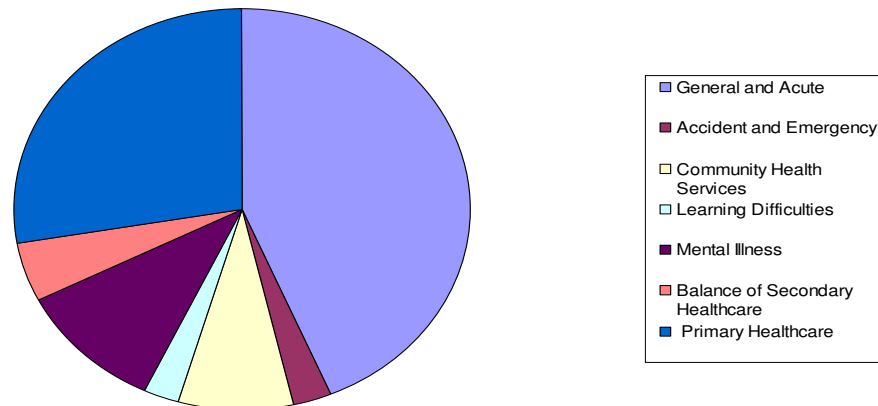


Annex X: Assessing the impact of the recommendations

Current position

1. NHS Yorkshire and the Humber delivers healthcare to over five million people and in 2008-09 its PCTs will be responsible for managing a budget of around £7.5bn. Figure 1 indicates the high level spend by service area in 2006-07 across Yorkshire and the Humber.

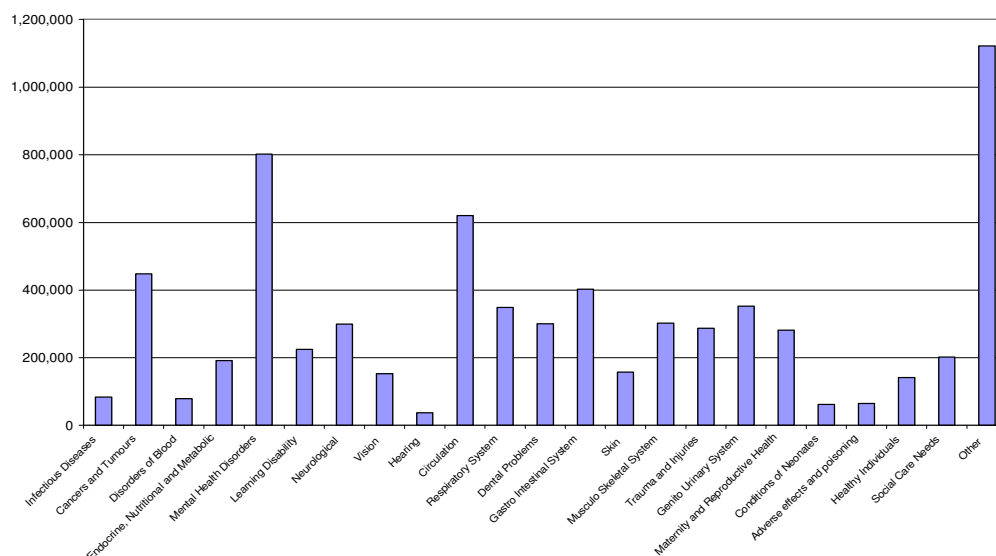
Figure 1: Healthcare Expenditure by sector, 2006-07



Source: ASF accounts, 2006-07

2. Programme budget information allows expenditure to be broken up by disease area. Figure 2 shows the breakdown for 2006-07. These figures mask wide variations in PCT spending, for example there is a 100% variation in spend on mental health services across PCTs in Yorkshire and the Humber.

