

Joint Report
of the
Directors of Public Health
of
**Barnsley, Doncaster and Rotherham
Health Authorities**

Foreword

It gives us great pleasure to present the first Public Health report to be jointly produced by Barnsley, Doncaster and Rotherham Public Health Departments. This is a major step forward in our work together and demonstrates the way the departments are currently working together to tackle shared public health problems. The main aim is to provide detailed information to those responsible for the planning and delivery of health care for the people of the three districts. The focus is on measuring progress against Health Improvement Plan targets, particularly those relating to inequalities in health.

The information within the report shows that the health of the three districts continues to improve with reductions in the three main causes of death: cancer, coronary heart disease and respiratory disease. However there are still significant health inequalities within the three districts with deprived areas having higher death rates than more affluent ones. The rise in lung cancer deaths in women is also a matter of great concern. As the vast majority of these cancer deaths are smoking related the reduction of smoking in females must continue to be a key area for action.

The report also provides key educational targets for the three districts in recognition that health is determined by a wide range of influences other than just health services and lifestyle. We hope that this holistic view of health will promote even greater cooperation between agencies in their efforts to develop joint strategies and targets.

We are grateful to the public health staff and others who have worked together to produce this excellent resource for the three districts. As always we welcome and value highly, comments about any public health matter discussed in the report and look forward to hearing the views of Barnsley, Doncaster and Rotherham people.

Dorothy Birks
Director of Public Health
Barnsley Health Authority

John Radford
Director of Public Health
Doncaster Health Authority



Tim Patterson
Director of Public Health
Rotherham Health
Authority

Foreword

Acknowledgments

Introduction

CHAPTER 1

Population, Overall Health and Regeneration

1.1	Death Rates for All Causes	3
1.2	Birth Rates	3
1.3	Overall Hospital Admission Rates	10

CHAPTER 2

Cancer

2.1	Death Rates for All Cancer	11
2.2	Registration Rates for All Cancer	11
2.3	Death Rates for Lung Cancer	15
2.4	Death Rates for Colorectal Cancer	15
2.5	Death Rates for Breast Cancer	20
2.6	Death and Registration Rates for Cervical Cancer	20
2.7	Coverage Rates for Cervical and Breast Screening	20
2.8	Waiting Times for Cancer Patients	26

CHAPTER 3

Coronary Heart Disease and Stroke

3.1	Death Rates for All Circulatory Diseases	27
3.2	Death Rates for Coronary Heart Disease	27
3.3	Death Rates for Stroke	27
3.4	Hospital Admission Rates for Revascularisation	27
3.5	Aspirin Therapy	36

CHAPTER 4

Accidents

4.1	Death Rates for Accidents	37
4.2	Hospital Admission Rates for Serious Accidents	41

CHAPTER 5
Mental Health

5.1	Death Rates for Suicide	45
5.2	Psychiatric Ward Emergency Readmission Rates	45
5.3	Benzodiazepine Prescribing Rates	49
5.4	Co-Proxamol Prescribing Rates	49

CHAPTER 6
Respiratory Disease

6.1	Death Rates for Chronic Obstructive Pulmonary Disease	54
6.2	Hospital Admission Rates for Asthma	54
6.3	Clean Air - PM10 Levels	54

CHAPTER 7
Smoking

7.1	Smoking in Adults	59
7.2	Smoking in Children	60

CHAPTER 8
Dental Health

8.1	Dental Registrations	62
8.2	Dental List Size	62
8.3	Dental Health of Children	62
8.4	Emergency Dental Care	63

CHAPTER 9
Children and Young People

9.1	Teenage Conceptions	68
9.2	Low Birthweight	68
9.3	Looked after Children	72
9.4	immunisation	79
9.5	Educational Targets	80

CHAPTER 10
Older People

10.1	Emergency Hospital Admissions	85
10.2	Targets for Social Services	85

CHAPTER 11
Prescribing in Primary Care

11.1	Prescribing of Generic Drugs	90
11.2	Drugs of Limited Clinical Value	90
11.3	Modified Release Products	90
11.4	Combination Products	90
11.5	Inhaled Corticosteroids	90
11.6	Antibiotic Prescribing	91

CHAPTER 12
Diabetes

12.1	Annual Checks	104
------	---------------	-----

APPENDIX 1
Sources of Data 105

APPENDIX 2
Technical Details 108

APPENDIX 3
Glossary of Terms 111

INDEX 114

Acknowledgements

This report has been produced on behalf of the three Directors of Public Health through collaboration of the Public Health Research and Information Departments at Barnsley, Doncaster and Rotherham Health Authorities:

Paul Fryers - Public Health Specialist, Doncaster HA
Michael Geraghty - Senior Administration Assistant, Doncaster HA
Heather McCabe - Research and Information Officer; Doncaster HA
Chris McManus - Research and Information Analyst, Doncaster HA
Laurie Mott - Public Health Specialist, Rotherham HA
Ljilja Ristic - Information Specialist, Doncaster HA
Linda Westlake - Specialist in Public Health Information, Barnsley HA
Marcus Williamson - Research Assistant, Rotherham HA
Ceri Wyborn - Specialist in Public Health Information, Barnsley HA

With:

Bev Henderson - Deputy Director of Health Promotion, Rotherham HA
Kevin Smith - *Specialist Registrar in Public Health Medicine, Barnsley HA*

We are also grateful to the many people who have provided information used in this report, including:

Kate Ayres - Doncaster MBC
Malcolm Beal - Doncaster Environmental Health
Philip Crabtree - Barnsley Health Authority
Paul Foster - Barnsley Health Authority
Louise Hollingworth - Trent Cancer Registry
Rachel Manning - Rotherham Health Authority
Jane Miller - Doncaster Social Services
Kate Mudge - Doncaster MAAG
Wendy Neilson - Barnsley Social Services
Andy Nicholson - NHS Executive, Trent
Mark Parry - Rotherham Environmental Health
Chris Shields - *Barnsley Environmental Health*

Introduction

The Annual Report of a Director of Public Health (DPH) is always a document steeped in history. The first Medical Officers of Health, over 150 years ago, were required to present a statement on the health of their district and this tradition has continued through many changes in health care in England.

Over recent years, the DPH Annual Reports have concentrated more and more on national and local targets for health improvement. This change reflects a new emphasis in the work of Public Health in not only documenting the need for action, but also in measuring progress.

Since the election in 1997, the present government has co-ordinated the overall targets for health improvement through the targets outlined in the White Paper *Saving Lives: Our Healthier Nation* (Department of Health, 1999). More recently, the High Level Performance Indicators have been used to highlight areas for improvement in health and social care services.

Specific targets have been set for key disease areas through the National Service Frameworks (NSFs) for Coronary Heart Disease and for Mental Health as well as within the National Cancer Plan. In the coming months, we expect two further NSFs (Older People and Diabetes).

With so many targets it is vital that the local Health Improvement Programmes (HImPs) take account of these different initiatives when outlining the development plans of the health community. The advent of Primary Care Groups and Trusts (PCGs/PCTs) means that more local planning is also required and it is important to realise that the national and local targets included in the HImP can only be achieved through the work of these new organisations.

In the year 2000, it is clear that the role of health authorities is changing. Future health authorities will need to be more strategic and work at a 'higher level'. There is an argument for doing the same with the DPH Annual Report.

Barnsley, Doncaster and Rotherham Health Authorities have been working together since the formation of the South Yorkshire Coalfields Health Action Zone (SYCHAZ). Part of this work included the creation of the HAZ database and Profile (South Yorkshire Coalfields HAZ, 2000) which brought together information about the three authorities for the first time. The success of this joint working made it clear that working together, the public health research and information departments of the three health authorities can produce a greater quantity of high quality work.

Out of this joint working came the decision to create a Joint Report of the three Directors of Public Health. This report aims to present routinely available data as they relate to the targets identified nationally and locally in the Health Improvement Programmes of the three health communities.

The primary purpose of this report is not to define the 'needs' of the people of the South Yorkshire Coalfields. Rather it is to benchmark the targets and identify those in most need of attention.

For this reason, this report focuses on trends: how the values have changed over time. Where possible and appropriate the values have been given not only for health authority areas, but also for PCG/PCT areas.

When presenting PCG/PCT information there are two ways to define the population. One is to look at those people registered with GPs in each PCG/PCT. The other is to look at the geographical area assigned to each PCG and attribute values to the PCG/PCT on that basis (see Appendix 2). For a number of reasons, the second option has been chosen for this report, with the exception of the prescribing analysis which uses the patients registered with GPs in each PCG/PCT. As information sources improve, future joint reports may be able to present data using the other method.

It is difficult to draw conclusions about PCG/PCT performance since each Group or Trust is different. In future, joint reports will look at the differences between wards and between enumeration districts across the South Yorkshire Coalfields. Inequalities identified in this way will be useful for guiding the targeting of action to improve health.

Much of the analysis in this report looks at use of services rather than need for services. Future reports will look at measured need through commissioned research and the findings of local health needs assessments.

About this Report

The first stage in the production of this Report was to review the targets set out in the three HImPs. Some of the HImP targets are not measurable at present and these have been omitted. The measurable targets shared by all three health communities were given priority in this document, but where a target existed in one or two HImPs only, data are presented for all areas if they are available.

As a first stage in this process we have combined the three sets of data in the three health authorities. Individuals in the three public health departments have led on different parts of the report to avoid duplication of work. The report represents a major step in the continuing process of increased collaboration by the three public health research and information departments in the South Yorkshire Coalfields.

The data analysed here come from many sources; Appendix 1 explains where they come from and the processes undertaken. The methods used to create the rates, forecasts and confidence intervals seen in the graphs are described in Appendix 2.

Finally, a glossary has been included (Appendix 3) to help explain some of the jargon.

References

Department of Health (1999). *Saving Lives: Our Healthier Nation*. London: The Stationery Office.

South Yorkshire Coalfields HAZ (2000). *HAZ Profile*. Doncaster: Doncaster Health Authority.

CHAPTER 1

Population, Overall Health and Regeneration

The general aim of all health authorities is to improve the health of the population they serve. Demographic changes can and should lead to changes in priorities for all strategic bodies including health authorities. By way of introduction to the analysis section of this report trends in birth, death and hospital activity rates are described. While no specific targets exist for these 'top-level' indicators, they form the background to the HImPs; if the specific targets in the HImP are met this will undoubtedly lead to a reduction in overall death rates and eventually to demographic change.

All three health authorities covered by this report have markedly fewer very old people than are seen in other parts of the UK, as a result of higher mortality rates at all stages of life. Detailed demographic analyses, including district and ward populations have been presented in previous annual reports (Patterson, 1999; Radford, 1999) and are available on the Health Action Zone Database (www.health-action.syorks.co.uk) and hence are not reproduced here.

1.1 Death Rates for All Causes

Mortality rates in England and Wales and the South Yorkshire Coalfields have fallen consistently over the last 20 years (figure 1.1a). However, throughout this period higher rates have been experienced in all parts of the Coalfields area than nationally. The trends appear similar to the national pattern and there is no evidence from these figures of a widening gap between national and local death rates. Rates in Doncaster East PCG appear to be falling more slowly than in other places whereas those in Rotherham PCG are falling more quickly.

Doncaster has a target 'to improve the under 75 age standardised mortality rate in the most deprived 20% of enumeration districts in Doncaster at a faster rate than the rest of the population'. Figure 1.1b shows the reductions in the most deprived areas, compared with the rest the purple line on the right-hand graph is simply a repeat of the rates presented on the left-hand graph, for ease of comparison (see Appendix 2 for fuller explanation of this analysis).

The figure illustrates that people living in the most deprived areas of each health authority have experienced much higher mortality rates than the those living in less deprived areas. Nevertheless in the deprived areas of the three health authorities declines in death rates over the last 20 years have been more marked compared with more affluent ones. We should, however, be cautious in interpreting these results as the trends could be affected by changing demographics before and after the 1991 Census.

1.2 Birth Rates

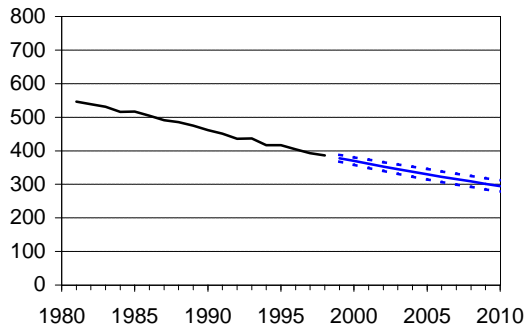
Figure 1.2 shows that birth rates in both England and Wales and in the South Yorkshire Coalfields have been declining steadily since 1990. Population projections based on the 1996 population show these trends will continue until the end of the current decade when they will begin rising again. It is worth noting that since 1997 birth rates have declined faster than predicted both nationally and locally.

Figure 1.1a - Death Rates for All Causes

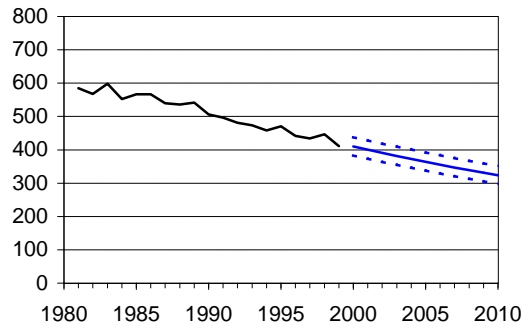
Directly Standardised Rates per 100,000 Resident Population
ICD-9 001-999 All persons aged under 75

Sources: ONS: Annual Abstracts of Deaths, Mid-Year Estimates of Population and 20th Century Mortality in England & Wales; Trent RHA: Deaths prior to 1992.

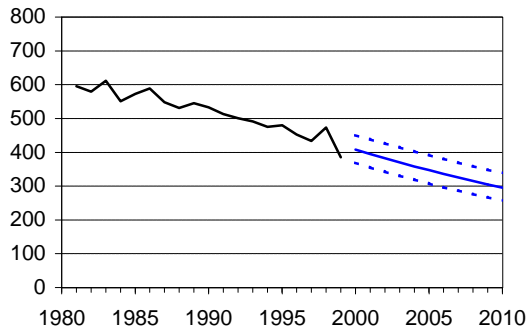
England & Wales



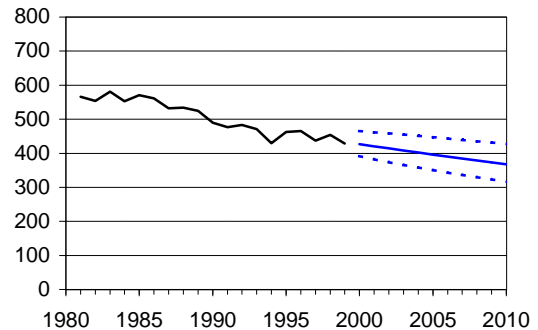
South Yorkshire Coalfields HAZ



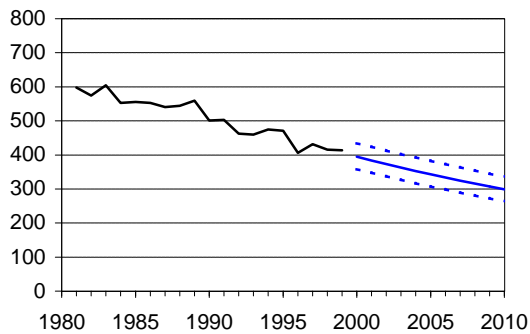
Barnsley HA



Doncaster HA



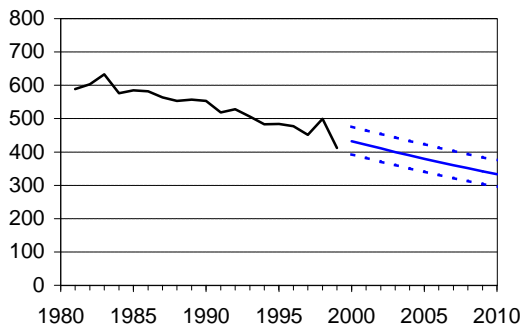
Rotherham HA



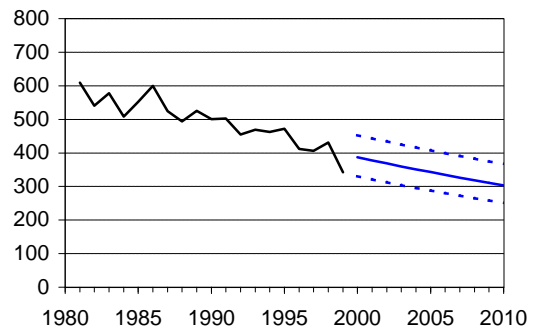
— Directly Standardised Rate
— Forecast Rate
..... 95% Confidence Interval

Rates forecast with 95% confidence intervals
by Holt's Method on logit-transformed data.

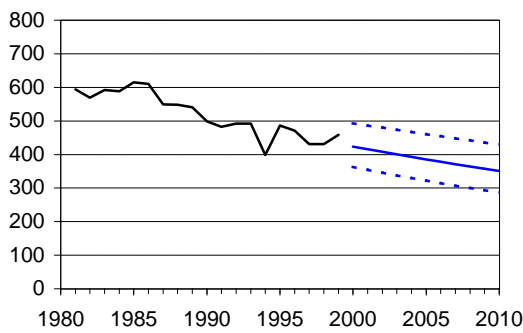
Barnsley East PCG



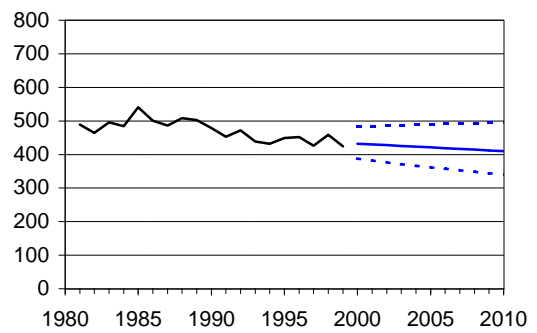
Barnsley West PCG



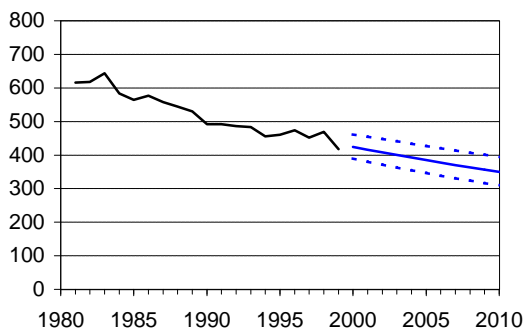
Doncaster Central PCT



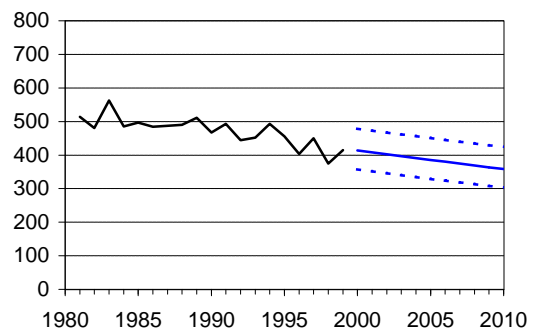
Doncaster East PCG



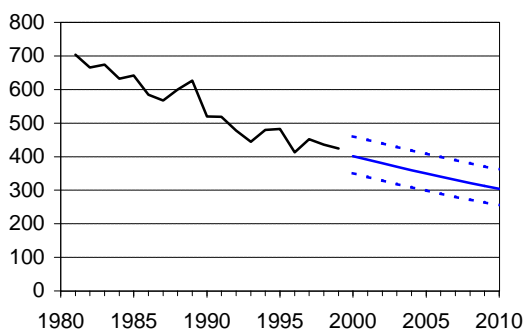
Doncaster West PCG



Rother Valley PCG



Rotherham PCG



Wentworth PCG

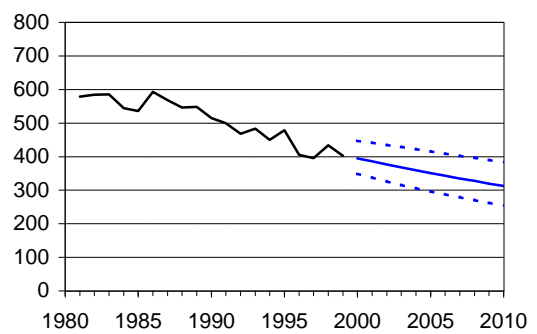


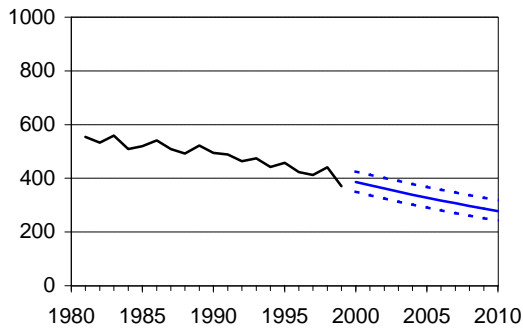
Figure 1.1b - Death Rates for All Causes

Directly Standardised Rates per 100,000 Resident Population
ICD-9 001-999 All persons aged under 75

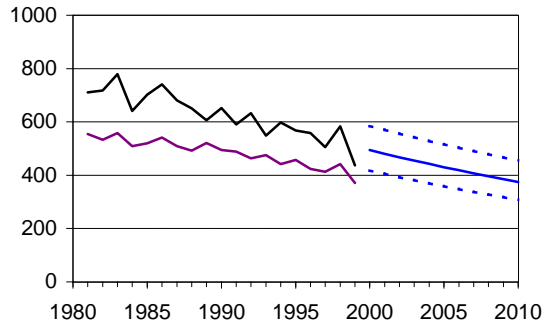
Sources: ONS: Annual Abstracts of Deaths, Mid-Year Estimates of Population and 20th Century Mortality in England & Wales; Trent RHA: Deaths prior to 1992.

— Directly Standardised Rate 95% Confidence Interval
— Forecast Rate — Quintiles 1-4 (replicated from left hand graph)

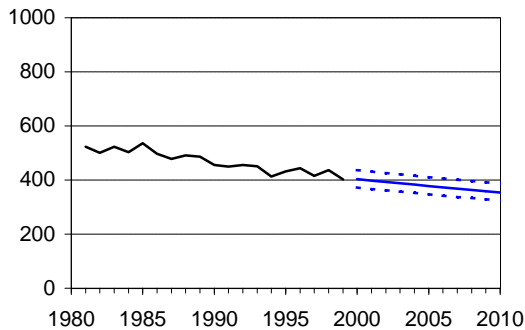
Barnsley Quintiles 1-4



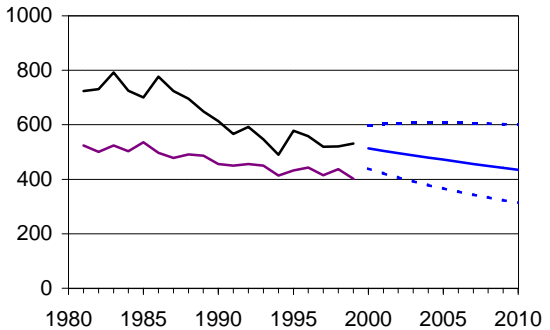
Barnsley Quintile 5 (Most Deprived)



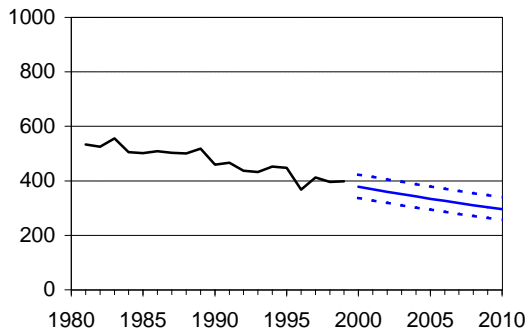
Doncaster Quintiles 1-4



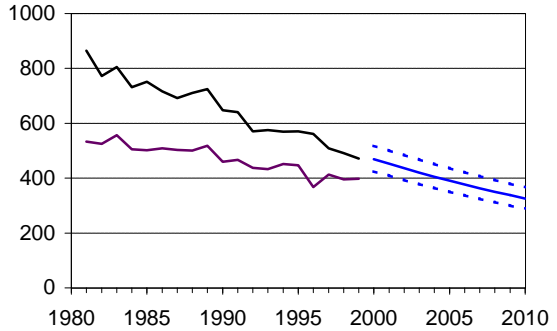
Doncaster Quintile 5 (Most Deprived)



Rotherham Quintiles 1-4



Rotherham Quintile 5 (Most Deprived)

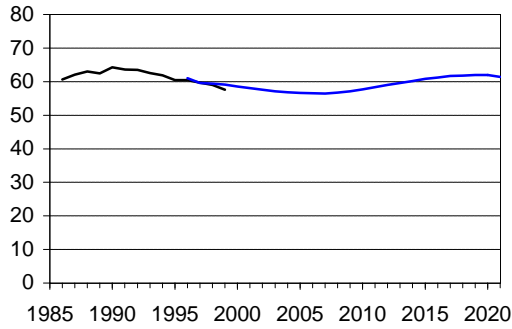


Rates forecast with 95% confidence intervals by Holt's Method on logit-transformed data

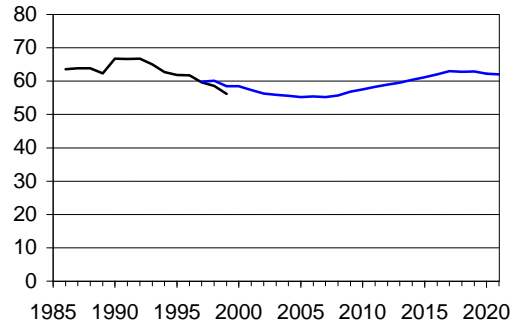
Figure 1.2 - Birth Rates
 General Fertility Rate
 Rates per 1000 Females aged 15-44

Sources: ONS 1996 Subnational Population Projections

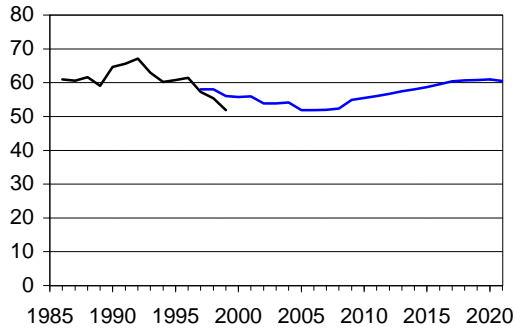
England & Wales



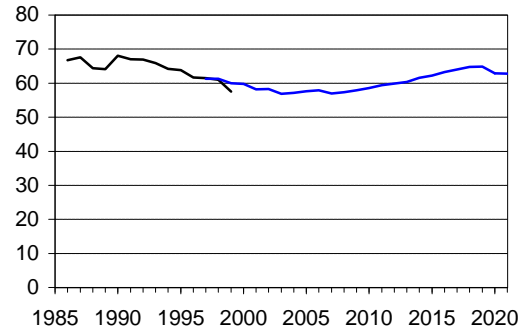
South Yorkshire Coalfields HAZ



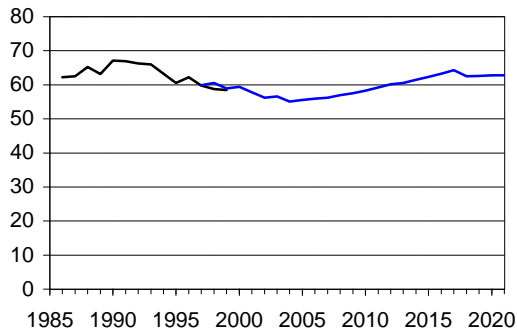
Barnsley HA



Doncaster HA



Rotherham HA



— Rate
 — Projected Rate

Figure 1.3 - Admission rates for All Causes

Directly Standardised Rates per 100,000 Resident Population
 All codes excluding well babies and renal dialysis
 All persons all ages

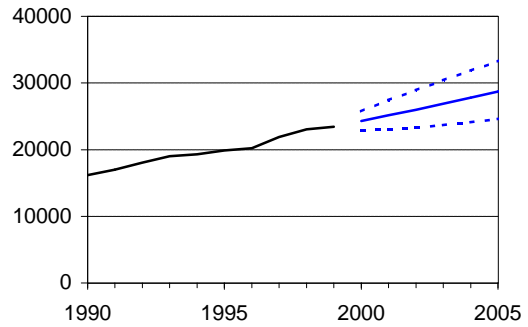
Sources: CMDS, Trent Region PIS Archive, ONS Mid-Year Estimates of Population

Notes: Admission rates include: First admissions (first FCEs), emergency admissions, elective admissions and day cases.

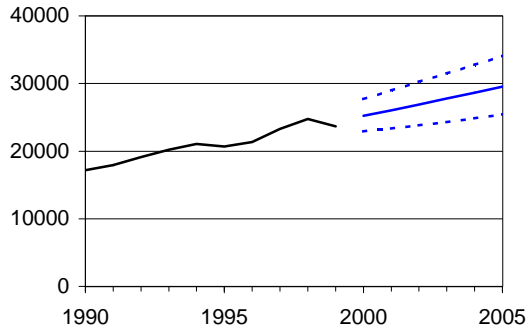
England and Wales

Data Not Available

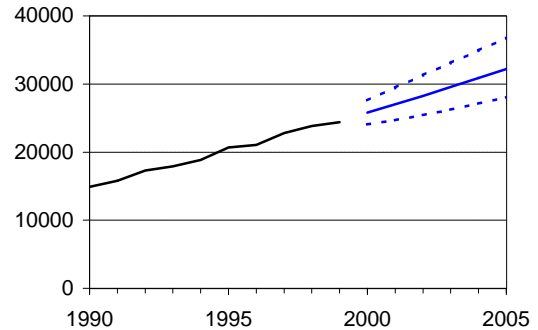
South Yorkshire Coalfields HAZ



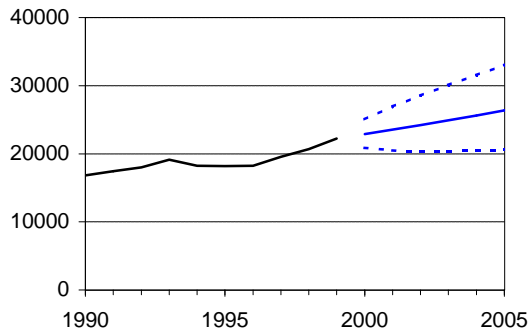
Barnsley HA



Doncaster HA



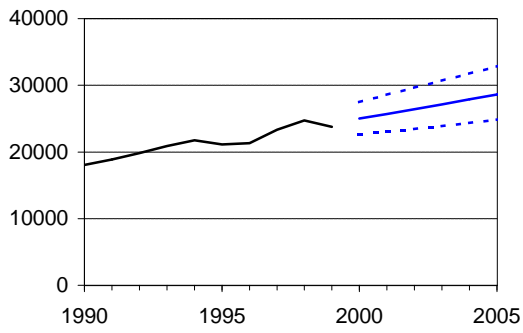
Rotherham HA



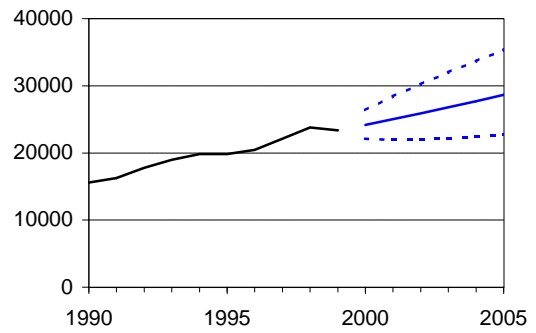
— Directly Standardised Rate
 — Forecast Rate
 95% Confidence Interval

Rates forecast with 95% confidence intervals
 by Holt's Method on logit-transformed data.

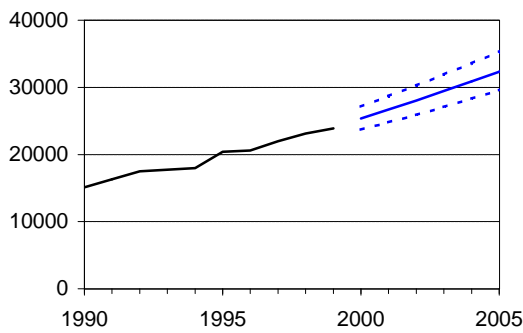
Barnsley East PCG



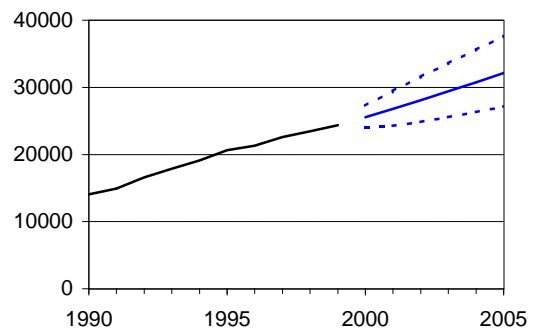
Barnsley West PCG



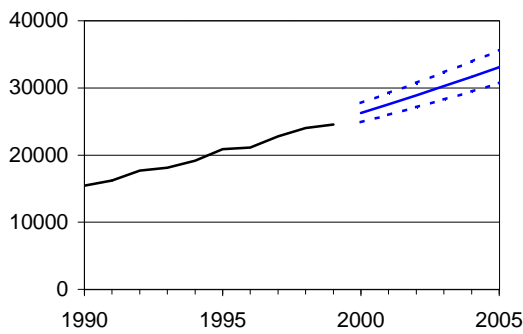
Doncaster Central PCT



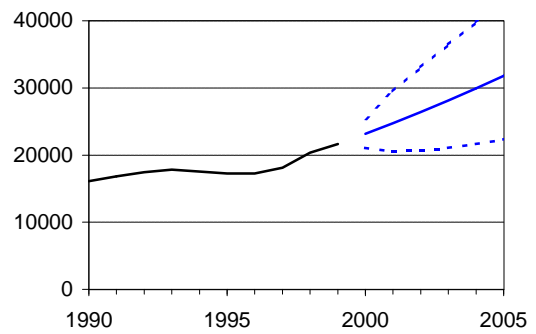
Doncaster East PCG



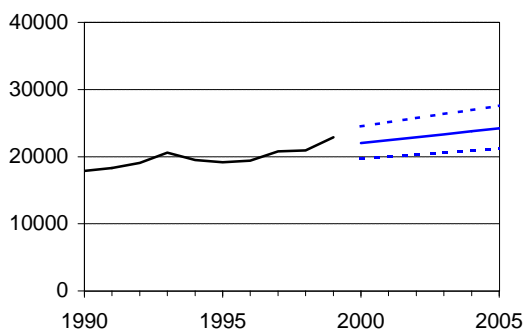
Doncaster West PCG



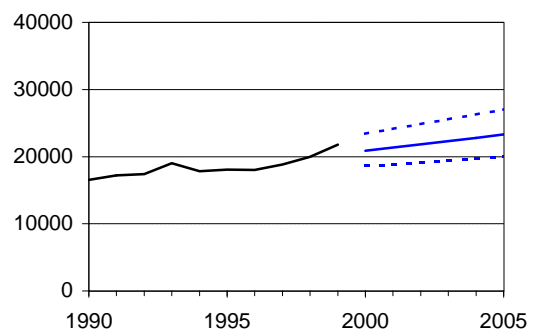
Rother Valley PCG



Rotherham PCG



Wentworth PCG



1.3 Overall Hospital Admission Rates

Admissions to hospital have been increasing year on year over the past nine years. Figure 1.3 shows that this is true in both the health authorities and the PCGs/PCT. This may be partly explained by the increasing numbers of elderly people in their populations. The elderly have more admissions per head than younger age groups. However an increasing ageing population does not necessarily mean increasing levels of illness or need for services (Normand, 1998). Other explanations include the availability of new or improved treatments, changes in expectations or increased propensity to refer.

For planning purposes, the projected increases in activity are considered together with changes in length of stay, increased use of day case surgery, other changes in clinical practice and demographic changes in more detailed analysis. The apparent dip in the trend for Rotherham is probably a result of a partial absence of data between 1993 and 1996 (see section 5.2).

References.

- Normand C (1998). Ten Popular Health Economic Fallacies. *J Public Health Med* **20**:129-132.
- Patterson W (1999). *Annual Report of the Director of Public Health*. Rotherham Health Authority.
- Radford J (1999). *Annual Report of the Director of Public Health*. Doncaster Health Authority.

CHAPTER 2

Cancer

2.1 Death Rates for All Cancer

Figure 2.1 illustrates that the three health authorities have all experienced higher mortality rates for cancer than the national average. However, if recent trends continue, the forecast is to surpass the 20% target reduction for all cancer mortality in the South Yorkshire Coalfields. The forecast is for the Coalfields area to achieve a rate close to the England and Wales target in 2010.

Due to the less stable nature of the time series in each district and each PCG/PCT the downward trend is less clear and prediction intervals are wide and include the target in every case. The small numbers make precision difficult as revealed by the wide confidence intervals so it is the confidence intervals which are important when interpreting these graphs.

Saving Lives: Our Healthier Nation (Department of Health, 1999) gives the all cancer mortality rate as the principal target but cancer is a collection of very different diseases, each requiring a different approach to reducing mortality and morbidity. The following analysis is intended to provide more detailed information to support strategy development. Death rates for individual cancers are not presented for PCGs/PCT as the numbers of deaths proved insufficient to give a stable basis for forecasting.

2.2 Registration Rates for All Cancer

The best way to prevent people dying from cancer is to stop them contracting it in the first place. Every newly diagnosed cancer case is registered with a Regional Cancer Registry and these registrations are as close as we can get to a measure of incidence. Figure 2.2 shows that registration rates have risen throughout the South Yorkshire Coalfields.

A large part of this rise is due to improvements in data gathering and it is likely that this will continue to improve as links with the pathology laboratories are extended. These links were only introduced in Trent in 1998; links exist with Doncaster's pathology laboratories but are only just being introduced in Barnsley and Rotherham. This should pick up cases where the hospital coding system or death certificate has not included the diagnosis of cancer and will result in increased registration rates. As it is impossible to ascertain true changes in cancer incidence, forecasting was felt to be unhelpful.

The two PCGs in Barnsley along with Doncaster East, Doncaster West and Rother Valley PCGs are all amongst the top ten PCGs/PCTs in Trent for overall cancer registration rates (Trent Cancer Registry, 2000). Doncaster East, Barnsley West and Doncaster West have the three highest incidence rates of all, with one person of every 36 in the population being newly diagnosed with cancer every year.

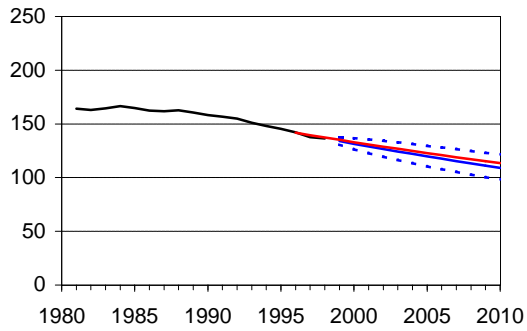
Figure 2.1 - Death Rates for All Cancers

Directly Standardised Rates per 100,000 Resident Population
ICD-9 140-208 All persons aged under 75

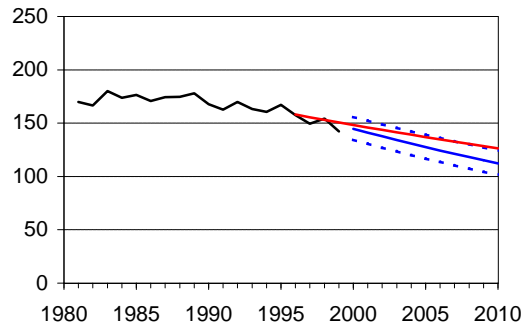
Target: (*Saving Lives: Our Healthier Nation*) To reduce the death rate by 20% by 2010 from the 1995-7 baseline.

Sources: ONS: Annual Abstracts of Deaths, Mid-Year Estimates of Population and 20th Century Mortality in England & Wales; Trent RHA: Deaths prior to 1992.

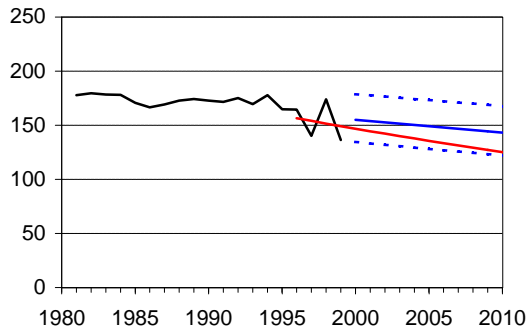
England & Wales



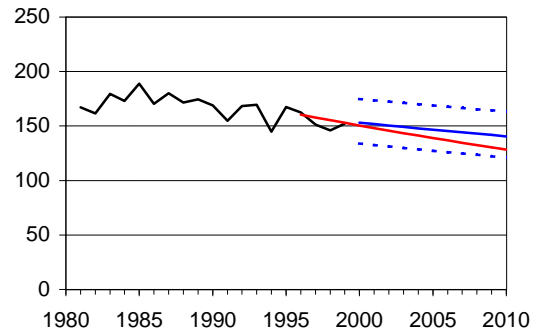
South Yorkshire Coalfields HAZ



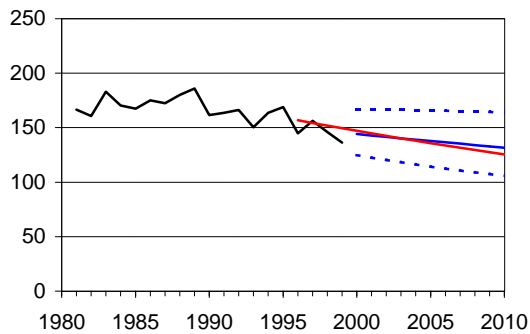
Barnsley HA



Doncaster HA



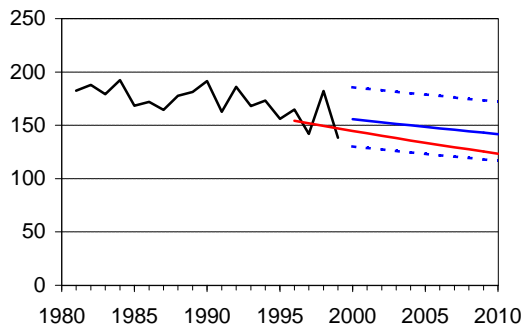
Rotherham HA



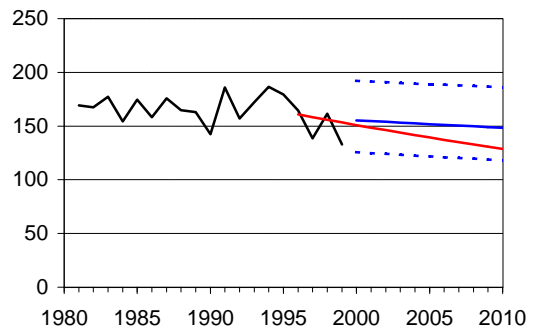
— Directly Standardised Rate
— Forecast Rate
..... 95% Confidence Interval
— OHN Target Line

Rates forecast with 95% confidence intervals
by Holt's Method on logit-transformed data.

