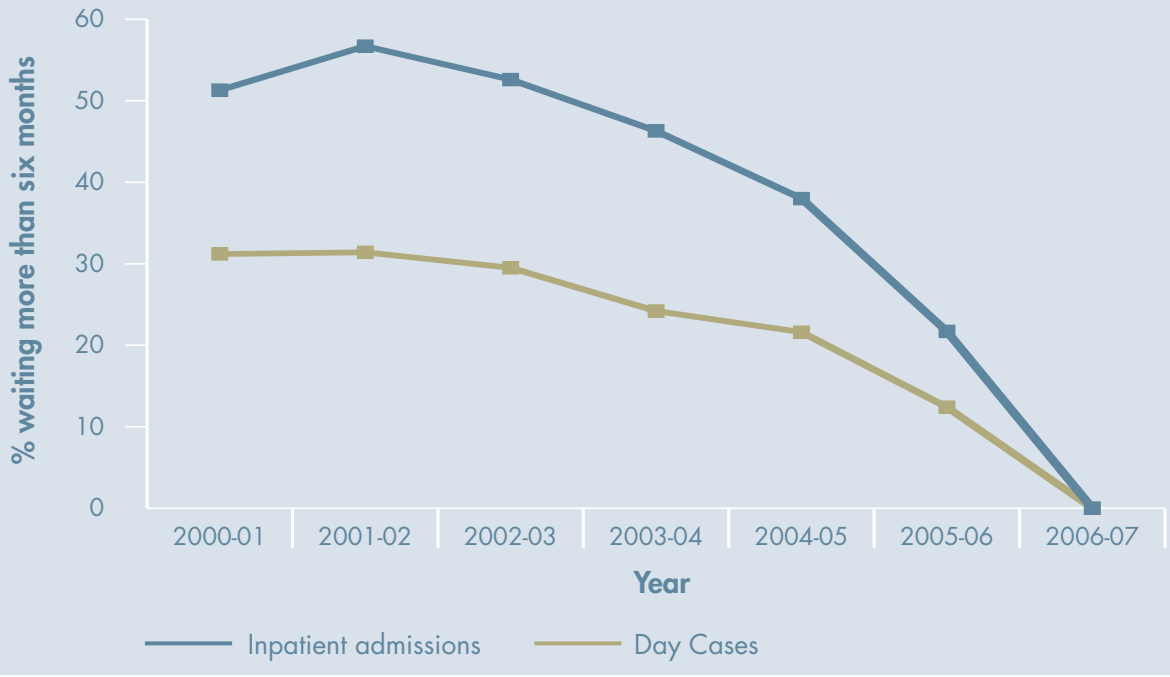
Inpatients and day case maximum waiting times

4.3 In terms of specific waiting time reduction targets (paragraph 4.1), in April 2006 the Department achieved the target that no one would wait more than 12 months for an inpatient or day case admission. With the exception of just one patient, the revised target, that no patient should be waiting more than six months for any inpatient or day case treatment by the end of March 2007, was also achieved (see Figure 29). The Department told us that it monitors progress towards waiting time targets weekly. In relation to a further target to reduce the number of patients waiting over 21 weeks for treatment, this has reduced from 1,982 at 1 April 2007 to 56 at the end of March 2008.

Outpatient maximum waiting times

4.4 In June 2006, the then Health Minister announced new, very challenging targets for outpatient waiting times (paragraph 4.1), describing the prevailing situation as "horrendous". In March 2006, over 180,000 people were waiting for a first outpatient appointment – 74,000 of these were waiting more than six months for assessment, some for several years. Figures

Figure 29: Percentage of patients waiting six months or more for treatment, 2001-2007, Northern Ireland



Source: Hospital Statistics, DHSSPS. Figures analysed by NIAO

Part Four:
Waiting for Care

Figure 30: Percentage of outpatients waiting six months and 12 months for treatment, 2001-2007

Source: Hospital Statistics, DHSSPS. Figures analysed by NIAO

for March 2007 (see Figure 30) show that a dramatically reduced number of people (32) were waiting more than six months for a first outpatient appointment out of a total of 102,491 – a reduction of 99.9 per cent over the previous March. The maximum waiting time target for March 2008 was *almost* achieved, with only 59 outpatients waiting more than 13 weeks at the end of March 2008.

4.5 Northern Ireland has a 13 week target for patients waiting for a first outpatient appointment. This is similar to England and more stringent than those applying in Scotland and Wales (see Figure 31).