Figure 2: Programme budget spend, 2006-07



Source: Department of Health

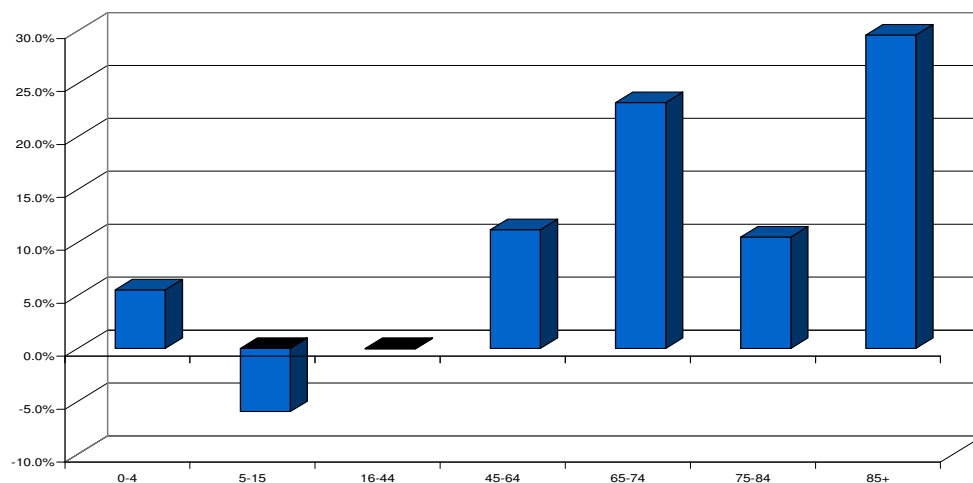
Future projections

3. Future projections of healthcare activity and expenditure are likely to be dependent on three interrelated factors:
 - Underlying population change
 - Change in disease prevalence
 - Other growth in activity, usually relating to changes in service provision, for example access targets

Underlying population change

4. Figure 3 below sets out the high level changes in the population structure projected in Yorkshire and the Humber between 2005 and 2015. Overall population is projected to grow slightly, but the main changes are in the population structure by age band.
5. Projections indicate relatively high growth in age bands above 45, (particularly in the 65-74 and 85+ group); and relatively low growth for the under 45s (including negative growth for the 5-15 age group).

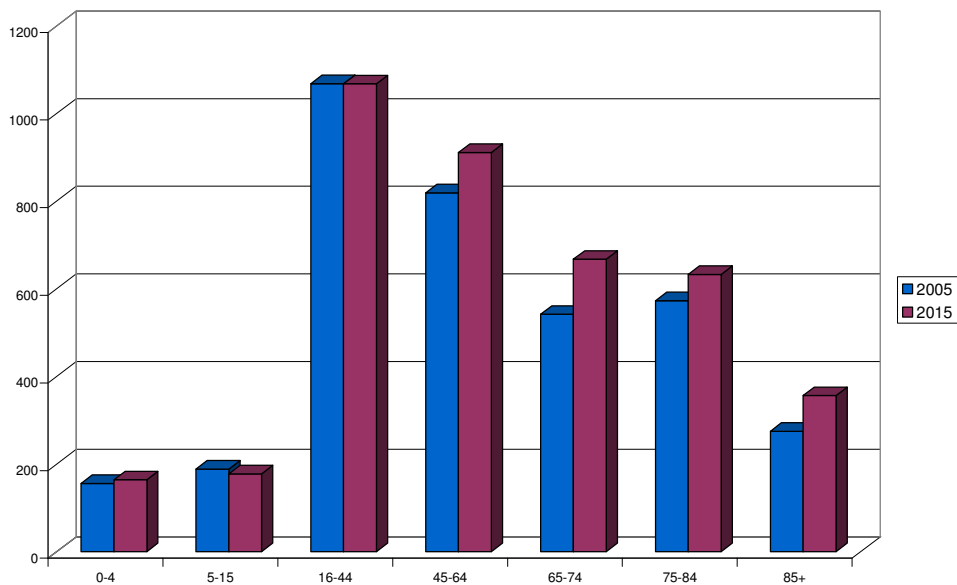
Figure 3: Percentage change in population in Yorkshire and the Humber 2005-2015.



Source: YHPHO based on ONS estimates.