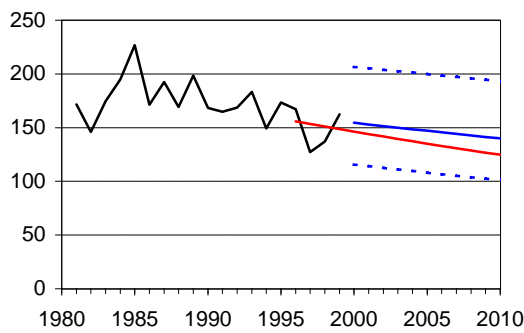
Barnsley East PCG



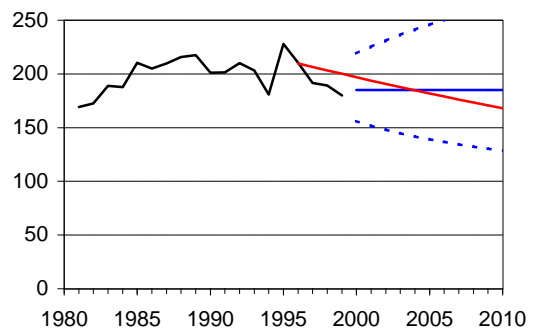
Barnsley West PCG



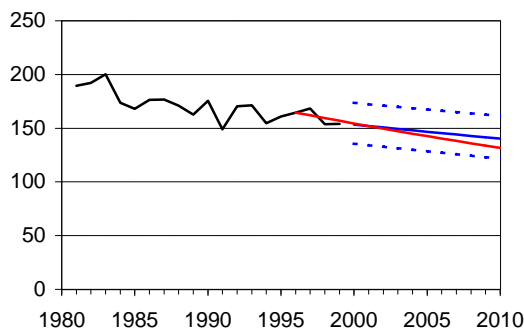
Doncaster Central PCT



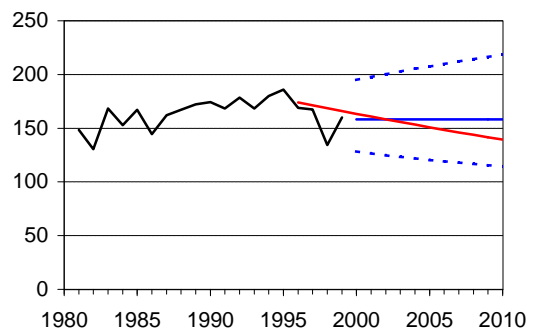
Doncaster East PCG



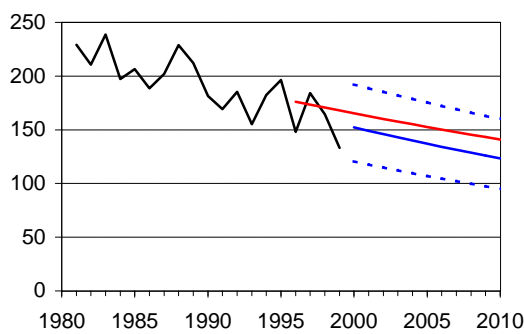
Doncaster West PCG



Rother Valley PCG



Rotherham PCG



Wentworth PCG

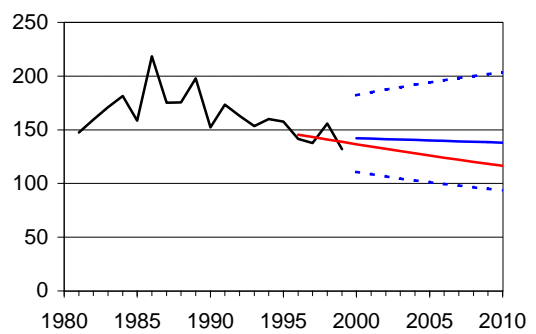


Figure 2.2 - Registration Rates for All Cancers

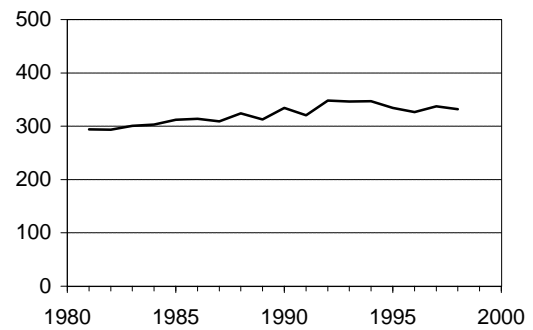
Directly Standardised Rates per 100,000 Resident Population
ICD-9 140-208, ICD-10 C00-C97 All persons aged under 75

Sources: Trent Cancer Registry, ONS Mid-Year Estimates of Population.

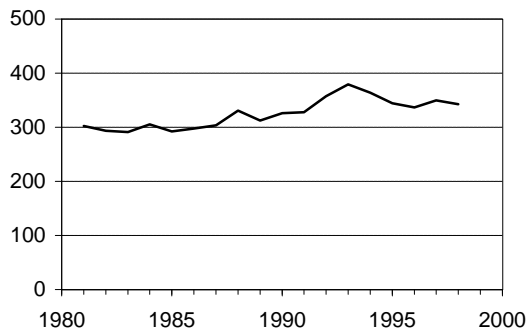
England and Wales

Data Not Available

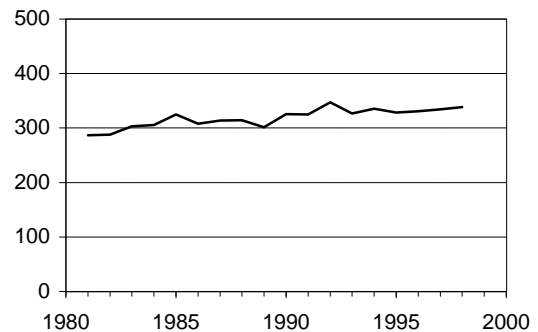
South Yorkshire Coalfields HAZ



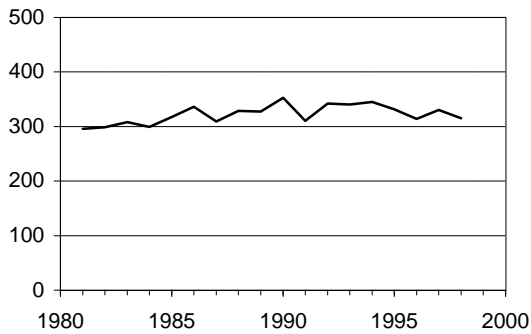
Barnsley HA



Doncaster HA



Rotherham HA



— Directly Standardised Rate

2.3 Death Rates for Lung Cancer

Figures 2.3a and 2.3b show trends in mortality rates separately for males and females, as they clearly have totally distinct trends from one another.

Rates for men have been falling very rapidly nationally. This pattern has been repeated in the South Yorkshire Coalfields, although it has remained above the national rate. At least 90% of lung cancers are caused by smoking (Peto *et al*, 1992) and 95% of people diagnosed from lung cancer die from the disease (ONS, 1999) – most within one year of diagnosis. In one sense, the strategy for reducing deaths is straightforward; reduce consumption of cigarettes. Practically this is not easily done. Furthermore, because the disease takes years or even decades to develop, current initiatives aimed at reducing tobacco use will only affect mortality rates in ten to 20 years' time.

For women the picture is less encouraging. Smoking prevalence in women has tended to mimic that of men twenty years earlier. While smoking in women reduced from 44% in 1961 to 30% in 1988 (Chollat-Traquet, 1992) there is evidence that it has stabilised recently (ONS, 1998) and is increasing in young females (see section 7.2). Nationally the forecasts are for no change in mortality rates, but alarmingly, and consistently throughout the three health authorities, rates seem set to continue rising. Furthermore there is evidence that cigarette smoking shortens women's lives even more than those of men (Prescott *et al*, 1998).

More women die from lung cancer in the South Yorkshire Coalfields than from breast cancer and on current trends, by 2010 death rates among women will be almost the same as men. Tackling smoking in women must be a priority.

Lung cancer incidence rates are higher in Doncaster East and Doncaster West PCGs than in any other PCG/PCT in Trent, with rates more than double the lowest PCGs/PCTs in the region (Trent Cancer Registry, 2000).

Figure 2.3c shows the rates for the most deprived 20% of areas within each health authority compared with the rest of the population. The much higher rates in the deprived areas are apparent. In all three districts, and most obviously in Rotherham, the gap between the most deprived and the rest appears to have narrowed. This is encouraging, but we should be cautious, as discussed in section 1.1; it is possible that this is an erroneous result caused by demographic changes within the districts prior or subsequent to the 1991 Census.

2.4 Death Rates for Colorectal Cancer

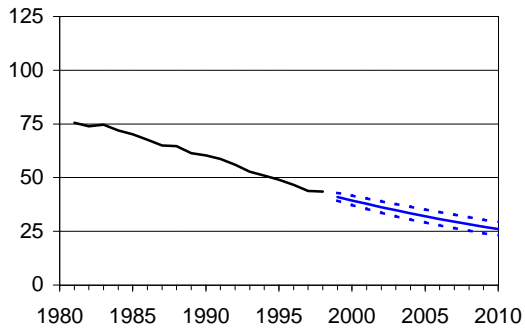
Mortality is falling steadily at the national level (figure 2.4). This is not reflected in the South Yorkshire Coalfields however, where forecasts suggest much more modest reductions. Death rates are presented here for under 75s, but in people over 75, the burden of the disease may be increasing. More than two-thirds of patients diagnosed with cancer of the colon or rectum are killed by the disease within ten years (ONS, 1999).

Figure 2.3a - Lung Cancer Death Rates for Men

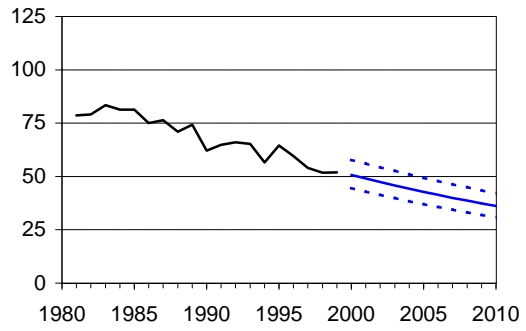
Directly Standardised Rates per 100,000 Resident Population
ICD-9 162 Males aged under 75

Sources: ONS: Annual Abstracts of Deaths, Mid-Year Estimates of Population and 20th Century Mortality in England & Wales; Trent RHA: Deaths prior to 1992.

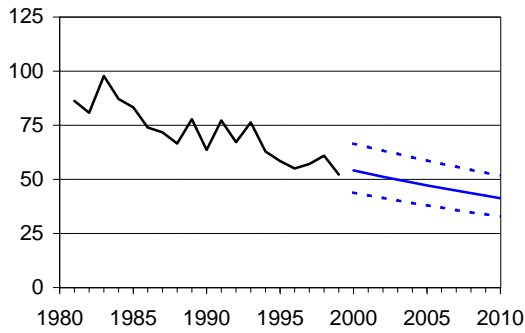
England & Wales



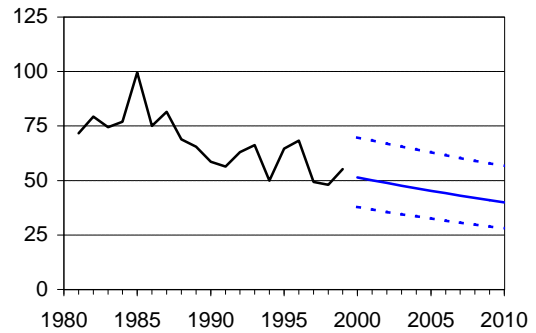
South Yorkshire Coalfields HAZ



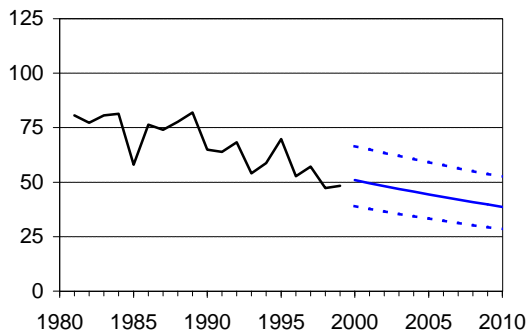
Barnsley HA



Doncaster HA



Rotherham HA



— Directly Standardised Rate
— Forecast Rate
..... 95% Confidence Interval

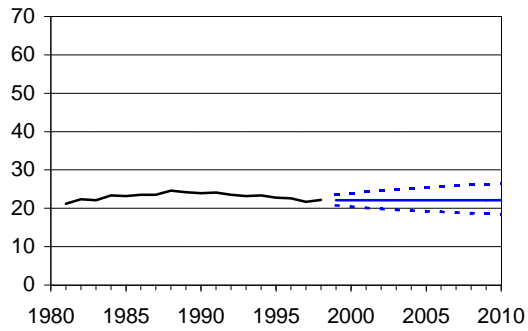
Rates forecast with 95% confidence intervals
by Holt's Method on logit-transformed data.

Figure 2.3b - Lung Cancer Death Rates for Women

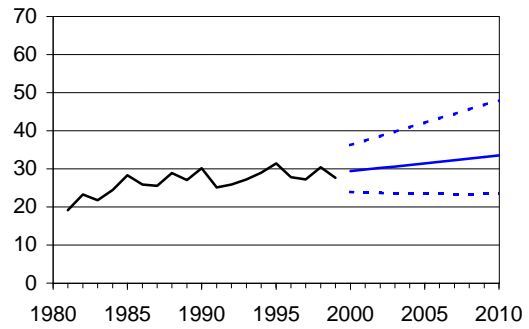
Directly Standardised Rates per 100,000 Resident Population
ICD-9 162 Females aged under 75

Sources: ONS: Annual Abstracts of Deaths, Mid-Year Estimates of Population and 20th Century Mortality in England & Wales; Trent RHA: Deaths prior to 1992.

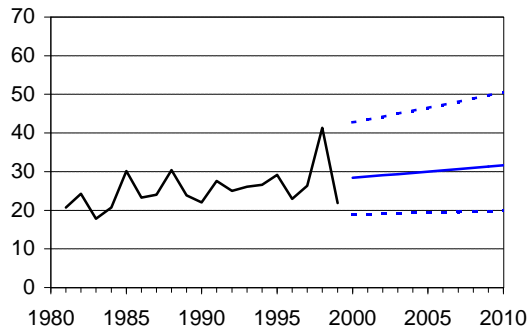
England & Wales



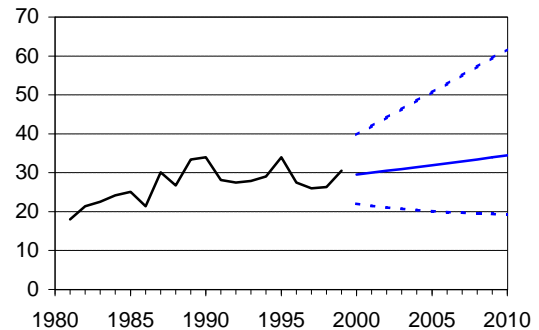
South Yorkshire Coalfields HAZ



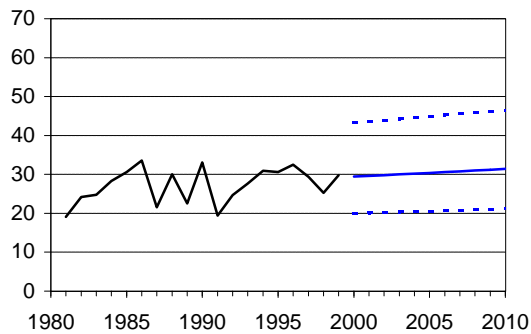
Barnsley HA



Doncaster HA



Rotherham HA



— Directly Standardised Rate
— Forecast Rate
..... 95% Confidence Interval

Rates forecast with 95% confidence intervals
by Holt's Method on logit-transformed data.

Figure 2.3c - Death Rates for Lung Cancer

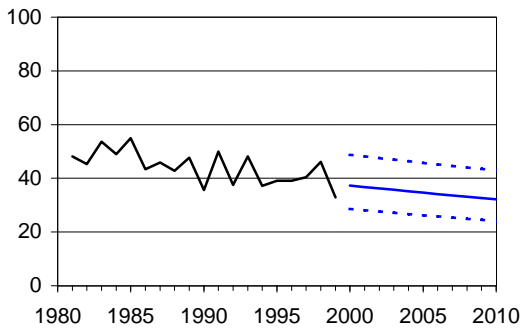
Directly Standardised Rates per 100,000 Resident Population
ICD-9 162 All Persons aged under 75

Target: Doncaster: To improve the under 75 age standardised mortality rate for lung cancer in the most deprived 20% enumeration districts in Doncaster at a faster rate than the rest of the population.

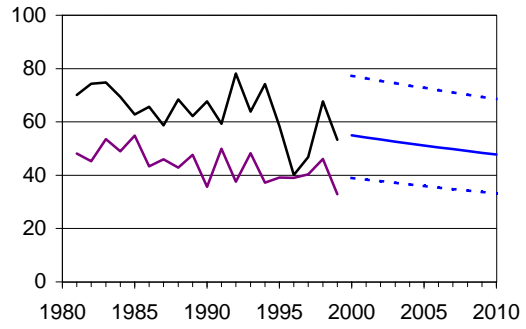
Sources: ONS: Annual Abstracts of Deaths, Mid-Year Estimates of Population and 20th Century Mortality in England & Wales; Trent RHA: Deaths prior to 1992.

— Directly Standardised Rate 95% Confidence Interval
— Forecast Rate — Quintiles 1-4 (replicated from left hand graph)

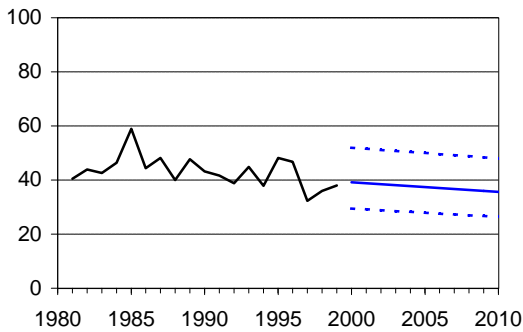
Barnsley Quintiles 1-4



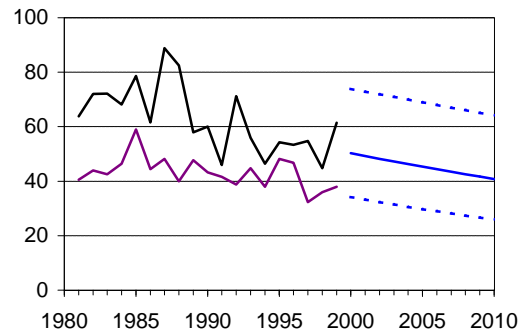
Barnsley Quintile 5 (Most Deprived)



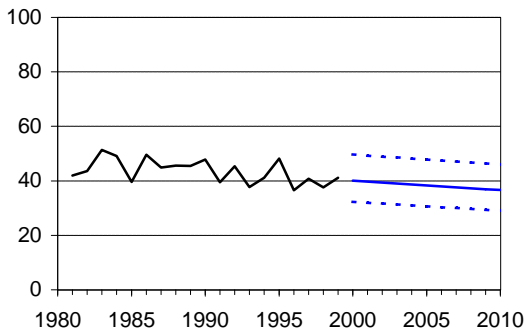
Doncaster Quintiles 1-4



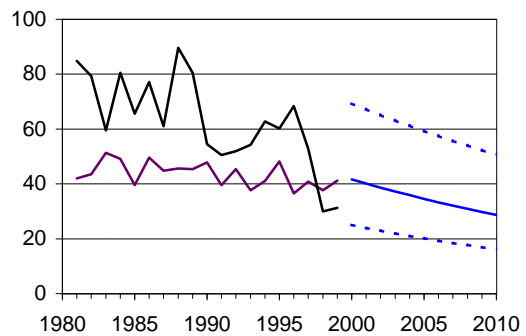
Doncaster Quintile 5 (Most Deprived)



Rotherham Quintiles 1-4



Rotherham Quintile 5 (Most Deprived)



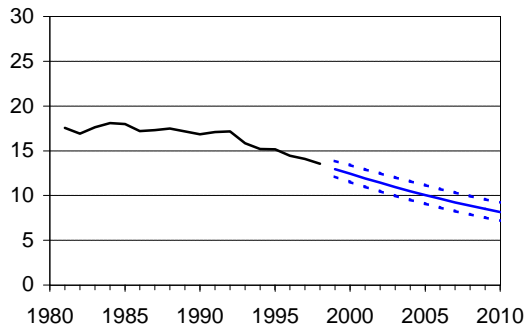
Rates forecast with 95% confidence intervals by Holt's Method on logit-transformed data

Figure 2.4 - Death Rates for Colorectal Cancer

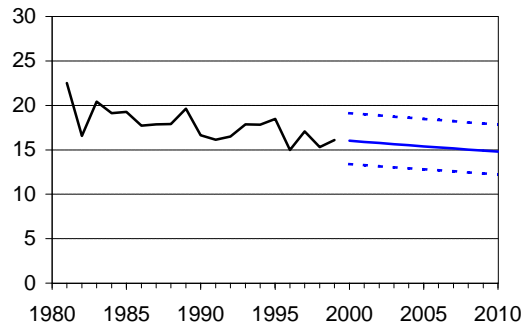
Directly Standardised Rates per 100,000 Resident Population
ICD-9 152-153 All persons aged under 75

Sources: ONS: Annual Abstracts of Deaths, Mid-Year Estimates of Population and 20th Century Mortality in England & Wales; Trent RHA: Deaths prior to 1992.

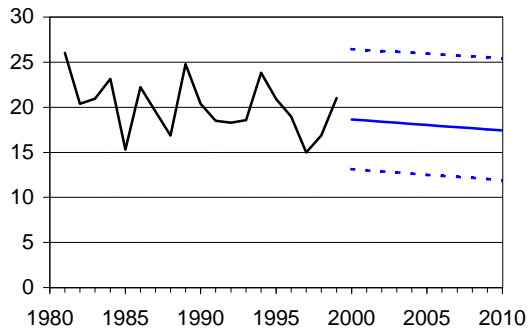
England & Wales



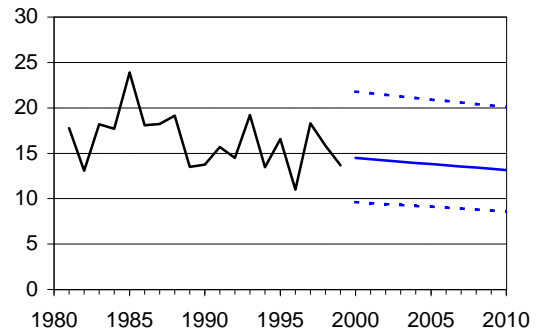
South Yorkshire Coalfields HAZ



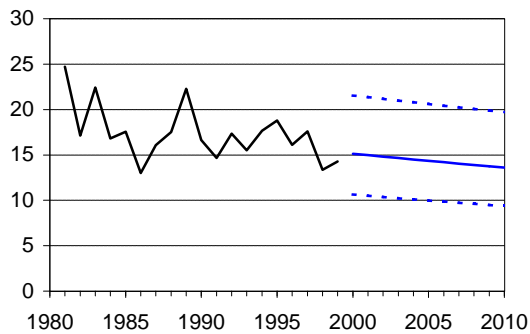
Barnsley HA



Doncaster HA



Rotherham HA



— Directly Standardised Rate
— Forecast Rate
..... 95% Confidence Interval

Rates forecast with 95% confidence intervals
by Holt's Method on logit-transformed data.

2.5 Death Rates for Breast Cancer

Once again the downward trend apparent at the national level is not reflected locally (figure 2.5). However the wide confidence intervals reveal the principle reason; the lack of stability in the time series. Nevertheless for the last three years all three health authorities have had lower death rates than the national average. Screening, service improvements such as wider availability of tamoxifen and chemotherapy and increased breast awareness in women may help further reduce deaths from breast cancer. However a close watch needs to be kept on these rates.

2.6 Death and Registration Rates for Cervical Cancer

Deaths from cervical cancer are fortunately comparatively rare and do not easily support time series analysis; figure 2.6a shows that the rates have fallen and are projected to fall further both at a national level and locally. This is, at least in part, due to the highly successful screening services in the three districts (see section 2.7). Of all cancer sites, cervical cancer is one of the most successfully treated with over 50% of patients surviving to ten years (ONS, 1999). Figure 2.6b shows that within the South Yorkshire Coalfields registration rates have been falling since 1988. Cervical cancer is largely a sexually transmitted disease (STD) and hence can be expected to benefit from the efforts being made to reduce the incidence of other STDs.

2.7 Coverage Rates for Cervical and Breast Screening

All three health authorities have an excellent record of cytology screening coverage (Figure 2.7a), Doncaster consistently achieving over 88%, Rotherham over 85% and Barnsley over 83%. While these figures are well in excess of the nationally required standard of 80%, trends are certainly more downward than upward and constant vigilance is required to ensure that standards don't fall. It is possible that recent discussion in the national press around deficiencies in the services in some parts of the country has affected confidence and hence compliance.

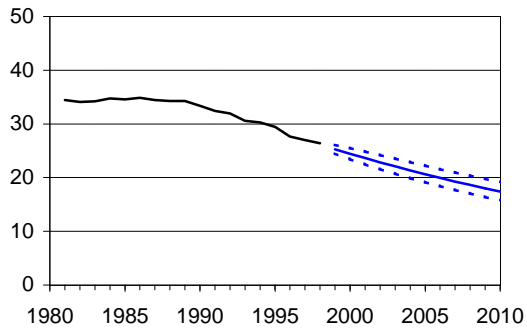
The breast screening programme has been set up more recently (starting in 1989/90) with a target of 70% coverage for women aged 50-64. In 1999, all three health authorities achieved the 70% target which only Barnsley has done consistently since 1995 (see Figure 2.7b). Barnsley has, in fact achieved its local target of 75% every year since 1995.

Figure 2.5 - Death Rates for Breast Cancer

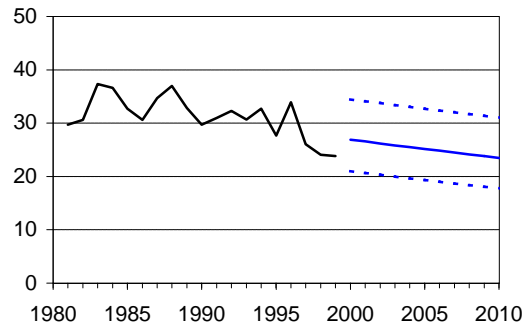
Directly Standardised Rates per 100,000 Resident Population
ICD-9 174 Females aged under 75

Sources: ONS: Annual Abstracts of Deaths, Mid-Year Estimates of Population and 20th Century Mortality in England & Wales; Trent RHA: Deaths prior to 1992.

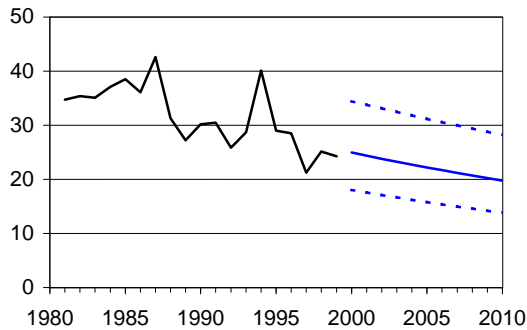
England & Wales



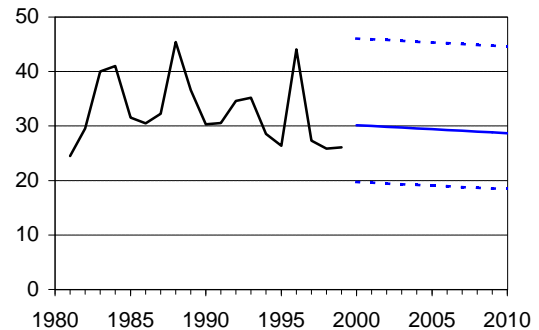
South Yorkshire Coalfields HAZ



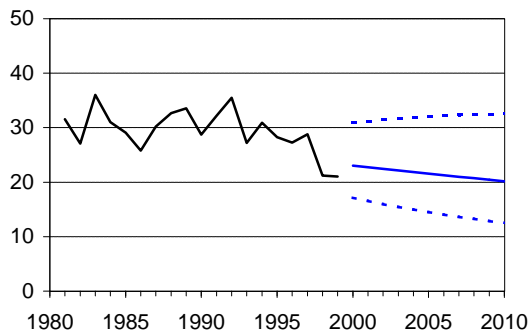
Barnsley HA



Doncaster HA



Rotherham HA



— Directly Standardised Rate
— Forecast Rate
..... 95% Confidence Interval

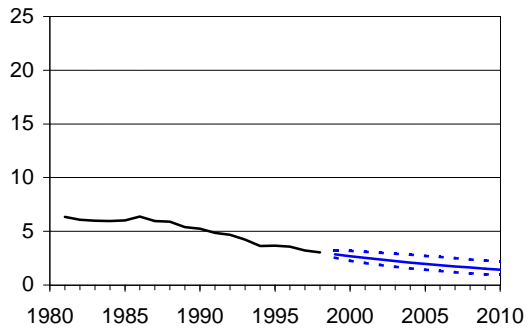
Rates forecast with 95% confidence intervals
by Holt's Method on logit-transformed data.

Figure 2.6a - Death Rates for Cervical Cancer

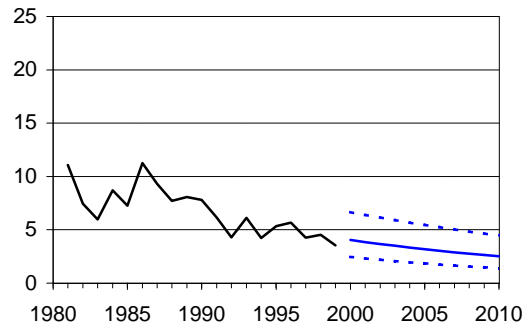
Directly Standardised Rates per 100,000 Resident Population
ICD-9 180 Females aged under 75

Sources: ONS: Annual Abstracts of Deaths, Mid-Year Estimates of Population and 20th Century Mortality in England & Wales; Trent RHA: Deaths prior to 1992.

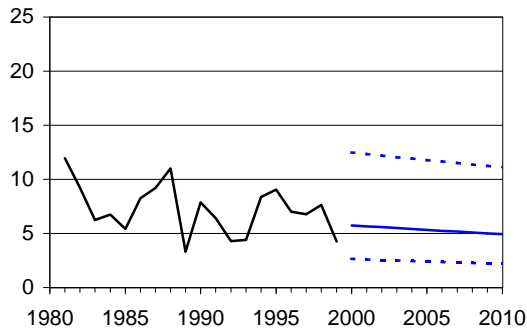
England & Wales



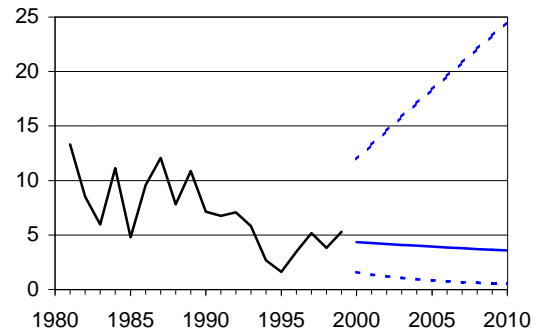
South Yorkshire Coalfields HAZ



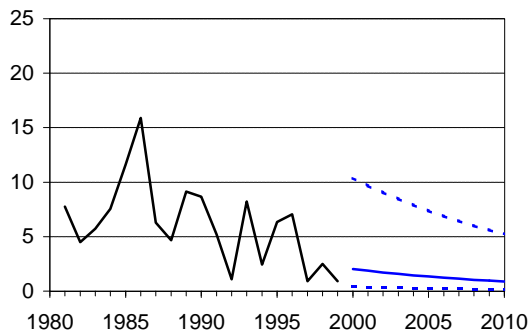
Barnsley HA



Doncaster HA



Rotherham HA



— Directly Standardised Rate
— Forecast Rate
..... 95% Confidence Interval

Rates forecast with 95% confidence intervals
by Holt's Method on logit-transformed data.

Figure 2.6b - Registration Rates for Cervical Cancer

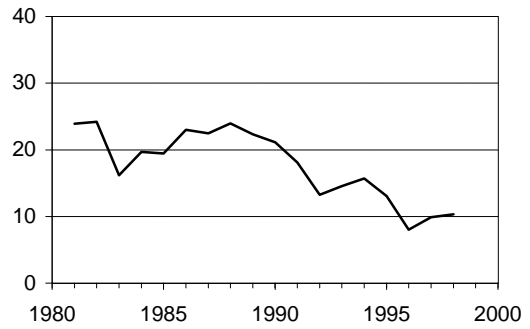
Directly Standardised Rates per 100,000 Resident Population
 ICD-9 180, ICD-10 C53 Females aged under 75

Sources: Trent Cancer Registry, Mid-Year Estimates of Population.

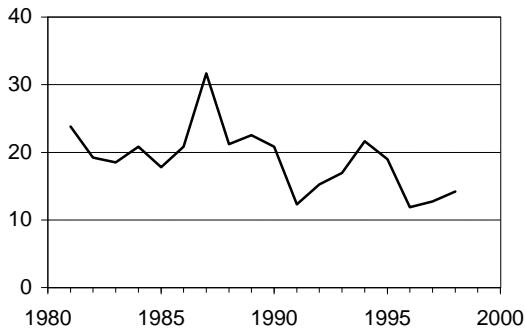
England and Wales

Data Not Available

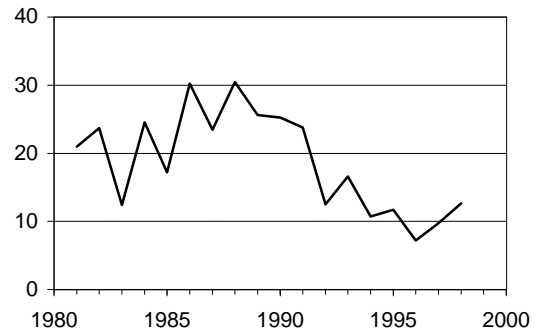
South Yorkshire Coalfields HAZ



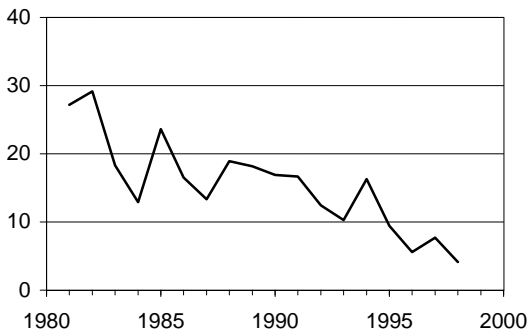
Barnsley HA



Doncaster HA



Rotherham HA



— Directly Standardised Rate

Figure 2.7a - Cervical Screening Uptake Rates

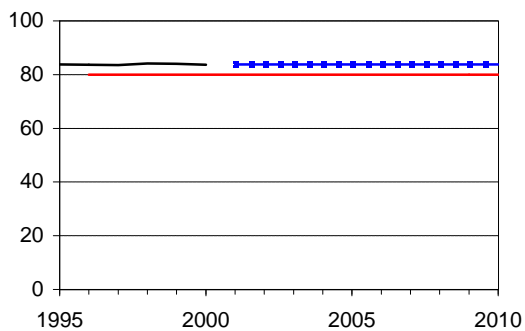
Percentage of Eligible Female Population Screened within Previous Five Years

Target: To maintain 80% coverage rates.

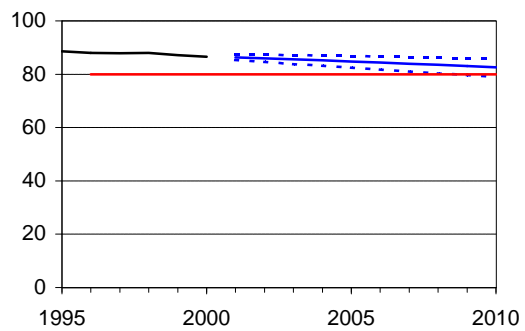
Source: DoH Statistical Bulletin 1999/32

Notes: The denominator for the calculation of coverage was amended in 1999 to exclude from the population those women with recall ceased for clinical reasons. Data for 1995 to 1998 have been adjusted to this new basis. (DoH. Statistical Bulletin 1999/32).

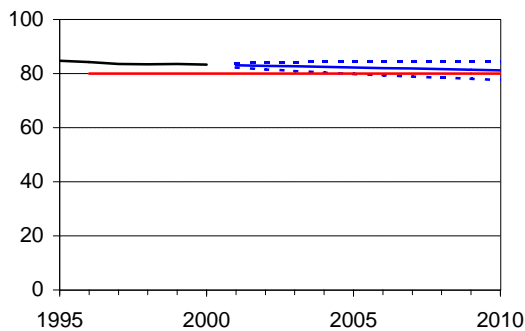
England & Wales



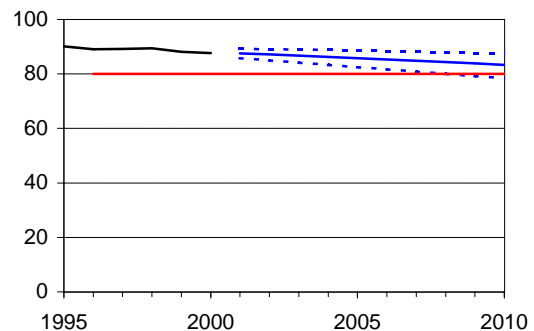
Trent Region



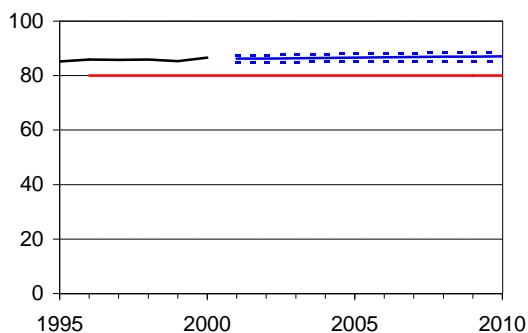
Barnsley HA



Doncaster HA



Rotherham HA



- Directly Standardised Rate
- Forecast Rate
- 95% Confidence Interval
- 80% National Standard

Rates forecast with 95% confidence intervals by Holt's Method on logit-transformed data.

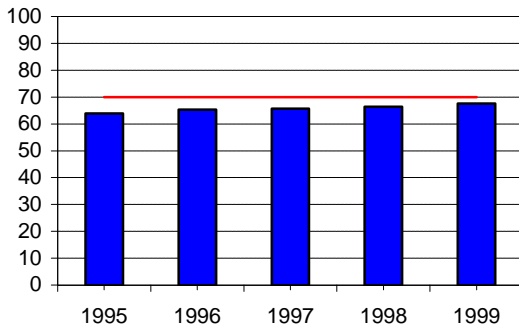
Figure 2.7b - Breast screening programme

Coverage of the target age group (50-64) by health authority at 31 March each year
Percentage less than 3 years since last test

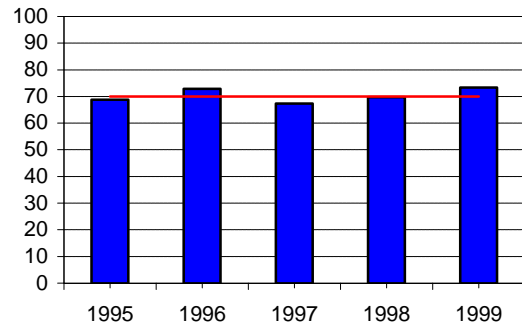
Target: National Target: 70%
Barnsley HImP Target: 75%

Sources: Form KC63 - Table 11

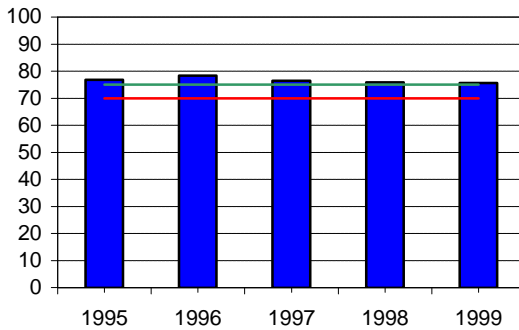
England



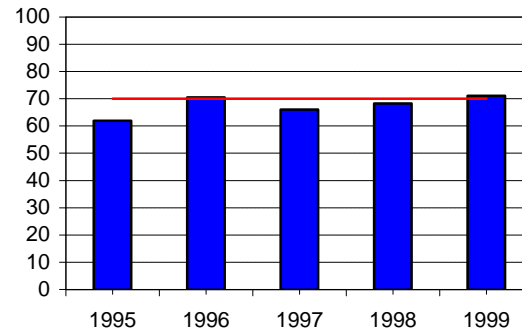
South Yorkshire Coalfields HAZ



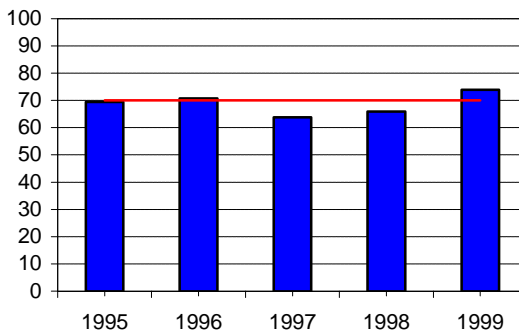
Barnsley HA



Doncaster HA



Rotherham HA



— 70% National Standard
— HImP Target (where applicable)

2.8 Waiting Times for Cancer Patients

Patients with a suspected cancer should be able to see a specialist within two weeks of their GP deciding they need to be seen urgently and requesting an appointment. The data in table 2.8 come from the 2000 NHS Performance Indicators and show data for breast cancer only, for January-March 2000. While Doncaster achieved the target and Rotherham very nearly did so, Barnsley has some way to go in this area.