4.6 Reduction of waiting lists has been a key objective for the Department and much has been achieved, with targets met well ahead of time. A key issue will be whether this level of performance can be sustained. The Department told us that it will continue to monitor waiting time performance on a weekly basis and meet regularly with Trusts to discuss any concerns. In addition the Department has provided significant additional investment in elective care services and will continue to drive forward a regional reform programme. In its view, these measures will ensure that recent improvements in performance will be sustained, and progress made towards the targets set for 2008-09.

Figure 31: Outpatient Waiting Time Targets in the United Kingdom

	Time Target	Achievement
England	13 weeks by December 2005	13 week target achieved
Scotland	18 weeks by December 2007 15 weeks from March 2009	18 week target achieved
Wales	22 weeks by March 2008	22 week target achieved
Northern Ireland	13 weeks by March 2008	13 week target achieved

Sources: Department of Health, Scottish Health Statistics, Health Statistics Wales 2006 and DHSSPS Hospital Statistics 2005-06

GP Appointments

4.7 Under the General Medical Services (GMS) contract for GPs which came into operation from April 2004, the Department set a target that, by March 2008, all primary care appointments should be met within a 48 hour period. This target was originally part of the Quality and Outcomes Framework (QOF) under the contract, whereby GP practices gain quality points for services provided to certain standards. In 2006-07 the funding was transferred into a Directed Enhanced Service, whereby achievement is measured against the number of substantiated patient access complaints.

4.8 In the first year of the GMS contract (2004-05), 95.9 per cent of GP practices achieved the 48 hour target. In 2005-06, this rose to 98.4 per cent of practices. On the basis of these reported statistics, it is likely that the 100 per cent target will be achieved by March 2008. In 2007-08 the Health Boards reported only one substantiated complaint in the whole of Northern Ireland. On that basis, the 100 per cent target was, therefore, achieved. In England, a similar level of high performance exists, however, the Healthcare Commission[30] has cast some doubt on reported high levels of achievement by carrying out a survey which suggested that a quarter of all patients had to wait more than two days to see a doctor. There has been no equivalent survey in Northern Ireland with which to compare these findings but the discrepancy in Great Britain appears to be explained by the official statistics measuring waits by patients who had seen a GP. People who might have rung their surgery and given up because they failed to get an appointment are not counted.

4.9 The Department told us that it may seek the flexibility to make payment related to the access target achievement contingent upon results and patients' experiences rather than simply having access to a GP within 48 hours. This is because this current target has a process/input focus rather than a direct

30 *Primary care trust: survey of patients 2005*, Healthcare Commission, September 2005

Part Four:
Waiting for Care

focus on improving the outcomes of health service delivery in the primary care setting: these would include more appropriate referrals to secondary care, contribution to waiting time targets in secondary care and better care management plans. From this year, patients are to be surveyed for their views on the services received from their GPs, including whether they were able to get an appointment with a GP or appropriate primary care professional within two days. The Patient Experience Survey, to be issued annually to over 300 patients in each practice and covering a range of topics, will provide fuller, patient-oriented, information with which to monitor the target. We acknowledge the Department's view that success against these outcome measures is now of overriding importance. We also acknowledge that, even though the focus has now switched more firmly to outcomes, the Department will continue to monitor progress against the two-day target.

Ambulance response times

4.10 The PSA target to respond to 75 per cent of Category A calls within eight minutes is in line with national targets for ambulance response times. It relates to life threatening calls only; non-life threatening calls are subject to less rigorous standards. Figure 32 shows that by the end of 2005-06, the target was still a long way from being achieved, with only 51 per cent of life threatening calls being responded to in less than eight minutes. This compared with 74 per cent in England, 58.5 per cent in Scotland and 57 per cent in Wales for the same year[31]. The Department told us that in making these comparisons the impact of

Figure 32: Ambulance Response Times for Life Threatening Calls, 2001-2006

Source: House of Lords Hansard, 13 December 2006

31 *Ambulance Services in Wales*, Wales Audit Office, December 2006

rural areas needs to be considered and that, for instance, the target will be easier to achieve in England where overall population density is around three times that of Northern Ireland.

4.11 Notwithstanding this, in relation to 2007-08, the target that NIAS would respond to 70 per cent of life threatening calls by March 2008 was only narrowly missed. NIAS responded to 68 per cent of such calls within eight minutes in March 2008. In both April and May 2008, NIAS responded to 70 per cent of Category A calls within eight minutes.

