Obesity and Diabetes Programmes in England

Capturing the State of Play in July 2011

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Foreword

This report gives an overview of the status of obesity and diabetes and related programmes in England, using data collected through Freedom of Information (FOI) requests sent to Primary Care Trusts in July 2011.

Diabetes and obesity are growing public health concerns in our society. The aim of the Survey was to analyse PCT initiatives in controlling the levels of obesity and diabetes in England and to highlight possibilities for further improvement.

It was necessary to collect as much information as possible from the Primary Care Trusts before they are abolished under the Health and Social Care Act. As a member of the Health Select Committee I followed the progress of the Bill. I am concerned about the future of the information held by these organisations.

NHS bodies including Primary Care Trusts and Strategic Health Authorities hold a range of data on obesity and diabetes. I have included available local level data in the annexes to this report. The source list includes suggestions for further reading.

Although some of this data is publicly available it is not always easily accessible. I hope that this report draws together the information in a way that is useful to a wide audience including healthcare providers, patients, policy-makers and organizations seeking to reduce obesity in England, and interested members of the public.

I would like to thank Dr Sophie Haines and Samiya Naseer for their help in the preparation of this report.

Every effort has been made to check the accuracy of the information in this report. However it is advised to contact PCTs directly for the most up-to-date information. The raw data collected from the PCTs is held in my office. Please contact me if you wish to consult this information.

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1. Introduction

1. This report gives an overview of the status of obesity and diabetes and related programmes in England, using data collected through Freedom of Information (FOI) requests sent to **Primary Care Trusts** (PCTs) in July 2011. The aim of the Survey was to analyse PCT initiatives relating to obesity and diabetes in England and to highlight possibilities for further improvement. It is envisaged that the report will make this useful information accessible to healthcare providers, patients, policy-makers and organizations, and to interested members of the public.

2. Obesity levels are rising around the world. In the UK, obesity is predicted to affect 60 per cent of adult men, 50 per cent of adult women and 25 per cent of children by 2050.[1] The 2004 Wanless Report, '*Securing Good Health for the Whole Population',*[2] compared obesity to smoking in terms of its associated disease burden and impact on future health.

3. The National Audit Office has estimated that obesity causes at least 30,000 deaths a year in the UK through conditions such as cancer, heart disease, stroke and diabetes.[3] Experts have linked the explosion of diabetes in the UK to rising obesity.[4]

4. In the UK 2.9 million people have been diagnosed with diabetes (2011).[5] By 2025, there will be more than four million people with diabetes in the UK. It is estimated that there are up to 850,000 more people in the UK who have diabetes but have not been diagnosed.[6]

Background to the Survey

5. PCTs commission primary, secondary and community care from healthcare providers and have been responsible for spending approximately 80 per cent of the total NHS budget. The Survey was undertaken in July 2011. PCTs are scheduled for abolition on 31 March 2013 under the NHS reorganisation associated with the Health and Social Care Act 2012. In preparation for their abolition, the 152 PCTs were grouped into 52 PCT clusters in May 2011.

6. PCTs are organised regionally into areas overseen by **Strategic Health Authorities** (SHAs). SHAs manage the NHS locally and provide an important link between the Department of Health and the NHS. There are ten SHAs covering England. Under the current NHS reorganisation SHAs have been grouped into clusters ahead of their abolition by April 2013. There are four such SHA clusters: North of England, South of England, Midlands & East and London.

7. There are nine regional **Public Health Observatories** (PHOs) in England. They collect data and provide information/intelligence on public health issues. At the time of writing their future remains uncertain. PHOs produce information for practitioners, commissioners, policy makers and the wider

community. Each PHO has a specific area of expertise: the South East PHO leads on obesity, while the Yorkshire and Humber PHO leads on diabetes. There is also a **National Obesity Observatory** (NOO) which analyses and reports on obesity and develops guidance for policy makers and practitioners.

8. The Survey was sent to the Chief Executives of PCT Clusters. 21 PCT clusters responded collectively on behalf of their individual PCTs (which remain as statutory bodies), while others distributed the Surveys to their individual PCTs who responded directly. Responses were received from or on behalf of 122 of the 152 PCTs. The Survey questions are listed at Annex I.

9. PCTs provided information from a variety of sources in response to different Survey questions as set out below:

- PCT costs and workforce: 80 per cent of PCTs referred to their published annual reports.
- Obesity prevalence: 80 per cent of PCTs referred to the Health Survey for England (HSE) and the NOO – organizations that collate data at a national level.
- Diabetes prevalence: approximately 65 per cent of PCTs provided local data and PCT-level data based on modeled estimates using the HSE, which is run by the **NHS Information Centre** (NHS IC). 35 per cent referred to the centrally-published statistics (for example the HSE and other tables published by the NHS IC, Yorkshire and Humber PHO and Diabetes UK) but did not provide specific links to the relevant PCT-level data.
- Outcomes of obesity and diabetes: 90 per cent of PCTs referred to the national Quality and Outcomes Framework (QOF), which collates PCT-level data from around the country.

10. Whilst much of the information is available publicly, this report aims to give an accessible overview of the current state of play regarding obesity and diabetes information and programmes, at a time when the future is uncertain for the organisations involved.

Measuring Obesity

11. The UK Faculty of Public Health defines obesity as an “excess of body fat frequently resulting in a significant impairment of health and longevity”.[7]

12. The most common method of measuring obesity is the **Body Mass Index** (BMI), which is calculated by dividing body mass (kg) by height (metres) squared. As Figure 1 illustrates, the **World Health Organisation** (WHO) classifies an adult BMI of between 25 and 29.9 as overweight, and a BMI of 30 or more as obese.