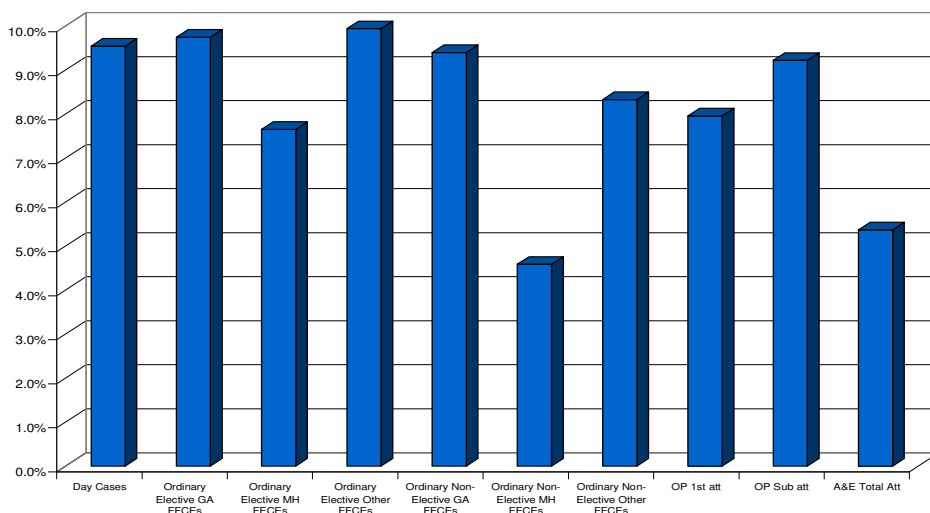
6. This changing demographic structure and increasing dependency ratio will place an additional burden on the NHS. On average, over 85s are the highest consumers of healthcare per person, and receive around 4 times more healthcare than the average person. Figure 4 and 5 provide estimates of the additional costs and activity resulting from demographic change over this period.

Figure 4: Change in secondary care costs resulting from demographic change: 2006-07 to 2015



Source: YHPHO, based on DH age-cost figures

Figure 5: Change in secondary care activity resulting from demographic change: 2006-07 to 2015



Source: YHPHO

- Based on current patterns of service delivery, expected growth secondary care activity resulting purely from demographic change is between 4% and 10%, and real terms secondary care cost increases are projected to be in the region of 9%.

Changes in patterns of disease.

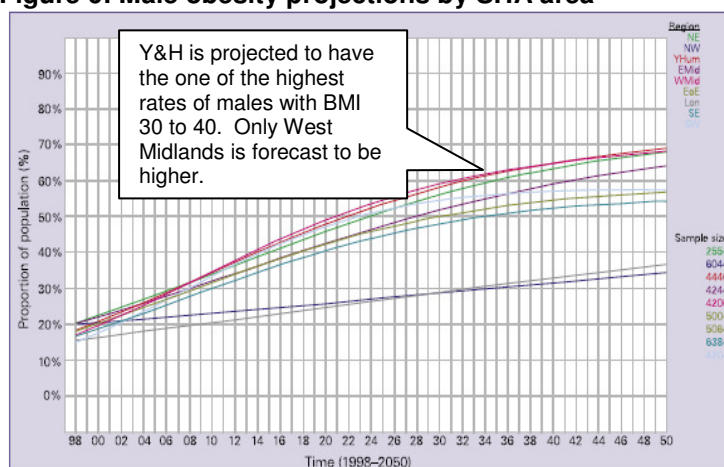
- Yorkshire and the Humber already has a range of challenges relating to the underlying needs of the population, for example it has the highest rate of alcohol consumption in England, and in 2003 25% of males and 24% of females were obese.

9. These and other factors have led to Yorkshire and the Humber having well below average life expectancy, with 1,800 more deaths per year in under 75s compared to the national average.
10. It is very difficult to accurately assess the changing impact of disease prevalence, but there is a range of evidence that give a high level assessment of the likely scale of the effect.
11. The 'Staying healthy' recommendations focus on interventions around obesity, smoking and alcohol and this analysis focuses on the broad impact of these factors on demand for healthcare.