Table 2.8 – Waiting Times for Breast Cancer Patients

	% of patients seen within 14 days when GP referral request was received within 24hrs	HImP Target 2001
Barnsley	71	-
Doncaster	100	100
Rotherham	98	100

Source: Quality and Performance in the NHS: NHS Performance Indicators July 2000

References.

Chollat-Traquet C (1992). *Women and Tobacco*. Geneva: World Health Organisation.

Department of Health (1999). *Saving Lives: Our Healthier Nation*. London: The Stationery Office.

ONS (1998). *Living in Britain – Results from the 1996 General Household Survey*. London: The Stationery Office.

ONS (1999). *Cancer Survival Trends in England and Wales - 1971-1995 – Deprivation and NHS Region*. London: The Stationery Office.

Peto R, Lopez AD, Boreham J, Thun M, Heath C Jr (1992). Mortality from tobacco in developed countries: indirect estimation from national vital statistics. *Lancet* **339**:1268-78.

Prescott E, Osler M, Hein HO, Borch-Johnsen K, Schnohr P, Vestbo J (1998). Life expectancy in Danish women and men related to smoking habits: smoking may affect women more. *J Epidemiol Community Health* **52**:131-2.

Trent Cancer Registry (2000). *Cancer Incidence and Survival*. Sheffield: Trent Public Health Observatory.

CHAPTER 3

Coronary Heart Disease and Stroke

3.1 Death Rates for All Circulatory Diseases

The trends in circulatory disease mortality for under 75s are very clear (figure 3.1a) and show that the number of deaths is expected to continue decreasing. The target reduction of 40% demanded by *Saving Lives: Our Healthier Nation* (Department of Health, 1999) looks well within reach in every area, but the rates are higher in the South Yorkshire Coalfields than nationally, particularly in Rotherham.

3.2 Death Rates for Coronary Heart Disease

The primary reason for the decline in circulatory disease mortality in under 75s is the huge fall in coronary heart disease (CHD) deaths. As other circulatory disease deaths are not diminishing so quickly, to achieve the 40% target will require even larger falls in CHD mortality. The national forecast shown in figure 3.2a suggests a drop of 54% by 2010 from the 1995-7 baseline. The forecasts within the South Yorkshire Coalfields are for a 40% reduction, with Barnsley's rates falling more steeply than elsewhere. Doncaster East PCG needs to pay particular attention to this area.

Figure 3.2b shows the reductions in the most deprived areas, compared with the rest – the purple line on the right-hand graph is simply a replica of the rates presented on the left-hand graph, for ease of comparison. It appears from this analysis that steep reductions are being experienced fairly consistently, although the deprived areas start from much higher levels. As discussed earlier (section 1.1), we should exhibit caution in interpreting these results. There is evidence that the gap in CHD mortality is widening; comparing the areas with the lowest CHD mortality rates with those with the highest rates led Shaw *et al* (1999:121) to this conclusion.

3.3 Death Rates for Stroke

Figure 3.3 demonstrates that, while stroke follows the same general downward trend as CHD, the rates are not declining as fast.

3.4 Hospital Admission Rates for Revascularisation

The government have specified a national target for revascularisations of an increase of 3,000 by April 2002. Revascularisation includes bypass graft surgery (CABG) and angioplasty (PTCA). This target equates to six revascularisations per 100,000 resident population; in other words 13 extra revascularisations per year in Barnsley, 17 in Doncaster and 15 in Rotherham. These procedures have not been shown to save life except in those with the most severe disease, but they do increase the quality of life through symptom relief those who live with heart disease (NHS Centre for Reviews and Dissemination, 1997; Bucher *et al*, 2000). Figure 3.4 illustrates that rates have increased enormously in all areas.

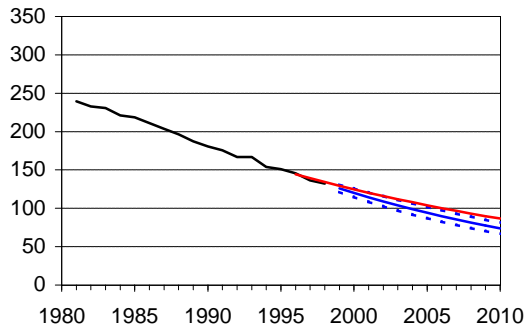
Figure 3.1 - Death Rates for All Circulatory Disease

Directly Standardised Rates per 100,000 Resident Population
ICD-9 390-459 All persons aged under 75

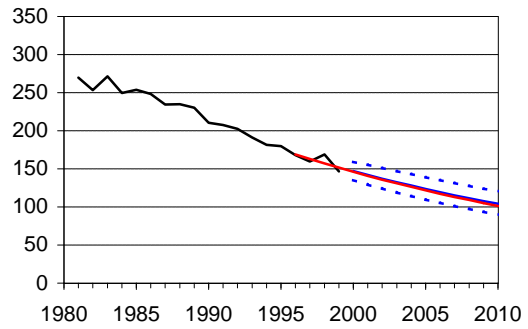
Target: (*Saving Lives: Our Healthier Nation*) To reduce death rates by 40% by 2010 from the 1995-7 baseline.

Sources: ONS: Annual Abstracts of Deaths, Mid-Year Estimates of Population and 20th Century Mortality in England & Wales; Trent RHA: Deaths prior to 1992.

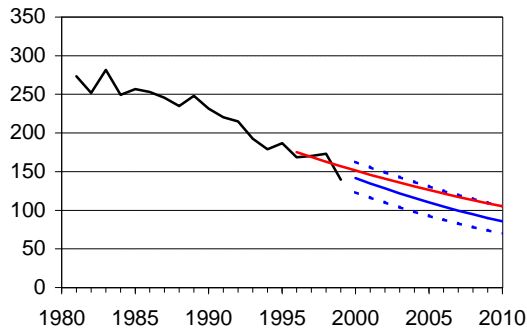
England & Wales



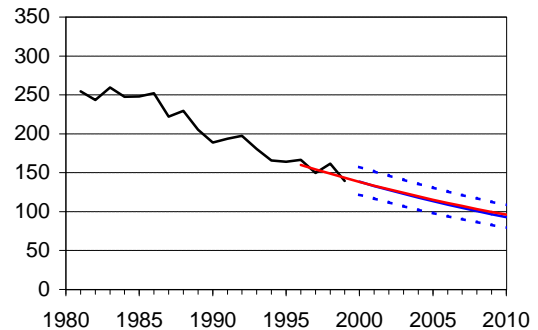
South Yorkshire Coalfields HAZ



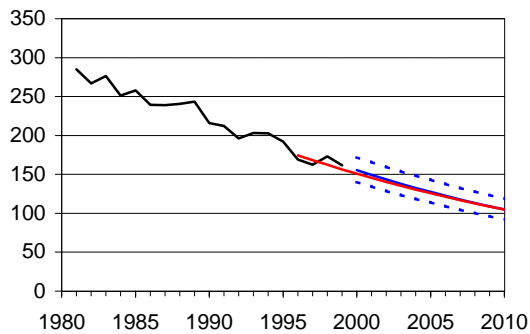
Barnsley HA



Doncaster HA



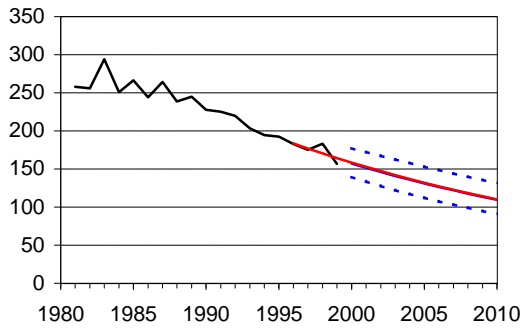
Rotherham HA



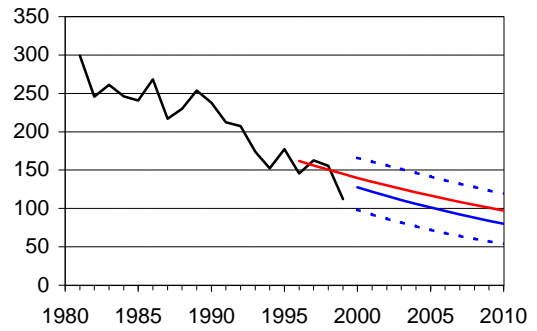
— Directly Standardised Rate
— Forecast Rate
..... 95% Confidence Interval
— OHN Target Line

Rates forecast with 95% confidence intervals by Holt's Method on logit-transformed data.

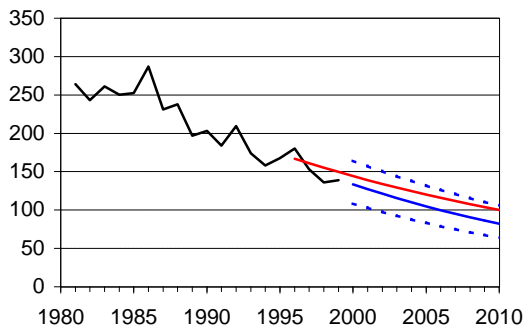
Barnsley East PCG



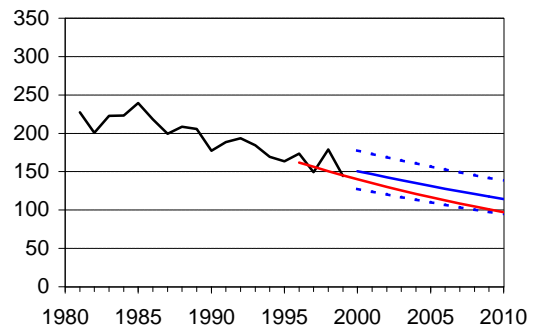
Barnsley West PCG



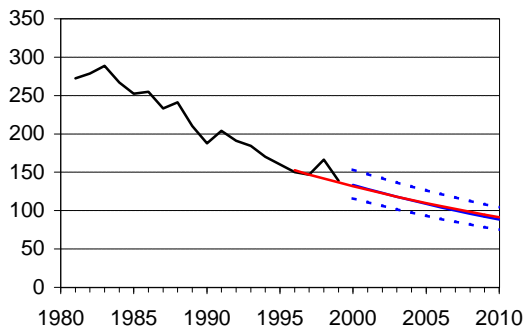
Doncaster Central PCT



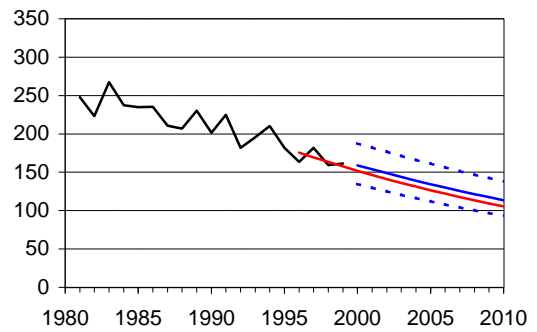
Doncaster East PCG



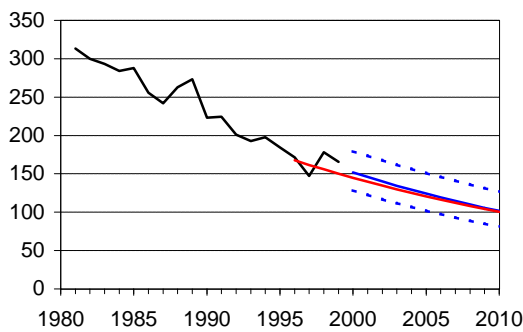
Doncaster West PCG



Rother Valley PCG



Rotherham PCG



Wentworth PCG

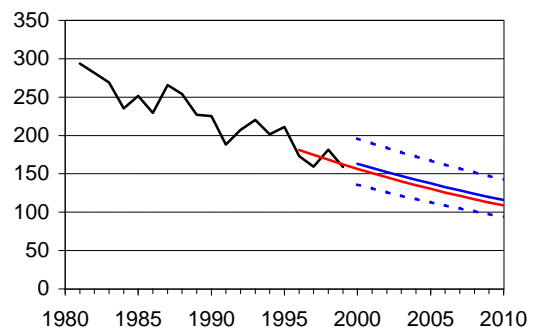
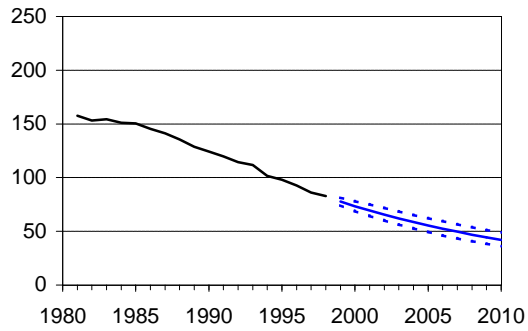


Figure 3.2a - Death Rates for Coronary Heart Disease

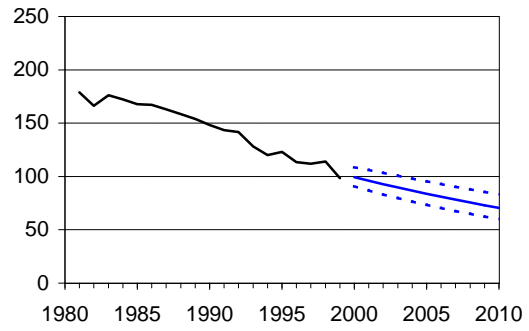
Directly Standardised Rates per 100,000 Resident Population
ICD-9 410-414 All persons aged under 75

Sources: ONS: Annual Abstracts of Deaths, Mid-Year Estimates of Population and 20th Century Mortality in England & Wales; Trent RHA: Deaths prior to 1992.

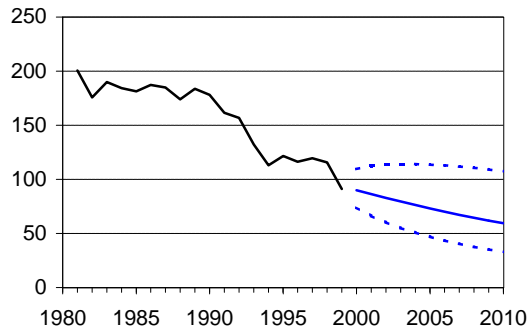
England & Wales



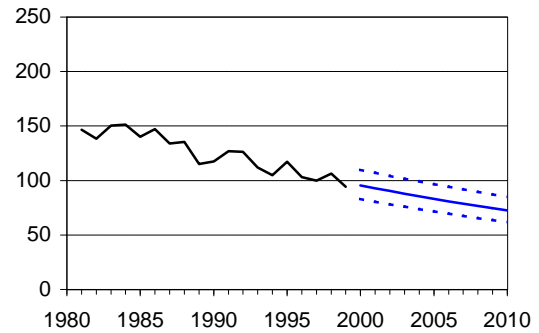
South Yorkshire Coalfields HAZ



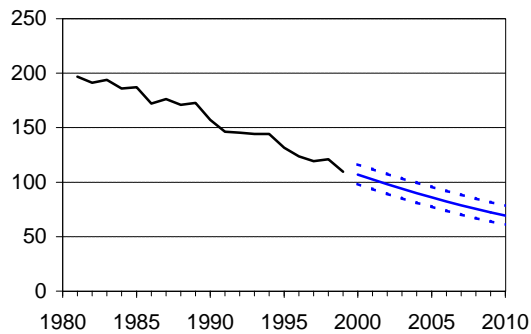
Barnsley HA



Doncaster HA



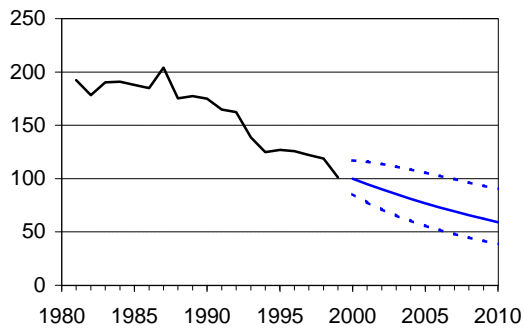
Rotherham HA



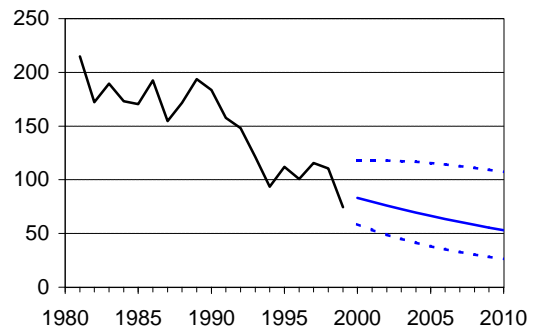
— Directly Standardised Rate
— Forecast Rate
..... 95% Confidence Interval

Rates forecast with 95% confidence intervals
by Holt's Method on logit-transformed data.

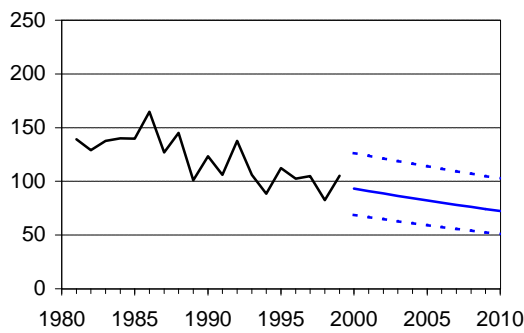
Barnsley East PCG



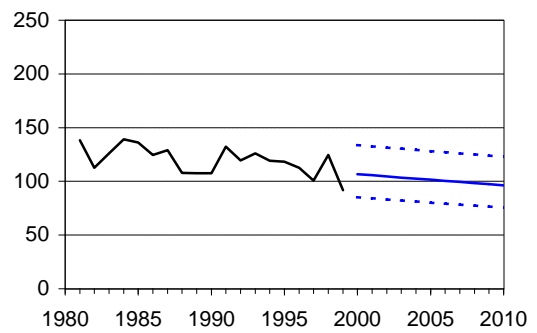
Barnsley West PCG



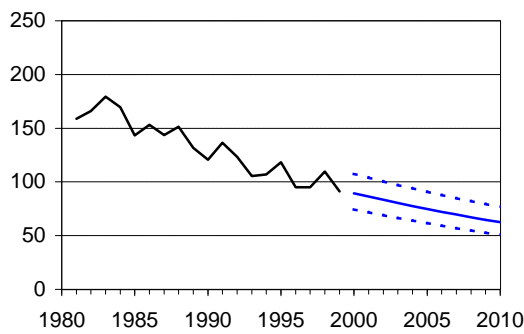
Doncaster Central PCT



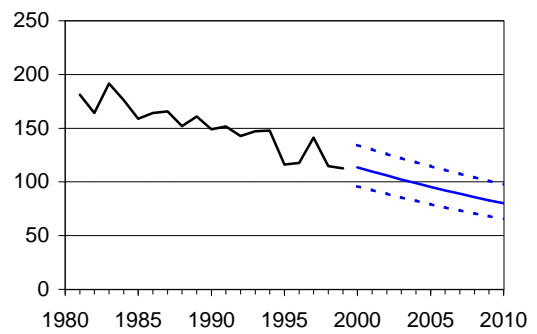
Doncaster East PCG



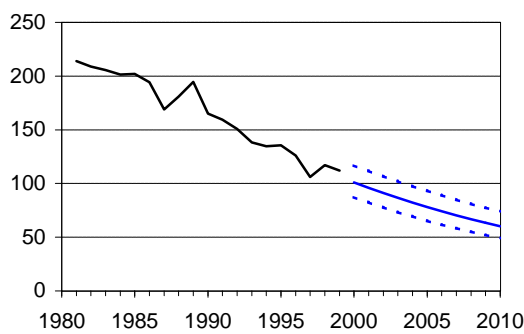
Doncaster West PCG



Rother Valley PCG



Rotherham PCG



Wentworth PCG

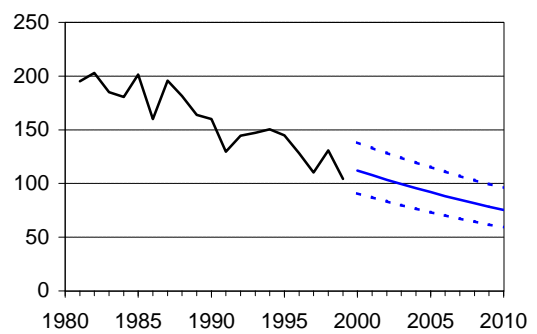


Figure 3.2b - Death Rates for Coronary Heart Disease

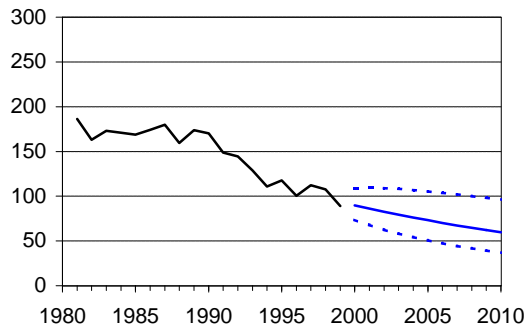
Directly Standardised Rates per 100,000 Resident Population
ICD-9 410-414 All persons aged under 75 years

Target: Rotherham: Reduce the difference between quintiles of electoral wards with the highest and lowest CHD death rates by a third for people aged under 65

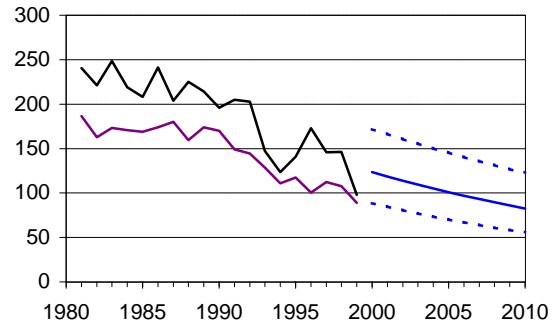
Sources: ONS: Annual Abstracts of Deaths, Mid-Year Estimates of Population and 20th Century Mortality in England & Wales; Trent RHA: Deaths prior to 1992.

— Directly Standardised Rate 95% Confidence Interval
— Forecast Rate — Quintiles 1-4 (replicated from the left hand graph)

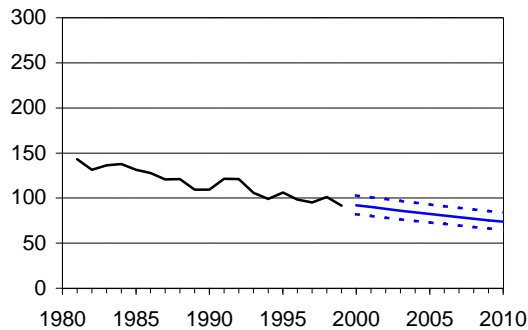
Barnsley Quintiles 1-4



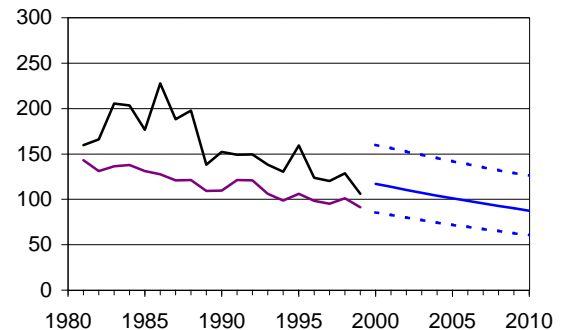
Barnsley Quintile 5 (Most Deprived)



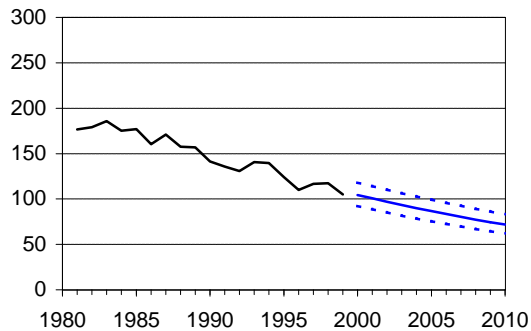
Doncaster Quintiles 1-4



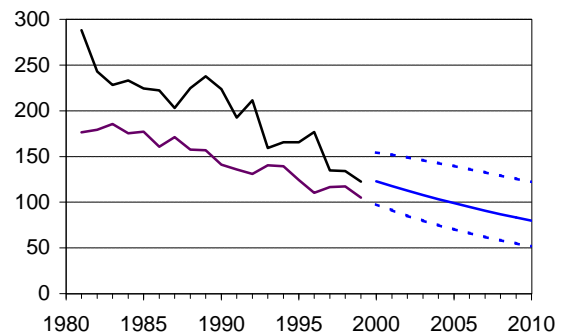
Doncaster Quintile 5 (Most Deprived)



Rotherham Quintiles 1-4



Rotherham Quintile 5 (Most Deprived)



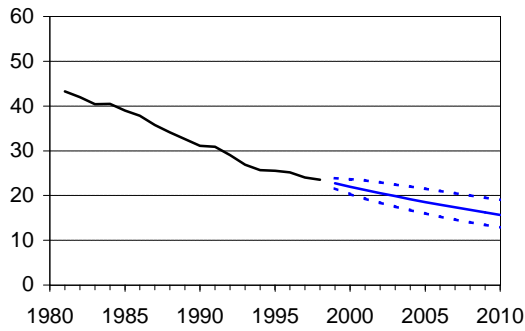
Rates forecast with 95% confidence intervals by Holt's Method on logit-transformed data

Figure 3.3 - Death Rates for Stroke

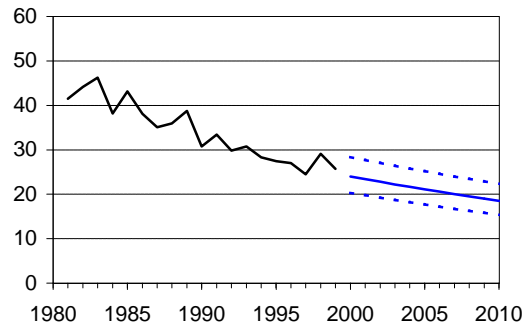
Directly Standardised Rates per 100,000 Resident Population
ICD-9 430-438 All persons aged under 75

Sources: ONS: Annual Abstracts of Deaths, Mid-Year Estimates of Population and 20th Century Mortality in England & Wales; Trent RHA: Deaths prior to 1992.

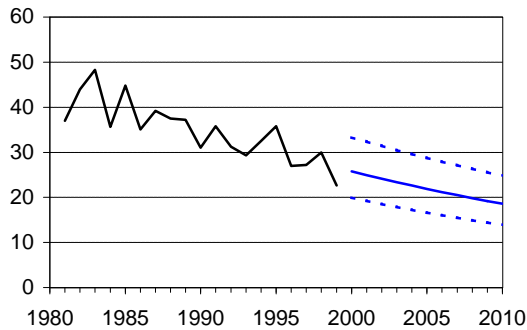
England & Wales



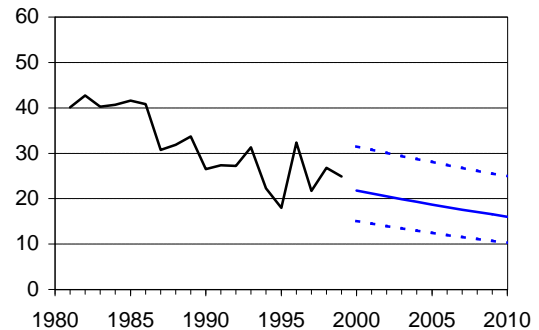
South Yorkshire Coalfields HAZ



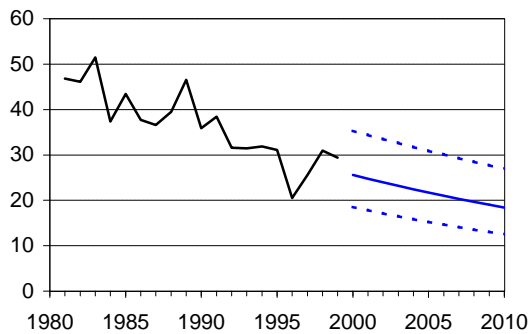
Barnsley HA



Doncaster HA



Rotherham HA



— Directly Standardised Rate
— Forecasted Rate
..... 95% Confidence Interval

Rates forecast with 95% confidence intervals
by Holt's Method on logit-transformed data.

Figure 3.4 - Admission rates for Revascularisation

Directly Standardised Rates per 100,000 Resident Population
 OPCS 4 K40-K46, K49-K50 All Persons all ages

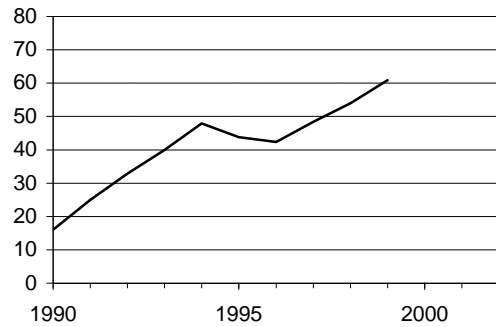
Target: Barnsley: Increase the number of coronary revascularisations by April 2002 to contribute to the national target increase of 3000

Sources: CMDS, Trent Region PIS Archive, ONS Mid-Year Estimates of Population

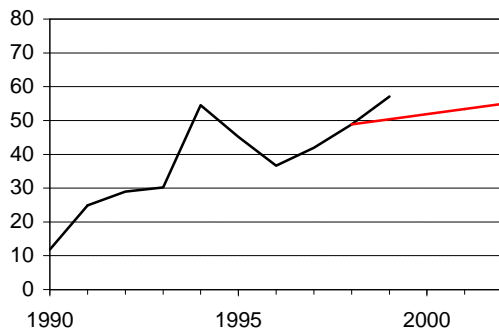
England and Wales

Data Not Available

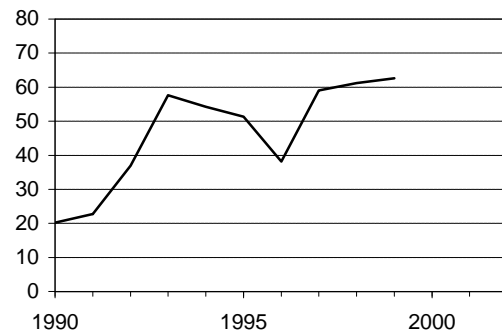
South Yorkshire Coalfields HAZ



Barnsley HA



Doncaster HA



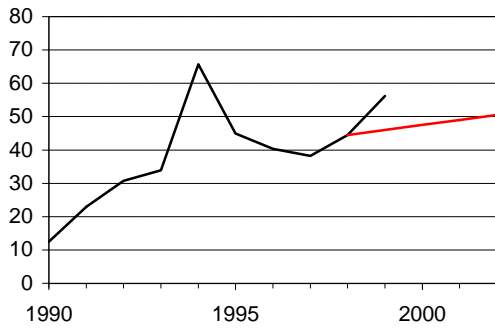
Rotherham HA



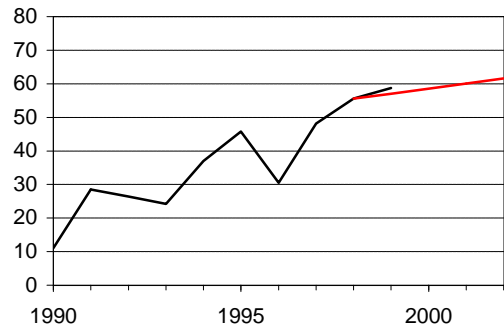
— Directly Standardised Rate
 — National Target applied pro rata (where appropriate)

Rates forecast with 95% confidence intervals by Holt's Method on logit-transformed data.

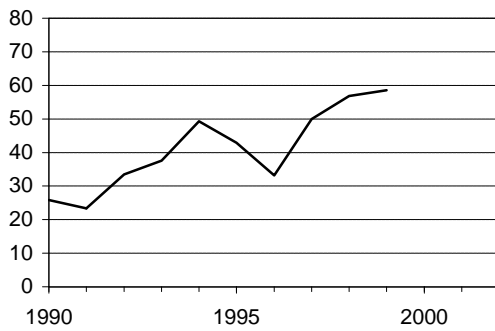
Barnsley East PCG



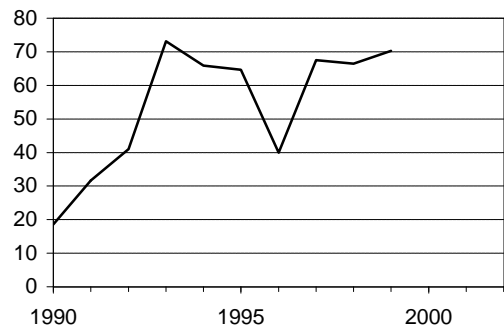
Barnsley West PCG



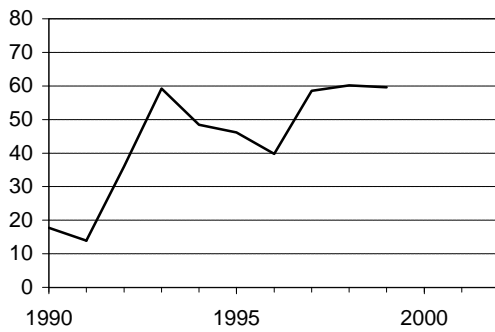
Doncaster Central PCT



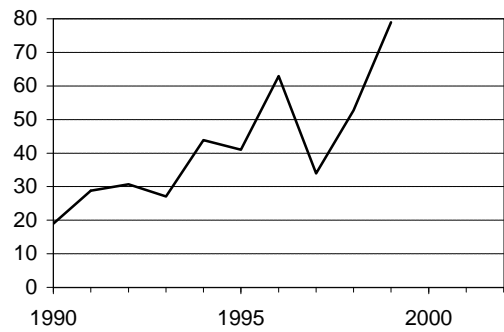
Doncaster East PCG



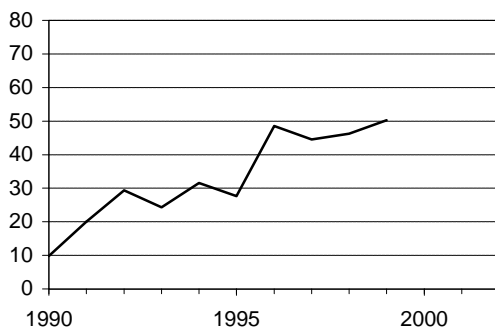
Doncaster West PCG



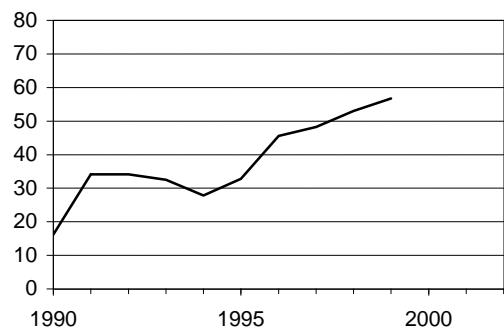
Rother Valley PCG



Rotherham PCG



Wentworth PCG



3.5 Aspirin Therapy

Doncaster has a target to assess 100% of patients at high risk of coronary or ischaemic cerebrovascular events for suitability for aspirin therapy by 2001. Audit suggests that currently 66% of patients are being considered for aspirin therapy (Doncaster MAAG, 2000).

References.

Bucher HC, Hengstler P, Schindler C, Guyatt GH (2000). Percutaneous transluminal coronary angioplasty versus medical treatment for non-acute coronary heart disease: meta-analysis of randomised controlled trials. *BMJ* **321**:73-77.

Department of Health (1999). *Saving Lives: Our Healthier Nation*. London: The Stationery Office.

Doncaster MAAG (2000). *Multi-practice audit of aspirin use in patients with ischaemic heart disease*.

NHS Centre for Reviews and Dissemination (1997). Management of stable angina. *Effective Health Care* **3(5)**.

Shaw M, Dorling D, Gordon D, Smith GD (1999). *The widening gap – Health inequalities and policy in Britain*. Bristol: The Policy Press.

CHAPTER 4

Accidents

4.1 Death Rates for Accidents

Figure 4.1a shows mortality rates for accidents. Numbers are small and even at national level the time series is relatively unstable and the prediction intervals wide. However, as with other *Saving Lives: Our Healthier Nation* targets (Department of Health, 1999), the national forecast appears to be very much in line with the target. The local results are not inconsistent with the national trends with targets well within prediction intervals.

It is important to note that the trend in the South Yorkshire Coalfields is predicted to rise, yet in each individual health authority the rates are predicted to fall. The reason for this is that the forecasting tool uses a different model to predict the trend in each case. The small numbers make precision difficult, as revealed by the wide confidence intervals. The model gives greater weight to more recent data. Thus it is the confidence intervals which are important when interpreting these graphs. The confidence intervals show that rates, particularly in Barnsley and Doncaster, could increase, therefore early partnership work is needed to ensure the target is met.

Figure 4.1b illustrates that death rates for accidents have been higher in the most deprived parts of Doncaster and Rotherham but have declined sharply in Rotherham. As in previous charts, the purple line on the right-hand graph is simply a replica of the rates presented on the left-hand graph, for ease of comparison (see section 1.1 for a fuller explanation).

Despite being dropped from the NHS Plan, accidents remain a public health priority. However it is not a problem which health authorities can tackle alone but instead needs to be tackled in partnership with other agencies. National government and local authorities, particularly, have a leading role in preventing deaths.

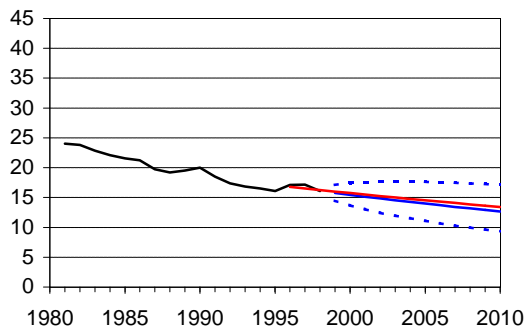
Figure 4.1a - Death Rates for Accidents

Directly Standardised Rates per 100,000 Resident Population
ICD-9 E800-E949 All persons all ages

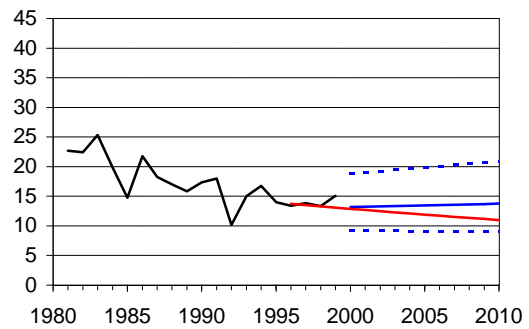
Target: (*Saving Lives: Our Healthier Nation*) To reduce death rates by 20% by 2010 from the 1995-7 baseline.

Sources: ONS: Annual Abstracts of Deaths, Mid-Year Estimates of Population and 20th Century Mortality in England & Wales; Trent RHA: Deaths prior to 1992.

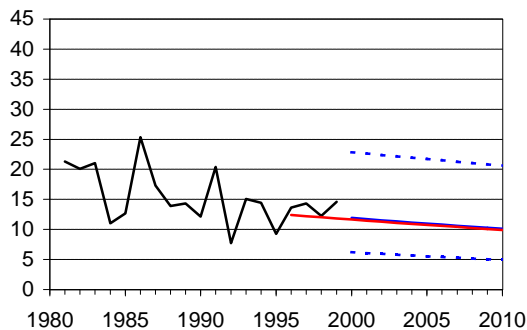
England & Wales



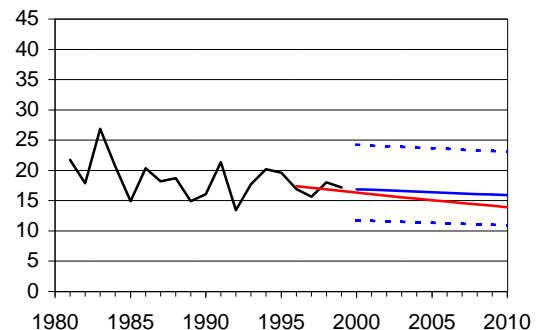
South Yorkshire Coalfields HAZ



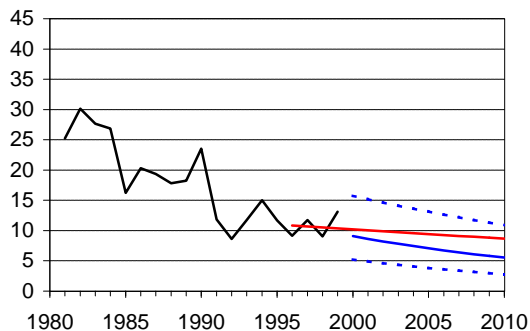
Barnsley HA



Doncaster HA



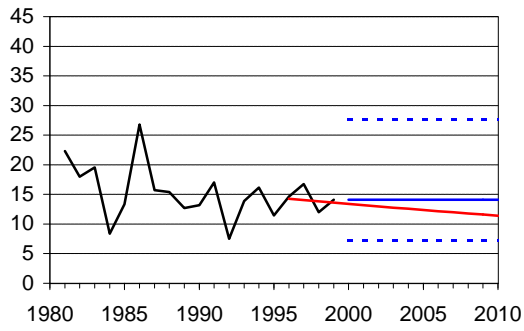
Rotherham HA



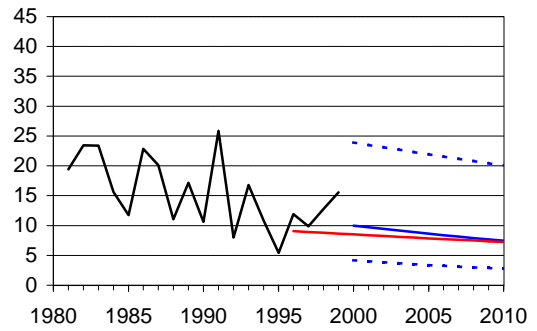
— Directly Standardised Rate
— Forecast Rate
..... 95% Confidence Interval
— OHN Target Line

Rates forecast with 95% confidence intervals
by Holt's Method on logit-transformed data.