BMI range (kg/m2)	Classification
<18.5	Underweight
18.5 – 24.9	Normal Weight
25 – 29.9	Overweight
30 – 39.9	Obese
>40	Morbidly Obese

Figure 1: World Health Organisation BMI Classification system for adults[8]

13. In the UK, the **National Institute for Health and Clinical Excellence** (NICE) recommends BMI as a measure of obesity. All 122 of the PCTs who responded to the Survey use BMI to measure obesity, and follow the WHO classification shown in Figure 1.

14. BMI requires no specialized equipment and therefore is easy to measure consistently across large populations. However it does have some limitations as a measurement. The Department of Health general information about obesity states that:

> "BMI normally correlates well with the level of body fat for most people. However, certain factors such as fitness, ethnic origin and puberty can sometimes alter the relation between BMI and body fatness. In cases such as this other measurements such as waist circumference and skin fold thickness can also be collected to confirm a person's weight status."[9]

15. For children in the UK, new WHO growth charts are used to define weight status (2009).[10] These take into account the child's height, length and head circumference.

Measuring Diabetes

16. Diabetes comprises a group of disorders with many different causes, all of which are characterized by a raised blood glucose level. This is the result of a lack of the hormone insulin and/or an inability to respond to insulin.

17. There are two main types of diabetes: type 1 and type 2. Type 1 diabetes tends to be diagnosed in childhood but the prevalence of type 2 diabetes increases steadily after the age of 45 years.[11] The NHS emphasises the need for early diagnosis of diabetes so that treatment can be started as soon as possible. The symptoms of type 2 diabetes may not be as obvious as those of type 1 diabetes, as the condition develops slowly.

18. According to Diabetes UK the main symptoms of undiagnosed diabetes include:

- passing urine more often than usual, especially at night
- increased thirst
- extreme tiredness

- unexplained weight loss
- genital itching or regular episodes of thrush
- slow healing of cuts and wounds
- blurred vision[12]

19. Diagnosis of diabetes may occur on the basis of these symptoms or by screening and tests including random/fasting blood glucose tests and oral glucose tolerance tests.

20. PHOs use a statistical process called 'cluster analysis' to better understand the prevalence of type 1 and type 2 diabetes in the UK. PCTs are grouped into five colour-coded categories based on the four main risk factors for diabetes, which are: age; ethnicity; obesity; and deprivation. This is known as the Diabetes Area Classification. Annexes VI and VII contain a description of each colour classification and a list of the PCTs classified under each.

21. The classification follows guidelines set by NICE and uses the following variables:

- % of population aged 40 to 64 years
- % of population aged 65 years or older
- % of population aged 40 years and older from Asian ethnic groups
- % of population aged 40 years and older from Black ethnic groups
- synthetic estimate of obesity
- indices of Deprivation 2007 (average score)"[13]

22. The cluster analysis process (see Paragraph 20) gives each of these six characteristics equal importance. This analysis is used to collect information on risk factors for diabetes and to estimate prevalence at local and national levels.

NICE Guidelines on Obesity and Diabetes

23. **The NICE Clinical Guideline 43 on Obesity (NICE CG43)**, issued in December 2006, is the first national guidance to be produced on the prevention, identification, assessment and management of overweight and obesity in both children and adults. Its target audiences are the public, the NHS, the local authorities and partners in the community, early year settings, schools, workplaces and self help, commercial and community programs. It is the first guidance from NICE with a specific reference guide for the NHS.

24. According to NICE CG43;

> "Investing time and energy in tackling obesity is a good investment for authorities at all levels."[14]

and;

> "As part of their roles in regulation, enforcement and promoting wellbeing, local authorities, primary care trusts (PCTs) or local health boards and local strategic partnerships should ensure that preventing and managing obesity is a priority for action – at both strategic and delivery levels – through community interventions, policies and objectives. Dedicated resources should be allocated for action."[15]

25. NICE CG43 promotes a joined-up approach across organisations including NHS bodies, local authorities, education, community clubs, local media, dietetic services and children's services to fully promote health, for example through diet and exercise. The guideline considers not only the clinical aspects of the obesity, but also the ways in which community development can contribute to a healthier environment.

26. **The NICE Clinical Guidelines on Type-1 Diabetes (NICE CG15)** and **Type-2 Diabetes (NICE CG66)** have been updated over the years to give an overview of the management of type 1, type 2 and gestational diabetes.

27. NICE CG15 and NICE CG66 have been developed to support and inform the management of diabetes in each the WHO categories of diabetes: type 1, type 2, genetic, drug- or chemical-induced and gestational diabetes. Information on all these categories, and supporting implementation tools, are made available in the NICE Online Pathways.[16]

28. This advice relies on accurate initial diagnosis and timely treatment. The NICE Guidelines therefore emphasise the need for structured education programmes for both patient and carer, as diabetes treatment involves a lot of self care.

2. Survey Results - Obesity

Prevalence of Obesity

29. The prevalence of obesity in England has more than doubled in the last twenty-five years.[17] Although virtually every country in the world has seen a recent increase, the rate of increase in England has been particularly high.[18]

30. The Survey revealed a number of trends in obesity prevalence in England. Prevalence was shown to vary over time and also by gender, ethnicity, age and region. These factors are discussed below.