Obesity

12. Obesity is commonly defined by reference to Body Mass Index (BMI). A BMI of over 30 defined as obese, and a BMI over 35 as morbidly obese. Rates of obesity have increased sharply since the mid 1980s and one in four adults are now obese. Obesity is responsible, or partly responsible for premature deaths associated with diabetes, coronary heart disease, stroke and a range of cancers.
13. Projections from the Foresight obesity report¹ (Figures 6 and 7 below) indicate that recently trends in growth in obesity rates will continue, and between now and 2050, Yorkshire and the Humber will have the highest rates of obesity in females of any SHA area in the country.

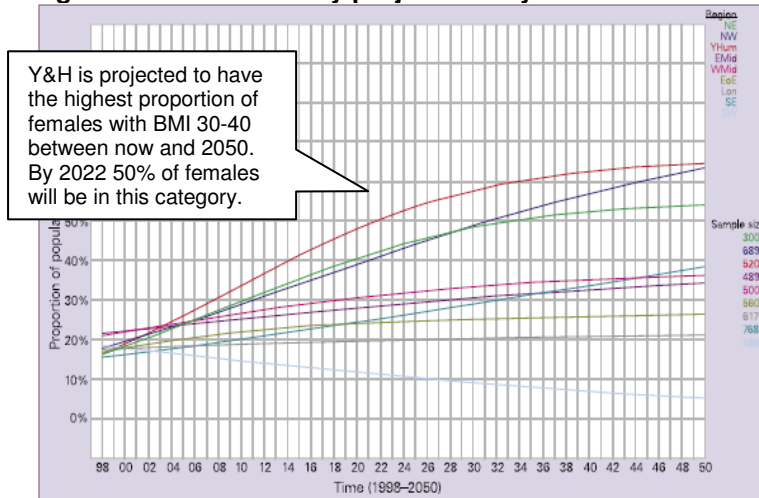
Figure 6: Male obesity projections by SHA area



Source: Foresight 2007

¹ Foresight: Tackling Obesity, Future Choices. Government Office for Science, 2007

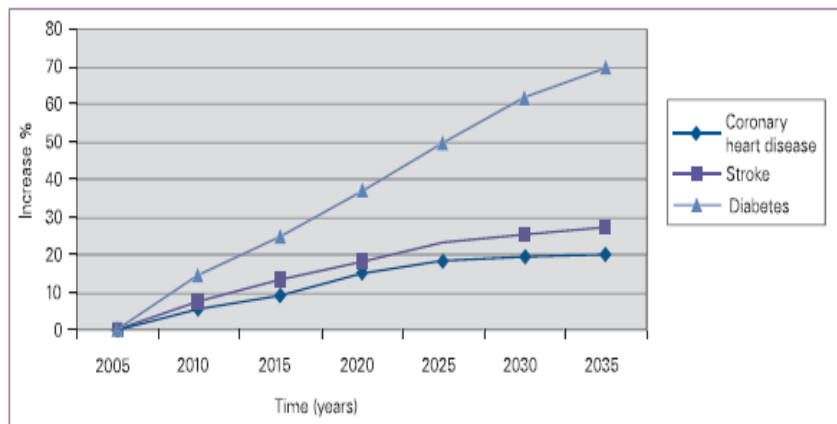
Figure 7: Female obesity projections by SHA area



Source: Foresight 2007

14. The impact of this rising obesity on disease prevalence and costs to the NHS is difficult to predict. Obesity impacts differentially across different individuals and interactions with other lifestyle factors can be complex.
15. The Foresight report also carried out a microsimulation to use the available evidence to calculate the prevalence of disease resulting from obesity. Figure 8 and 9 below shows the high level impact, and cost estimations of this nationally.