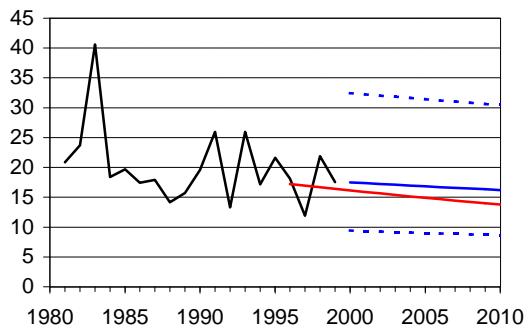
Barnsley East PCG



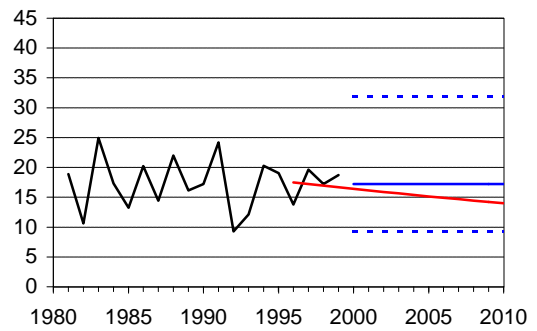
Barnsley West PCG



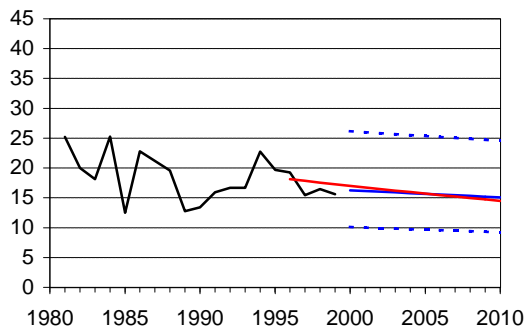
Doncaster Central PCT



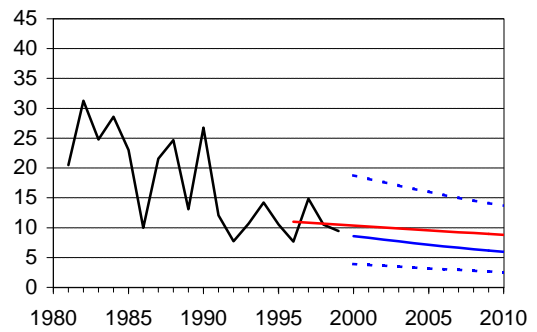
Doncaster East PCG



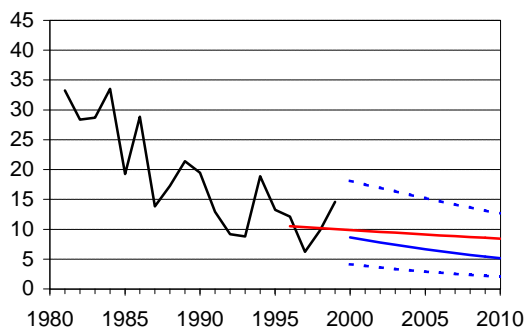
Doncaster West PCG



Rother Valley PCG



Rotherham PCG



Wentworth PCG

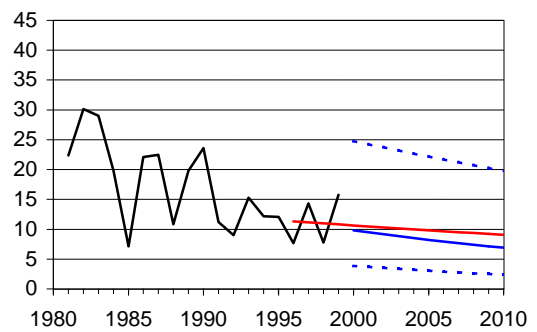


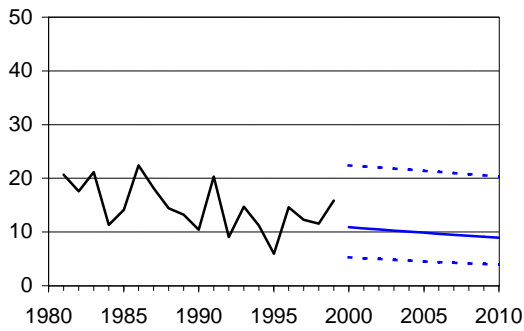
Figure 4.1b - Death Rates for All Accidents

Directly Standardised Rates per 100,000 Resident Population
ICD-9 E800-E949 All persons all ages

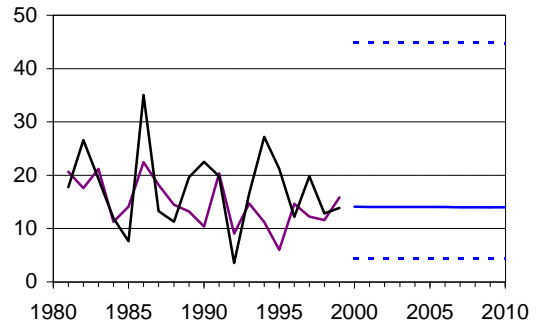
Sources: ONS: Annual Abstracts of Deaths, Mid-Year Estimates of Population and 20th Century Mortality in England & Wales; Trent RHA: Deaths prior to 1992.

— Directly Standardised Rate 95% Confidence Interval
— Forecast Rate — Quintiles 1-4 (replicated from left hand graph)

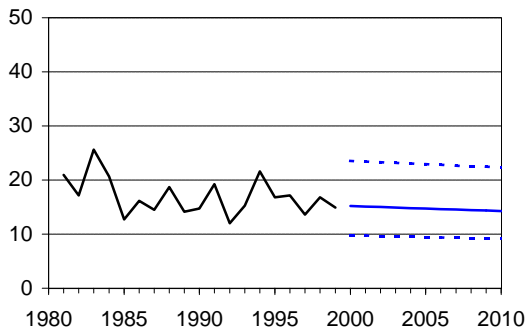
Barnsley Quintiles 1-4



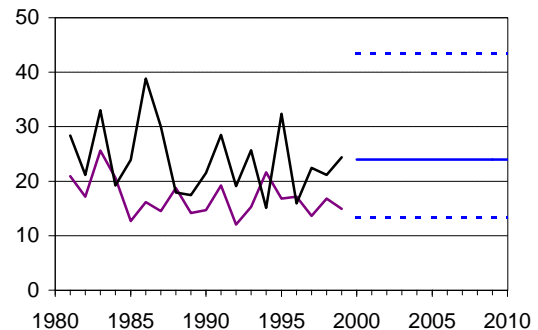
Barnsley Quintile 5 (Most Deprived)



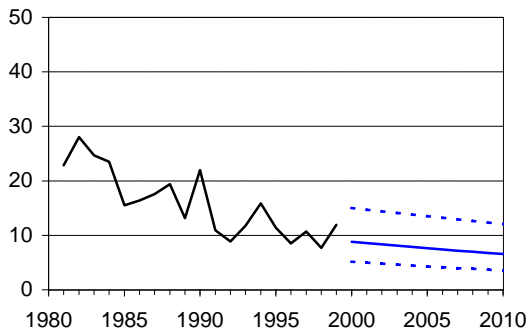
Doncaster Quintiles 1-4



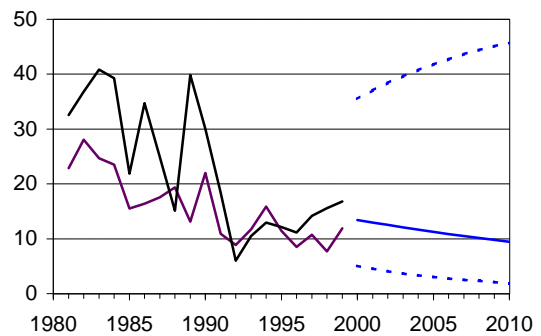
Doncaster Quintile 5 (Most Deprived)



Rotherham Quintiles 1-4



Rotherham Quintile 5 (Most Deprived)



Rates forecast with 95% confidence intervals by Holt's Method on logit-transformed data

4.2 Hospital Admission Rates for Serious Accidents

In recognition of the fact that deaths from accidents represent only a tiny proportion of the burden of accidents on health services and society, *Saving Lives: Our Healthier Nation* included a target for 'serious accidents', defined as accidents requiring at least four days stay in hospital.

Figure 4.2a shows trends in and forecasts of admission rates for these 'serious accidents'. There is no evidence for concern around this target, no health authority or PCG/PCT being forecast to miss the target (taking into account the 95% confidence intervals). However the width of the confidence intervals demonstrates the difficulty of forecasting 11 years into the future on the basis of only ten years of historic data

Figure 4.2b suggests that the higher rates experienced in the early 1990s by those living in more deprived areas have not been maintained; the gap appears to have narrowed. We should, however, be cautious in drawing this conclusion, for the same reasons discussed in section 3.2.

Reference:

Department of Health (1999). *Saving Lives: Our Healthier Nation*. London: The Stationery Office.

Figure 4.2a - Admission Rates for Serious Accidents

Directly Standardised Rates per 100,000 Resident Population

Primary Diagnosis: ICD-9 800-999, ICD-10 S00-T98

With Secondary Diagnosis: ICD-9 E800-E949, ICD-10 V00-V99, W00-X59, Y40-Y84

All persons all ages

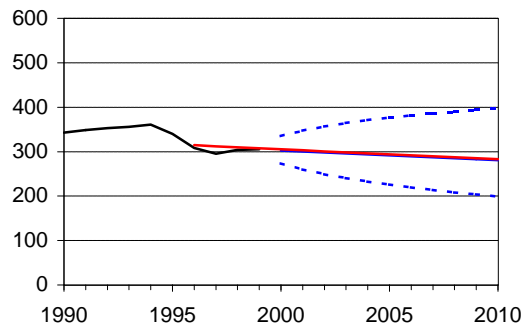
Target: *Saving lives: Our Healthier Nation*) To reduce the rate of serious injury from accidents by at least one tenth by 2010 from the 1995-7 baseline.

Sources: CMDS, Trent Region PIS Archive, ONS Mid-Year Estimates of Population

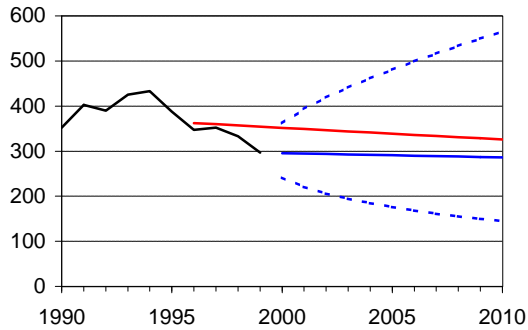
England and Wales

Data Not Available

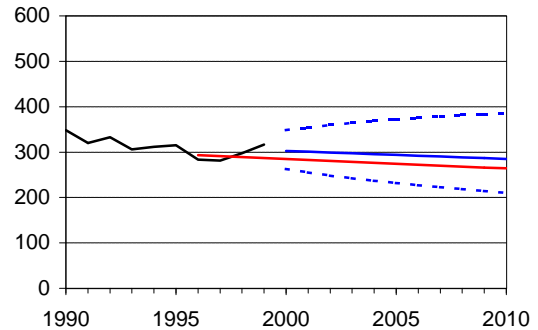
South Yorkshire Coalfields HAZ



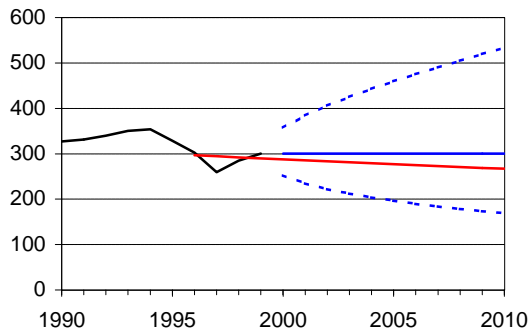
Barnsley HA



Doncaster HA



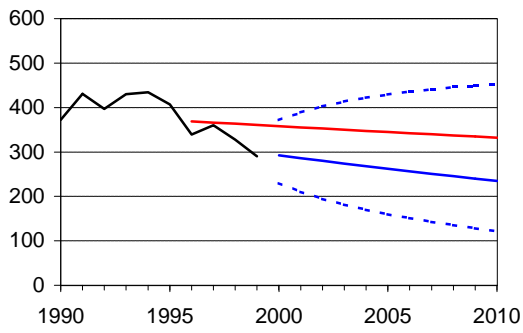
Rotherham HA



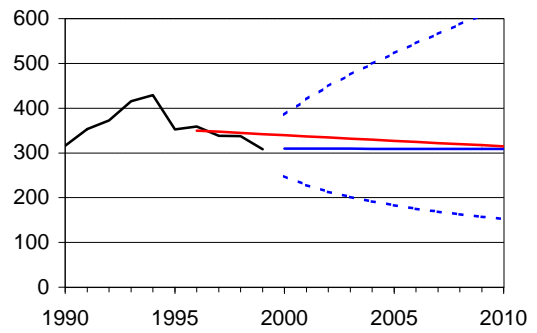
- Directly Standardised Rate
- Forecast Rate
- 95% Confidence Interval
- OHN Target Line

Rates forecast with 95% confidence intervals by Holt's Method on logit-transformed data.

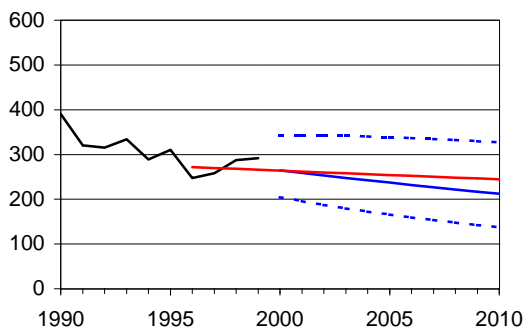
Barnsley East PCG



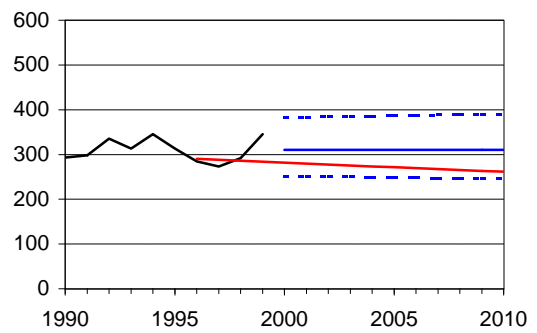
Barnsley West PCG



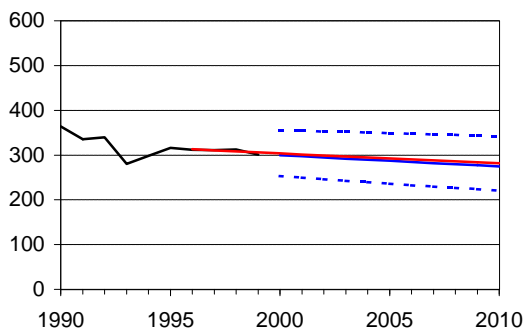
Doncaster Central PCT



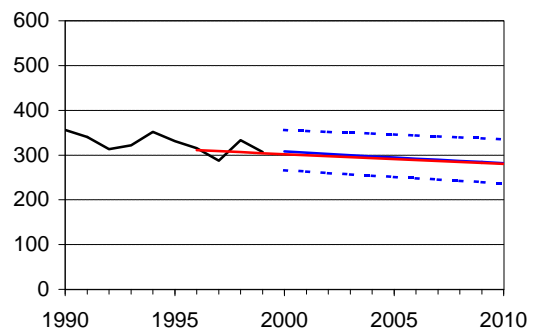
Doncaster East PCG



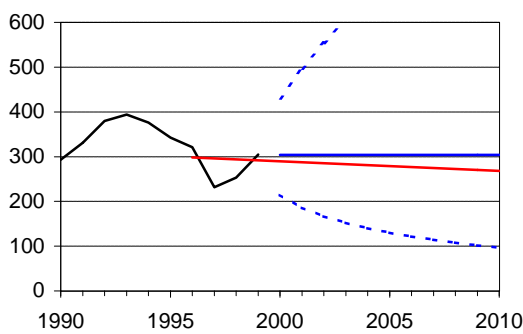
Doncaster West PCG



Rother Valley PCG



Rotherham PCG



Wentworth PCG

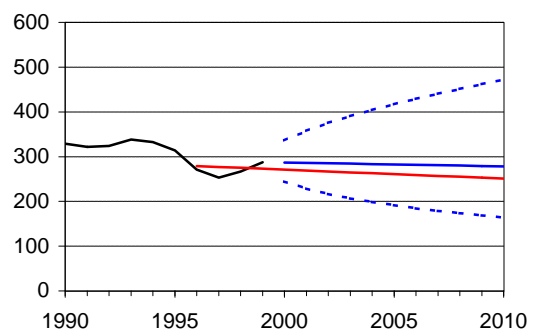


Figure 4.2b - Admission Rates for Serious Accidents

Directly Standardised Rates per 100,000 Resident Population

Primary Diagnosis: ICD-9 800-999, ICD-10 S00-T98

With Secondary Diagnosis: ICD-9 E800-E949, ICD-10 V00-V99, W00-X59, Y40-Y84

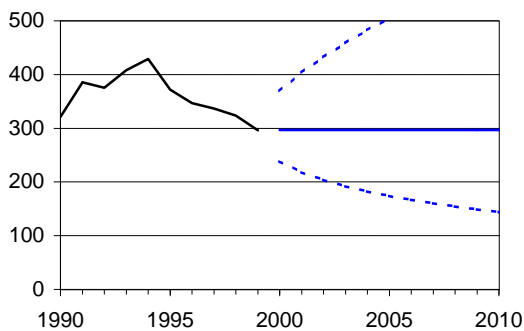
All persons all ages

Target: Doncaster: To reduce the rate of serious injury from accidents in the most deprived 20% of enumeration districts at a faster rate than the rest of the population.

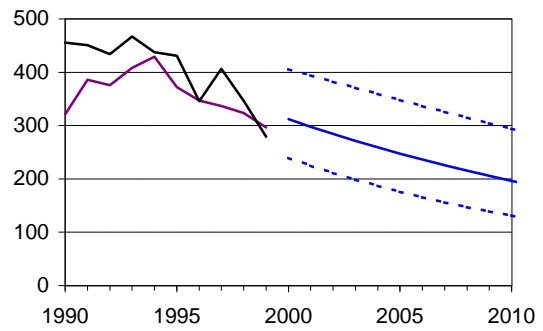
Sources: CMDS, Trent Region PIS Archive, ONS Mid-Year Estimates of Population.

— Directly Standardised Rate 95% Confidence Interval
 — Forecast Rate — Quintiles 1-4 (replicated from left hand graph)

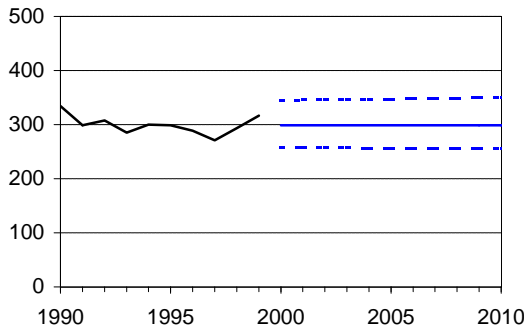
Barnsley Quintiles 1-4



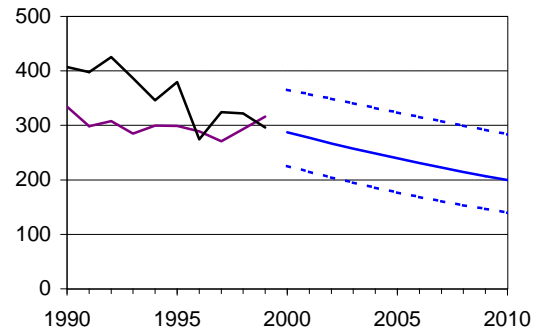
Barnsley Quintile 5 (Most Deprived)



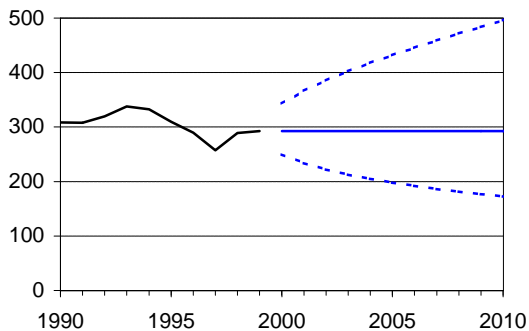
Doncaster Quintiles 1-4



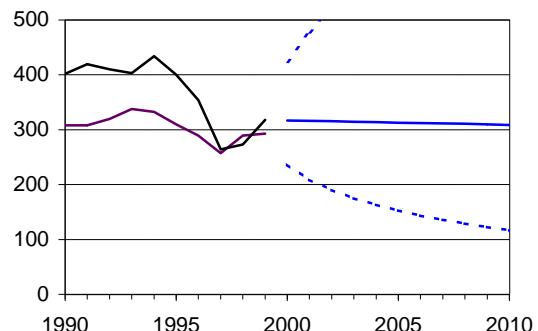
Doncaster Quintile 5 (Most Deprived)



Rotherham Quintiles 1-4



Rotherham Quintile 5 (Most Deprived)



Rates forecast with 95% confidence intervals by Holt's Method on logit-transformed data

CHAPTER 5

Mental Health

5.1 Death Rates for Suicide

Suicide has been used as an indicator of levels of mental health despite representing a very small tip of a very large iceberg and consisting of numbers too small for meaningful analysis at local level. Once again national forecasts appear in line with the 20% reduction target (figure 5.1) set in *Saving Lives: Our Healthier Nation* (Department of Health, 1999). In the South Yorkshire Coalfields as a whole it is less likely that current trends will lead to success against the target, but it is difficult to break down the figures even to health authority level. No health authority exhibits any evidence of a downward trend – the rates have been constant for 20 years - although rates in Rotherham have been consistently lower than those of Barnsley and Doncaster. Doncaster has had a number of suicides at its prisons in recent years which are included in the figures.

5.2 Psychiatric Ward Emergency Readmission Rates

This target derives from NHS High Level Performance Indicators. The drive to reduce readmission rates is based on the assumption that readmissions will be reduced if patients are discharged only when appropriate and if services in other sectors for people with mental illness are effective in supporting patients outside hospital. Figure 5.2 shows emergency readmission rates. A technical problem with Rotherham's data has meant that rates between 1993 and 1996 could not be calculated; hence South Yorkshire Coalfields averages could not either.

Doncaster's emergency readmission rates are heading downwards, Barnsley's less convincingly so. It is difficult to reach any conclusions from Rotherham's data.

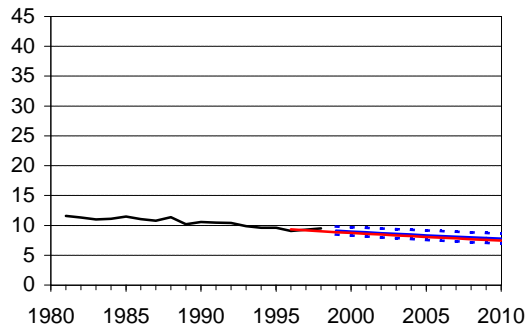
Figure 5.1 - Death Rates for Suicide and Undetermined Injury

Directly Standardised Rates per 100,000 Resident Population
ICD-9 E950-E959, E980-E989 not E988.8 All persons all ages

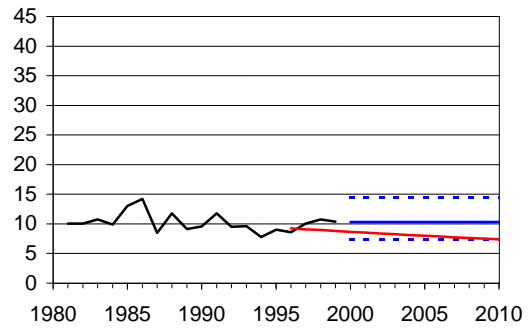
Target: (*Saving Lives: Our Healthier Nation*) To reduce death rates by 20% by 2010 from the 1995-7 baseline.

Sources: ONS: Annual Abstracts of Deaths, Mid-Year Estimates of Population and 20th Century Mortality in England & Wales; Trent RHA: Deaths prior to 1992.

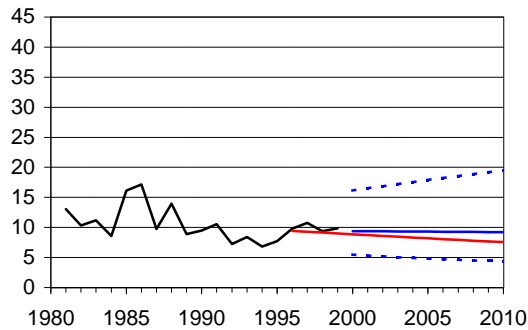
England & Wales



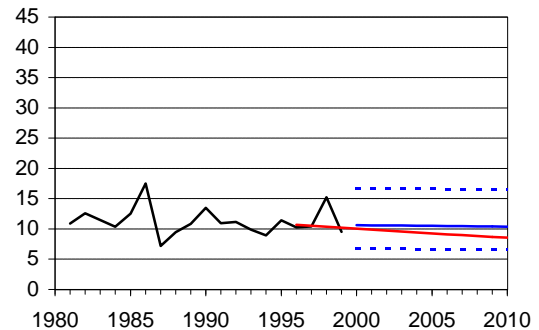
South Yorkshire Coalfields HAZ



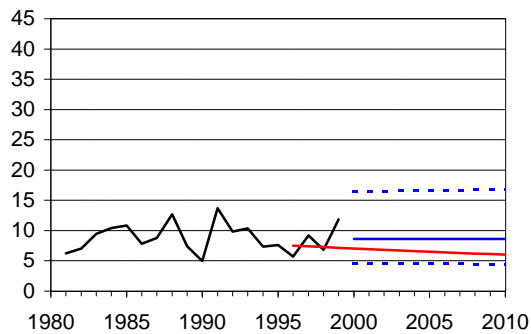
Barnsley HA



Doncaster HA



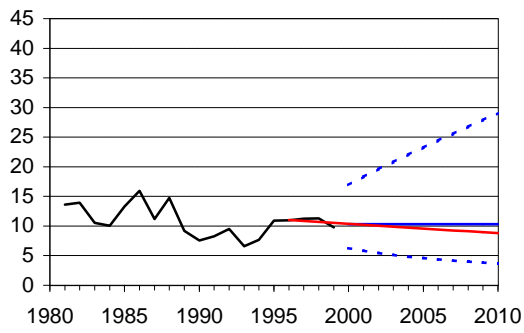
Rotherham HA



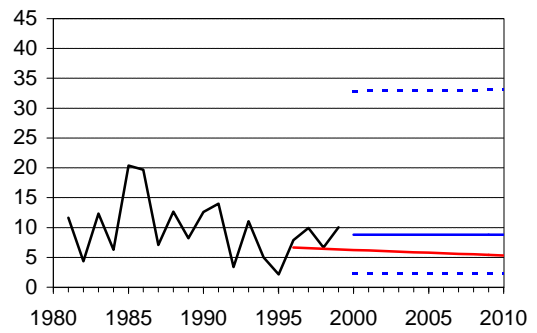
— Directly Standardised Rate
— Forecast Rate
..... 95% Confidence Interval
— OHN Target Line

Rates forecast with 95% confidence intervals by Holt's Method on logit-transformed data.

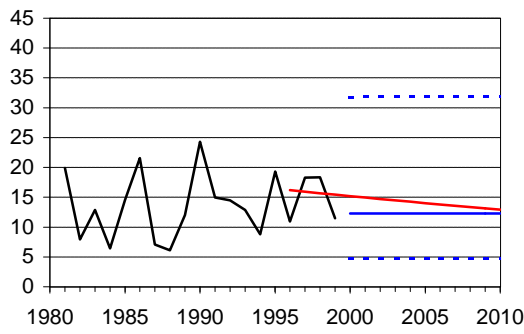
Barnsley East PCG



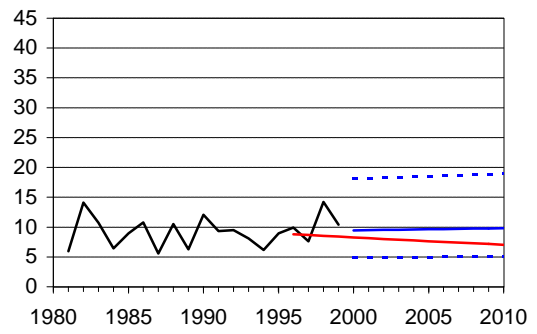
Barnsley West PCG



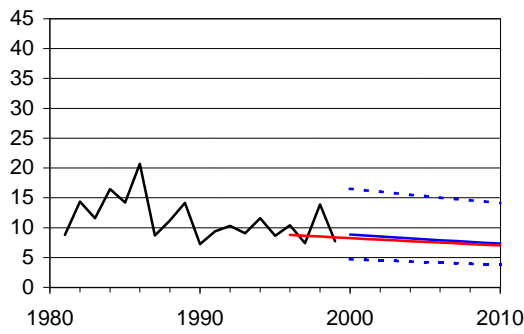
Doncaster Central PCT



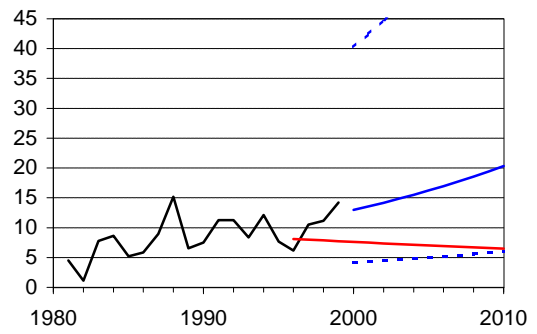
Doncaster East PCG



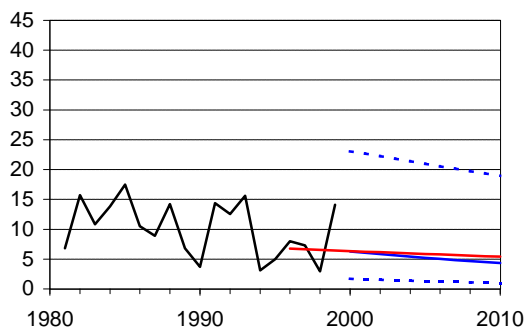
Doncaster West PCG



Rother Valley PCG



Rotherham PCG



Wentworth PCG

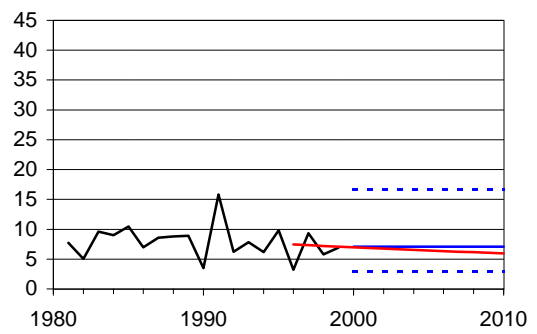


Figure 5.2 - Emergency Re-Admission rates for psychiatric care

Discharge and subsequent emergency admission with psychiatric specialty code (within 90 days of discharge)
All persons aged 15-64

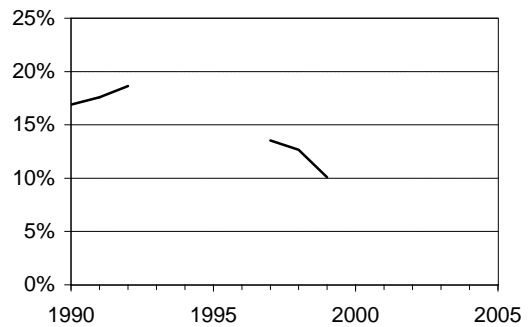
Target: Barnsley: To reduce the number of patients aged 16-64 who are readmitted to the care of a psychiatric specialist within 90 days of discharge from 14.3% to 12.3% by April 2002.

Sources: CMDS, Trent Region PIS Archive, ONS Mid-Year Estimates of Population

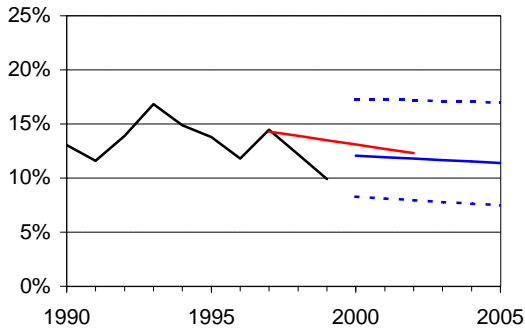
England and Wales

Data Not Available

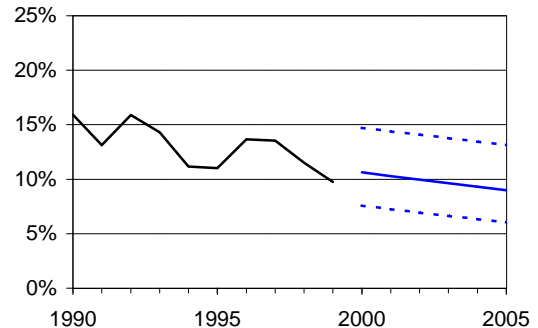
South Yorkshire Coalfields HAZ



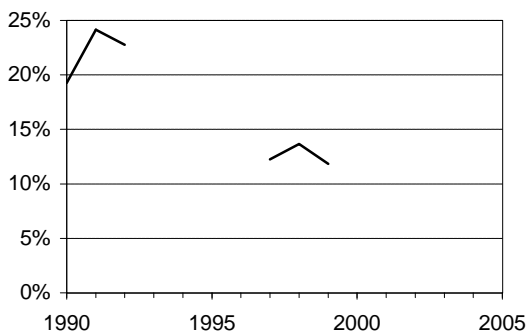
Barnsley HA



Doncaster HA



Rotherham HA



— Directly Standardised Rate
— Forecasted Rate
..... 95% Confidence Interval

Rates forecast with 95% confidence intervals
by Holt's Method on logit-transformed data.

5.3 Benzodiazepine Prescribing Rates

Benzodiazepines are used as anxiolytics (sedatives) or hypnotics (sleep inducers). Prescribing of these drugs is widespread but is only appropriate in the short term, as physical and psychological dependence develops. High rates of Benzodiazepine prescribing indicate inappropriate use. Barnsley has a target to reduce prescribing of these drugs by 15% by 2002/3. Doncaster's and Rotherham's HImPs state the aim to reduce their use. Measured in Annual DDDs/STAR-PU (defined daily doses per person on list – standardised for age and sex) the indicator aims to provide a fair comparative figure for the amount of the drugs being prescribed, relative to the population. While at a national level there is no evidence of change, locally, in all three health authorities and the seven PCGs/PCT for which data were obtained, there are clear improvements (figure 5.3). However the very different levels around the South Yorkshire Coalfields are clear, Barnsley East being particularly high prescribers of Benzodiazepines, followed by Doncaster West.

5.4 Co-proxamol Prescribing Rates

Doncaster's target, to reduce the level of the prescribing of Co-proxamol to the national average by 2003, has its origin in an audit of suicides carried out in Doncaster (Sims, 1998). The most important finding of the audit was the large number of suicides involving an overdose of co-proxamol. This drug is particularly lethal when taken in conjunction with alcohol or sedatives and it seems likely that some 'cries for help' are resulting in unintended death. Since that finding, co-proxamol has continued to be a major source of suicides in Doncaster and the health authority has worked with trusts and GPs to attempt to reduce the quantity in circulation by prescribing it less.

Figure 5.4 very clearly demonstrates that change is possible! Only in Doncaster has this been a target and the results speak for themselves. The indicator, number of items (prescriptions) per PU (people on list – standardised for age and sex) does not strictly reflect the amount of co-proxamol being prescribed, as prescriptions are not necessarily always for a set dose or for a set period, but it is unlikely that the reduction seen is misleading. Doncaster appears to have met this target already.

References:

Department of Health (1999). *Saving Lives: Our Healthier Nation*. London: The Stationery Office.

Sims A (1998). *Doncaster Suicide Audit*. Doncaster Health Authority.

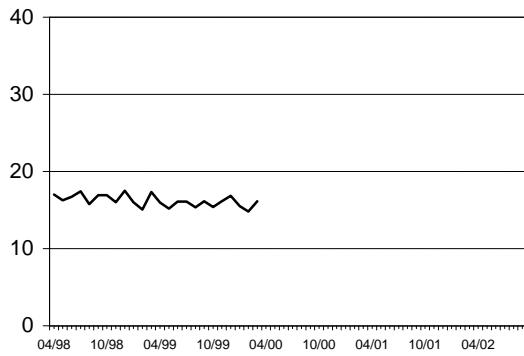
Figure 5.3 - Prescription Rates for Benzodiazepines

Annual defined daily dose per patient unit

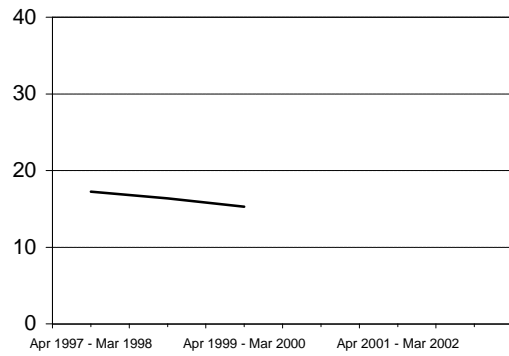
Target: Barnsley: Reduce the prescribing of benzodiazepines by 15% by 2002/3
 Doncaster & Rotherham: To improve performance on this indicator

Source: Prescription Pricing Authority

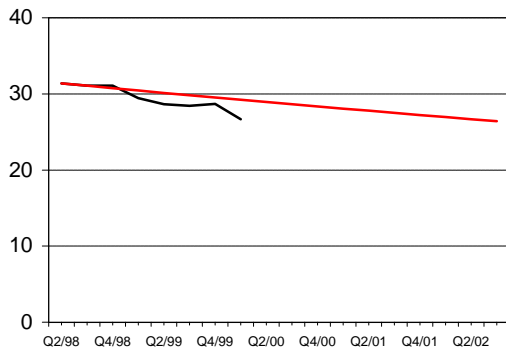
England & Wales



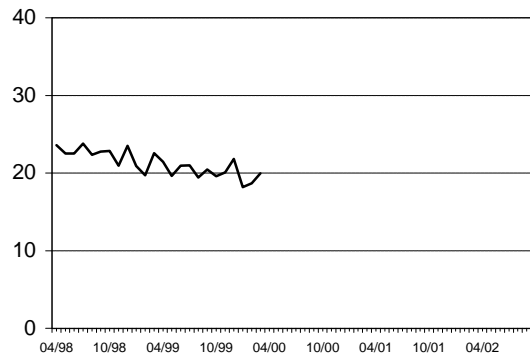
Trent Region



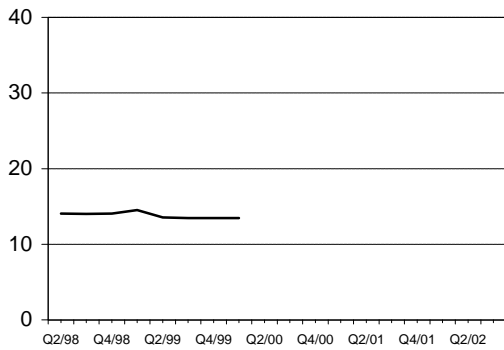
Barnsley HA



Doncaster HA

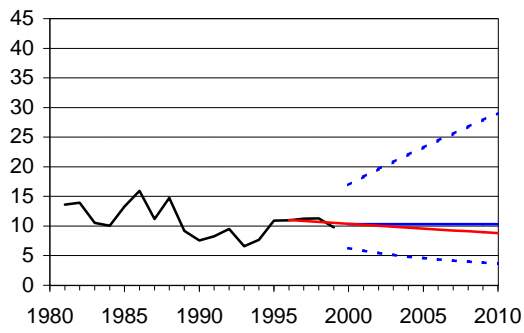


Rotherham HA

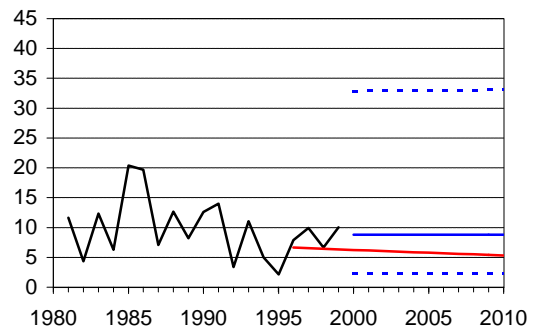


— Annual DDD/STAR-PU
 — HImP Target (where appropriate)

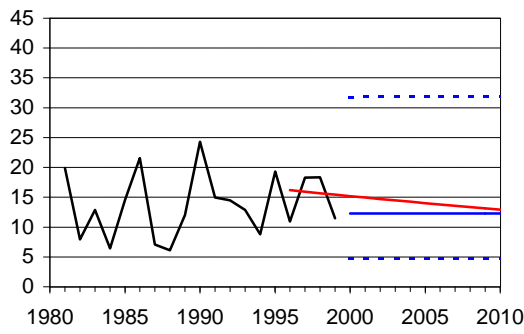
Barnsley East PCG



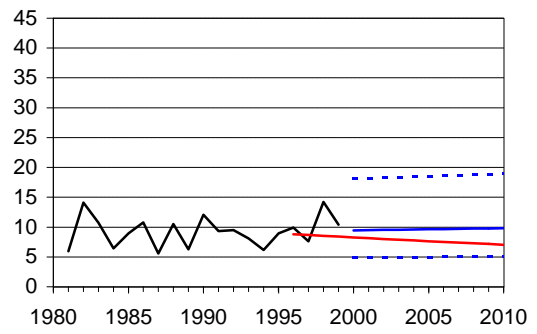
Barnsley West PCG



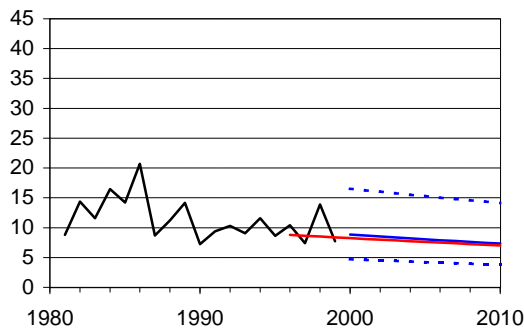
Doncaster Central PCT



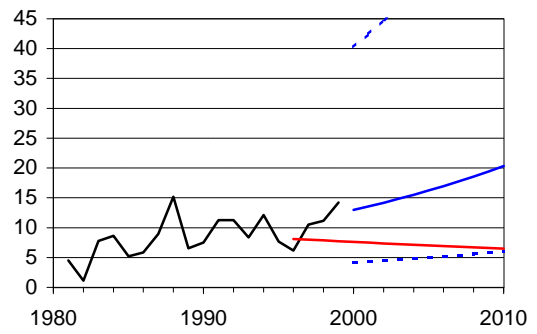
Doncaster East PCG



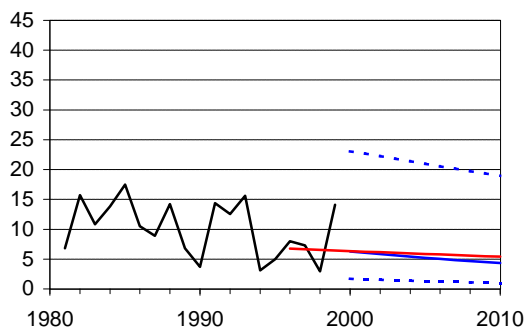
Doncaster West PCG



Rother Valley PCG



Rotherham PCG



Wentworth PCG

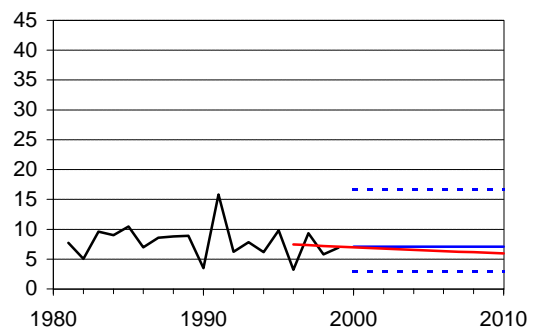


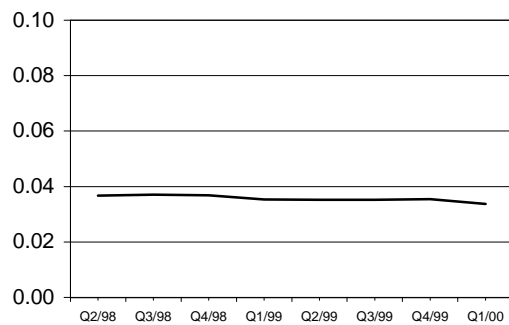
Figure 5.4 - Prescription rates for Co-proxamol