Prevalence of obesity over time and by gender

31. Obesity prevalence levels are illustrated in Figure 2. PCTs provided links to the NOO web page which contains HSE data from 1993-2008. The data show that 24.5 per cent of adults in England were obese in 2008.

32. More recent figures (for 2009 and 2010) are available on the NHS IC website and have been included in the Figure 2 below. These show that after falling slightly in 2009, prevalence increased to 26 per cent for both men and women in 2010. Since 1993, prevalence among men has almost doubled, and prevalence among women has increased by almost 60 per cent. On average the increase is more than 75 per cent.

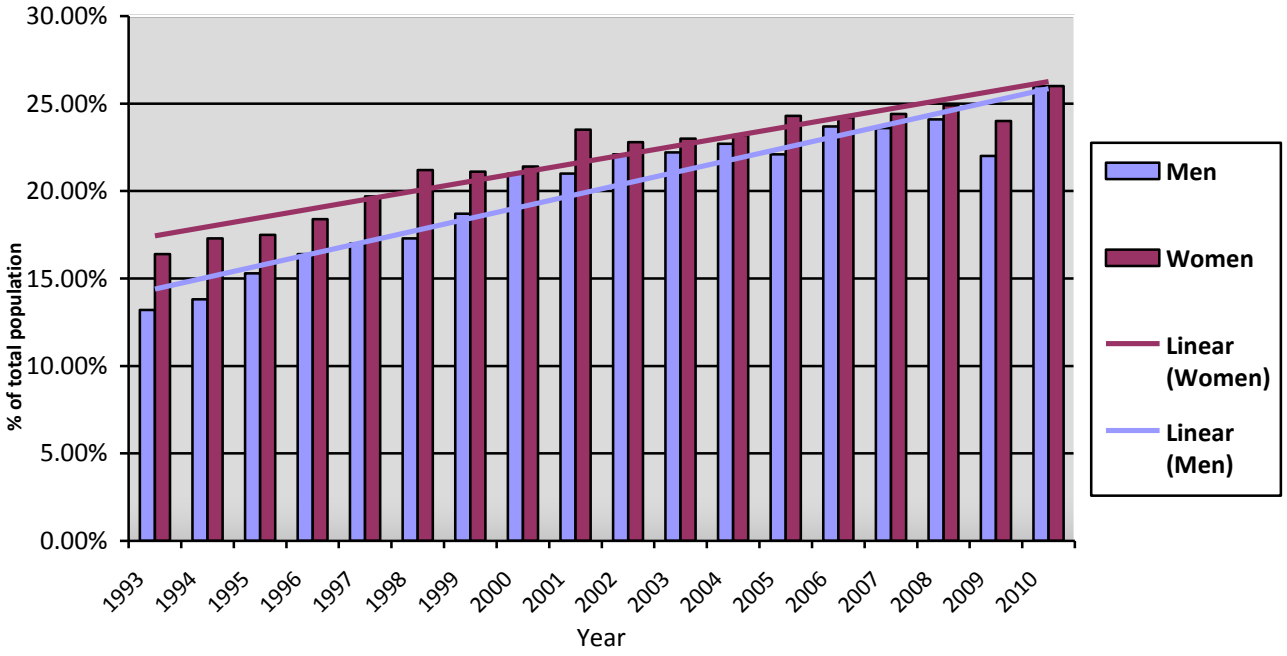

Figure 2: Obesity (BMI 30 or more) prevalence in adults (aged 16 and over) in England[19] [20]

33. Figure 2 shows that obesity prevalence has been persistently higher among women than among men, until 2010 when both figures were equal.

Prevalence of obesity by ethnicity

34. The Survey suggests that ethnicity is an important factor relating to obesity prevalence and efforts to tackle obesity. A regional cross-section of PCTs that highlighted ethnicity includes NHS Dudley, NHS Walsall, NHS Worcestershire, NHS Bolton, NHS Blackburn and Darwen and NHS Swindon among others. These PCTs provided specific information on prevalence and access to services on obesity by ethnicity.

35. Other PCTs including NHS Tees, NHS Bedfordshire, NHS Suffolk and NHS Buckinghamshire referred to data collated by the NOO. The most recent information was collected in the HSE 2004 and published by the NHS IC in 2006. These show variation in BMI levels among various ethnic groups, as represented in Figure 3. Black Caribbean and Black African groups have the highest prevalence of obesity while Chinese and Bangladeshi groups have the lowest prevalence of obesity.