Figure 8: The impact of obesity on disease prevalence



Source: Foresight, 007

Figure 9: Additional cost to the NHS of increasing obesity

| | Cost/year (£ billion) | | | |
|---------------------------------|-----------------------|------|------|------|
| | 2007 | 2015 | 2025 | 2050 |
| Diabetes | 2.00 | 2.20 | 2.60 | 3.50 |
| Coronary heart disease | 3.90 | 4.70 | 5.50 | 6.10 |
| Stroke | 4.70 | 5.20 | 5.60 | 5.50 |
| Colorectal cancer | 0.45 | 0.50 | 0.53 | 0.50 |
| Breast cancer | 0.27 | 0.29 | 0.32 | 0.31 |
| NHS cost (all related diseases) | 17.4 | 19.5 | 21.5 | 22.9 |

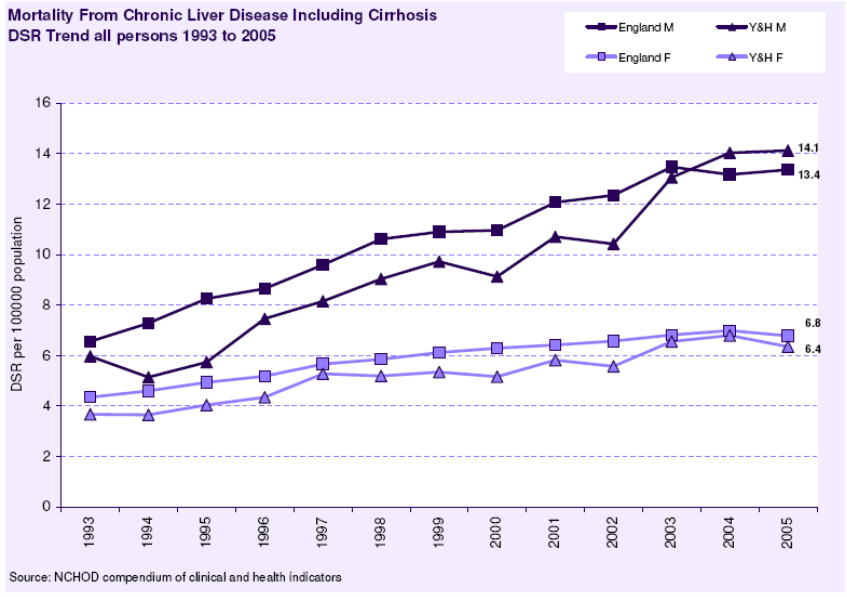
Source: Foresight, 2007

16. These high level figures should be treated with caution but indicate an overall increase in cost to the NHS of over £2bn between 2007 and 2015. On this basis, if obesity rates were growing at the same rate across the country we would expect the additional burden to be in the region of £200m per year by 2015. However, given that Yorkshire and the Humber is projected to have much higher increases in prevalence than average, the costs could be considerably higher.

Alcohol

17. At present, over a third of adults in the region (nearly half of all men and over a quarter of all women) drink more alcohol than the recommended daily allowance – more than anywhere else in the country.
18. Yorkshire and the Humber has the third highest prevalence of ‘binge drinking’ in England after the North East and North West (22% compared to England average of 18.6%). And, along with the North East, our region has the highest percentage (5%) of people dependent on alcohol compared to the national average (3.6%). In line with national trends, deaths from chronic liver disease have almost doubled in the region in the past ten years.
19. There are around 650,000 hospital attendances due to alcohol misuse in the year. The estimated cost to healthcare services alone of dealing with the impacts of alcohol misuse is approximately £170million, and this figure is likely to increase if alcohol misuse is allowed to continue unchecked.