Items per patient

Target: Doncaster: Reduce prescribing of Co-proxamol to the national average by 2003

Source: Prescription Pricing Authority

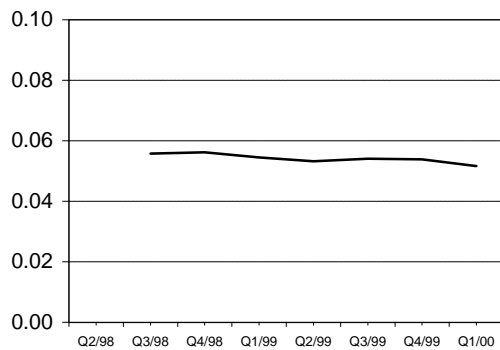
England & Wales



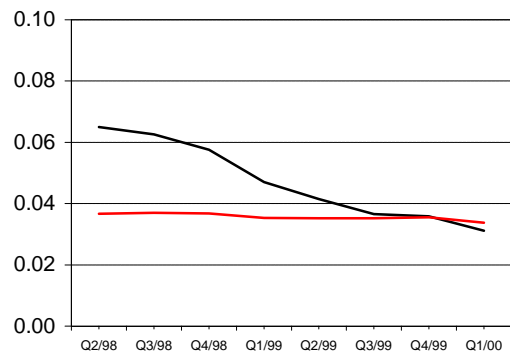
Trent Region

Data Not Available

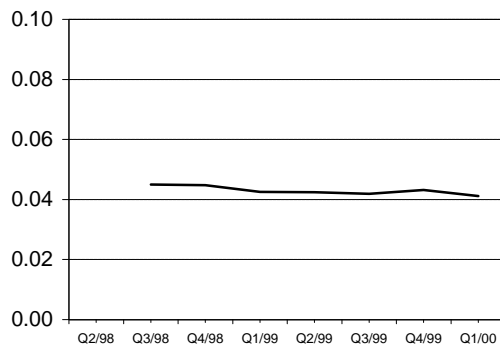
Barnsley HA



Doncaster HA

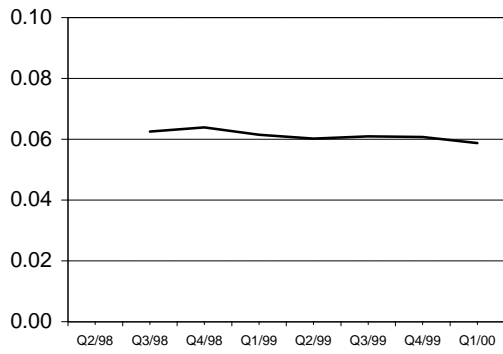


Rotherham HA

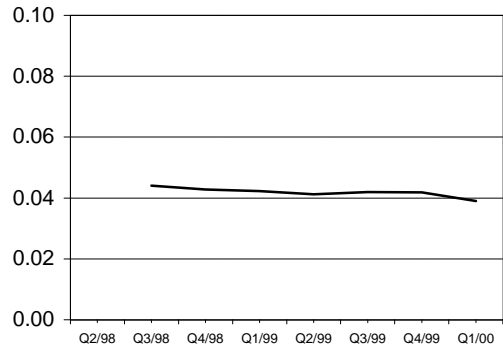


— Items/PU
 — HImP Target (where appropriate)

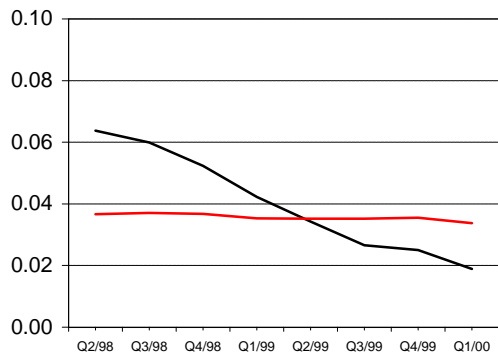
Barnsley East PCG



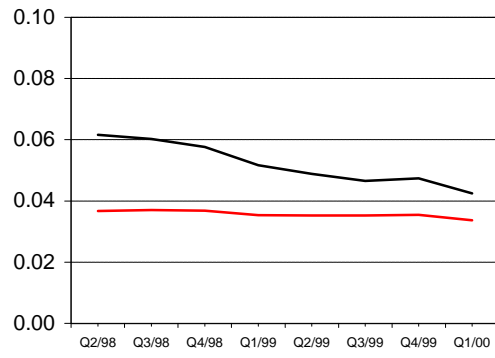
Barnsley West PCG



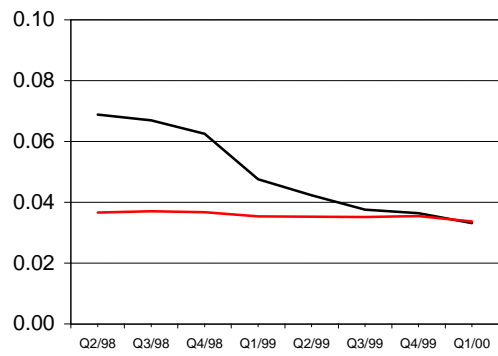
Doncaster Central PCT



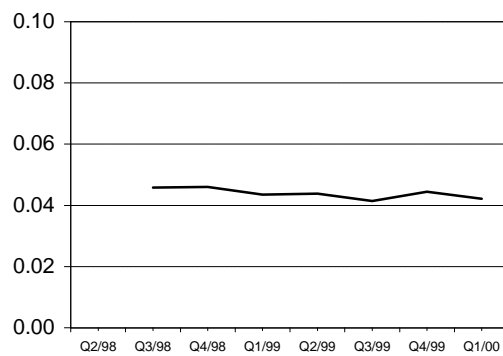
Doncaster East PCG



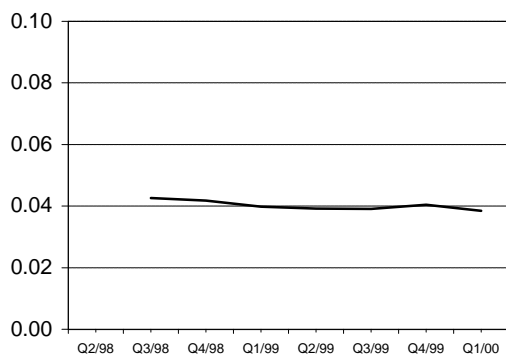
Doncaster West PCG



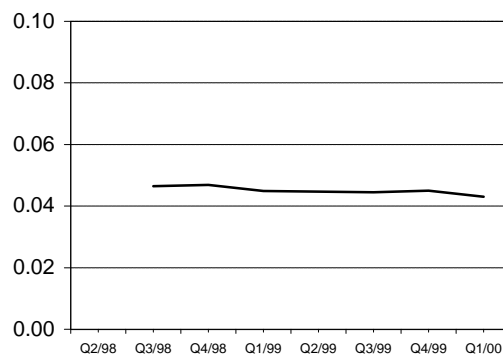
Rother Valley PCG



Rotherham PCG



Wentworth PCG



CHAPTER 6

Respiratory Disease

6.1 Death Rates for Chronic Obstructive Pulmonary Disease

Nationally chronic obstructive pulmonary disease (COPD), which includes chronic bronchitis and emphysema, accounts for around 30% of all deaths from respiratory disease and is caused primarily by smoking. Death rates have fallen in Barnsley and Rotherham but not in Doncaster (figure 6.1), hence the focus on respiratory disease in Doncaster's HImP. Once again, the solution lies in reducing the use of cigarettes.

6.2 Hospital Admission Rates for Asthma

Asthma affects largely the youngest and oldest in society and rates vary a great deal between localities within health authorities. Figure 6.2 illustrates that rates are reducing in Doncaster and Rotherham, and their constituent PCGs/PCT, but not in Barnsley.

6.3 Clean Air – PM10 Levels

Atmospheric pollution, in the form of tiny PM10 particulates, have been shown to have a significant effect on respiratory and coronary heart disease mortality and morbidity (Künzli *et al*, 2000). Doncaster has a target, taken from a national standards for clean air, to reduce town centre PM10 levels to $50\mu\text{g}/\text{m}^3$ or less when expressed as the 99th percentile of daily maximum running 24 hour means.

Since the production of the HImP the national standard has changed to having no more than 30 days per year where the 24 hour mean exceeds $50\mu\text{g}/\text{m}^3$.

Figure 6.3 shows data from specific locations in each authority where readings have been taken for a continuous period. Readings from devices in different locations should not be compared, as the precise distance from sources of pollution and exposure to weather can drastically affect the readings.

The levels of PM10 particulates at Frenchgate in Doncaster (close to a particularly heavy road) have been generally rising over the last 18 months, but only on five days in the last year did the 24-hour mean exceed $50\mu\text{g}/\text{m}^3$.

Readings from the two TEOMs in Rotherham imply that there has been a slight decline in PM10 levels at Treeton (Arundel Avenue, adjacent to the Orgreave open cast site and in a solid fuel burning area) and Brinsworth (Brinsworth Howarth Junior and Infant School, White Hill Lane, Brinsworth, about 70m from the M1).

The Barnsley TEOM has only been situated at Churchfield Car Park for nine months and hence no trends are evident yet.

See also section 2.3 – Lung Cancer and figure 2.3c, where Doncaster's target for reducing the gap between deprived and affluent enumeration districts is covered.

Reference:

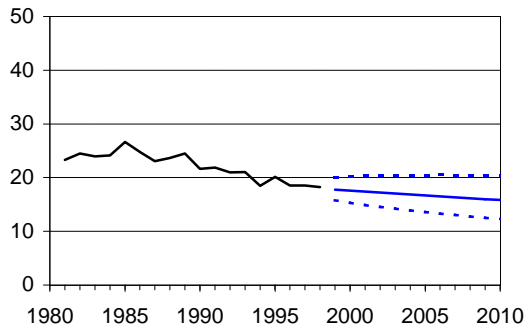
Künzli N, Kaiser R, Medina S, Studnicka M, Chanel O, Filliger P *et al* (2000). Public-health impact of outdoor and traffic-related air pollution: a European assessment. *Lancet* **356**:795-801.

Figure 6.1 - Death Rates for COPD

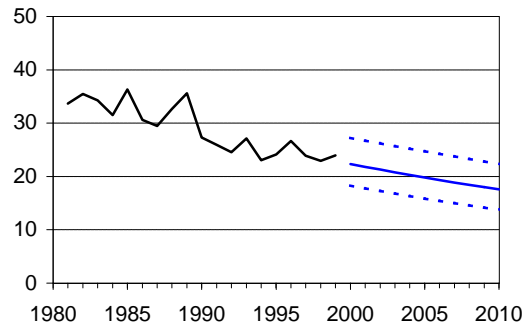
Directly Standardised Rates per 100,000 Resident Population
ICD-9 490-496 All persons aged under 75

Sources: ONS: Annual Abstracts of Deaths, Mid-Year Estimates of Population and 20th Century Mortality in England & Wales; Trent RHA: Deaths prior to 1992.

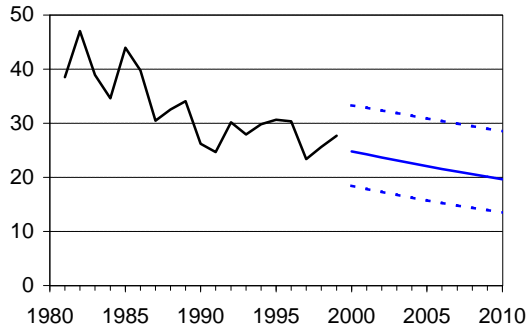
England & Wales



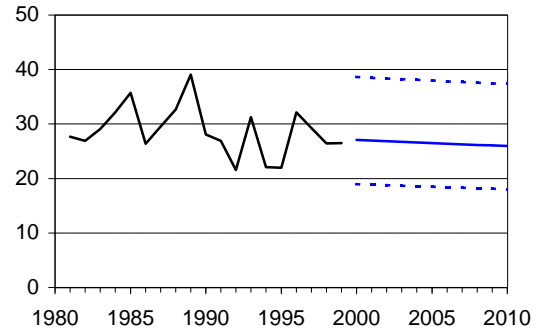
South Yorkshire Coalfields HAZ



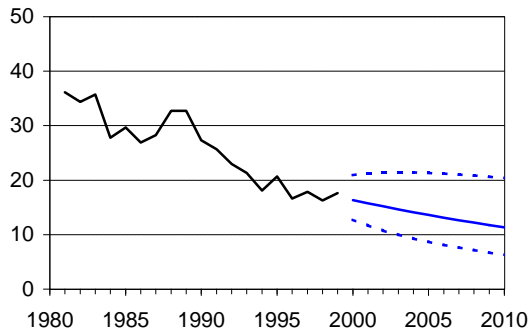
Barnsley HA



Doncaster HA



Rotherham HA



— Directly Standardised Rate
— Forecast Rate
..... 95% Confidence Interval

Rates forecast with 95% confidence intervals
by Holt's Method on logit-transformed data.

Figure 6.2 - Asthma Admission rates

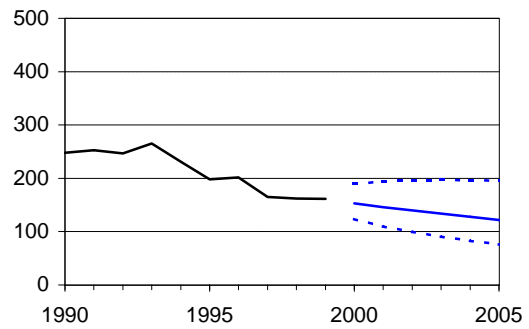
Directly Standardised Rates per 100,000 Resident Population
 Primary Diagnosis: ICD-9 493, ICD-10 J45 and J46
 All persons all ages

Sources: CMDS, Trent Region PIS Archive, ONS Mid-Year Estimates of Population

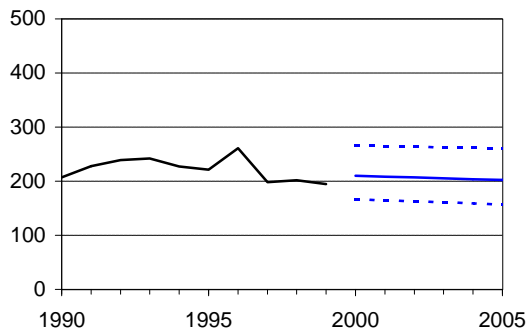
England and Wales

Data Not Available

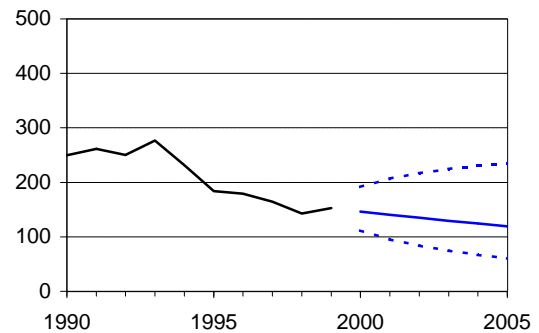
South Yorkshire Coalfields HAZ



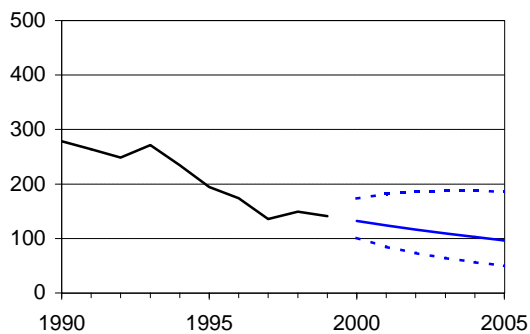
Barnsley HA



Doncaster HA



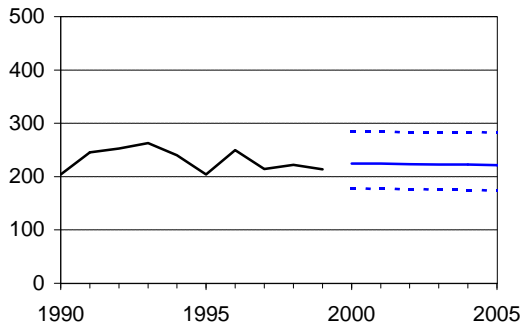
Rotherham HA



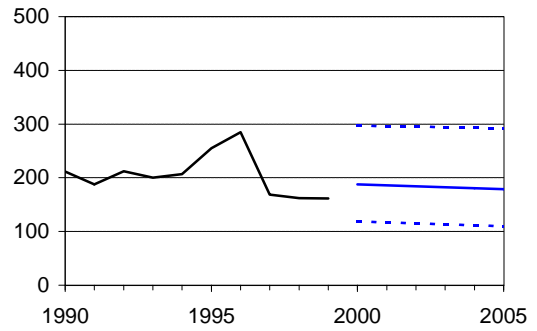
— Directly Standardised Rate
 — Forecast Rate
 95% Confidence Interval

Rates forecast with 95% confidence intervals
 by Holt's Method on logit-transformed data.

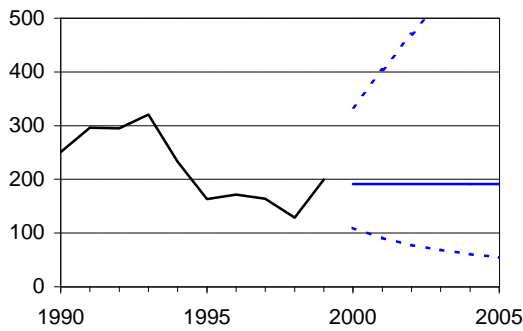
Barnsley East PCG



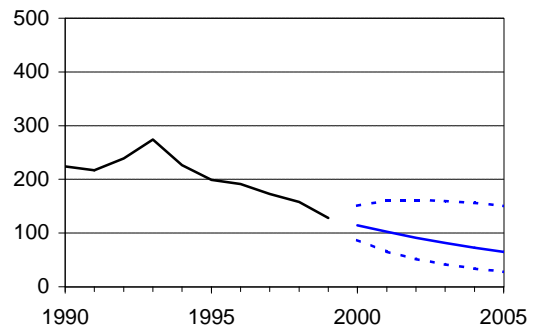
Barnsley West PCG



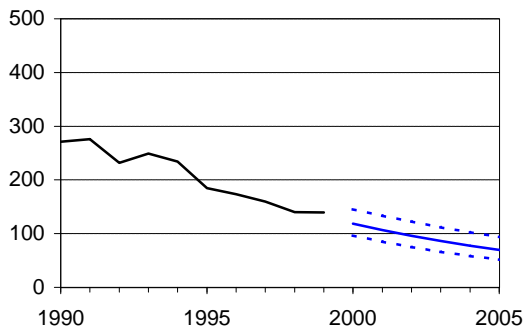
Doncaster Central PCT



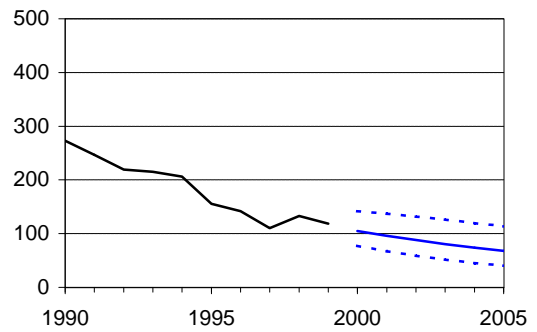
Doncaster East PCG



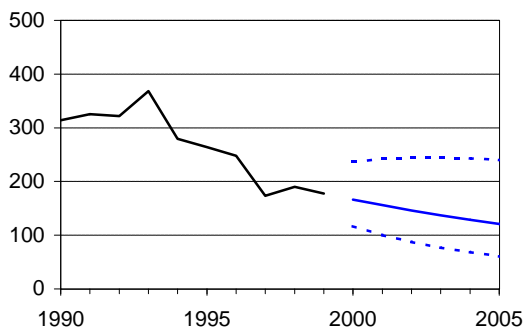
Doncaster West PCG



Rother Valley PCG



Rotherham PCG



Wentworth PCG

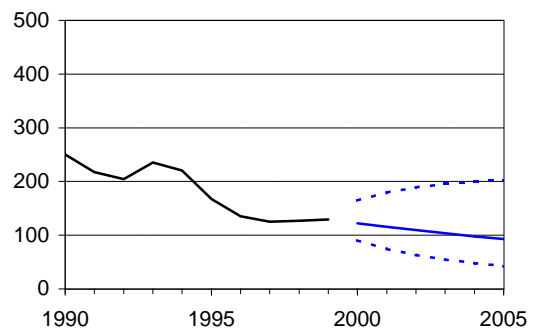


Figure 6.3 - Air quality monitoring

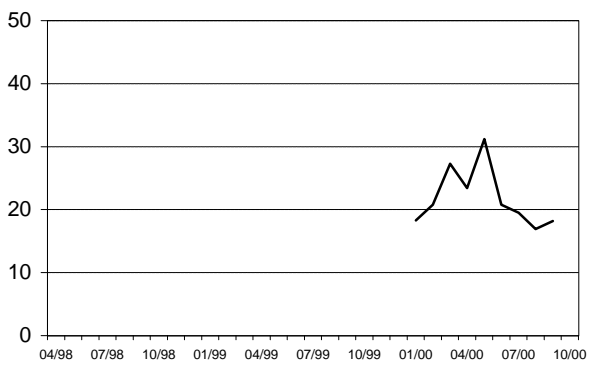
PM10 levels (micrograms per cubic metre)

Target: Doncaster: To reduce town centre PM10 levels to 50 micrograms per cubic metre or less when expressed as the 90th percentile of daily maximum running 24 hour means.

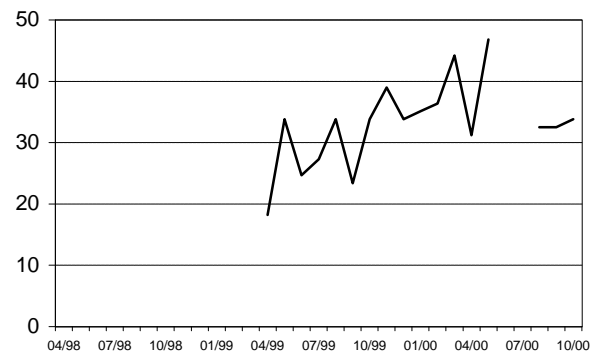
Source: Barnsley, Doncaster and Rotherham MBCs

Note: TEOM results converted to Gravimetric scale

Barnsley - Churchfield Car Park



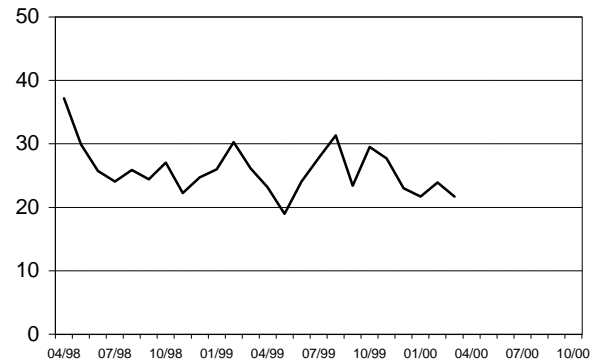
Doncaster - Frenchgate



Rotherham - Treeton



Rotherham - Brinsworth



CHAPTER 7

Smoking

7.1 Smoking in Adults

Although mentioned in the sections on cancer, coronary heart disease and respiratory disease, smoking is the key factor in so many areas of ill-health that it warrants a chapter of its own. Smoking causes two million deaths each year in developed countries alone, one sixth of all deaths (Peto, 1994). At least 50% of regular cigarette smokers are killed by the habit (Doll *et al*, 1994), half in middle age (under 70) and half in old age (Peto *et al*, 1992). Life expectancy for smokers is approximately 6.5 years less than for non-smokers (Shaw *et al*, 2000).

Smoking prevalence figures are not available routinely at health authority level. The Trent Regional Lifestyle Survey gave estimates for 1994 (table 7.1) and this was followed up in 1997 in Barnsley, 1998 in Rotherham and 2000 in Doncaster (results unavailable at time of going to press). In future, consideration should be given to synchronising smoking surveys. Smoking prevention and cessation must be considered core business for acute and community trusts and all primary care groups and trusts.

Evidence suggests that smoking prevalence cannot be reduced significantly by health services alone (Arblaster *et al*, 1997) and that the ill-effects of smoking are greater in deprived smokers than in more affluent ones (Birch *et al*, 2000). The socio-economic inequalities must be tackled. There is a wealth of evidence to support the imposition of a ban on tobacco advertising (Economics and Operational Research Division, 1992). The current Labour government have accepted this and plan to introduce such a ban. It needs to happen as soon as possible.

Table 7.1 – Percentage of adult population smoking regularly or occasionally

	Barnsley			Doncaster			Rotherham		
	M	F	Total	M	F	Total	M	F	Total
1994	28	25	27	41	24	33	33	26	29
1997	31	28	30						
1998							30	24	27

Source: Trent Lifestyle Survey 1994, Health Authority Lifestyle Surveys.

Reducing smoking in pregnant women is a particularly high priority. Data are being collected in all three districts now but have not been established long enough yet to allow monitoring. It is hoped that future reports will include data on this important area.

7.2 Smoking in Children

Figure 7.2 shows smoking prevalence in 15-16 year old school children for England and Doncaster. Doncaster rates are consistent with the national figures and show a worrying increase in prevalence. The graph very clearly illustrates the enormity of the task of achieving this target.

Table 7.2 gives data supporting the national target to reduce smoking in 11-15 year olds. Estimating prevalence of smoking from the data available on year 7 (11-12 year olds) and year 10 (14-15 year olds) gives figures not far off the target of 9% by 2010. However the figures of around 20% for year 10 pupils is of great concern.

Table 7.2 – Smoking in children

Percentages who smoke at least one cigarette a day

	11-12 yrs	14-15 yrs	11-15yrs	HImP Target	
				2005	2010
Barnsley (1994)	1.5%	19.7%	10.0%	11%	9%
Doncaster (1994)	1.0%	21.4 %	11.3%	11%	9%
Rotherham (1998)	0.7%	18.7%	9.4%	11%	9%

Source: Barnsley and Doncaster – Trent Lifestyle survey (1994); Rotherham – Young Persons Data (1998)

References.

Arblaster L, Lambert M, Entwistle V, Forster M *et al* (1996). A systematic review of the effectiveness of health service interventions aimed at reducing inequalities in health. *J Health Services Research and Policy* 1:93-103.

Birch S, Jerrett M, Eyles J (2000). Heterogeneity in the determinants of health and illness: the example of socioeconomic status and smoking. *Social Science and Medicine* 51:307-317.

Doll R, Peto R, Wheatley K, Gray R, Sutherland I (1994). Mortality in relation to smoking: 40 years' observations on male British doctors. *BMJ* 309:901-11.

Economics and Operational Research Division (1992). *Effect of tobacco advertising on tobacco consumption: a discussion document reviewing the evidence*. London: Department of Health.

Peto R, Lopez AD, Boreham J, Thun M, Heath C Jr (1992). Mortality from tobacco in developed countries: indirect estimation from national vital statistics. *Lancet* 339:1268-78.

Peto R (1994). Smoking and death: the past 40 years and the next 40. *BMJ* 309:937-9.

Shaw M, Mitchell R, Dorling D (2000). Time for a smoke? One cigarette reduces your life by 11 minutes. *BMJ* 320:53.

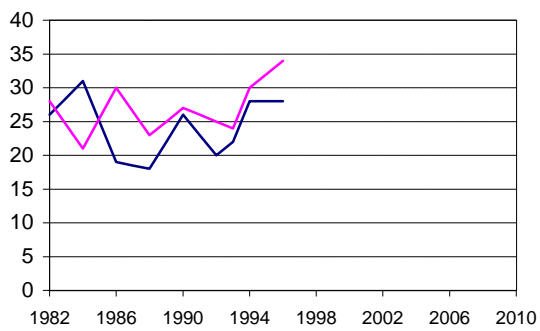
Figure 7.2 - 15-16 year old regular smokers

Percentage regular smokers
15-16 year olds

Target: Doncaster: To reduce smoking among 15-16 year olds from the 1997 baseline of 28% to 13% by the year 2010; with a fall to 18% by the year 2005.

Sources: Doncaster Health Authority: Smoking in 15-16 year olds 1997 (England figures originally from ONS)

England



Doncaster HA

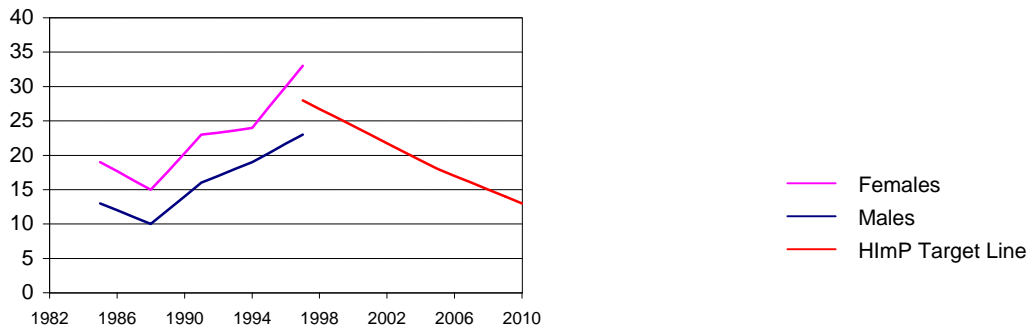


Table 8.3b – Decayed, Missing and Filled Teeth (DMFT) in 12 year olds

Average number of decayed, missing or filled teeth per child

	1996	HImP Target 2003
Barnsley	1.69	1
Doncaster	1.24	1
Rotherham	1.25	1

Source: Dental Public Health, Barnsley, Doncaster and Rotherham Health Authorities

Table 8.3c – Decayed, Missing and Filled Teeth (DMFT) in 14 year olds

Average number of decayed, missing or filled teeth per child

	1994	1998	HImP Target 2001
Barnsley	2.41	2.38	1.5
Doncaster	2.32	2.16	-
Rotherham	2.21	1.74	-

Source: Dental Public Health, Barnsley, Doncaster and Rotherham Health Authorities

Table 8.3d – Percentage of 14 year old children receiving active orthodontic treatment

	1994	1998	HImP Target 2001
Barnsley		8.0%	10%
Doncaster		10.5%	-
Rotherham	11.3%	11.6%	-

Source: Dental Public Health, Barnsley, Doncaster and Rotherham Health Authorities

8.4 Emergency Dental Care

No patient, resident or visitor with acute dental pain should have to wait more than 24 hours for emergency dental care. This target has been achieved by running Sunday sessions in all three health authority areas.

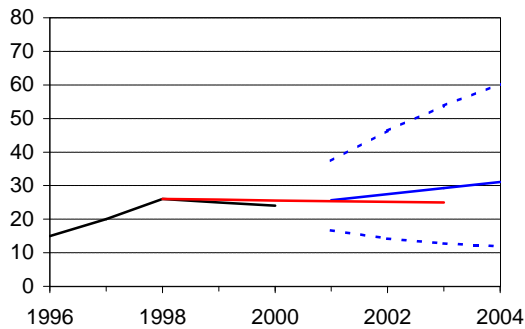
Figure 8.1 - Dental Registration Rates

Percentage of Population Registered with a Dentist

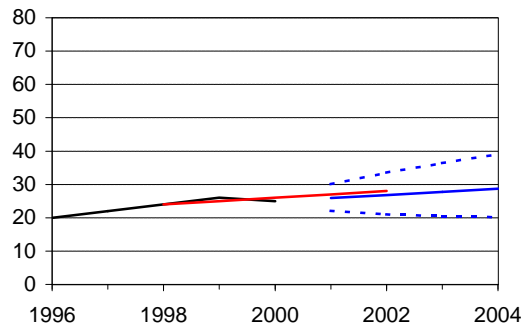
Targets: 0-2 year-olds:	Barnsley:	Increase the percentage of children aged 0-2 registered with an NHS dentist to 25% by the year 2003.
	Doncaster:	Raise registrations of 0-2s to 28% by 2003.
	Rotherham:	Increase in registration with a dentist by children and adults of all ages.
Under 18s:	Barnsley:	Increase the percentage of children (under 18 years) registered with an NHS dentist to 70% by the year 2003.
	Doncaster:	Increase registrations with dentists.
	Rotherham:	Increase in registration with a dentist by children and adults of all ages.
Adults:	Barnsley:	60% of adults aged 18 and over should be registered with an NHS dentist by 2001.
	Doncaster:	Increase registrations with dentists.
	Rotherham:	Increase in registration with a dentist by children and adults of all ages.

Source: Dental Practice Board.

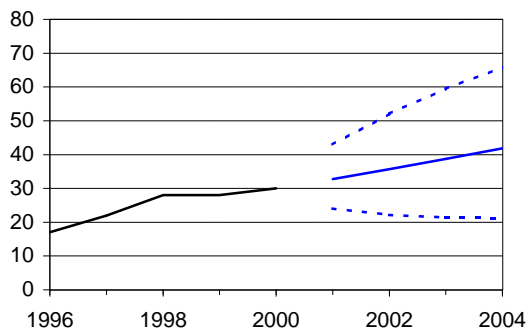
Barnsley 0-2 year-olds



Doncaster 0-2 year-olds



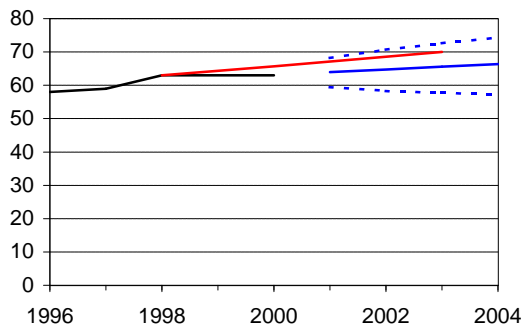
Rotherham 0-2 year olds



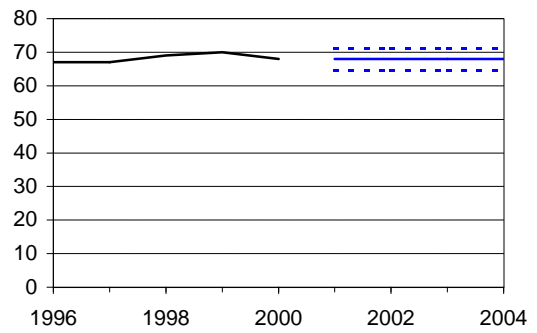
— Registration Rate
 — Forecast Rate
 95% Confidence Interval
 — HImP Target (where applicable)

Rates forecast with 95% confidence intervals by Holt's Method on logit-transformed data.

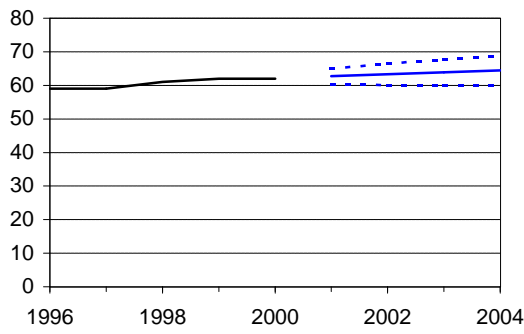
Barnsley under 18s



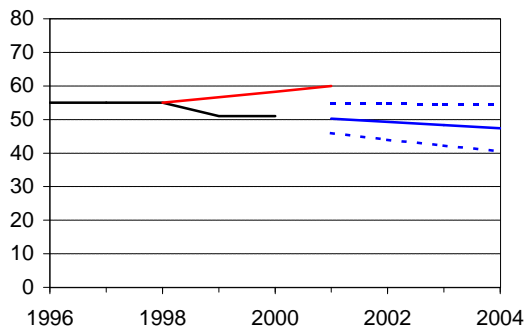
Doncaster under 18s



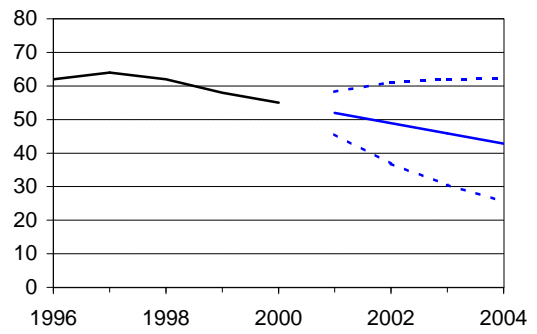
Rotherham under 18s



Barnsley Adults (18+)



Doncaster Adults (18+)



Rotherham Adults (18+)

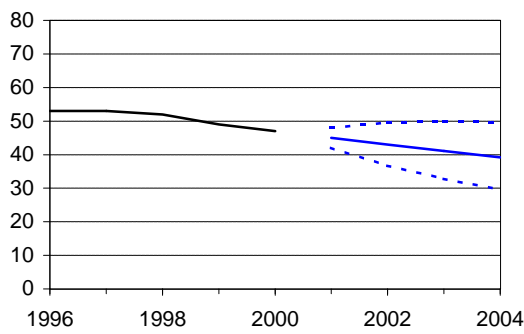


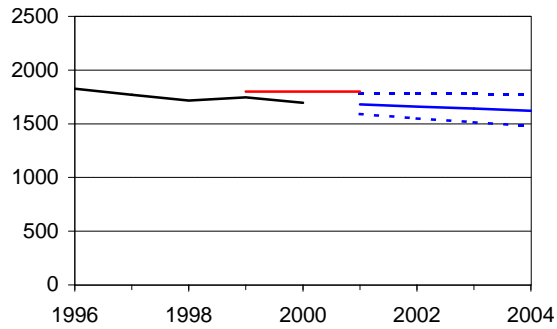
Figure 8.2 - Dental List Size

Average List Size per Principal Dentist

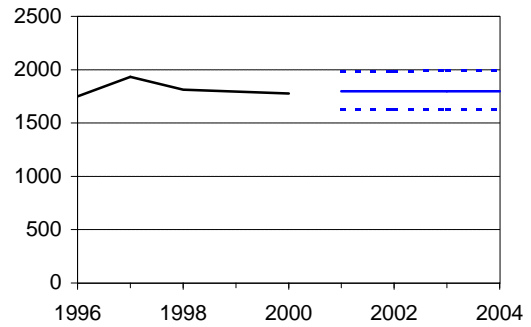
Targets: Barnsley: Barnsley dentists should each have less than 1800 registered patients on average by 2001.

Source: Dental Practice Board.

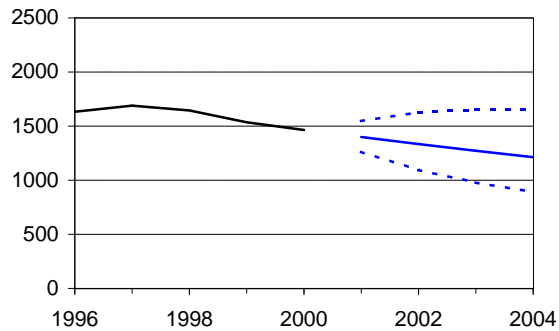
Barnsley HA



Doncaster HA



Rotherham HA



- Average List Size
- Forecast List Size
- 95% Confidence Interval
- HImP Target (where applicable)

Rates forecast with 95% confidence intervals by Holt's Method on logit-transformed data.

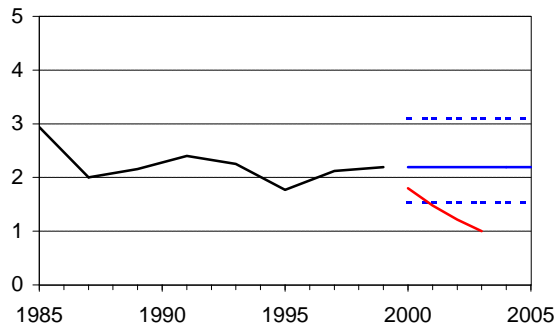
Figure 8.3 - Dental Health of Five Year Olds'

Average number of decayed, missing and filled teeth per child

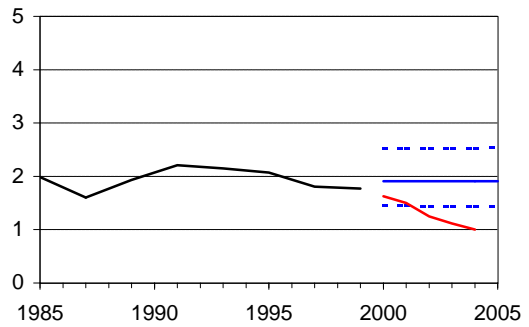
Targets: Barnsley: Reduce the average number of DMFT in 5yr olds to no more than 1 by the year 2003.
 Doncaster: Reduce the average number of DMFT in 5yr olds to 1.5 by 2001, 1.25 by 2002 and 1.0 by 2004
 Rotherham: Reduce the average number of DMFT in 5yr olds to no more than 1 by the year 2003.