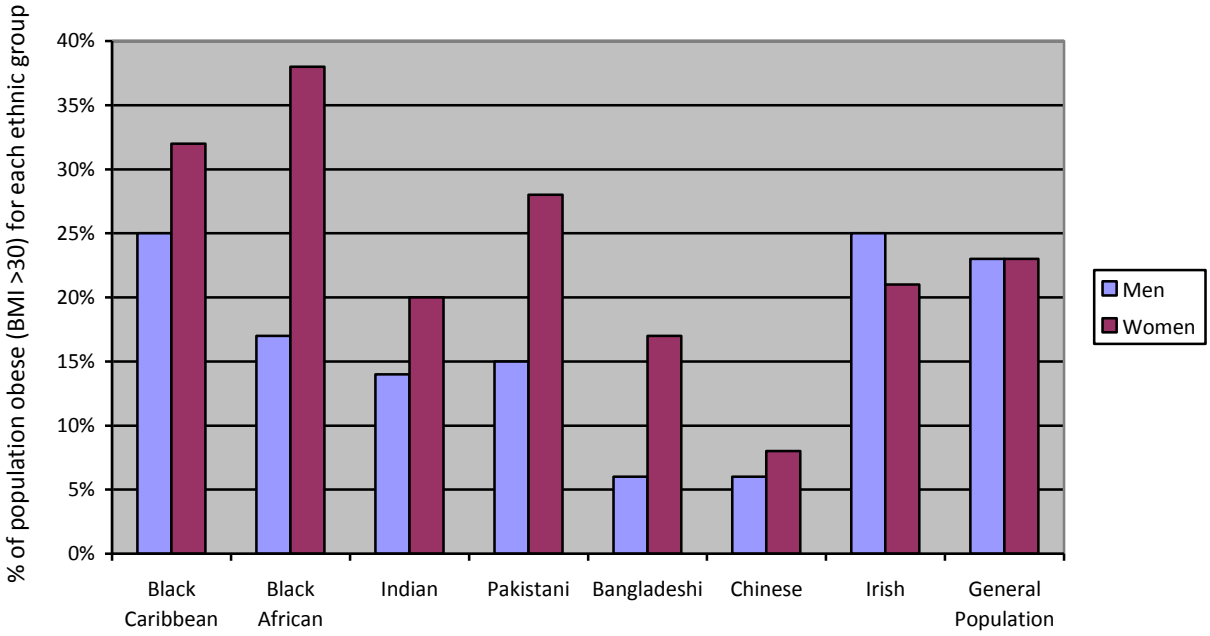

Figure 3: Prevalence and trends of Obesity among British ethnic minorities (2004)[21]

PCT Case Study: NHS Walsall

36. NHS Walsall's *Healthy Weight Programme* started in 2008. The 2009 programme report states that

> "in Walsall, estimates vary that between 37,000 (19 %) and 66,000 (33 %) of adults are obese and up to 57% are overweight or obese." [22]

The report contains figures for the percentage of patients achieving target weight loss through three services: Level 2 (GP/Pharmacy based services); Slimming World; and Weight Watchers. For 12-week programmes, achieving target weight loss was considered to be achieving 5 per cent loss of the starting weight. Figure 4 shows a graph from the report, which suggests that Asian and Asian British patients achieve considerably lower levels of weight loss in each service type than their White British counterparts.

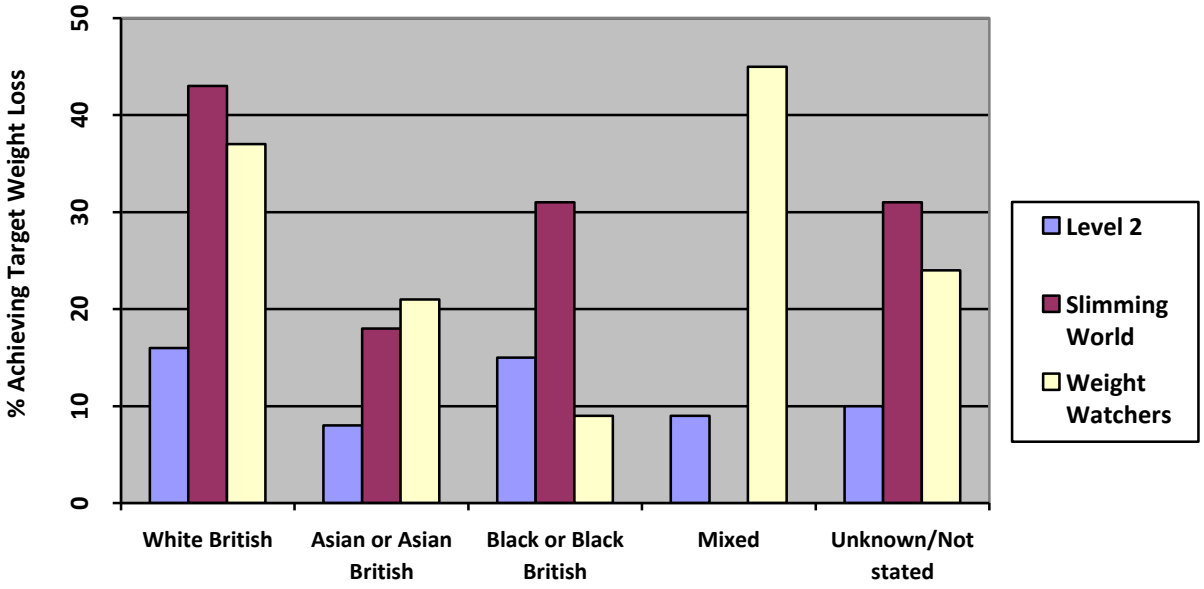

Figure 4: Percentage of patients achieving target weight loss for each service by ethnicity[23]

37. The data for other ethnicity groups are less conclusive. According to NHS Walsall;

> "Further work needs to be undertaken within this area to examine potential links and contributing/compounding factors more carefully." [24]

Prevalence of obesity by age

38. The Survey also revealed age to be an important factor in determining trends in obesity. Almost 70 per cent of PCTs referred to age-related data collated by the NHS IC. These data show the number of 'finished admissions episodes' (FAEs) for people with a primary or secondary diagnosis of obesity. An FAE is the first period of inpatient care under one consultant within one healthcare provider, for example a hospital. FAEs are counted against the year in which the admission episode finishes. One person may have more than one admission within the year.[25]

39. This data, represented below in Figure 5, shows that the number of people with primary or secondary diagnoses of obesity who are undergoing treatment rises with age to reach a peak at age 55-64.