4.12 Ambulance response time performance has vital clinical significance and it is clear that the service currently being provided needs to improve in the important area of life-threatening calls. The performance of NIAS (70 per cent) is now broadly comparable with the average for England (74 per cent), a notable achievement given the greater degree of rurality in Northern Ireland. It is important that the Trust's forward planning sets out how it intends to deliver and then maintain 75 per cent across the region. The Department told us that it is preparing to issue a consultation document in the near future which will set out proposals to modernise NIAS and enable it to achieve the national target of responding to 75 per cent of Category A, life-threatening calls within 8 minutes by 2011.

Appendices:

Appendix One: (Paragraph 1.4)
DHSS Public Service Agreement Targets, as contained in Priorities and Budget 2006-08

Target	Progress to date
Health Improvement	
Increase life expectancy by at least 3 years for men and 2 years for women between 2000 and 2012	Projections by the Government Actuary Department for 2012 show increases of 3.5 years for men and 2.5 years for women above the baseline. The target is therefore judged to be **on track for achievement.**
Reduce the gap in life expectancy between those living in the fifth most deprived electoral wards and the NI average by 50 per cent for both men and women between 2000 and 2012	By 2004, the gap for men had increased by 11 per cent and the gap for women had reduced by only 4 per cent. **This suggests the PSA target will not be met.**
By 2011, reduce the proportion of adult smokers to 22 per cent or less, with a reduction among manual groups to 27 per cent or less	Continuous Household Survey 2007-08 indicates a figure of 23 per cent and the percentage of smokers in manual groups in 2007-08 was 30 per cent. **Target is on course for achievement.**
By 2010, stop the increase in levels of obesity in children	The next Health and Social Wellbeing Survey is due to be run in 2009-10 and will give an indication of whether the 2010 target will be achieved. **No indication of progress available.**
By 2008, reduce standardized suicide rate by 10 per cent	The Department anticipates that it will not achieve the PSA target for suicide reductions. It believes that, as suicide becomes less stigmatised, there will continue to be an increase in the number of deaths classed as suicide before any reduction is likely.
By 2010, achieve a 40 per cent reduction in the rate of births to teenage mothers under 17 years of age	The under-17 birth rate fell to 2.9 births per 1,000 girls in 2005. This is a 29 per cent reduction from the base year of 1998 and suggests that the 2010 **PSA target is achievable.**
By 2008, Boards and Trusts should reduce the difference in decay levels in 5 year old children in the fifth most deprived wards in each Community Trust area and the NI average by 20 per cent	Achievement of the target will only be known when the level of decay is measured again in 2008. **The target is believed to be on course for achievement.**
To increase the proportion of the public who are satisfied or very satisfied with health and social care in Northern Ireland from 78% in April 2004 to 80% in March 2008	The latest Public Attitude Survey findings, published in June 2007,. show an overall level of satisfaction of 82 per cent, so **the PSA target has been exceeded.** The survey identified areas of concern where further improvement needs to be targeted.

Target	Progress to date
Clinical Outcomes	
Between 2000 and 2010, reduce the death rate from circulatory diseases by at least 20 per cent in people under 75	The death rate from circulatory diseases in Northern Ireland decreased by 28 per cent between 2000 and 2005. **The PSA target has therefore been well exceeded.**
By 2010, increase the five year survival rates for the main cancers including breast, colorectal and lung, by 5 per cent	The target increase for survival rates **has already been achieved** for the majority of the main cancers.
By March 2007, increase renal dialysis provision by 30 per cent above the 2004 baseline	The target was to ensure that the HPSS responded fully to demand for renal dialysis. In the event, demand increased by 20% rather than the 30% projected but the policy intention – to treat by dialysis all those for whom such treatment is clinically indicated – was fulfilled. **The PSA target was therefore achieved.**

Appendix One: (Paragraph 1.4)
DHSS Public Service Agreement Targets, as contained in Priorities and Budget 2006-08

Target	Progress to date
Waiting Times	
Ensure a maximum waiting time for inpatients and day cases of 12 months from April 2006	**The target was achieved.** The Minister set a new target that no patient should be waiting more than six months for any inpatient or day case treatment by 31 March 2007. At the end of March 2007, only 1 patient was waiting longer than six months for surgery. In relation to a further target to reduce to zero the number of patients waiting over 21 weeks for treatment, this has reduced from 1982 at 1 April 2007 to 56 at the end of March 2008".
Ensure a maximum waiting time for outpatients of 6 months from April 2007 and 13 weeks from April 2008	**The Minister set a target** that, by March 2007, no-one should wait more than six months for a first outpatient appointment, reducing to 13 weeks by March 2008. At March 2007, only 32 people were waiting more than six months, so the **target has been all but achieved.**
By March 2008, all patients who request a clinical appointment through their GP for other than emergencies to be able to see an appropriate primary care professional within 2 days	In 2005-06, 98.4 per cent of GP practices achieved the 48-hour access target It is therefore **likely that the 100 per cent target will be achieved by March 2008.**
The Ambulance Service should respond to an average of 70% of Category A (life threatening) calls within eight minutes, by March 2008	By 2005-06, only 51 per cent of life threatening calls were being responded to within eight minutes. In relation to the 2007/08 target for NIAS to respond to 70% of life threatening calls (Cat A calls) by March 2008, this target was only narrowly missed. NIAS responded to 68% of such calls within 8 minutes in March 2008.