Source: Doncaster Public Health Barnsley, Doncaster, Rotherham Health Authorities

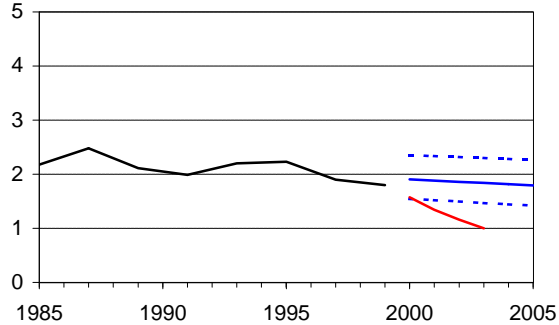
Barnsley HA



Doncaster HA



Rotherham HA



— Average DMFTs
 — Forecast average DMFTs
 95% Confidence Interval
 — HImP Target

Rates forecast with 95% confidence intervals
 by Holt's Method on logit-transformed data.

CHAPTER 9

Children and Young People

9.1 Teenage Conceptions

‘England has one of the highest teenage conception rates in the developed world and the highest in Western Europe.’ This is how the national situation is summed up in *Saving Lives: Our Healthier Nation* (Department of Health, 1999). The UK rate of 22.9 live births in under 20s per 1000 females aged 15-19 is far in excess of the next highest, Portugal (16.7) and Iceland (16.3). The Netherlands (4.1) and Switzerland (4.0) really put our situation into perspective.

Rates of underage conception in the South Yorkshire Coalfields are far higher even than our national average. *Saving Lives: Our Healthier Nation* set a target, devised by the National Social Exclusion Unit, for under 18s; to halve the rate by 2010 from the 1995-7 baseline. Figure 9.1a shows that nationally and locally, particularly in Doncaster, the targets look challenging, to say the least. It is worth noting that within the definition of under 18 conceptions there are, potentially, planned pregnancies within marriage.

Previous analysis has tended to concentrate on conceptions in under 16s. Locally all three health authorities have extended the national target for under 18s to cover specifically under 16s as well. Similar patterns are evident (figure 9.1b), but Barnsley’s rates seem to be headed in the right direction. Previous annual reports have demonstrated that there is also extremely wide variation within the health authorities; there are wards where teenage conceptions are practically unknown.

Tackling this problem is not easy; it involves a major cultural change in many areas, something which can only be achieved through concerted action of agencies across all sectors.

9.2 Low Birthweight

Weight at birth is a good indicator of child and maternal health. Babies born to less healthy mothers are often smaller than usual. One cause of this is maternal smoking, but other factors which influence birthweight are ethnicity, multiple births, prematurity and quality of ante-natal care. Obviously, babies born early will be lighter than normal but as medical science improves, smaller babies are being born and surviving. Perinatal and infant mortality rates have been presented in previous reports, but small numbers make interpretation difficult at local level.

Nationally there has been an increasing proportion of births weighing less than 2500g (Figure 9.2). Figures for Barnsley, Doncaster and Rotherham suggest a moderate increase. Understanding these trends needs additional work to disentangle the effects of interventions and socioeconomic and demographic factors.

The Barnsley health community has set a target to have less than 7% of babies born with a birth weight below 2500g. Reducing maternal smoking will be an important part of achieving this target.

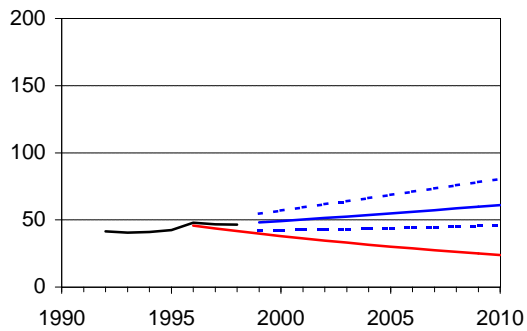
Figure 9.1a - Under 18 Teenage Conception Rates

Directly Standardised Rates per 1000 Resident Females aged 15-17

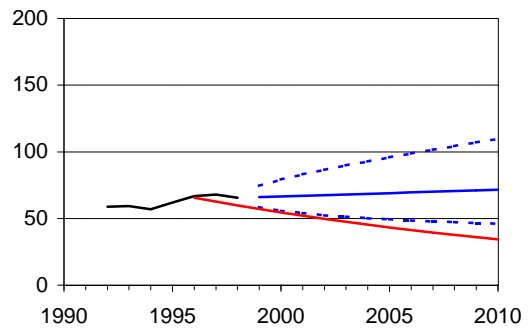
Target: OHN Target: To halve the rate of teenage pregnancies amongst under 18s by 2010 from the 1995-7 Baseline.

Sources: ONS: Teenage Conception Data, Mid-Year Estimates of Population.

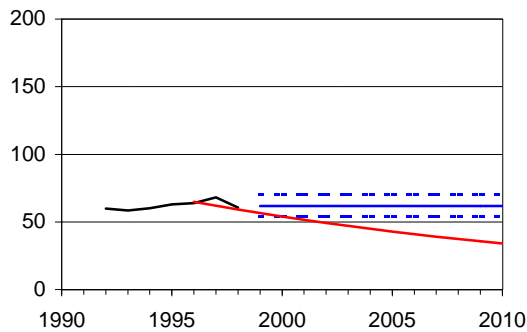
England & Wales



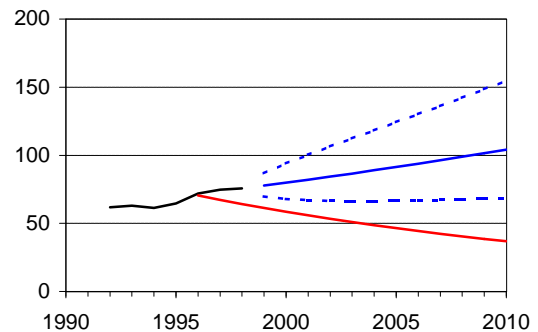
South Yorkshire Coalfields HAZ



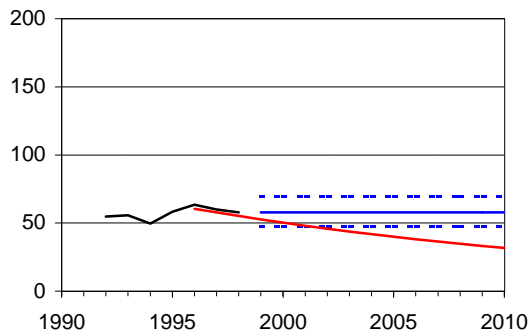
Barnsley HA



Doncaster HA



Rotherham HA



— Directly Standardised Rate
 — Forecast Rate
 95% Confidence Interval
 — OHN Target Line

Rates forecast with 95% confidence intervals by Holt's Method on logit-transformed data.

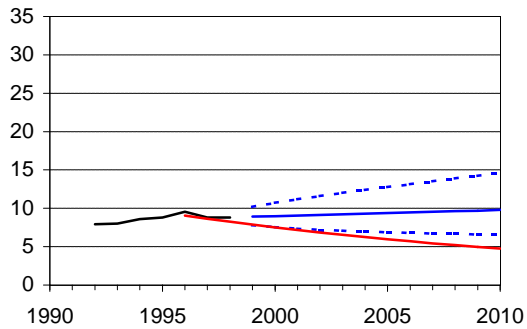
Figure 9.1b - Under 16 Teenage Conception Rates

Rates per 1000 Resident Females aged 13-15

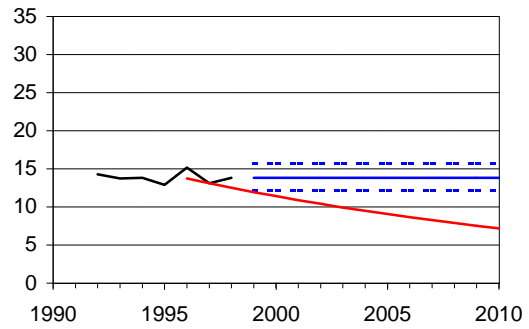
Target: To halve the rate of conceptions amongst under 16s by 2010 from the 1995-97 baseline.

Sources: ONS: Teenage Conception Data, Mid-Year Estimates of Population.

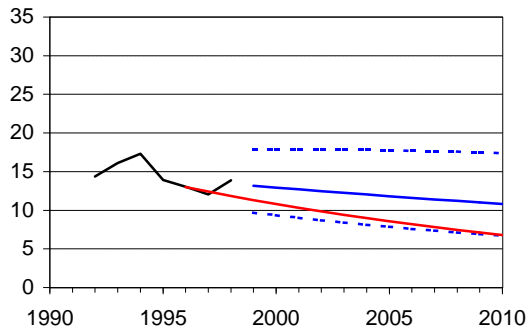
England & Wales



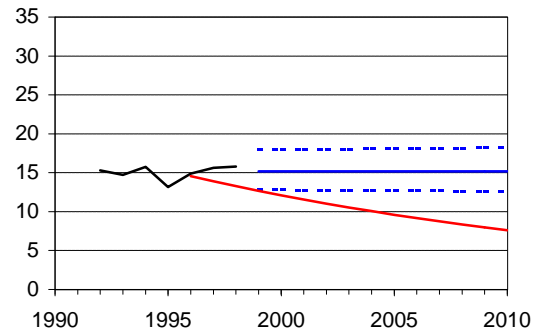
South Yorkshire Coalfields HAZ



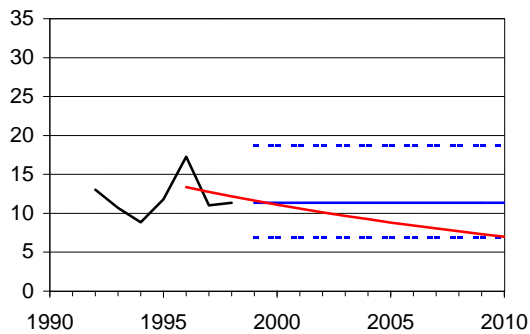
Barnsley HA



Doncaster HA



Rotherham HA



— Directly Standardised Rate
 — Forecast Rate
 95% Confidence Interval
 — HImP Target Line

Rates forecast with 95% confidence intervals by Holt's Method on logit-transformed data.

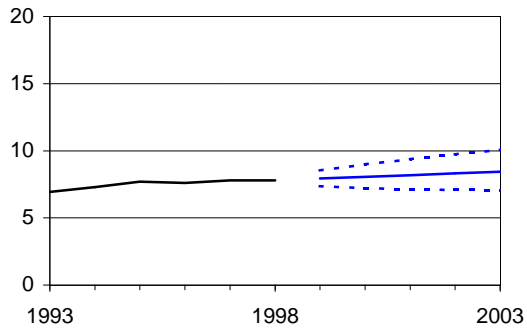
Figure 9.2 - Low Birth Weight Rates

Percentage of Total Births weighing under 2500 grammes

Target: Barnsley: Less than 7% by March 2003

Sources: Public Health Common Data Set

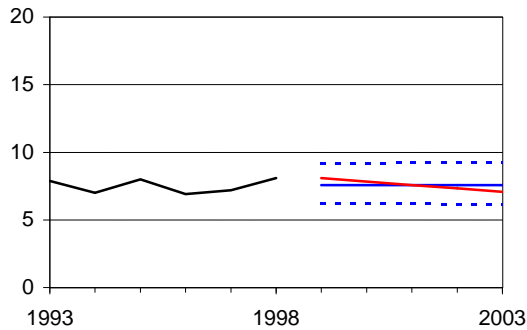
England & Wales



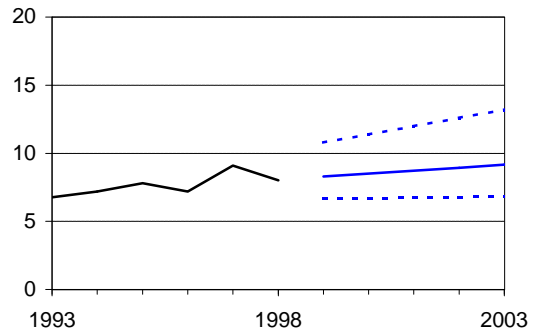
South Yorkshire Coalfields HAZ

Data Not Available

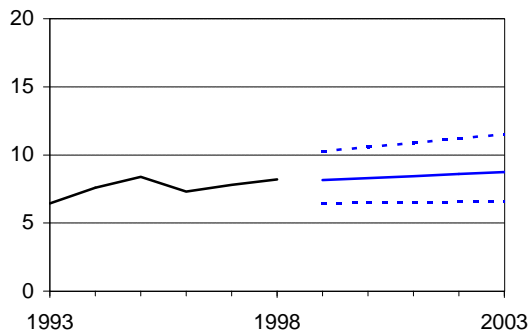
Barnsley HA



Doncaster HA



Rotherham HA



- Rate
- Forecast Rate
- 95% Confidence Interval
- HImP Target (where appropriate)

Rates forecast with 95% confidence intervals by Holt's Method on logit-transformed data.

9.3 Looked after children

Placements

Stability of placements for looked after children is an indicator of the appropriateness of placements (Table 9.3a). Older children are more likely to need further placements. Short term placements and care orders increase the number of placements in a year.

Table 9.3a – The percentage of children looked after at 31 March with three or more placements during the year.

Social Services Performance Indicator A1

%	Baseline 31/3/98	Actual Position		Planned Position		HImP Target 2001
		31/3/99	31/3/2000	31/3/01	31/3/02	
Barnsley	21	19	15	16	16	16
Doncaster	19	19	21	14	12	16
Rotherham	26	19	18	15	14	16

Source: Social Services Quality Protects Management Action Plan (BMBC Plan 2 2000, DMBC 2000-2001, RMBC 2000-2001)

National policy favours the maximum use of adoption to provide permanent families for children. This indicator is one way of measuring this (Table 9.3b). The national percentage is around 4.7%.

Table 9.3b – The number of looked after children adopted during a year as a percentage of children looked after at year ending 31 March.

Social Services Performance Indicator C23

%	Baseline 31/3/98	Actual Position		Planned Position		HImP Target 03/2003
		31/3/99	31/3/2000	31/3/01	31/3/02	
Barnsley	4.0	4.0	5.9	6.5	8.0	8.0
Doncaster	4.0	4.0	6.4	6.0	7.0	-
Rotherham	4.8	6.9	5.9	8.0	9.0	-

Source: Social Services Quality Protects Management Action Plan (BMBC Plan 2 2000, DMBC 2000-2001, RMBC 2000-2001)

For the majority of children, care in a family setting is preferred. There are some children who are better cared for in residential settings, but this is not generally true. Family settings are particularly appropriate for the under tens. Tables 9.3c and 9.3d show the local results for 'family setting' indicators.

Table 9.3c – Of children looked after at 31 March the proportion that are in foster placements or placed for adoption.

Social Services Performance Indicator B7

%	Baseline	Actual Position		Social Services Planned Position			HImP Target 2002
	31/3/98	31/3/99	30/9/99	31/3/00	31/3/01	31/3/02	
			9				
Barnsley	59	60	61	64	68	74	74
Doncaster	57	60	65	65	68	70	-
Rotherham	72	71	68	71	71	-	

Source: Social Services Quality Protects Management Action Plan (BMBC Plan 2 2000, DMBC 2000-2001, RMBC 2000-2001)

Table 9.3d – Of children looked after at 31 March aged under 10 the proportion that are in foster placements or placed for adoption.

Social Services Performance Indicator C22

%	Baseline	Actual Position		Planned Position		HImP Target 2002
	31/3/98	31/3/99	31/3/2000	31/3/01	31/3/02	
			0			
Barnsley	70	71	71	75	77	77
Doncaster	75	79	72	83	85	-
Rotherham	81	78	76	71	71	

Source: Social Services Quality Protects Management Action Plan (BMBC Plan 2 2000, DMBC 2000-2001, RMBC 2000-2001)

The final indicator in this set reflects the success of local authorities in promoting long-term stability for looked after children. It is reasonable to expect that for children looked after for more than four years, a substantial proportion of that time is spent with the same foster parents or an adoptive placement is found (Table 9.3e).

Table 9.3e – Of children looked after at 31 March who have been looked after continuously for more than 4 years, the proportion who have been in their foster placement for at least 2 years.

Social Services Performance Indicator D35

%	Baseline	Actual Position		Planned Position		HImP Target
	31/3/98	31/3/99	31/3/2000	31/3/01	31/3/02	2002
Barnsley	-	41	40	50	61	61
Doncaster		38	33	40	42	-
Rotherham	45	40	50	43	44	

Source: Social Services Quality Protects Management Action Plan (BMBC Plan 2 2000, DMBC 2000-2001, RMBC 2000-2001)

Registrations

Re-registrations on the Child Protection Register indicate a return to need (Table 9.3f). Very low figures can be due to children being kept on the register too long (See Table 9.3g) or left unreviewed (See Table 9.3h). High registration rates lead to high re-registrations. The national target for 2001/02 is 17.2%.

Ideally, children at risk should be included on the register until the risk has passed. This requires reviews, where appropriate, and de-registrations when this is seen as possible.

The combination of these three indicators gives some impression of performance.

Table 9.3f – The percentage of children registered during the year on the child protection register who had been previously registered.

Social Services Performance Indicator A3

%	Baseline	Actual Position		Planned Position		HImP Target
	31/3/98	31/3/99	31/3/2000	31/3/01	31/3/02	2002
Barnsley	17	18	16	14	14	14
Doncaster	11	21	20	13	12	10
Rotherham	21	25	21	24	3	10

Source: Social Services Quality Protects Management Action Plan (BMBC Plan 2 2000, DMBC 2000-2001, RMBC 2000-2001)

Table 9.3g– The proportion of children de-registered from the child protection register during the year ending 31 March who have been on the register for at least two years.

Social Services Performance Indicator C21

%	Baseline	Actual Position		Planned Position		HImP Target
	31/3/98	31/3/99	31/3/2000	31/3/01	31/3/02	
			0			
Barnsley	5	11	5	10	10	10
Doncaster	8	19	7	12	10	-
Rotherham	3	7	5	3	2	

Source: Social Services Quality Protects Management Action Plan (BMBC Plan 2 2000, DMBC 2000-2001, RMBC 2000-2001)

Table 9.3h – The percentage of child protection register cases which should have been reviewed that were reviewed.

Social Services Performance Indicator C20

%	Baseline	Actual Position		Planned Position		HImP Target
	31/3/98	31/3/99	31/3/2000	31/3/01	31/3/02	
			0			
Barnsley	100	100	99	100	100	100
Doncaster	76	54	79	95	100	-
Rotherham	94	90	86	100	100	

Source: Social Services Quality Protects Management Action Plan (BMBC Plan 2 2000, DMBC 2000-2001, RMBC 2000-2001)

Educational and employment outcomes

The national target for this indicator (table 9.3i) is that 50% of young people will have at least one GCSE at grades A*-G or a GNVQ by 2000/01 and 75% by 2002/03. Higher educational attainment leads to better health experience and a better chance of employment. Since these figures relate to 'looked after' young people it needs to be recognised that many of these teenagers have learning difficulties.

Table 9.3i – The proportion of those young people leaving care aged 16 or over with at least 1 GCSE at Grades A*-G or a GNVQ.

Social Services Performance Indicator A2

%	Baseline	Actual Position		Planned Position		HImP Target	
	31/3/98	31/3/99	31/3/2000	31/3/01	31/3/02	2001	2003
Barnsley	-	21	29	50	75 (2003)	50	-
Doncaster	13	22	20	25	35	50	75
Rotherham	28	36	21	60	70	50	75

Source: Social Services Quality Protects Management Action Plan (BMBC Plan 2 2000, DMBC 2000-2001, RMBC 2000-2001)

One reason for poor educational attainment could mean absence from school. Table 9.3j shows the values for September 1999. As yet, there are no national figures for comparison (due out October 2001).

Table 9.3j – Of children looked after at 30 September that have been looked after continuously for 12 months and are of school age, the proportion who have missed at least 25 days schooling for any reason during the school year.

Social Services Performance Indicator C24

%	Baseline	Actual Position		Social Services Planned Position			HImP Target
	30/9/98	31/3/99	30/9/99	31/3/00	31/3/01	31/3/02	2002
Barnsley	-	-	12	12	11	10	10
Doncaster	-	-	14	10	8	8	-
Rotherham			14	13	12	11	

Source: Social Services Quality Protects Management Action Plan (BMBC Plan 2 2000, DMBC 2000-2001, RMBC 2000-2001)

Prevention

The family support indicator (Table 9.3k) is a proxy indicator for access to preventative services. The national percentage was 36% for 1999/00. An increase in this proportion would reflect a move towards preventative services and may lead to a reduction in the requirement from children to be looked after by the local authority.

Table 9.3k – Expenditure on children in need (and not looked after) as a percentage of expenditure on all children’s services.

Social Services Performance Indicator E44

%	Baseline	Actual Position		Social Services Planned Position			HImP Target
	31/3/98	31/3/99	30/9/99	31/3/00	31/3/01	31/3/02	
Barnsley	-	21	23	-	-	-	Increase
Doncaster	-	23	23	24	25	28	-
Rotherham	-	18	20 (est.)	20	21	25	-

Source: Social Services Quality Protects Management Action Plan (BMBC Plan 2 2000, DMBC 2000-2001, RMBC 2000-2001)

Health

The good health of looked after children is an important part of their care. Older children have the right to refuse but ideally a high proportion of looked after children should receive basic health care. Table 9.3l shows the percentage of looked after children who have had an annual health check; Table 9.3m shows the percentage with up to date immunisations and Table 9.3n shows the percentage who have had a dental check. The Social Service Performance Indicator C19 is a composite of these three figures.

Table 9.3l – Of children looked after for at least 12 months, the average percentage who had an annual health assessment in the previous year.

Social Services Performance Indicator C19

%	Baseline	Actual Position		Social Services Planned Position			HImP Target
	31/3/98	31/3/99	30/9/99	31/3/00	31/3/01	31/3/02	
Barnsley	37	74	74	78	82	82	82
Doncaster	62	46	52	85	90	90	-
Rotherham	68	-	72	75	80	80	

Source: Social Services Quality Protects Management Action Plan (BMBC Plan 2 2000, DMBC 2000-2001, RMBC 2000-2001)

Table 9.3m – Of children looked after for at least 12 months, the average percentage with routine immunisations up to date.

Social Services Performance Indicator C19

%	Baseline	Actual Position		Social Services Planned Position			HImP Target
	31/3/98	31/3/99	30/9/99	31/3/00	31/3/01	31/3/02	2002
Barnsley	97	95	95	95	95	95	95
Doncaster	74	67	77	85	90	95	-
Rotherham	84	-	-	100	100	100	

Source: Social Services Quality Protects Management Action Plan (BMBC Plan 2 2000, DMBC 2000-2001, RMBC 2000-2001)
Rotherham data from a sample.

Table 9.3n – Of children looked after for at least 12 months, the average percentage checked by a dentist in the previous year.

Social Services Performance Indicator C19

%	Baseline	Actual Position		Social Services Planned Position			HImP Target
	31/3/98	31/3/99	30/9/99	31/3/00	31/3/01	31/3/02	2002
Barnsley	97	82	82	83	85	87	87
Doncaster	17	37	41	60	80	90	-
Rotherham	66	76	-	100	100	100	

Source: Social Services Quality Protects Management Action Plan (BMBC Plan 2 2000, DMBC 2000-2001, RMBC 2000-2001)

On entering care, it is desirable that children should be offered a health check. Table 9.3o shows progress towards this target.

Table 9.3o – Percentage of children entering public care who have had a comprehensive health assessment.

%	Baseline	Actual Position		Social Services Planned Position			HImP Target
	31/3/98	31/3/99	30/9/99	31/3/00	31/3/01	31/3/02	
Barnsley	64	59	59	70	85	95	-
Doncaster	-	5.5	8.2	40	60	80	100
Rotherham	65	61	-	75	80	80	100

Source: Social Services Quality Protects Management Action Plan (BMBC Plan 2 2000, DMBC 2000-2001, RMBC 2000-2001)

Crime

Barnsley has a target to reduce the proportion of children over ten who are cautioned or convicted to 2.9% by 2002. Figures are not available for individual districts, but the current figure in South Yorkshire is 3.2%. Reducing this figure will require joint work across the county.

Inspections

Children's homes should be inspected regularly. At present, all homes are inspected at the appropriate time.

9.4 Immunisation

Immunisation of children as part of a national programme is an excellent way to improve health. Older readers will remember the effects of polio and measles epidemics in the middle of the twentieth century. To prevent the return of these and other infectious diseases it is important that all children who are able to receive vaccines are offered them. The immunisation rates shown in Table 9.4 reflect the efforts of parents and NHS staff. Some lower rates may be due to concerns about the safety of vaccines. MMR (measles, mumps and rubella vaccine) uptake rates are close to the target in Barnsley and Doncaster but not in Rotherham. It can be clearly stated that the benefits of immunisation for all of the vaccines in the table far outweigh the theoretical risks.

Table 9.4 – Percentage of children immunised by their 2nd birthday – national target 95%

Health Authority	Year	Percentage Immunised by their 2 nd birthday					
		Diphtheria	Tetanus	Polio	Pertussis	HiB	MMR
Barnsley	1997-1998	98	98	96	98	98	94
	1998-1999	98	98	97	98	98	94
	1999-2000	98	98	98	97	98	94
Doncaster	1997-1998	97	97	95	96	96	94
	1998-1999	96	96	94	96	95	93
	1999-2000	97	97	97	95	96	93
Rotherham	1997-1998	94	94	93	93	94	87
	1998-1999	94	94	93	94	93	87
	1999-2000	94	94	94	93	94	85

Hib* : Haemophilus Influenza Type B.

Source: DoH Statistical Bulletins 1998/38, 1999/28, 2000/26 - NHS Immunisation Statistics, England (COVER/Korner Data)

9.5 Educational Targets

Figures 9.5a-d and table 9.5 reflect educational attainment targets for children and young people. It is well recognised that better qualifications lead to better employment opportunities and better health in later life.

Table 9.5 – Average points score for pupils aged 16+ (GCSEs)

	Actual Position			HImP Target		
	1998	1999	2000	2000	2001	2002
England	37.0	38.1	38.9			
Barnsley	29.3	30.6	32.2	-	-	-
Doncaster	31.1	32.6	33.3	33.1	34	35
Rotherham	32.7	34.9	35.6	-	-	-

Source: DfEE (www.dfes.gov.uk/perform)

Note: 2000 actual figures include GNVQs, previously excluded.

Reference:

Department of Health (1999). *Saving Lives: Our Healthier Nation*. London: The Stationery Office.

Figure 9.5a - Key Stage 2 English Results

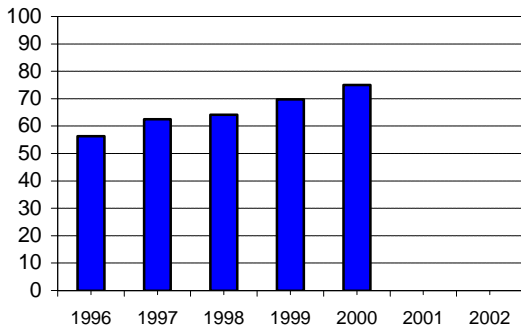
The proportion of children in the Local Authority attaining Level 4 or better in the English test at the end of Key Stage 2
Percentage of pupils aged 11

Target: Doncaster: To achieve a 67% in 2000, 73% in 2001 and 79% in 2002.

Sources: DfEE (www.dfes.gov.uk/perform)

Notes: The 2000 figures are provisional, Quality Protects Performance Indicator 3

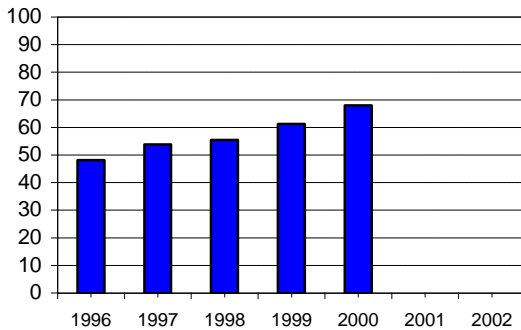
England & Wales



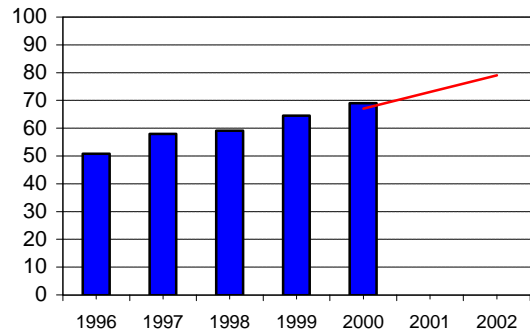
South Yorkshire Coalfields HAZ

Data Not Available

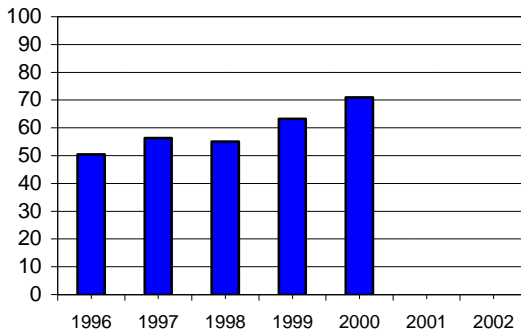
Barnsley



Doncaster



Rotherham



— HImP Target (where applicable)

Figure 9.5b - Key Stage 2 Mathematics Results

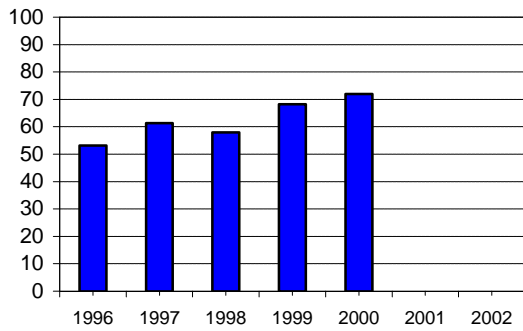
The proportion of children in the Local Authority attaining Level 4 or better in the mathematics test at the end of Key Stage 2
Percentage of pupils aged 11

Target: Doncaster: To achieve a 63% in 2000, 68% in 2001 and 74% in 2002.

Sources: DfEE (www.dfes.gov.uk/perform)

Notes: The 2000 figures are provisional, Quality Protects Performance Indicator 3

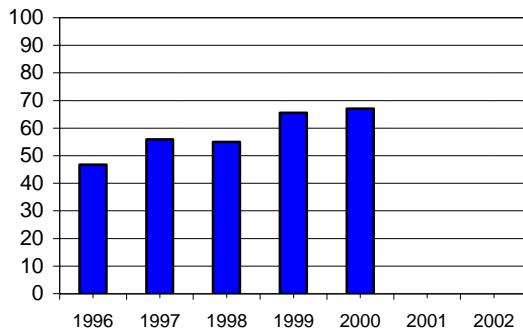
England & Wales



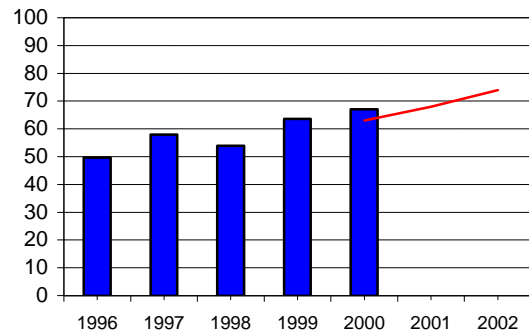
South Yorkshire Coalfields HAZ

Data Not Available

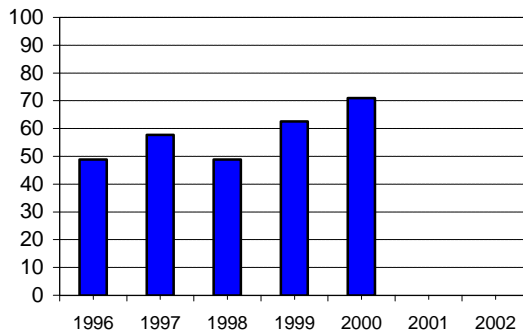
Barnsley



Doncaster



Rotherham



— HImP Target (where applicable)

Figure 9.5c - 5 GCSE Grades A-C

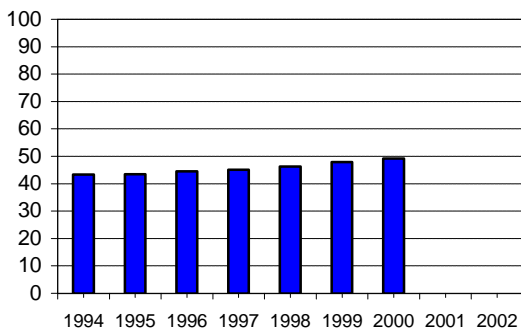
The proportion of children in the Local Authority achieving 5 or more passes at GCSE grades A-C
 Percentage of pupils aged 15 at the start of the appropriate school year

Target: Doncaster: To achieve a 37.3% in 2000, 39% in 2001 and 43% in 2002.

Sources: DfEE (www.dfes.gov.uk/perform)

Notes: The 2000 figures include both GCSE and GNVQ results, previous years were GCSEs only

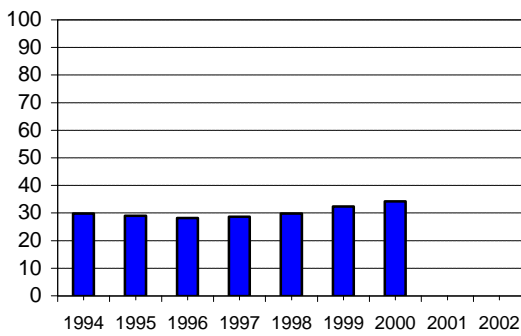
England & Wales



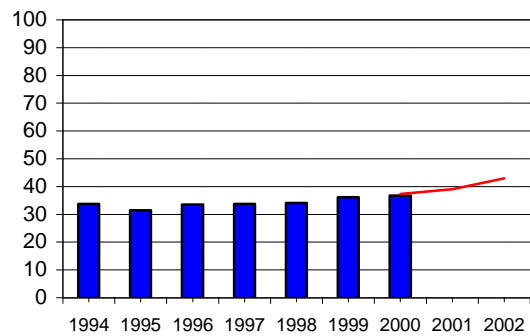
South Yorkshire Coalfields HAZ

Data Not Available

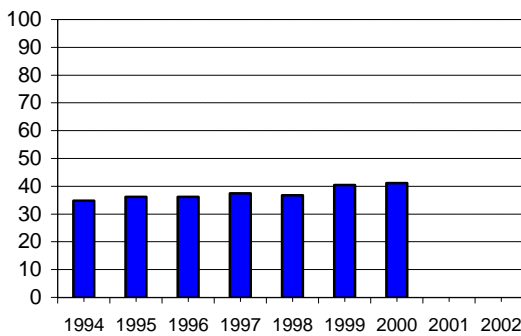
Barnsley



Doncaster



Rotherham



— HImP Target (where applicable)

Figure 9.5d - 5 GCSE Grades A-G

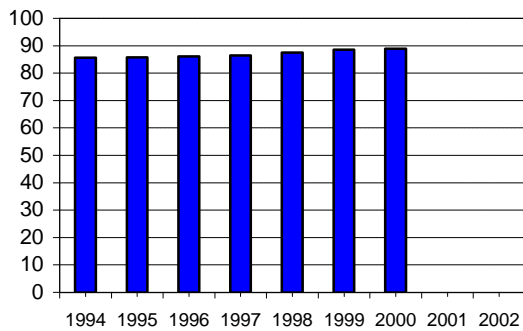
The proportion of LEA achieving 5 GCSE grades A-G
Percentage of pupils aged 15 at the start of the appropriate school year

Target: Doncaster: To achieve a 91.7% in 2000, 93.4% in 2001 and 95% in 2002.

Sources: DfEE (www.dfes.gov.uk/perform)

Notes: The 2000 figures include both GCSE and GNVQ results, previous years were GCSEs only

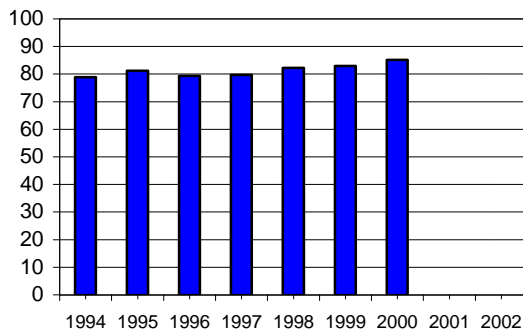
England & Wales



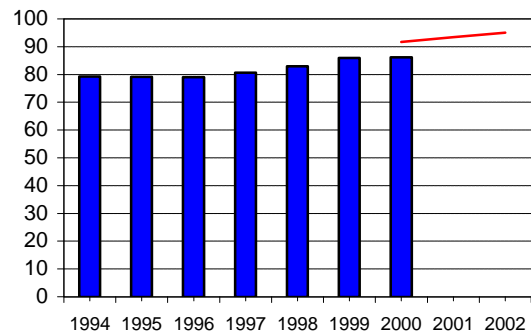
South Yorkshire Coalfields HAZ

Data Not Available

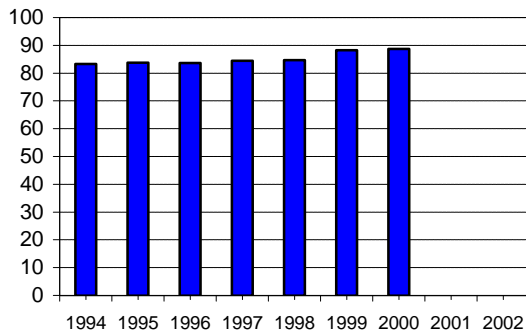
Barnsley HA



Doncaster HA



Rotherham HA



CHAPTER 10

Older People

10.1 Emergency Hospital Admissions

All three HImPs contain a target for reducing emergency admission rates in elderly people, which has its origins in the first planning guidance issued by the present Government. The emergency admission rate is an important measure of the effectiveness of community care arrangements for elderly people. The rates have, over the past decade, increased steadily (figure 10.1). Rates of emergency admission in over 75s might be expected to reduce as life expectancies increase and more of the elderly population are healthy and out of hospital. However rates are still steadily increasing. This could be due to increased tendency to admit, or it could be due to a combination of deteriorating social networks and increasing levels of disease and morbidity in the elderly, many of whom have complex morbidities and are appropriately admitted to hospital. Developments in intermediate care may in future have an influence on these acute admissions.

10.2 Targets for Social Services

Whilst admission to nursing or residential home may be appropriate and desirable for some elderly people, for a significant number of older people community services and rehabilitation could make it possible for them to return home.

Table 10.2a shows the admission rates for various areas.

Table 10.2a – Supported admissions of elderly people to residential and nursing care per 10,000 population aged 65 and over

Social Services Performance Indicator C26

	1998/9	1999/2000	HImP Target (2000/1)
England	128	124	
Metropolitan Districts	153	150	
Barnsley	138	113	111
Doncaster	134	129	
Rotherham	178	173	

Source: Department of Health (www.doh.gov.uk)

Figure 10.1 - Rates for Emergency Admissions in the Elderly

Directly Standardised Rates per 100,000 Resident Population
All emergency admissions All Persons over 75s

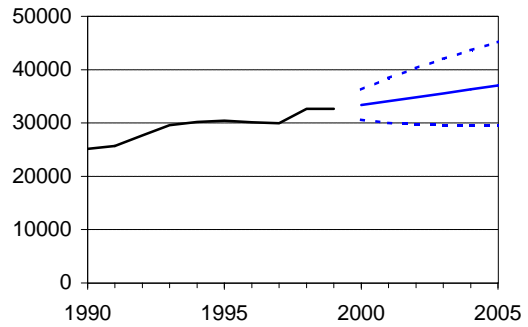
Target: Barnsley: Reduce the emergency admission rate to hospital of people aged 75 and over closer to the England average.
Doncaster: To achieve a year on year 3% reduction in emergency hospital admission of the over 75s
Rotherham: To achieve a year on year 3% reduction in emergency hospital admission of the over 75s

Sources: CMDS, Trent Region PIS Archive, ONS Mid-Year Estimates of Population

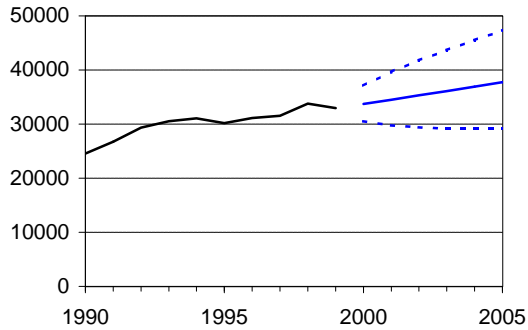
England and Wales

Data Not Available

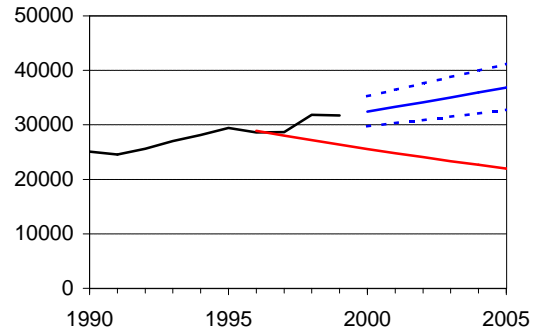
South Yorkshire Coalfields HAZ



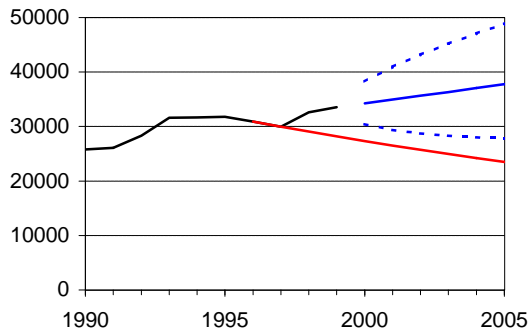
Barnsley HA



Doncaster HA



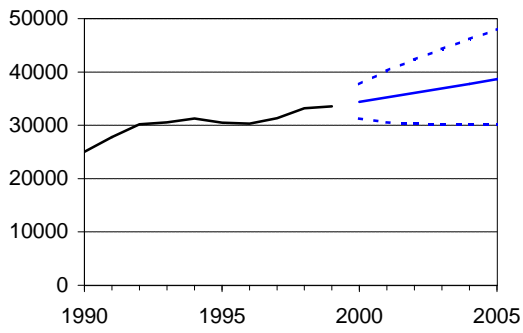
Rotherham HA



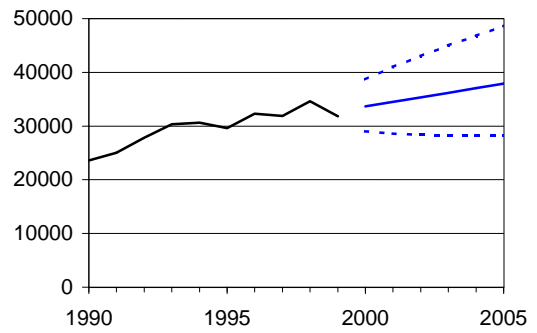
- Directly Standardised Rate
- Forecast Rate
- ⋯ 95% Confidence Interval
- HImP Target (where appropriate)

Rates forecast with 95% confidence intervals by Holt's Method on logit-transformed data.