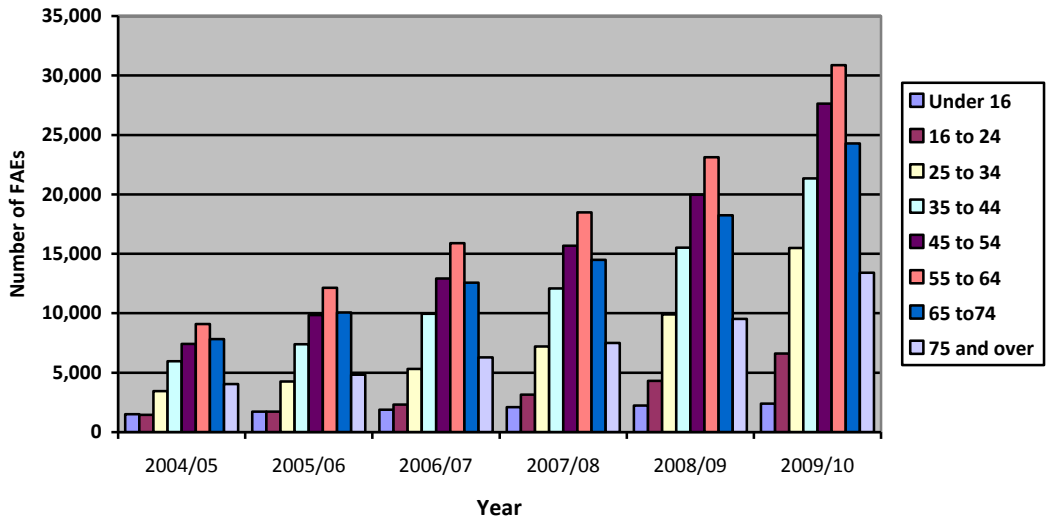

Figure 5: Finished admission episodes with primary or secondary diagnosis of obesity[26]

40. As Figure 5 shows, FAEs tend to then reduce among older adults (aged 65+). Forty-four per cent of PCTs acknowledged this in the Survey.

41. PCTs including NHS Coventry Teaching, NHS South Staffordshire, NHS Stoke on Trent, NHS Southampton City, NHS Hampshire, NHS Isle of Wight and NHS Portsmouth identified childhood obesity as a particular problem. They note that if childhood obesity is not controlled, it is likely to perpetuate the problem of obesity among the general population, as most obese children grow up to become obese adults. These PCTs have implemented programmes targeted to help both children and adults reduce their weight or maintain a healthy weight.

42. The Survey revealed that 58 per cent of PCTs have programmes specifically aimed at childhood obesity, while 22 per cent would like to incorporate them into their future plans.

Prevalence of obesity by region

43. Almost 38 per cent of PCTs referred to NHS IC data organised by SHA region. Figure 6 shows that FAEs with primary or secondary diagnoses of obesity are highest in areas covered by the North West SHA, North East SHA, West Midlands SHA and East of England SHA. Areas covered by the South Central and South East Coast SHAs have the lowest levels of FAEs.

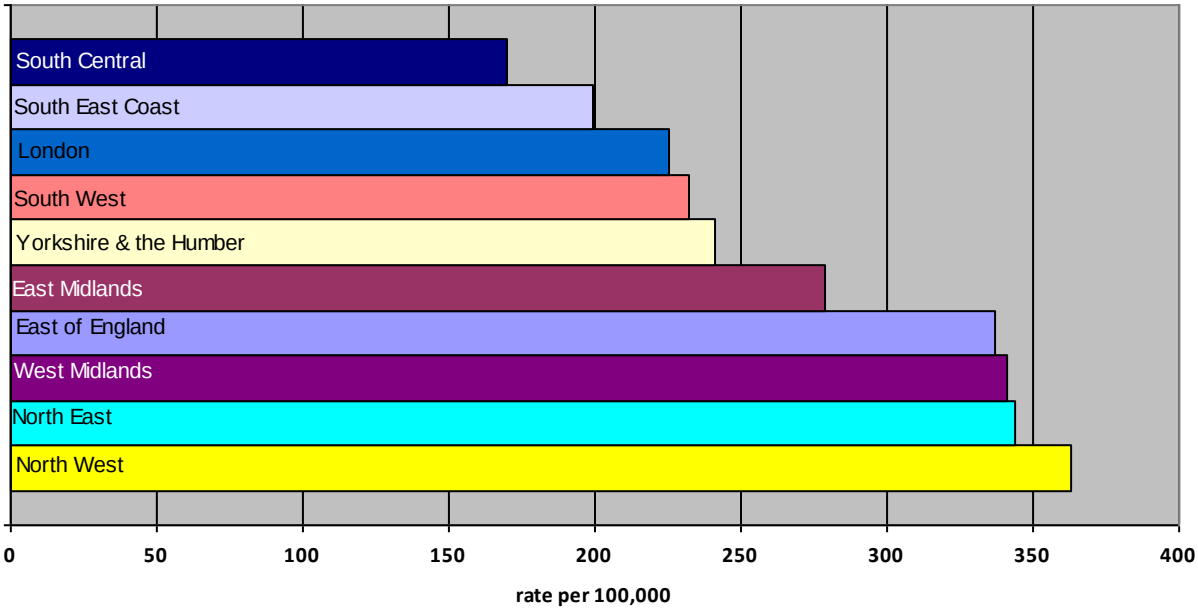

Figure 6: FAEs with primary or secondary diagnosis of obesity per 100,000 of population, by SHA of residence (2009-2010)[27]

44. These regional variations may be the result of a variety of factors. PCTs in clusters including NHS Black Country, NHS Staffordshire, NHS North of Tyne, NHS West Mercia and NHS Somerset highlighted regional differences in obesity prevalence in the Survey, but were unable to identify a particular cause.