NIAO Reports 2007-08

Title	HC/NIA No.	Date Published
2007		
Internal Fraud in Ordnance Survey of Northern Ireland	HC 187	15 March 2007
The Upgrade of the Belfast to Bangor Railway Line	HC 343	22 March 2007
Absenteeism in Northern Ireland Councils 2005-06	-	30 March 2007
Outpatients: Missed Appointments and Cancelled Clinics	HC 404	19 April 2007
Good Governance – Effective Relationships between Departments and their Arms Length Bodies	HC 469	4 May 2007
Job Evaluation in the Education and Library Boards	NIA 60	29 June 2007
The Exercise by Local Government Auditors of their Functions	-	29 June 2007
Financial Auditing and Reporting - Health Sector: 2003-04 and 2004-05	NIA 66	6 July 2007
Financial Auditing and Reporting: 2005-06	NIA 65	6 July 2007
Northern Ireland's Road Safety Strategy	NIA 1/07-08	4 September 2007
Transfer of Surplus Land in the PFI Education Pathfinder Projects	NIA 21/07-08	11 September 2007
Older People and Domiciliary Care	NIA 45/07-08	31 October 2007
2008		
Social Security Benefit Fraud and Error	NIA 73/07-08	23 January 2008
Absenteeism in Northern Ireland Councils 2006-07	-	30 January 2008
Electronic Service Delivery within NI Government Departments	NIA 97/07-08	5 March 2008
Northern Ireland Tourist Board – Contract to Manage the Trading Activities of Rural Cottage Holidays Limited	NIA 113/07-08	28 March 2008
Hospitality Association of Northern Ireland: A Case Study in Financial Management and the Public Appointment Process	NIA 117/07-08	15 April 2008

Transforming Emergency Care in Northern Ireland	NIA 126/07-08	23 April 2008
Management of Sickness Absence in the Northern Ireland Civil Service	NIA 132/07-08	22 May 2008
The Exercise by Local Government Auditors of their Functions	-	12 June 2008
Transforming Land Registers: The LandWeb Project	NIA 168/07-08	18 June 2008
Warm Homes: Tackling Fuel Poverty	NIA 178/07-08	23 June 2008
Financial Auditing and Reporting: 2006-07 General Report by the Comptroller and Auditor General	NIA 193/07-08	2 July 2008
Brangam Bagnall & Co Legal Practitioner Fraud Perpetrated against the Health & Personal Social Services	NIA 195/07-08	4 July 2008
Shared Services for Efficiency – A Progress Report	NIA 206/07-08	24 July 2008
Delivering Pathology Services: THE PFI Laboratory and Pharmacy Centre at Altnagelvin	NIA 9/08-09	3 September 2008
Irish Sport Horse Genetic Testing Unit Ltd: Transfer and Disposal of Units	NIA 10/08-09	10 September 2008

Printed in the UK for the Stationery Office on behalf of the Northern Ireland Audit Office
PC2357 09/08s

Published by TSO (The Stationery Office) and available from:

Online
www.tso.co.uk/bookshop

Mail, Telephone, Fax & E-mail
TSO
PO Box 29, Norwich, NR3 1GN
Telephone orders/General enquiries: 0870 600 5522
Fax orders: 0870 600 5533
Order through the Parliamentary Hotline Lo-Call 0845 7 023474
E-mail book.orders@tso.co.uk
Textphone 0870 240 3701

TSO Shops
16 Arthur Street, Belfast BT1 4GD
028 9023 8451 Fax 028 9023 5401
71 Lothian Road, Edinburgh EH3 9AZ
0870 606 5566 Fax 0870 606 5588

The Parliamentary Bookshop
12 Bridge Street, Parliament Square
London SW1A 2JX
Telephone orders/General enquiries 020 7219 3890
Fax orders 020 7219 3866
Email bookshop@parliament.uk
Internet bookshop.parliament.uk

TSO@Blackwell and other Accredited Agents

ISBN 978-0-337-09088-2