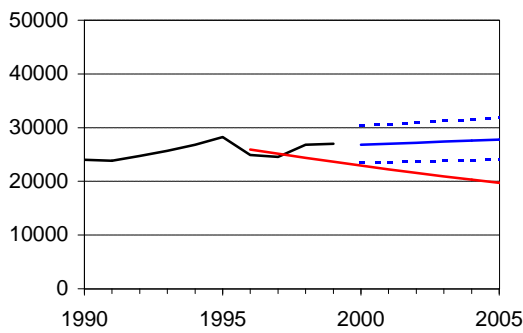
Barnsley East PCG



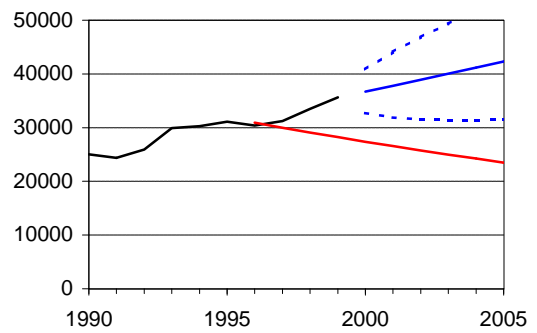
Barnsley West PCG



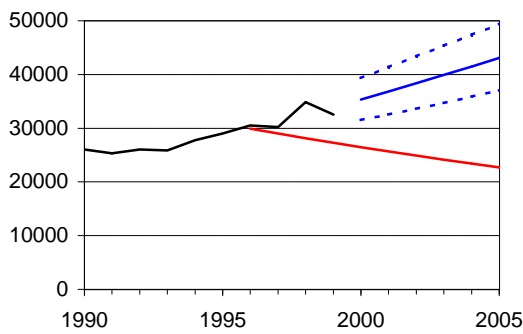
Doncaster Central PCT



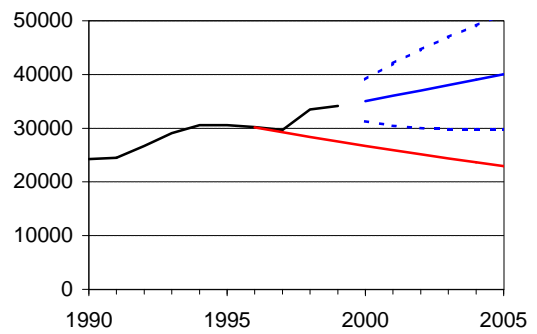
Doncaster East PCG



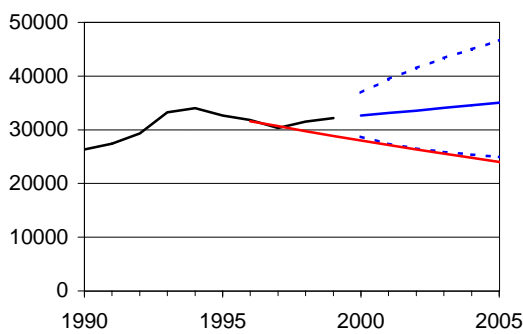
Doncaster West PCG



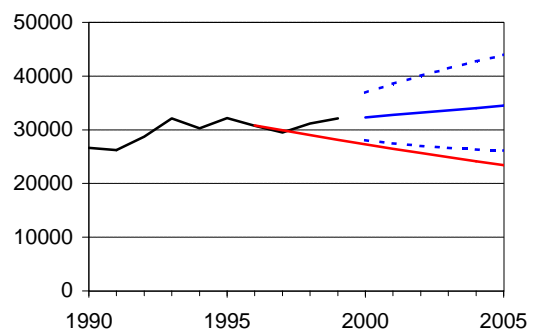
Rother Valley PCG



Rotherham PCG



Wentworth PCG



In the same way that it is hoped that the rate of admission to nursing and residential homes will be reduced, so it is hoped that the number of elderly people helped to live at home will rise.

Table 10.2b shows performance against this indicator. Information now available indicates that the target set in Barnsley was not appropriate as it would require a reduction in the number of people helped to live at home. The figures are based on the Referrals, Assessment and Packages (RAP) of care return.

Table 10.2b – Elderly people helped to live at home per 1,000 population aged 65 and over

Social Services Performance Indicator C32

	1998/9	1999/2000	HImP Target (2000/1)
England	82	84	
Metropolitan Districts	99	104	
Barnsley	69	80	55
Doncaster	109	103	
Rotherham	87	133	

Source: Department of Health (www.doh.gov.uk)

Regular inspection of residential homes should take place as appropriate. Table 10.2c shows that this target is being met.

Table 10.2c – Percentage of inspections of residential homes for adults and elderly people which should have been carried out that were carried out

Social Services Performance Indicator C34

%	1998/9	1999/2000	HImP Target
England	97	99.6	-
Barnsley	100	100.0	100
Doncaster	100	100.0	-
Rotherham	100	100.0	-

Source: Department of Health (www.doh.gov.uk)

The option of a single room is important in preserving the dignity and retaining independence of the client entering the home. Table 10.2d shows that this need is being met locally.

Table 10.2d – Percentage of single adults and elderly people going into residential and nursing care who were allocated single rooms

Social Services performance indicator D37

%	1998/9	1999/2000	HImP Target
England	94	91	-
Barnsley	100	100	100
Doncaster	100	100	-
Rotherham	100	100	-

Source: Department of Health (www.doh.gov.uk)

A further target is to increase number of households receiving intensive home care. Barnsley appears already to have achieved this target (table 10.2d).

Table 10.2e – Percentage of households receiving intensive home care (more than 10 contact hours and 6 or more visits) during survey week per 1000 population aged 65+.

Social Services performance indicator D28

%	1998/9	1999/2000	HImP Target
England	7.8	8.8	-
Barnsley	10.1	11.7	11.0
Doncaster	15.9	16.5	-
Rotherham	14.1	14.0	-

Source: Department of Health (www.doh.gov.uk)

CHAPTER 11

Prescribing in Primary Care

11.1 Prescribing of Generic Drugs

Generic drugs are those prescribed using their scientific name, rather than a trade name. The 'generic' version of a drug can be dispensed by the pharmacist in place of an equivalent more expensive branded drug. If there is no generic version, the pharmacist can dispense the cheapest form of the drug. The quality of the generic form of the drug is monitored to guarantee the highest standards. Generic prescribing can provide an excellent cost-saving to the NHS.

Not every drug can be prescribed generically. Figure 11.1 shows that in Barnsley and Doncaster the percentage of items prescribed generically has increased over the last two years. Barnsley's HImP includes a target to increase to 72% the rate of generic prescribing by 2002.

11.2 Drugs of Limited Clinical Value

For the purposes of this indicator, those products considered to be of limited clinical value are based on the list produced by the Audit Commission for their report, *A prescription for improvement*, modified in the light of more recent knowledge and consensus (the list is agreed nationally).

Overall, the aim should be to reduce this level to as little as possible (see figure 11.2). Locally it appears to be heading in the right direction, against the national trend.

11.3 Modified Release Products

Modified release preparations are often more expensive than standard forms of a drug, but with little extra benefit. Again, the aim is to reduce the value to as little as possible (figure 11.3) and rates of prescribing by Doncaster GPs seem to be falling faster, particularly in PCT Central, than those in Barnsley and Rotherham.

11.4 Combination Products

By prescribing drugs separately, doctors can reduce the cost of treatment with little change in the effect. In figure 11.4, the aim is to lower the value as much as possible.

11.5 Inhaled Corticosteroids

In the treatment of asthma, it is now recommended that inhaled steroid preparations are prescribed as 'preventers'. However, some forms of the inhalers are much more expensive. This indicator relates to the cost per dose and will be lower if less expensive preparations are prescribed/dispensed. Figure 11.5 shows a remarkable picture of consistency.

11.6 Antibiotic Prescribing

There is concern that antibiotics are being prescribed too much, leading to resistance in bacteria. Data shown in figure 11.6. do not give any evidence of a downward trend.

See also sections 5.3 and 5.4 for prescribing related to mental health.

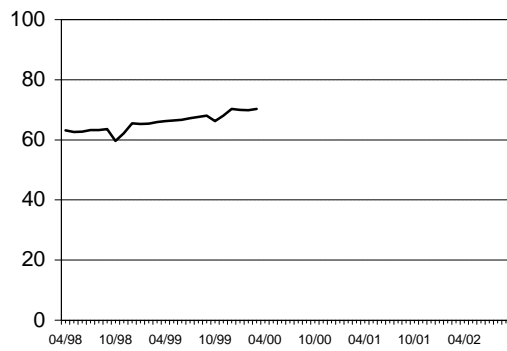
Figure 11.1 - Percentage of Generic Prescribing

Percentage of all items prescribed generically

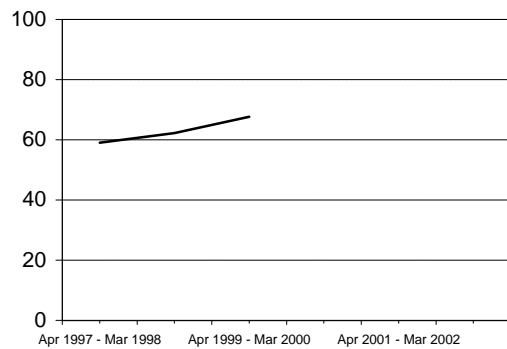
Target: Barnsley: To increase the rate of generic prescribing to 72% by 2002

Source: Prescription Pricing Authority

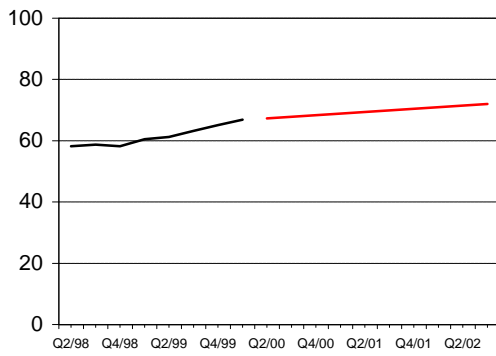
England & Wales



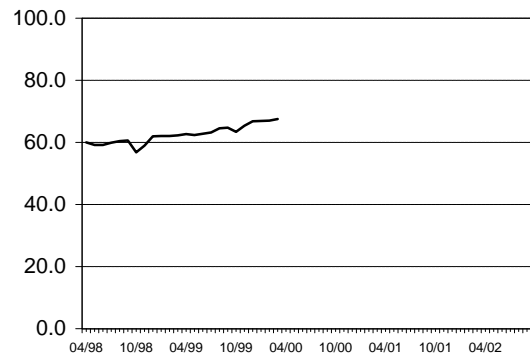
Trent Region



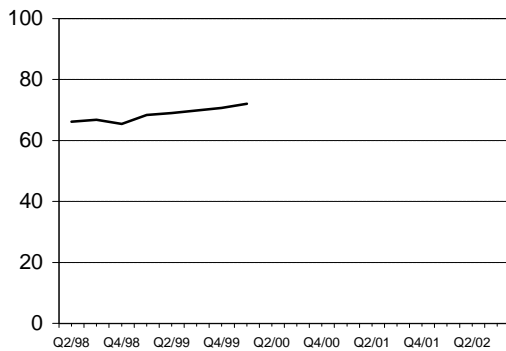
Barnsley HA



Doncaster HA

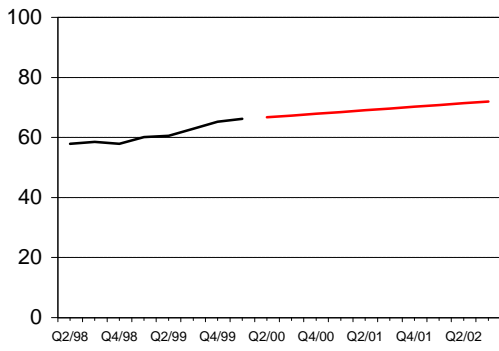


Rotherham HA

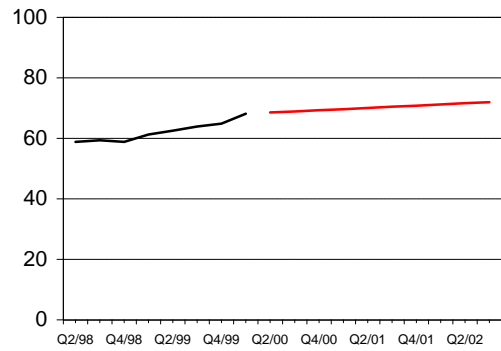


— Percentage
 — HImP Target (where appropriate)

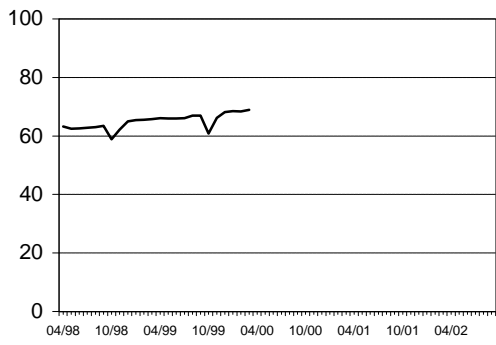
Barnsley East PCG



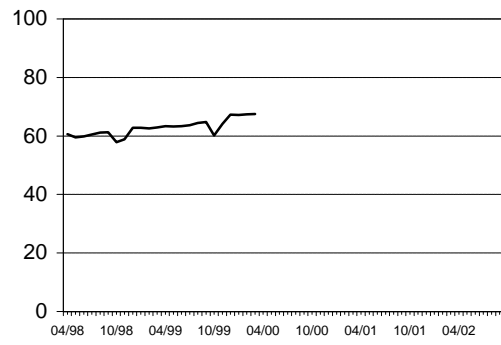
Barnsley West PCG



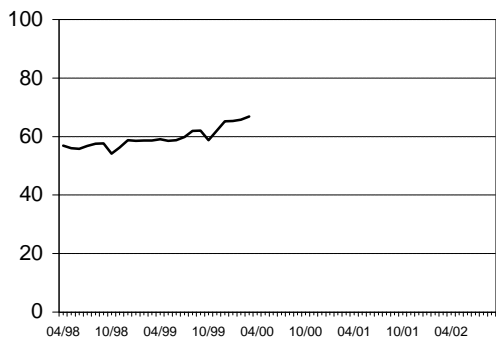
Doncaster Central PCT



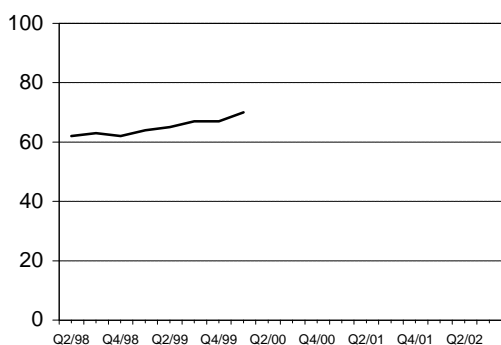
Doncaster East PCG



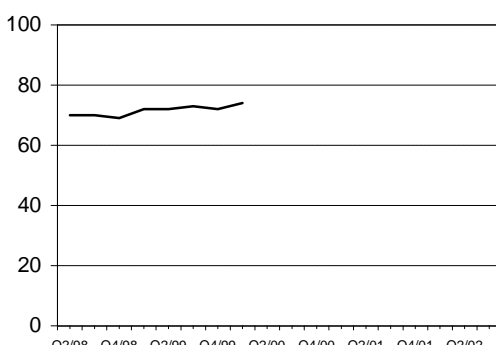
Doncaster West PCG



Rother Valley PCG



Rotherham PCG



Wentworth PCG

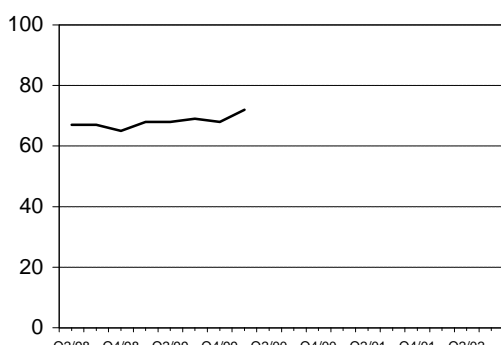


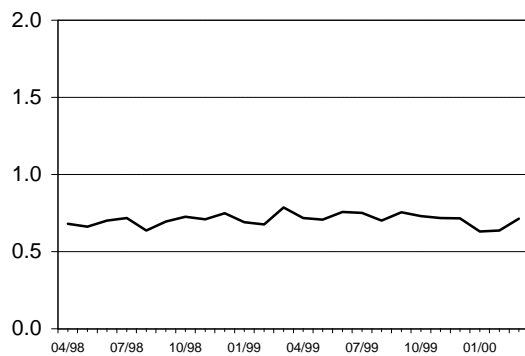
Figure 11.2 - Prescription Rates for Drugs of Limited Clinical Value

Cost per patient unit

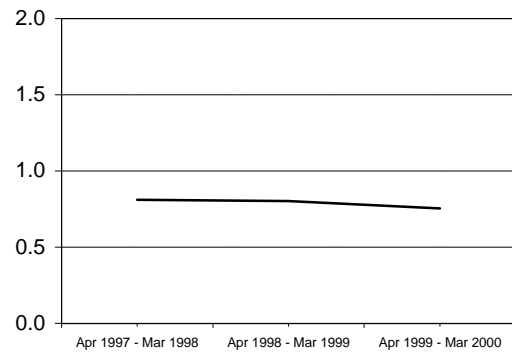
Target: Barnsley: Move towards the Trent average position.

Source: Prescription Pricing Authority

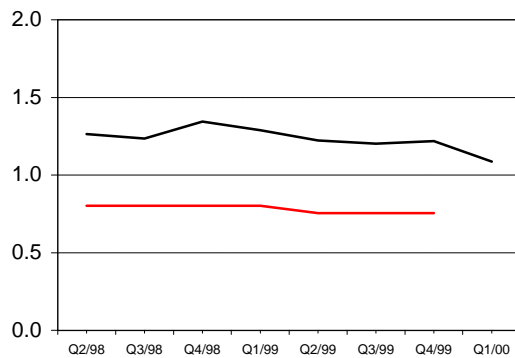
England & Wales



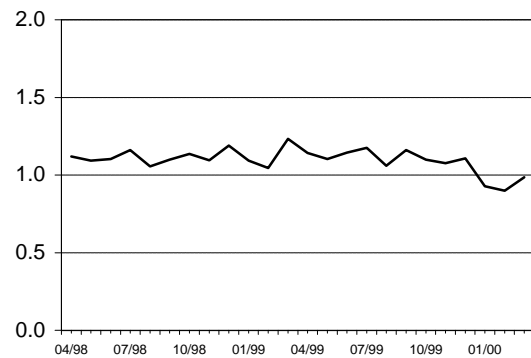
Trent Region



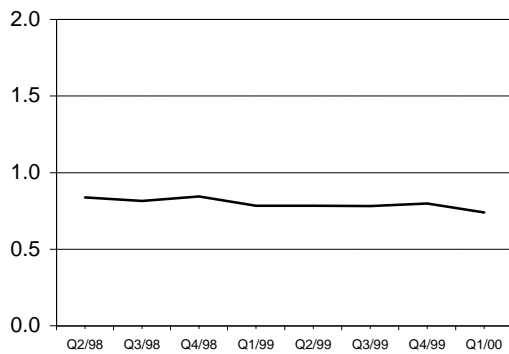
Barnsley HA



Doncaster HA

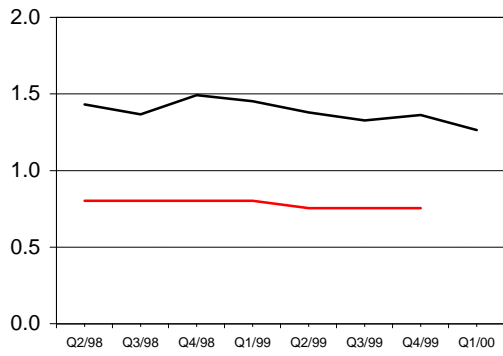


Rotherham HA

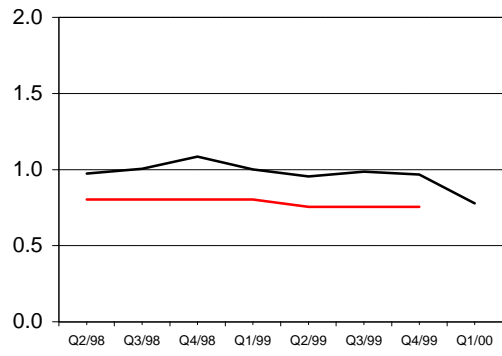


— Annual NIC/PU
 — HImP Target (where appropriate)

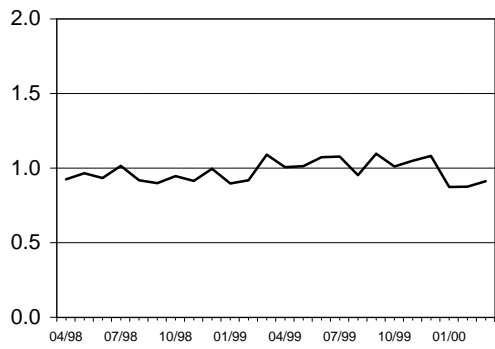
Barnsley East PCG



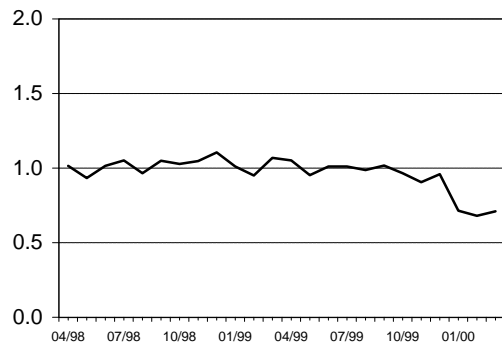
Barnsley West PCG



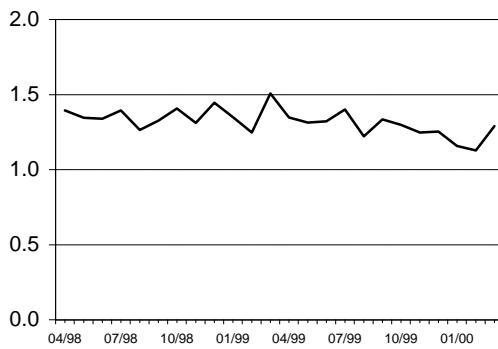
Doncaster Central PCT



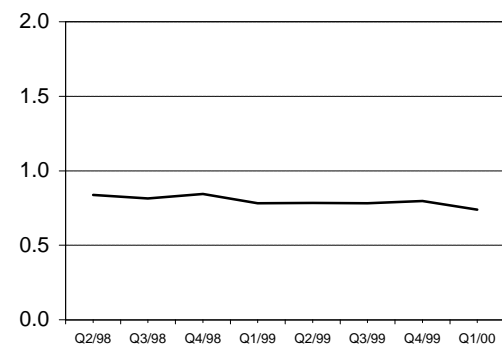
Doncaster East PCG



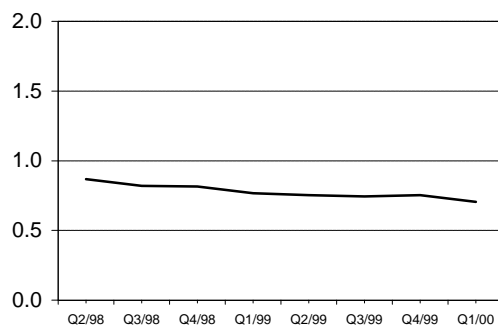
Doncaster West PCG



Rother Valley PCG



Rotherham PCG



Wentworth PCG

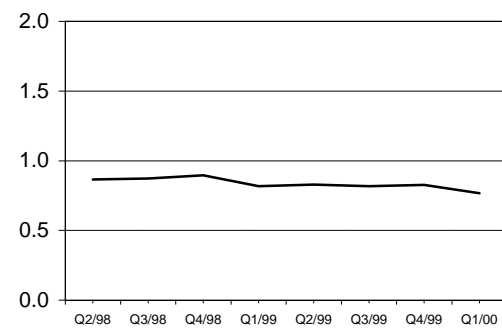


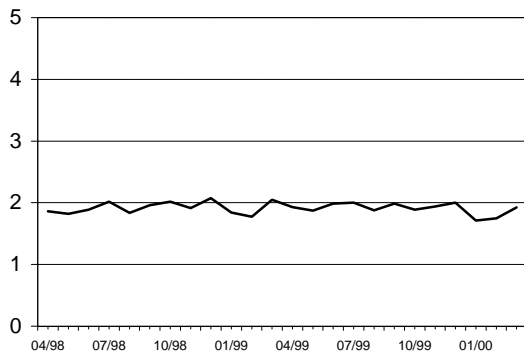
Figure 11.3 - Prescription Rates for Modified Release Drugs

Cost per patient unit

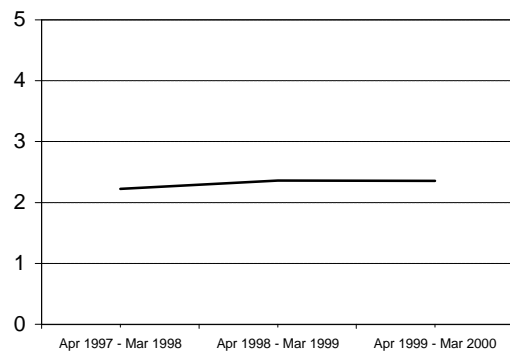
Target: Barnsley: Move towards the Trent average position.

Source: Prescription Pricing Authority

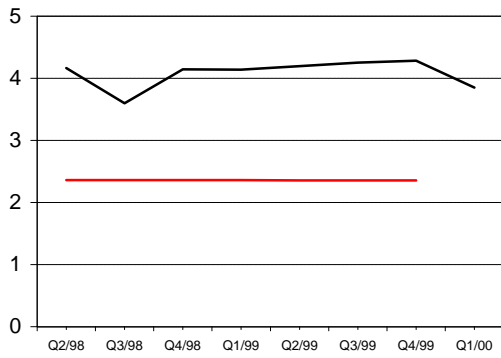
England & Wales



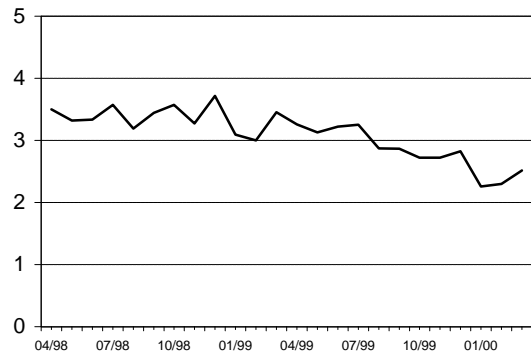
Trent Region



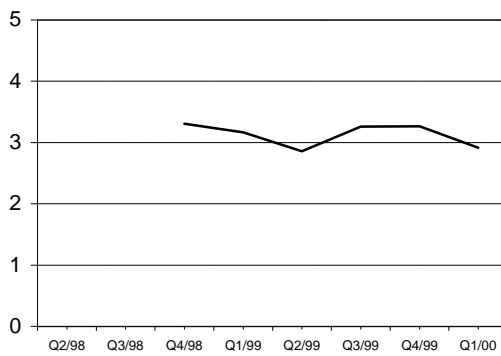
Barnsley HA



Doncaster HA

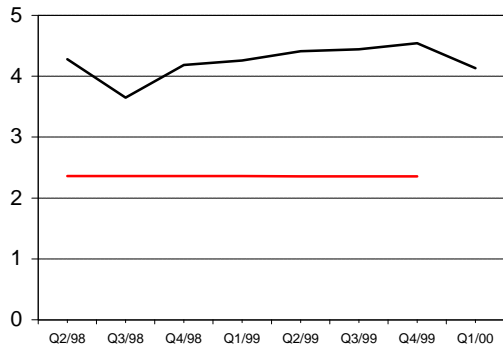


Rotherham HA

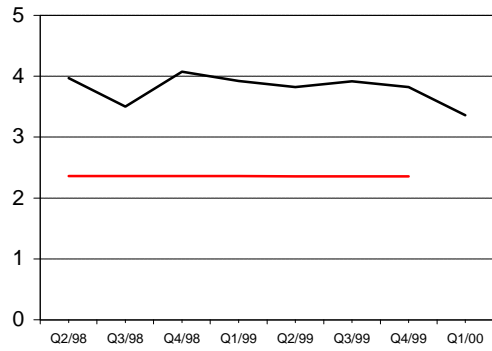


— Annual NIC/PU
 — HImP Target (where appropriate)

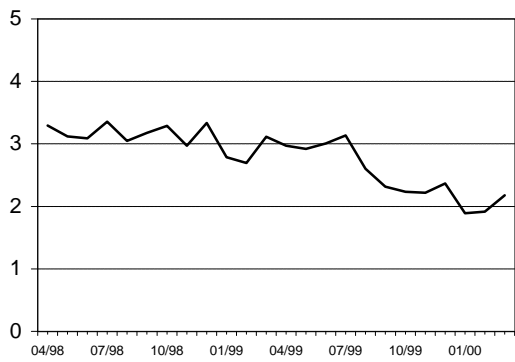
Barnsley East PCG



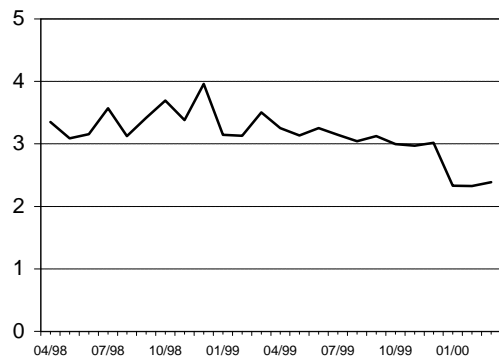
Barnsley West PCG



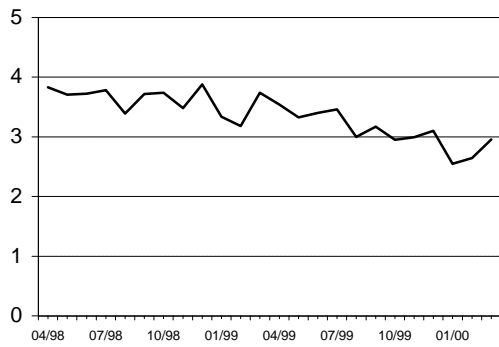
Doncaster Central PCT



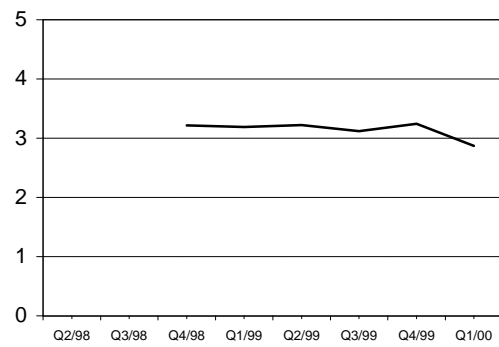
Doncaster East PCG



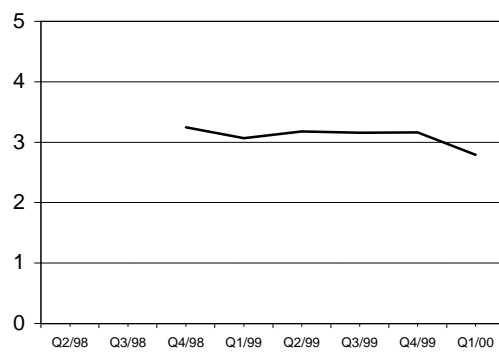
Doncaster West PCG



Rother Valley PCG



Rotherham PCG



Wentworth PCG

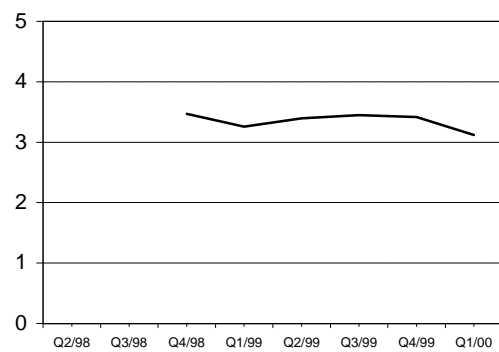


Figure 11.4 - Prescription Rates for Combination Products

Cost per patient unit

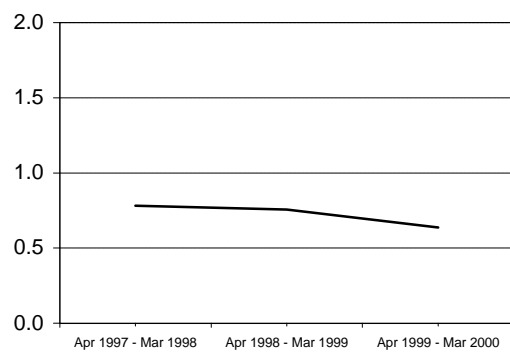
Target: Barnsley: Move towards the Trent average position.

Source: Prescription Pricing Authority

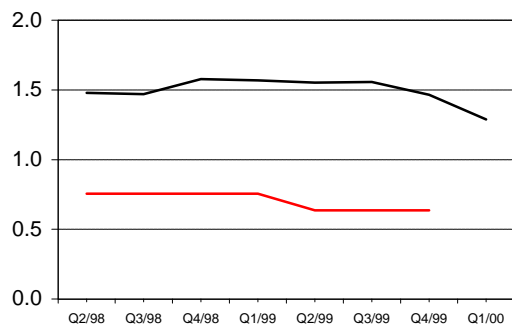
England & Wales

Data Not Available

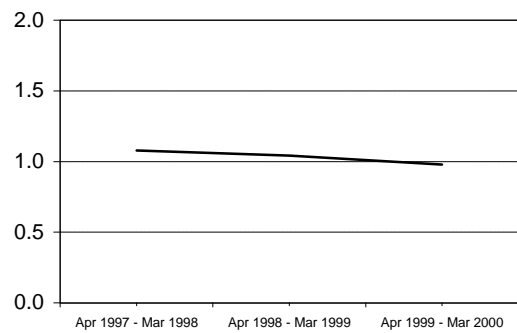
Trent Region



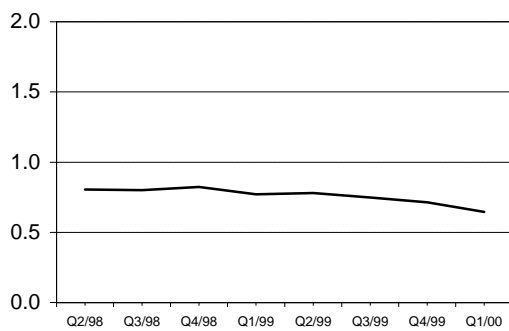
Barnsley HA



Doncaster HA

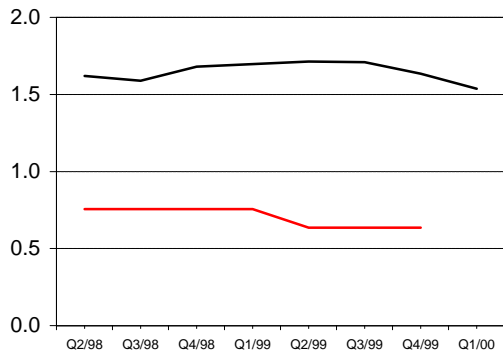


Rotherham HA

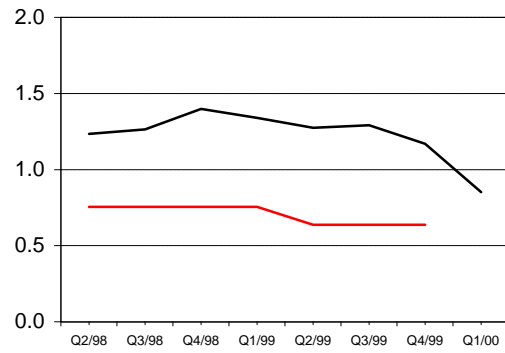


— Annual NIC/PU
 — HImP Target (where appropriate)

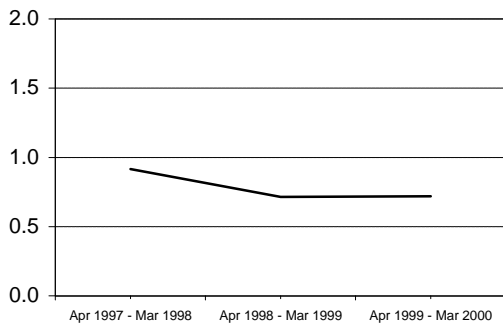
Barnsley East PCG



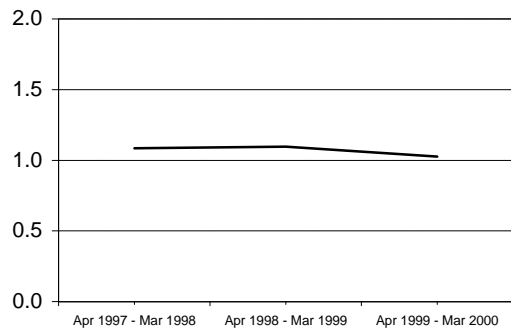
Barnsley West PCG



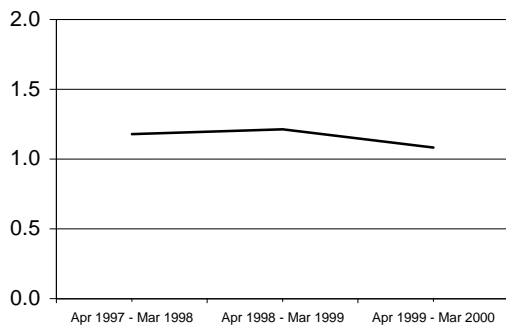
Doncaster Central PCT



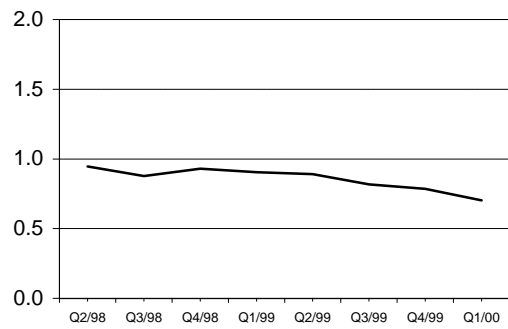
Doncaster East PCG



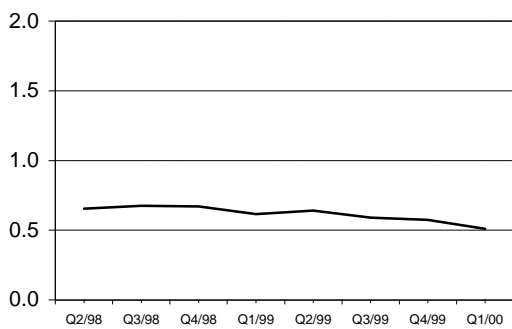
Doncaster West PCG



Rother Valley PCG



Rotherham PCG



Wentworth PCG

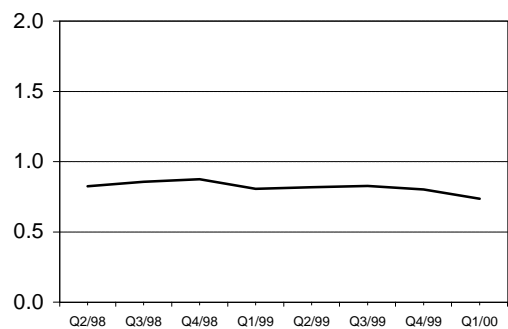


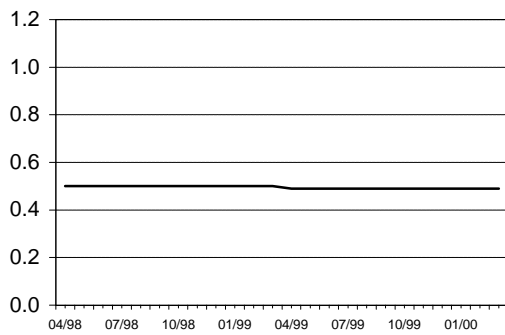
Figure 11.5 - Prescription Rates for Inhaled Corticosteroids

Cost per defined daily dose

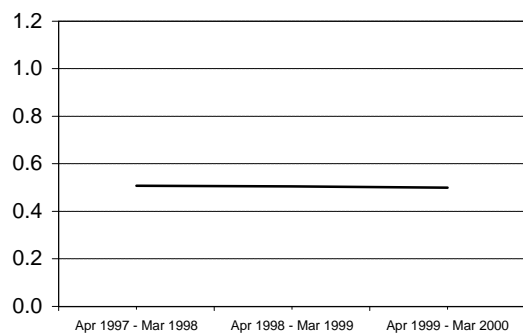
Target: Barnsley: Move towards the Trent average position.