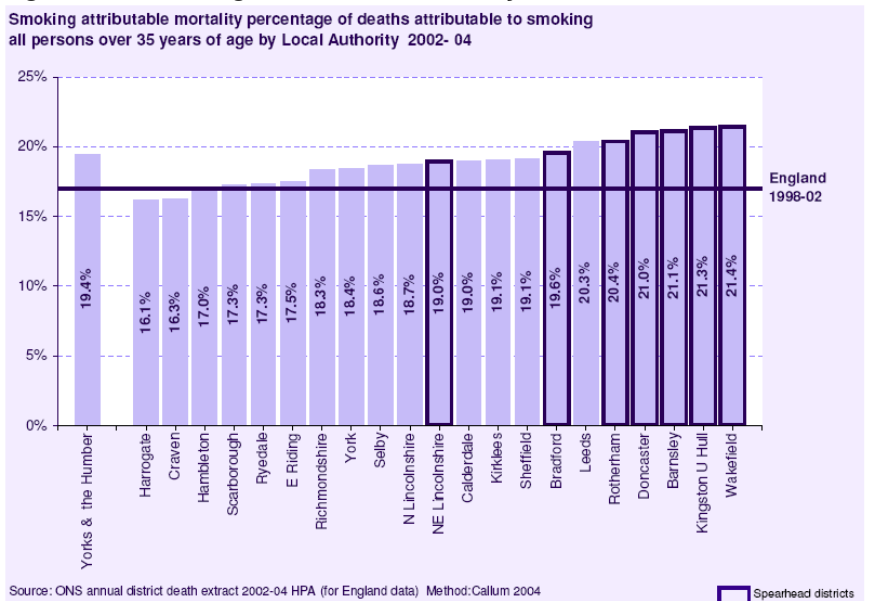
Figure 10: Trends in mortality from chronic liver disease including cirrhosis



Smoking

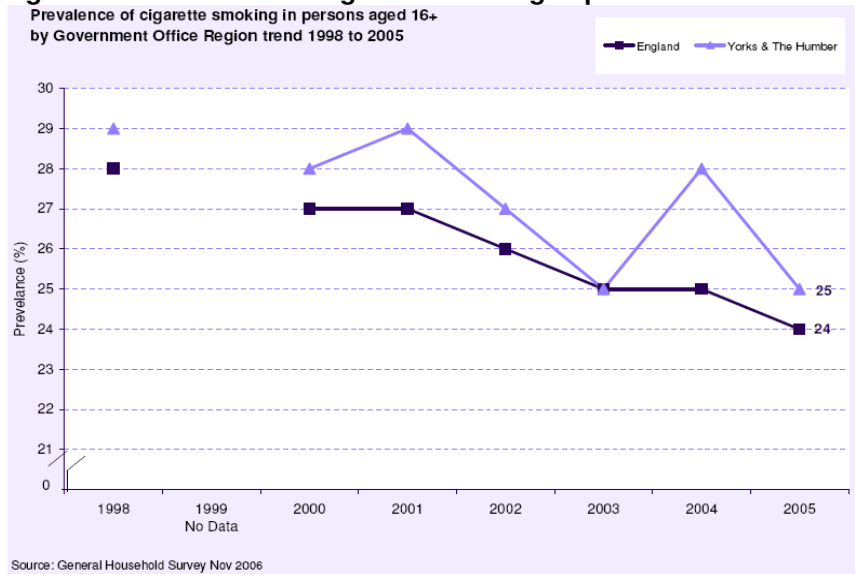
- 20. Nearly 10,000 people continue to die each year in the region from smoking-related causes: it is our biggest killer and is responsible for around 19% of deaths of over 35 year olds. Figure 11 shows smoking attributable mortality across Local Authorities in Yorkshire and the Humber.

Figure 11: Smoking attributable mortality, LAs in Yorkshire and the Humber



21. Smoking is also a key contributor to health inequalities. While smoking prevalence overall has been falling, this masks the continuing high levels of smoking by people in routine and manual occupations – currently at 31% compared to 17% of people in managerial or professional groups.

Figure 12: Prevalence of cigarette smoking in persons 16+



22. NHS costs are not the only costs incurred by changing lifestyle habits. There are also likely to be impacts in terms of loss of work, and reduction in the general quality of life.

Impact of the recommendations

23. The recommendations included in this report are wide ranging and it is very difficult to accurately assess their impact, not least given the knock on impacts that the recommendations will have on each other and the differing implementation trajectories across PCTs.
24. What follows is a high level and illustrative assessment of the broad impact of the main recommendations set out in this report. PCTs will consider the impact and affordability of implementing the recommendations as part of their strategic plans.