45. It is interesting to note that whilst the highest rate of admissions episodes with primary or secondary diagnoses of obesity were in the North West, North East, West Midlands and East of England SHAs, the PHO which leads on obesity is based in the South East.

Outcomes of Obesity

46. Obesity leads to a plethora of difficult health conditions. The list below outlines some of the main health risks of obesity identified by the Survey – NHS West Kent provided a particularly easily accessible list.[28]

- 90% of people with Type 2 diabetes have a BMI of more than 23
- Obesity is a contributing factor to heart failure in 10% of patients
- 85% of cases of hypertension occur in people with a BMI of more than 25
- People who are overweight or obese and have hypertension have an increased risk of ischaemic stroke
- 10% of all cancer deaths amongst non-smokers and 30% of endometrial cancers are related to obesity
- Obesity increases the risk of colon cancer by nearly three times in both men and women

- 30% of overweight people have gall stones compared to 10% of non-obese people
- Obesity contributes to infertility and impotence.

47. The rise in the prevalence of obesity has resulted in adverse outcomes for both patients and services. The NOO and the WHO note that outcomes of obesity include not only physical and psychological effects on the patient; they also bring societal pressures whereby growing discrimination against obese people may reinforce wider social inequalities and perpetuate a situation where the least well off are the least well.

48. The rise in obesity prevalence and in the number of patients in need of medical assistance for obesity and related conditions has caused increased pressure on clinical care for obesity across a range of health specialisms.

49. The Survey revealed that the PCTs recognise a large number of health conditions related to obesity. The most commonly-cited conditions are listed below:

- impaired glucose tolerance (pre-diabetes)
- type 2 diabetes
- high cholesterol or triglyceride levels
- high blood pressure
- coronary heart disease
- stroke
- sleep apnoea (breathing patterns are disturbed during sleep owing to excess weight around the chest, neck and airways)
- fertility problems
- complications in pregnancy (including an increased risk of high blood pressure during pregnancy, diabetes during pregnancy, pre-term labour, Caesarean section)
- stress incontinence
- gallstones
- cancers (including colon, breast and endometrial (womb) cancer)
- gout
- fatty liver

50. The conditions listed above all require clinical interventions. Direct costs caused by obesity are estimated to be £4.2 billion per year and are forecast to more than double by 2050 if current trends continue.[29] Wider consequences, such as obese people being unable to work, are expected to add a further £38.5bn to the bill.[30]

Treatment of obesity - Finished Admission Episodes (FAEs)

51. The Survey shows that the outcomes of obesity among women have been more adverse than those among men or children suffering from obesity.

52. Figure 7 shows the increase in treatment episodes over the past decade.

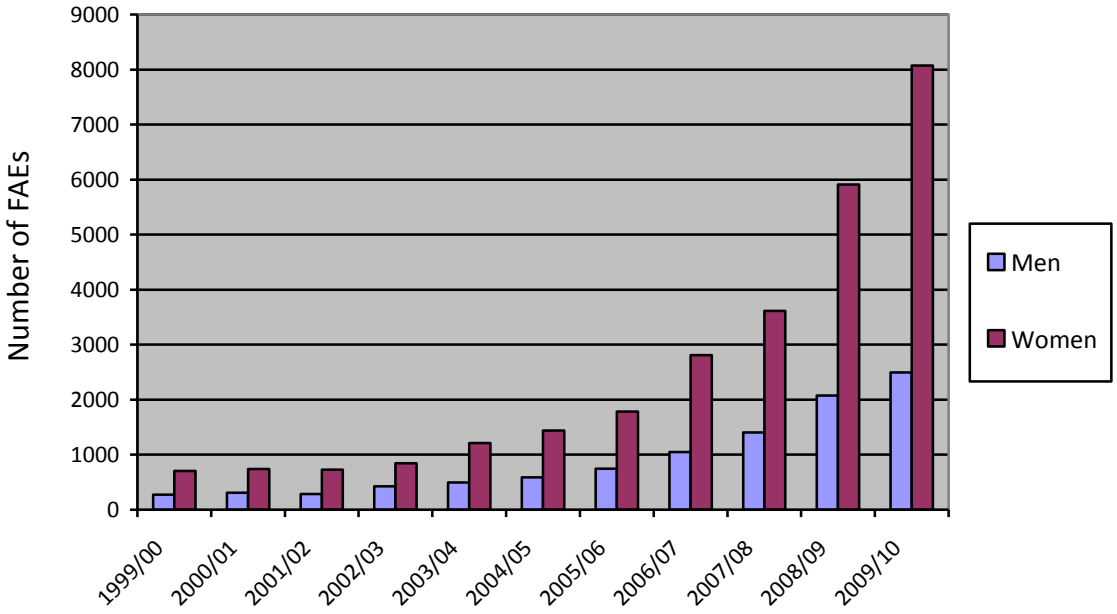

Figure 8: Finished Admission Episodes with a primary diagnosis of obesity, by gender, 1999/00 to 2009/10 (England)[31]

53. In NHS hospitals the number of FAEs with a primary diagnosis of obesity, among people of all ages, shows a more than tenfold increase between 1999-00 and 2009-10.