Source: Prescription Pricing Authority

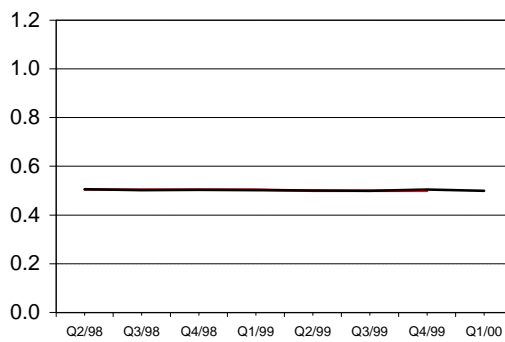
England & Wales



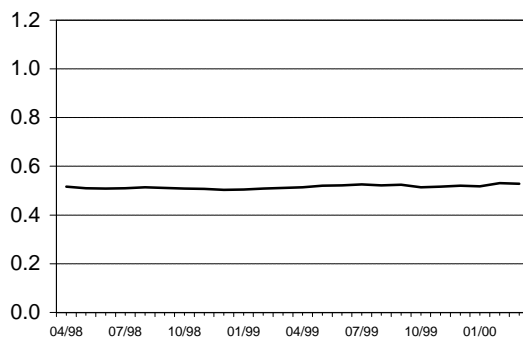
Trent Region



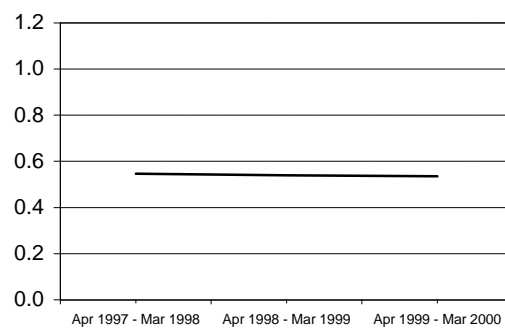
Barnsley HA



Doncaster HA

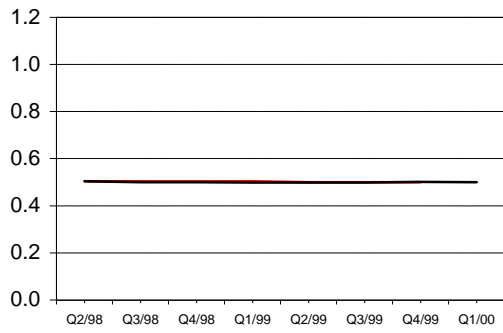


Rotherham HA

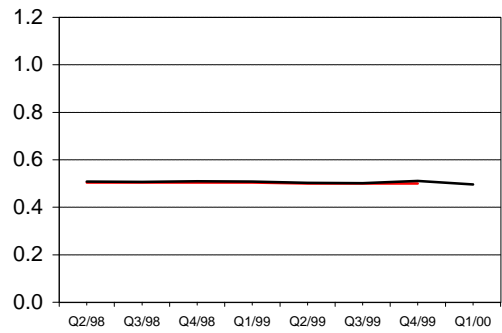


— NIC/DDD
 — HImP Target (where appropriate)

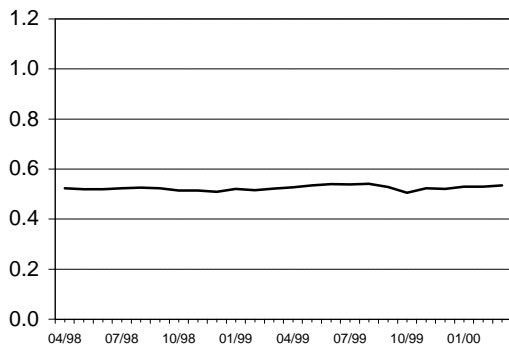
Barnsley East PCG



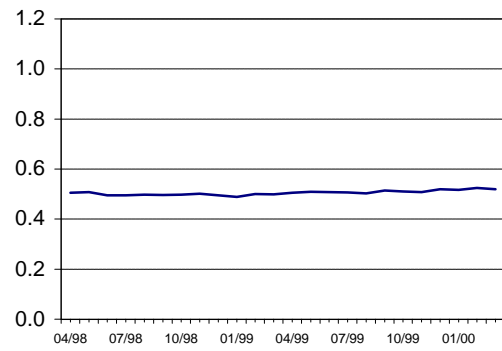
Barnsley West PCG



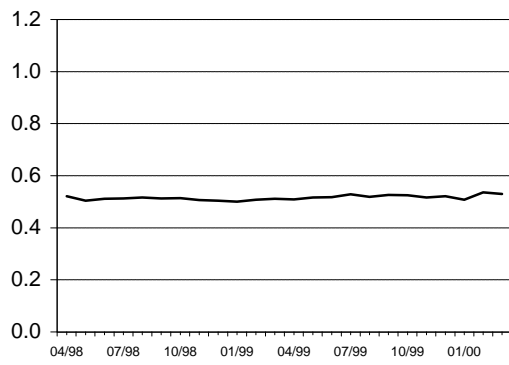
Doncaster Central PCT



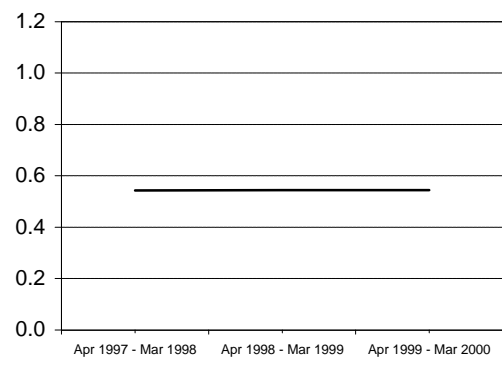
Doncaster East PCG



Doncaster West PCG



Rother Valley PCG



Rotherham PCG

Data Not Available

Wentworth PCG

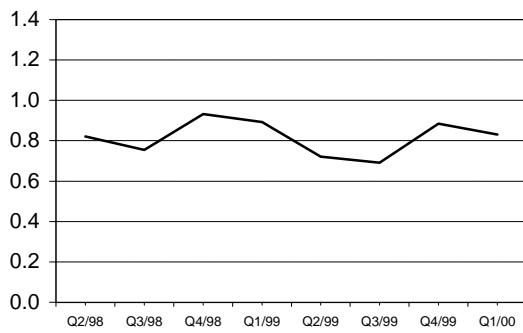


Figure 11.6 - Prescription Rates for Antibiotic Drugs

Items per weighted patient unit

Source: Prescription Pricing Authority

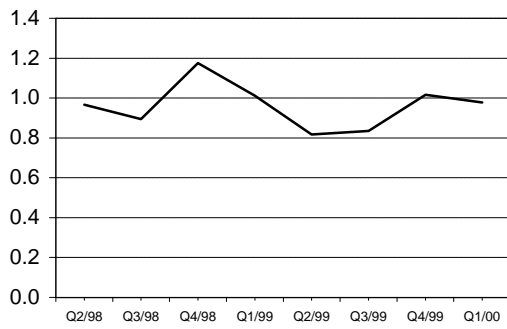
England & Wales



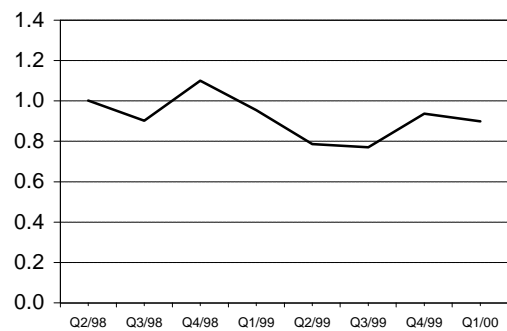
Trent Region

Data Not Available

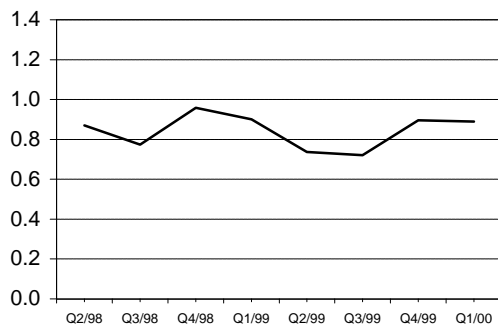
Barnsley HA



Doncaster HA

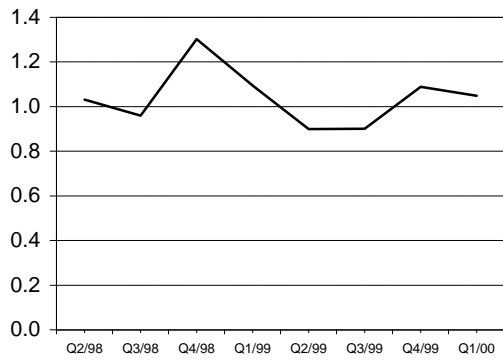


Rotherham HA

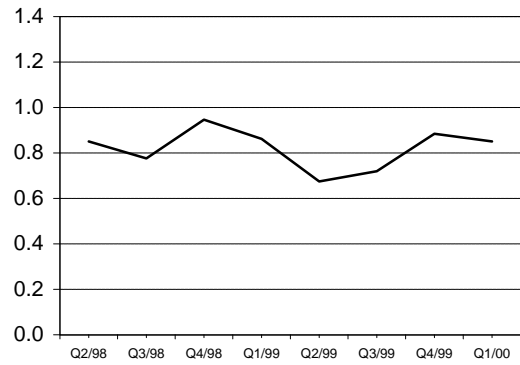


— Annual Items/STAR-PU

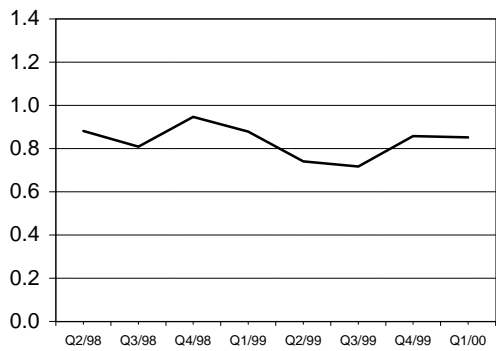
Barnsley East PCG



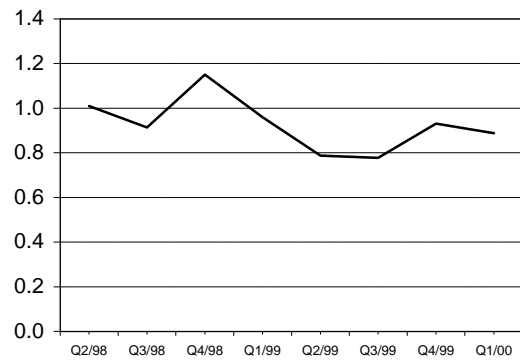
Barnsley West PCG



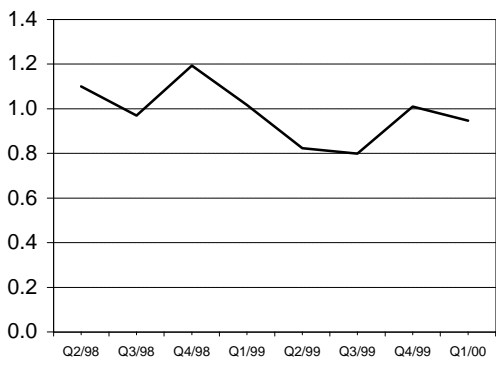
Doncaster Central PCT



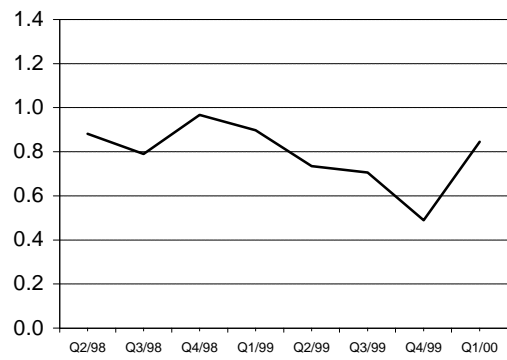
Doncaster East PCG



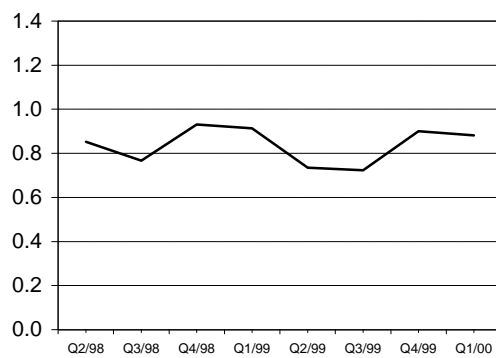
Doncaster West PCG



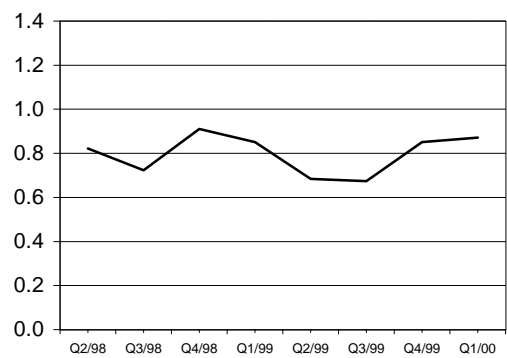
Rother Valley PCG



Rotherham PCG



Wentworth PCG



CHAPTER 12

Diabetes

12.1 Annual Checks

The Doncaster and Rotherham HImPs include targets for annual checks for people with diabetes. Diabetes influences health in many different ways and it is important that these checks are carried out, in order to detect complications as soon as they occur. Of the three health authorities, only Doncaster currently has a fully functioning diabetes register, ie. a list of all known diabetics in the district, which is required to monitor these checks.

Table 12.1 gives the latest position for each of the ten checks required, for Doncaster and each PCG/T. In each case the target is to achieve 70% by 2002 and 80% by 2005.

Table 12.1 – Annual checks for diabetics.

	1999 Position				Target	
	Doncaster	PCT Central	PCG East	PCG West	2002	2005
Weight	69%	68%	65%	72%	70%	80%
Blood pressure	69%	69%	67%	72%	70%	80%
Haemoglobin A1c	70%	70%	67%	72%	70%	80%
Urinary albumin	55%	57%	53%	56%	70%	80%
Cholesterol	55%	51%	49%	64%	70%	80%
Creatinine	64%	67%	57%	69%	70%	80%
Fundoscopy	53%	57%	47%	53%	70%	80%
Foot neuropathy	56%	54%	59%	55%	70%	80%
Foot (vascular)	62%	64%	62%	59%	70%	80%
Smoking status	64%	63%	60%	70%	70%	80%

Source: Doncaster District Diabetes Register Audit 1999

Although performance is at or around the 2002 target level for weight, blood pressure and haemoglobin A1c (an indicator of long-term blood sugar levels), other checks need to be increased.

APPENDIX 1

Sources of Data

This report has presented analysis of data from a variety of sources. These sources are set out below.

A1.1 Populations

For each year the Office for National Statistics (ONS) calculates mid-year population estimates based on a final mid-1991 (or mid-1981) estimate derived from the 1991 (or 1981) Census with allowances for subsequent births, deaths, migration and ageing of the population. These are available at health authority level and have been used to calculate the yearly rates for each health authority and form the basis of the estimates for PCG and Townsend Quintile populations (see A2.1 below). For England and Wales population estimates from the 20th Century Mortality File (see A1.2 below) have been used.

A1.2 Deaths

Information on deaths notified to Registrars of Births and Deaths is collated nationally by ONS including the information given on death certificates. Each health authority receives an annual extract of information relating to deaths of its residents in a particular year. Prior to 1993 these extracts were supplied to the regional health authorities for dissemination to health authorities. Records with no legitimate age or sex or no year of death were removed before carrying out the calculations as were records where the PCG (derived from postcode) did not match the district. In all only a very small number of deaths were removed.

Information on deaths in England and Wales as a whole was obtained from the 20th Century Mortality File, a database compiled by ONS of all deaths registered in England and Wales between 1901 and 1998, aggregated by age, sex, year and cause of death. Population estimates for each year are also supplied.

A1.3 Births

The numbers of live births is derived from the Vital Statistics returns produced by ONS. The Government Actuary's Department calculates the national population projections. These figures are then used by ONS to produce projections for sub-national populations such as HAs. The data used in calculating the projected birth rates were based on the 1996 population projections. These are currently being updated; the 1998 national projections are available already but not yet at a sub-national level.

A1.4 Hospital Activity

All health authorities receive information on treatment of their residents in NHS Trusts, currently through the Nation-Wide Clearing Service (NWCS) as Minimum Data Sets (MDS). Health authorities hold data retrospectively for a number of years although data quality and availability differs between health authorities. Prior to 1997/98, hospital activity data for Trent Region health authorities were collected through a region-wide Patient Information System (PIS) by the regional health authority. This information was archived when regional health authorities were abolished. Data from this archive have been used to supplement MDS data where necessary – before 1993 for Doncaster, before 1994 for Barnsley and before 1997 for Rotherham.

As for the deaths records with no legitimate age or sex were removed before carrying out the calculations, but there was a larger number of records where the postcode-derived PCG did not match the district code. These were left in the analysis at district level but left out of the PCG calculations.

A1.5 Cancer registrations

Trent Cancer Registry collects information about people resident in the region when they are diagnosed with cancer. Notification can come from hospitals, when a diagnosis of cancer is made, from the death certificate (if the cancer has not been diagnosed before death), or, more recently, and only in some districts, from the pathology laboratories. The analyses in this report are derived from these individual records, supplied to the health authorities by the Registry.

A1.6 Lifestyle surveys

Health authorities regularly carry out surveys of the health and health-related behaviour (e.g. smoking) of their resident populations. This is frequently done by means of a postal questionnaire. In 1992 and 1994 lifestyle surveys were carried out region-wide by Trent RHA. Barnsley and Rotherham Health Authorities carried out lifestyle surveys in 1997 and 1998 respectively. Doncaster HA has carried out a survey in 2000, which is currently being analysed.

A1.7 Dental Health

Data on registrations are kept by the British Dental Institute. The Director of Dental Public Health in each health authority keeps records of dental health obtained from regular surveys of children in the areas. Five year olds are surveyed every two years, with surveys carried out in the intervening years on 12 year olds and 14 year olds alternately.

A1.8 Cervical Cytology

Invitation and attendance for cervical cancer screening is monitored by local screening services. Aggregate information on attendance rates is available for each year from the Department of Health (form KC61) and it is these returns on which the analysis in this report is based.

A1.9 Air Quality Data

Local authorities use TEOM (Tapered Element Oscillating Microbalance) devices to measure levels of PM10 particulates in the air. The devices are generally placed in areas where pollution levels are likely to be highest, for example near to busy roads. Readings from devices in different locations should not be compared with each other as the precise distance from the road and exposure to weather can have a substantial effect on readings. The national standards are set in gravimetric measurements and the TEOM readings have been converted to gravimetric for this report.

A1.10 Prescribing Data

The Prescriptions Pricing Authority (PPA) collects information on prescribing from all GP practices and NHS Trusts. Health authorities are then allowed access to aggregated information relating to prescribing in their area. A variety of different units are used;

- i) Items; number of prescriptions issued for a particular drug or class of drugs.
- ii) Net Ingredient Cost (NIC); the total value that has been prescribed of a particular drug or class of drugs (£ sterling).
- iii) Defined Daily Doses (DDD); One DDD is defined as an average daily dose of a particular drug that would normally be prescribed. The number of DDDs gives an indication of how much of the drug has been prescribed, regardless of the size of tablets used or the amount prescribed per prescription.
- iv) Patient Units; the number of patients on GP's lists, adjusted (standardised – see section A2.2) to take account of the age/sex distribution of the list. Older people, in general, place greater demands on prescribing budgets than younger people, therefore a practice or PCG/PCT with a lot of old people will have more PUs than a practice with the same list size but dominated by younger people. Several versions exist and are used in different circumstances; in this report PUs indicate standard Pus; STAR-PUs are also used.

A1.11 Teenage Pregnancies

ONS collects information on birth registrations and legal abortions which are then used to calculate the number of teenage conceptions. To calculate a rate for under 16s an estimate of the female population aged 13-15 is used, based on the ONS mid-year estimates. For under 18s an estimate of the population of women aged 15-17 is used. The annual data used here were purchased from ONS specifically for this report.

A1.12 Birthweight

Birthweights are collected by ONS from birth notification information provided to Registrars of Births and Deaths, by local health services. Data used in this report were taken from the Public Health Common Data Set, an annual comparative analysis made available to all health authorities by the Department of Health.

APPENDIX 2

Technical Details

As far as possible, this report has aimed to analyse and present data in a consistent way, despite the differences in quality and availability of data. This appendix attempts to explain some of the techniques used, very briefly. For more detail statistical textbooks such as those referred to here should be consulted.

A2.1 Rates

Rates are used throughout this report to enable comparisons between areas and over time. The populations used as denominators originate from ONS, as discussed in A1.1 above, but sub-district populations had to be estimated for years between censuses.

Primary Care Group/Trust (PCG/PCT) populations have been calculated on the basis of geographical areas. The populations were calculated, for each health authority and each age/sex stratum, by taking the proportions of residents in each PCG/PCT at the time of the 1991 Census and applying those proportions to the ONS mid-year estimate for the health authority.

Townsend quintiles have been used to compare relatively affluent groups of the population of each health authority with the most deprived groups. The Townsend Index (Townsend *et al*, 1988) is a categorisation of all enumeration districts (EDs - the smallest areas available for analysis of Census data, containing about 500 people) in the country, using four variables from the Census (unemployment, housing tenure, overcrowding and car ownership) to attribute a 'deprivation' level to those areas. The enumeration districts in each health authority have then been ranked and grouped into five 'quintiles' of roughly equal population. Hence quintile 1 can be said to include the most affluent areas in each district and quintile 5 the most deprived areas. Several HImP targets refer to these quintiles in setting targets to 'narrow the gap' between rich and poor.

The Townsend quintile populations were calculated in the same way as the PCG/PCT populations, ie. by taking the proportions of residents in each quintile in the 1991 Census, applying those to the ONS mid-year estimates for each age/sex stratum.

A2.2 Directly Standardised Rates

Rates for many of the targets presented in this report vary greatly across the range of age groups and between the sexes. We would expect, on the whole, to see higher mortality and hospital admission rates for a PCG with a large proportion of old people than in another PCG where the population is much younger. To enable comparisons between different areas and over time it is necessary to compensate for the differences between age/sex distributions of the populations being compared.

In order to do this we calculate directly standardised rates, using the European Standard Population (Breslow & Day, 1987; 54). In effect, we use the rates in each age group to calculate what the overall rate would be if the population were the same as the European Standard Population. Hence any differences which still exist must be down to factors other than the age and sex structure of the populations in question.

These calculations are have been carried out in the Microsoft Excel spreadsheet software.

A2.3 Forecasting – Holt's Exponential Smoothing

In this report, the focus has been on targets, and every effort has been made to produce forecasts which are as accurate as possible using the data available.

There are various different ways of forecasting future values of a variable. One, all too frequently used, is to fit a regression line or curve and extrapolate. This assumes a consistent trend with independent errors; something which is clearly not the case in many of the examples in this report, and any 'prediction intervals' produced tend not to reflect the uncertainty about the future. Regression should not be used in this way (Altman, 1991; 316).

In cases where data are available routinely on the factors that influence rates, it may be more accurate to forecast the rates using the historic values of the predictor variables (this is called multivariate forecasting, using causal models). These data on predictors do not exist for the health outcomes we have looked at in this report.

Since we have at our disposal only past observations (called time series) of the rates themselves this report presents forecasts produced using a univariate method. Several such methods exist, but here again we are limited by the length of time series available – at most 20 years – which precludes more complex forms of forecasting such as Box-Jenkins methods (Chatfield, 1996; 75).

Given the need to be able to produce univariate forecasts from fairly short time series, work done at Yorkshire Region concluded that the method most appropriate is Holt's Exponential Smoothing (Haward, 1993). This method applies a linear trend to the data, but gives more weight to recent points than to points at the beginning of the time series. Hence the forecasts 'start from where we are'.

It is important to give an indication of the precision of forecasts by giving prediction intervals, which are simply confidence intervals for the forecasts. The intervals are calculated such that, if current trends continue, there is less than a 5% chance that the rate will be outside the 95% prediction interval. There are instances where the prediction intervals are extremely wide. This simply indicates that, because the past observations are so widely scattered, there is no way of knowing whether the rates will go up or down or by how much. In a few cases, particularly where the most recent point is out of kilter with previous values, the forecasts can appear anomalous. The forecasts in this report were all produced in Forecast Pro XE (Business Forecast Systems Inc., 1999).

In order to preserve the mathematical integrity of the forecasting models, the rates are transformed prior to forecasting using the logit function [$\text{logit}(p) = \ln(p/(1-p))$] which, amongst other things, ensures that the rates do not go below zero or above one (100%). For rates close to zero this is effectively the same as log-transforming the rates, but for rates which approach one (such as percentage coverage of cervical cytology programmes) the logit transformation is necessary.

A2.4 Targets

The targets are stated in varying forms in the HImP documents, but are presented here in one of two ways. Firstly, and most simply, where the target is to maintain a certain standard (eg. 80% coverage of cervical screening programme) the target is simply shown as a red horizontal line representing an ongoing standard. Where there is a target reduction or increase (either a percentage reduction or a target figure) these have been translated into a constant rate of change between the baseline period and the target deadline.

For example, the target ‘to reduce mortality by at least a fifth by 2010 from a baseline of 1995-7’ can be stated as a reduction of 1.58% each year from 1996 to 2010. The baseline is calculated as the average of the 1995, 1996 and 1997 figures. Hence these targets are shown as a constant rate of decline or increase. At any point in the future new data may be compared with the relevant point on the target curve to assess progress being made.

References.

Altman DG (1991). *Practical Statistics for Medical Research*. London: Chapman & Hall.

Breslow NE & Day NE (1987). *Statistical Methods in Cancer Research; Volume II – The Design and Analysis of Cohort Studies (IARC Scientific Publications No 82)*. Lyon: International Agency for Research on Cancer.

Business Forecast Systems Inc. (1999). *Forecast Pro*. Belmont, MA.

Chatfield C (1996). *The Analysis of Time Series: An Introduction*. London: Chapman & Hall.

Haward RA (1993). *‘The Health of the Nation’ Targets – First Steps. Public Health Report: Statistical Review*. Harrogate: Yorkshire Regional Health Authority.

Townsend P, Phillimore P, Beattie A (1988). *Health and Deprivation. Inequality and the North*. London: Croom Helm.

APPENDIX 3

Glossary of Terms

Acute	Describes a disease of rapid onset, severe symptoms, and brief duration. Can be used to describe any intense symptom, such as severe pain.
Admission (to hospital)	An attendance at hospital that entails the use of a hospital bed. Outpatient appointments and attendances at Accident and Emergency departments are not admissions.
Audit Commission	An organisation that appoints auditors to all Local Authorities and NHS bodies in England and Wales, and helps bring about improvements in economy, efficiency and effectiveness through value for money studies and the audit process.
Care order	A court order (as provided in Part IV of the Children Act 1989) directing that a child is in the compulsory care of a named local authority, and vesting shared parental responsibility in that authority.
Caries	Dental decay; normally requires filling.
CABG	Coronary Artery Bypass Graft. A surgical procedure that involves by passing a blocked artery using a blood vessel from elsewhere in the body.
Census	A Census of the whole population of the UK is taken every 10 years, the most recent being in 1991. Data from the 1991 Census are available at district, ward and small area (Enumeration district) level.
Child protection register	A central register held by each social services department which lists all the children in the area who are considered to be suffering from, or likely to suffer from, significant harm. An inter-agency child protection must be drawn up for each child who is registered.
Chronic	Describes a disease of long duration very slow changes. Such disease is often of gradual onset. The term does not imply anything about the severity of the disease.
Chronic Obstructive Pulmonary Disease (COPD)	COPD (ICD-9: 490-496) a chronic, slowly progressive disorder characterised by airflow obstruction.
Conceptions	A total of live births, stillbirths and abortions
Confidence Interval	A statistical tool for indicating the accuracy of an estimated figure. It can reasonably be assumed that the true value lies somewhere within the confidence interval. Throughout the report 95% confidence intervals are used, therefore there is a 5% chance that the true value lies outside the confidence interval. Estimates based on small number of cases are less accurate and will hence tend to have wide confidence intervals.
Coronary Heart Disease (CHD)	CHD (ICD-9: 410-414, ICD-10: I20-5) is a group of conditions associated with the stiffening and narrowing of arteries of the heart due to fatty deposits. The heart is denied blood and the results are chest pain (angina). Heart attack (acute myocardial infarction) or heart failure.
Demography	Description of a population's age, sex and geography.
Deprivation	A state of social, economic and environmental inequality. The term can be applied to individuals, families, social groups, communities or areas. Those experiencing deprivation are being excluded from the acceptable standards of community and economic life.
Emergency Medical Admissions	Episodes of hospital care which have happened at short notice because of clinical necessity.
Enumeration District (ED)	The administrative area of a census enumerator (data collector) during the 1991 census. It is the smallest level of aggregation of census data. EDs vary in size but average about 200 households or 500 people.
GCSE	General Certificate in Secondary Education undertaken mainly by pupils aged 15-16 years old. There are 8 pass grades ranging from A* to G. Five or more A*- C is the standard normally required to prepare pupils to study for GCE A/AS level examinations or the more advanced vocational courses.
GNVQ	General National Vocational Qualifications are designed to develop knowledge, skills and understanding in broad vocational areas like business, manufacturing and retail. There are two levels of GNVQ - Foundation level and Intermediate level - and each is awarded a grade of Pass, Merit or Distinction. Part One GNVQs are aimed at pupils of compulsory school age and are the same vocational standard as a full GNVQ but have half the content.

Health Action Zone (HAZ)	Partnerships of Local Authorities, Health Authorities and other organisations, established to pioneer creative approaches to modernising services and responding to social exclusion. The South Yorkshire Coalfields HAZ was one of the first 11 HAZs and officially began in April 1999.
Health Authority (HA)	The local administrative area of the NHS. Health Authorities are responsible for assessing the health needs of the local population, developing strategies to meet those needs, and developing and monitoring targets and standards.
Health Improvement Programme (HImpP)	A HImpP is a local health strategy lead by the Health Authority. It is intended to improve health and health care in partnership with NHS Trusts, Primary Care Groups/Trusts and Local Authorities.
High Level Performance Indicators	See NHS Performance Indicators
Hospital Activity	Measurement of the number of patients treated at a hospital. Standard units of measurement are admissions and FCEs.
ICD	'International Classification of Diseases', a system which categorises ill-health, mortality and its causes. Mortality data are coded according to the ninth revision (ICD-9). Hospital activity has been coded using the tenth revision (ICD-10) since April 1995.
Immunisation	Protection of individuals from communicable disease by administration of a substance (also vaccination).
Intermediate care	Services to promote independence and improve quality of care for older people. These include rapid response teams, integrated home care teams and intensive rehabilitation services.
Key stage 2 (Educational tests)	National curriculum test for pupils aged 11 years at state schools in England.
List (practice)	The patients registered with a GP or dentist.
Looked after children	A looked-after child is someone who is either: provided with accommodation, arranged by a local authority social services department, for a continuous period of more than 24 hours; or: someone subject to a relevant court order under part IV or V of the Children Act 1989. This included children subject to accommodation under agreed series of short-term placements (often called 'short breaks', 'family link placements' or 'respite care'). Most looked-after children cease to be looked after on reaching their 18 th birthday. A very small number may continue to be looked after up to their 21 st birthday under section 20(5) of the Children Act.
Morbidity	The state of being diseased.
Mortality	Number of deaths in a given period excluding stillbirths.
National Service Frameworks (NSFs)	These set out plans, based on evidence of what works best, to ensure that in future these standards of care are available to everyone. Therefore people in every part of the country can get the top quality and treatment and care they need, whether from their local doctors or community services, local district general hospitals or specialist regional centres.
NHS Performance Indicators	Performance indicators are part of the NHS performance assessment framework (PAF). The framework is intended to improve the quality of services across six areas: health improvement, fair access, the effective delivery of appropriate healthcare, efficiency, patient/carer experience, and health outcomes of NHS care. The performance indicators are a set of 49 indicators covering all six areas of the PAF.
NHS Plan	A national strategy published in 2000, which intends to increase investment and refocus services around the needs of patients.
Nursing Homes	Look after more heavily dependant people who may be immobile or even unable to eat without help. They often provide convalescent care after hospital treatment. They are staffed by a mix of qualified nurses and nursing auxiliaries. They are registered with, and regularly inspected by the local Health Authority.
Orthodontics	The branch of dentistry concerned with the growth and development of the face and jaws and the treatment of irregularities of the teeth.
Pathology Laboratory	A hospital department that takes samples from patients to assist diagnosis and prognosis of disease.

Placements	A formal decision made regarding where, and with whom, a child should live.
PM10	Particulate matter (PM) with a mass aerodynamic diameter less than 10 micrometers (μm) - PM10. In other words, these are the (smaller) particles that make it through some type of pre-separator (removes large particles) and are collected on a sampling medium (filter).
Prediction Interval	A confidence interval for a predicted rate.
Prevalence	The number of persons with a disease or an attribute at a specified point in time (strictly 'point prevalence'). Prevalence rate is the number as a proportion of the total population.
Primary Care Group/Trust	Primary Care Groups are responsible for promoting health, commissioning services and developing primary care and community care services with ultimate accountability remaining with the Health Authority. Primary Care Trusts are intended to consolidate the work of PCGs, and accountability will pass from the HA to the PCTs. Doncaster Central has been a PCT since October 2000.
PTCA	Percutaneous Transluminal Coronary Angioplasty. A surgical procedure that involves passing an instrument in a thin wire along the walls of arteries to widen them.
Registration (cancer)	Cancer registration is the systematic collection of data on the occurrence and characteristics of malignant neoplasms and non-malignant neoplasms
Residential homes	These are for people needing assistance with daily living tasks: washing, dressing, bathing, mobility etc. They provide personal care in much the same way as a caring relative would at home and are inspected by Social Services. The Doctor and District Nurse would continue to provide health care for residents in the same way as if they were in their own home.
Respiratory disease	Diseases of the respiratory system. This includes the following conditions: pneumonia, influenza, chronic obstructive pulmonary disease, emphysema, bronchitis and asthma.
Revascularisation	A collective term for surgical treatments that improve the flow of blood to the heart. CABGs and PTCAs are examples of this.
Saving lives: Our Healthier Nation	A national policy to promote public health in England. The aims of the policy are to: improve the health of the population as a whole, and to narrow the health gap by improving the health of the worst off in particular. The four main targets are circulatory disease (coronary heart disease and stroke), cancer, mental health, and accidents.
Screening programmes	The process of investigation of a population to identify the existence of a disease. Screening tests sort out those apparently well persons who probably have a disease from those who probably do not. Positive tests are usually followed up with a diagnostic investigation to establish whether or not the person really does have the disease.
South Yorkshire Coalfields	The area of south Yorkshire covered by Barnsley, Doncaster and Rotherham Health and Local Authorities.
Suicide	Intentional self killing (ICD-9: E950-9, E980-9 (excluding E988.8)). For comparative purposes deaths from 'suicide' included deaths from injuries undetermined whether accidentally or purposely inflicted.
Tamoxifen	Tamoxifen has been used for more than 20 years to treat patients with advanced breast cancer. It has recently been found to reduce the incidence of breast cancer in women at high risk of developing this disease.
TEOM	Tapered Element Oscillating Microbalance: a device that measures levels of PM10 particulates in the air.
Top level indicators	Data that enables individuals to assess the overall performance of an organisation, programme or project.
Townsend Score	A measure of material and social deprivation. The score is calculated using the following data from the 1991 census: unemployment, housing tenure, overcrowding and car ownership.
Trent Regional Office	The Department of Health has a number of regionally based offices, which support and monitor the health communities in an area. Trent RO covers the HAs of South Yorkshire, Lincolnshire, Derbyshire, Nottinghamshire and Leicestershire.
Vaccination	See Immunisation.

Index	Page		Page
accidents	37-44, 113	children in need	77
deaths	37, 41	prevention	77
hospital admissions	41	children looked after	72-4, 76-8
serious accidents	41	adopted	72
asthma	54, 90, 111, 113	education - qualifications	76
audit	36, 49, 90, 104, 111	health check	77-8
Audit Commission	90, 111	homes - inspection	79
Barnsley East Primary Care Group	49	schooling	76
Barnsley West Primary Care Group	54	chronic obstructive pulmonary disease	54, 111
benzodiazepine	49	circulatory disease	27, 113
births	68, 105, 107, 111, 112	death rates	27
numbers	68, 105	confidence intervals	2, 11, 20, 37, 41, 109
rates	3, 105	co-proxamol	49
registrations	107	coronary heart disease	i, 1, 27-36, 54, 59, 113
birthweight	68, 107	death rates	27, 54
maternal smoking	68	data sources	105
British Dental Institute	106	deaths	i, 11, 15, 20, 27, 37, 41, 54, 59, 105-7, 112-3
Cancer	i, 11-26, 54, 59, 106, 110, 113	20 th century mortality file	105
breast cancer	15, 20, 26, 113	accidents	37, 41
cervical cancer	20, 106	all causes rates	3
colorectal cancer	15	cancer	i, 11
deaths	i, 11	circulatory diseases	27
incidence	11, 15, 26	coronary heart disease	27, 54
laboratories	11, 106	death certificates	105
lung cancer	i, 15, 54, 113	extracts	105
registrations	11, 106	records	105
tamoxifen	20, 113	stroke	27
two-week maximum wait	26	suicide	45
car ownership	108, 113	demography	3, 10, 15, 68
census	3, 15, 105, 108, 111, 113	dental list size	62
cervical cancer	20, 106	dental health	62, 106
cytology	20, 106, 109	adults	62
Child Protection Register	74, 75	children	62
Registrations	74	DMFT	62, 63
Reviews	74	dental registrations	62, 106
Children	60, 62, 68-84, 111-2	Department of Health	1, 11, 27, 37, 45, 60, 68, 85, 88-9, 106-7, 113
annual health assessment	77	deprivation/ deprived	i, 3, 15, 26-7, 37, 41, 54, 59, 108, 110-1, 113
crime	79	Quintiles	108
dental	62, 63	Townsend	105, 108, 110, 113
health	77		
immunisations	77, 79		
infectious diseases	79		
vaccines	79		

	Page		Page
diabetes	1, 104	mental health	1, 45, 91, 113
annual check	104	benzodiazepine	49
check	104	co-proxamol	49
register	104	mental illness	45
Doncaster Central Primary Care Trust	113	prescribing rates	49
Doncaster East Primary Care Group	3, 11, 15, 27	readmission rates	45
Doncaster West Primary Care Group	11, 15, 49	suicides	45, 49
education	i, 75-6, 80, 111-2	Minimum Data Set (MDS)	105
children in care	76	morbidity	11, 54, 85, 112
GCSEs/GNVQs	75-6, 80 111	mortality	3, 11, 15, 26-7, 37, 54, 60, 68, 105, 108, 110, 112
key stage 2	112	National Service Frameworks (NSFs)	1, 112
England & Wales	3, 11, 26 105, 111	nation-wide clearing service (NWCS)	105
enumeration district (ED)	2, 3, 54, 108, 111	NHS plan	37, 112
European standard population	108	NHS performance indicators	26, 112
forecast	2, 11, 15, 27, 37, 41, 45, 62, 109, 110	NHS Trusts	105, 107, 112
forecasting, calculation of	109	Office for National Statistics	15, 20, 26, 105, 107-8
GP	2, 26, 49, 90, 107, 112	older people	1, 85-89, 112
practices	107	admission to nursing homes	112
List size	107	Community services	85
Health Action Zone (HAZ)	1, 3, 112	helped to live at home	88
Health Improvement Programme (HImp)	1-3, 26, 49, 54, 60, 62-3, 72-81, 88-90, 104, 108, 110, 112	hospital admission rates	85
health needs assessment	2	Inspection of residential homes	80
Holt's exponential smoothing	109	rehabilitation	85, 112
hospital admissions	10, 45, 85, 112	residential home	88, 113
rates	10, 45	visits	89
readmission	45	Our Healthier Nation (OHN)	1, 11, 27, 37, 45, 68
incidence rate	11, 15	Overcrowding	108, 113
indicator	1, 3, 26, 45, 49, 68, 72-8, 85-6, 88, 90, 104, 112-3	Partnership	37, 112
inequalities	i, 2, 36, 59, 60	pathology laboratories	11, 106
immunisations	77, 79	patient information system (PIS)	105
children	77, 79	pharmacist	90
life expectancy	26, 59	population	2, 3, 10-1, 15, 27, 49, 59, 62, 85, 88-9, 105-8, 111-3
lifestyle survey	59, 60, 106	ageing	10
Local Authority	77, 106, 111	estimates	105
		migration	105
		projections	3, 105
		sub-district	108

	Page		Page
postcode	105-6	smoking	i, 15, 26, 54, 59-61, 104, 106
prediction intervals	11, 37, 109	adults	59
prescribing	2, 49, 90-103, 107, 112-3	cessation	59
antibiotic prescribing	91	children	60
aspirin therapy	36	maternal	68
combination products	90	prevalence	15, 59, 60, 113
generics	90	tobacco advertising	59, 60
inhaled corticosteroids	90	social services	72-8, 85, 89, 111-3
limited clinical value	90	social services performance indicators	72-8, 85, 89
modified release products	90	socio-economic	59
preventers	90	South Yorkshire Coalfields Health Action Zone (SYCHAZ)	1
prevention	59, 77	stroke	27, 113
primary care	1, 59, 107, 112-3	deaths	27
Primary Care Group(s) (PCG(s))	1-3, 10-11, 15, 27, 41, 49, 54, 104-8, 113	suicide	45, 49, 113
Primary Care Trusts(s) (PCT(s))	1-3, 10-11, 15, 27, 41, 49, 54, 104-8, 113	deaths	45, 113
public health common dataset	107	prisons	45
quality protects	72-8	surveys	59, 62, 106
quintiles	108	targets	i, 1-3, 37, 62, 68, 80, 85, 104, 108-10, 112-3
regeneration	3	local	1, 20
Regional Health Authority	105, 110	HimP	2, 26, 60, 62-3, 76, 80, 85, 88-9, 108
registrars	105, 107	national	27, 60, 62, 68, 74-5
Respiratory Disease	i, 54-58, 59, 113	technical details	108
air quality	107	teenage conceptions	68, 107
PM10 levels	54	time series	11, 20, 37, 109-10
revascularisation	27, 113	Townsend	105, 108, 110, 113
angioplasty (PTCA)	27, 113	Trent	11, 15, 26, 59, 60, 105-6, 113
bypass graft surgery (CABG)	27, 111, 113	Trent Cancer Registry	11, 15, 26, 106
Rother Valley PCG	11	unemployment	108, 113
Rotherham PCG	3, 110, 113	young people	68, 75, 76, 80
<i>Saving Lives: Our Healthier Nation</i>	1, 11, 27, 45, 68		
screening	20, 106		
sexually transmitted disease (STD)	20		