Staying healthy

25. The Wanless review set out a range of scenarios about the costs and patterns of delivery of services in the future. The ‘fully engaged’ scenario described a state where there is higher levels of public engagement in relation to health care; a focus on preventative

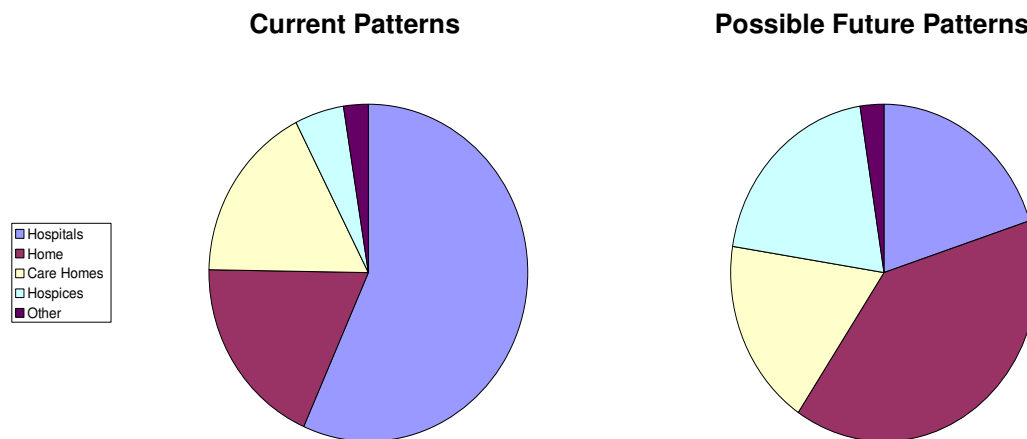
services; higher patient satisfaction; and costs, although rising, that are below the other two scenarios.

26. The proposals set out in the Staying Healthy section of the report, along with other national and local strategies aimed at health promotion and disease prevention will support the movement towards the fully engaged scenario. Achieving the fully engaged scenario would mean a far lower spending requirement for NHS services, and deliver better outcomes and life expectancy.

End of life

27. The recommendations of the End of Life chapter of the report are concerned with improving the quality of care, and increase the public awareness and support patients' preferences around their place of death.
28. Around 50,000 people die each year in Yorkshire and the Humber, and this figure is falling over time. At present around 19% of people die in their own home compared to 57% of people dieing in hospitals. In Yorkshire and the Humber around 60% of people have expressed preference to die in their own home. Over time, and as a result of these recommendations we would expect a gradual shift in this direction, as indicated in Figure 13.

Figure: 13 Current and future patterns of place of death



Source: Based on ONS Annual Death Extract, 2005.

Planned Care

29. The recommendations in the planned care chapter are concerned with improving planned care pathways to secure better integration of services through the pathway, care in the appropriate setting and higher quality services.

30. The recommendations will have a range of effects on the way that services are delivered. Key changes include the proportion of outpatient activity carried out in primary/community settings compared to hospitals, and the proportion of day case rates for key procedures.
 - Outpatient appointments
31. Outpatient appointments are forecast to rise over time as a result of changing demographics and disease prevalence and access targets. However, a crude estimation is that as many as 40% of outpatient appointments currently carried out in hospitals could be carried out in alternative settings within the next 10 years as a result of the changes set out here. This would translate into almost 2.4 million outpatient appointments per annum.
 - Day case rates
32. At present, Yorkshire and the Humber achieves an average day case rate of 72.9% for the basket of 25 procedures. If organisations reached the upper quartile day case rate, the savings would be in the region of £1.7m per annum.
 - Average length of stay
33. There are wide variations in the average length of stay across organisations in Yorkshire and the Humber. According to the better Care, Better Value analysis, there is the potential for a 13% reduction in bed days by moving up to the top quartile. This could generate efficiency savings of £94m per annum.

Maternity and newborn care

34. The aim of the maternity and newborn care pathway work aims to strengthen the commissioning of maternity services to improve capacity, improve quality of services and reduce inequalities.
35. The recommendations will also offer greater choice around maternity services, to comply with the Department of Health's 'Maternity Matters' publication. The high level effects of these changes could be as follows:
 - Home births
36. At present only 1.8% of the 63,000 births per annum in Yorkshire and the Humber are carried out at home (the England average is 2.5%). This is despite there being a much higher proportion of patients having a preference for home births. As a result of the changes set out in the chapter, we would anticipate that as many as 6,000 births per year would be carried out at home.