54. The increase is particularly steep for women: in 2009-10 there were more than eleven times more FAEs for women than in 1999-2000.

55. In 2009, 1.45m 'prescription items' were dispensed for the treatment of obesity. This is more than eleven times the number of items dispensed in 1999 (127,000).[32] Prescription items include drugs such as Orlistat and treatments such as bariatric surgery. These figures demonstrate the increased pressure on health services.

Bariatric surgery

56. The difference between men and women is also clear in figures relating to bariatric surgery (e.g. gastric band surgery or gastric bypass surgery), provided by PCTs including NHS Hertfordshire, NHS Bristol, NHS Heywood, Middleton and Rochdale and NHS Trafford.

57. On the NHS, these procedures are usually reserved for patients a) who are morbidly obese (BMI is over 30 and their obesity is affecting their health) and b) for whom treatment options such as dieting and medication have been unsuccessful.

58. The chart in Figure 8 (below) shows the number of Finished Consultant Episodes (FCE) for patients with a primary diagnosis of obesity undergoing bariatric surgery, by gender. A FCE is defined as a continuous period of admitted patient care under one consultant within one healthcare provider. Of 7,214 patients who opted for bariatric surgery in the year 2009 - 2010, 5762 (80%) were female.

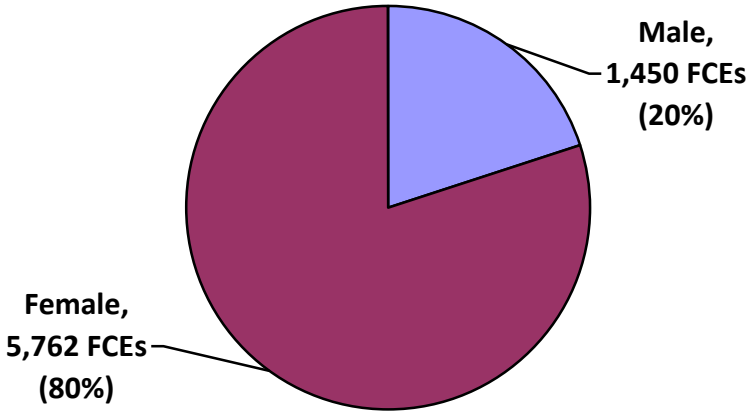

Figure 8: Finished Consultant Episodes with a primary diagnosis of obesity and a main or secondary procedure of 'Bariatric Surgery' in England, by gender, 2009/10[33]

Health Programs: Managing Obesity

59. All 122 PCTs who responded to the Survey were running a number of programmes to tackle obesity. These programmes include broader services that focus on improving eating patterns and levels of physical activity, well-being and self esteem, all of which are recognised as contributory factors to the development of obesity. For example, according to NHS Southampton:

> "many services offered to tackle obesity are part of routine service provision as opposed to specific weight management schemes and aim to change behaviour around diet and physical activity over time and not just tackle obesity as a disease".

60. The Survey showed that PCTs work in collaboration with a range of specialists and organisations including health visitors, schools, primary care services, country-wide sports and physical activity partnerships, local media, dietetic services, community voluntary organisations, local NHS Trusts, businesses, pharmacies and local authorities, including transport and planning departments.

61. PCTs implement national programmes such as *Change4Life* and the *National Child Measurement Programme,* and local programmes and activities including *Healthy Schools*, community health support, sports and physical activity, healthy food programmes, *Weight Watchers*, Cycling, breastfeeding support, *Active Kids*, green park spaces, food co-ops and community clubs. Figure 9 below shows the most commonly cited organisations/programmes and the number of PCTs working with each.

Organisations	**No. of PCTs**
Schools & related activities	92
Physical Activity & Sports	122
Diet / Fitness	122
Healthy Food Programmes	89
Local Authorities	104
Local Media	56
Children Programmes	92
Community Clubs	103

Figure 9: Number of PCTs working with different organisations to control obesity levels.

62. While all PCTs follow the NICE guidelines on obesity, some have been particularly pro-active in addressing obesity as an epidemic. For example, NICE only introduced guidance on maternal obesity in 2010, yet PCTs including County Durham PCT, Darlington PCT and NHS East Riding of Yorkshire had already begun to work on issues surrounding obesity and pregnancy in 2009. The case studies of NHS Southampton City PCT and NHS West Mercia PCT cluster below provide some further examples of pioneering programmes run by PCTs.

Case Study - NHS Southampton

63. NHS Southampton commissions a range of services such as midwifery, health visiting, school nursing, district nursing, pharmacies, primary care, health trainers, nutrition & dietetic services. The PCT works with a range of partners including community centres, private organisations and local authorities with the aim of changing behaviour around diet and physical activity. NHS Southampton also works with children's centres and schools to promote healthy eating and physical activity in order to reduce child obesity.

64. Of particular significance are a number of projects which support particular target or at-risk groups, for example black and minority ethnic communities, mothers and children (through the *Healthy Early Years* Award pilot), and school pupils (through weight management support). The PCT also makes use of social marketing to raise awareness among adults through the national *Change4Life* campaign.

Case Study - NHS West Mercia PCT Cluster

65. In Herefordshire, 19-20 per cent of women of childbearing age are classified as obese. NHS West Mercia goes beyond the NICE guidelines in its implementation of specific pre-natal and family-building services, which are designed to help pregnant women maintain a healthy weight during pregnancy and when taking care of a newborn child.