- Low birth weight babies
37. There are wide variations in the proportion of low birth weight babies across Local Authorities in Yorkshire and the Humber. These are strongly linked with the deprivation of the area and can perpetuate health inequalities. The recommendations set out are aimed at reducing this gap by levelling down the LAs with higher low birth weight rates.

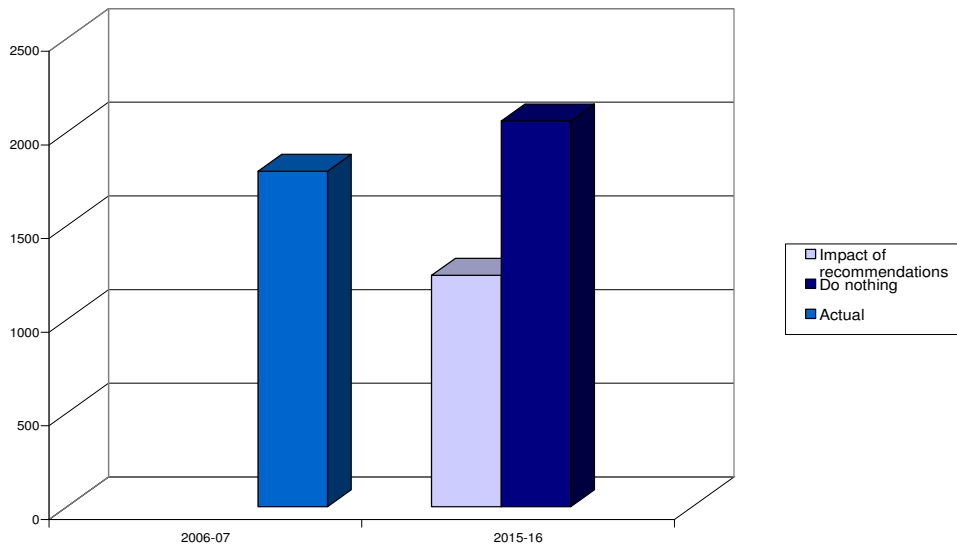
Children's services

38. Yorkshire and Humber has some of the worst health outcomes for children in the country. There are also wide and unacceptable variations in the care received by children across Yorkshire and the Humber. The recommendations in the report will lead to:
- Reductions in infant mortality, and variations in infant mortality – currently at 5.8 per1000 and well above the national average
 - Reductions in mortality in under 15s – again Yorkshire and the Humber is well above the national average
 - Tackling the increasing problem of obesity in children – particularly amongst girls.
 - Tackling the wide and unexplained variation in A&E attendances by children.

Acute services

39. The acute episode pathway chapter sets out a broad range of recommendations for improving the way services are delivered across all NHS services.
40. The key principles underpinning the recommendations are that care should be delivered through an integrated system; common standards should apply 24 hours a day, 7 days a week, care should be delivered close to home as long it is safe and effective; very specialised care should be delivered only in centres that have the right level of expertise; robust information and technology must underpin each part of the pathway; and consistent signposting should ensure patients can navigate though the system.
41. The effects of the recommendations will be wide ranging, one of the key ones will be to reduce to accident and emergency attendances by up to 40% over the next 10 years. This is illustrated in Figure 14 below.

Figure 14: Impact of the acute episode recommendations on A&E attendances



Source: SHA analysis

Mental Health

42. The mental health pathway makes recommendations around the promotion of mental health wellbeing across the whole population, and responsive, integrated and person centred care for those who are identified as having a problem with their mental health.
43. Among other things we would anticipate that this could lead to a 50% reduction in mental health inpatient admissions in the next ten years.

Long term conditions

44. The long term condition recommendations focus on improving care for diabetes, stroke and the elderly and frail. These recommendations look to improve care through more proactive and better management of long term conditions in community settings.
45. The overall impact of these recommendations could be to reduce emergency admissions by up to 30% in 10 years time.