Future Plans of PCTs to tackle obesity

66. The Survey revealed that PCTs' future plans involve working across the wider determinants of health and working towards social change relating to obesity. Ninety per cent of PCTs outlined their future plans as creating an environment that promotes healthy weight and helping people make healthier choices. For example NHS North of Tyne described its future plans relating to obesity thus:

> "to create an environment that promotes healthy weight and ensure effective services to help individuals reduce their weight and become healthier."

67. Eighty per cent of PCTs explicitly stated that they aspire to collectively control the rising levels of obesity in line with the Government's Public Health White Paper, *Healthy Lives, Healthy People*.

68. Several PCTs responded with a degree of hesitation to the question about their future plans, citing uncertainty due to changes under the *Health and Social Care Act*. For example, the Somerset PCT Cluster stated that:

> "the national NHS reform agenda sets out plans for the future transfer of public health services to the Local Authorities. In this context and in the light of the Government's Spending Review, there are no specific plans for the introduction of new programmes relating to obesity but NHS Somerset will seek to maintain the services and programmes which are currently provided."

69. An estimated 40 per cent of the PCTs explained that they are seeking to maintain the services and programmes which are currently provided. Sixty per cent of PCTs hoped to implement new projects to tackle obesity in the future. The most commonly-cited plans included:

- creating an environment that promotes healthy weight
- helping people make healthier choices
- targeting limited resources and refreshing a country-wide obesity prevention strategy
- expanding and developing weight management care pathways for maternal obesity
- working on specialised morbid obesity services
- embedding an early years obesity prevention programme
- providing antenatal care to avoid childhood obesity and maternal obesity
- promoting health through structured education programs for obesity
- ensuring wider geographical coverage and better access to obesity prevention services
- making the referral system more efficient

- collaborating with the commercial sector to promote a healthy environment (e.g. PCT SHIP runs an active work place project for staff and large & small businesses locally)
- balancing the amount spent on medication and pathways
- maintaining work through school nursing consultation system
- enhancing community based services
- catering some weight management programs to ethnic minorities

70. The Survey showed how PCTs have been working both independently and with a number of organisations to tackle obesity at present and in the future. Figure 10 below gives a breakup of the number of PCTs, of the 122 that responded, that are working in specific areas to fight obesity.

Programmes	**No. Of PCTs**
Promoting Healthy Weight	122
Country Wide Obesity Prevention Strategy	92
Tackling Maternal Obesity	72
Promoting structured education programmes	65
Working with local authorities	107
Catering to ethnic minorities	62
Collaborating with commercial sector	69
Early years obesity prevention	103

Figure 10: Number of PCTs that responded to the Survey with specific future plans

3. Survey Results - Diabetes

Prevalence of Diabetes

71. Diabetes is a chronic disease that impacts upon almost every aspect of life. It can lead to premature death, ill health and disability yet these outcomes can often be prevented or delayed by high-quality care.

72. Age, deprivation, genetic heredity, ethnicity, obesity and in some cases pregnancy can affect the likelihood of developing diabetes.[34]

Prevalence of diabetes over time

73. Figure 11 (below) shows the increasing prevalence of diabetes in England between 2005/6 and 2009/10. These figures reflect the number of patients on the diabetes register in the Quality and Outcomes Framework (QOF) for each given year. The register excludes patients aged 16 or younger and those with gestational diabetes.

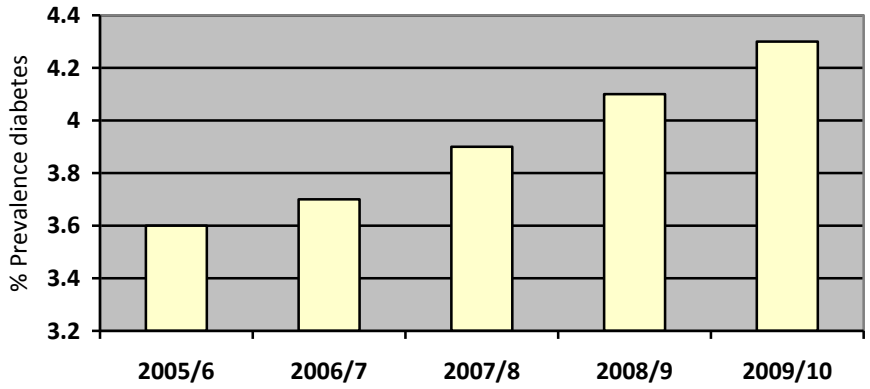

Figure 11: Prevalence of diabetes in England[35]

Prevalence of diabetes by deprivation

74. The Survey revealed a strong link between diabetes and deprivation in England. People living in the 20 per cent most deprived neighbourhoods in England are 56 per cent more likely to have diabetes than those living in the least deprived areas.[36] People in the most deprived one-fifth of the population are one-and-a-half times more likely than average to have diabetes at any given age.[37] Type 2 diabetes in particular is more prevalent among the deprived populations.

75. Thirty-two PCTs across England (including NHS Bassetlaw, NHS Lincolnshire Teaching PCT, NHS Somerset, NHS Dudley and the PCTs in the NHS Sussex PCT Cluster) provided specific information on prevalence of diabetes by deprivation. Figure 12 (below) shows the variation in

incidence of diabetes by quintile of deprivation (where quintile 5 is most deprived and quintile 1 is the least deprived). The incidence of diabetes is higher in areas of high deprivation.

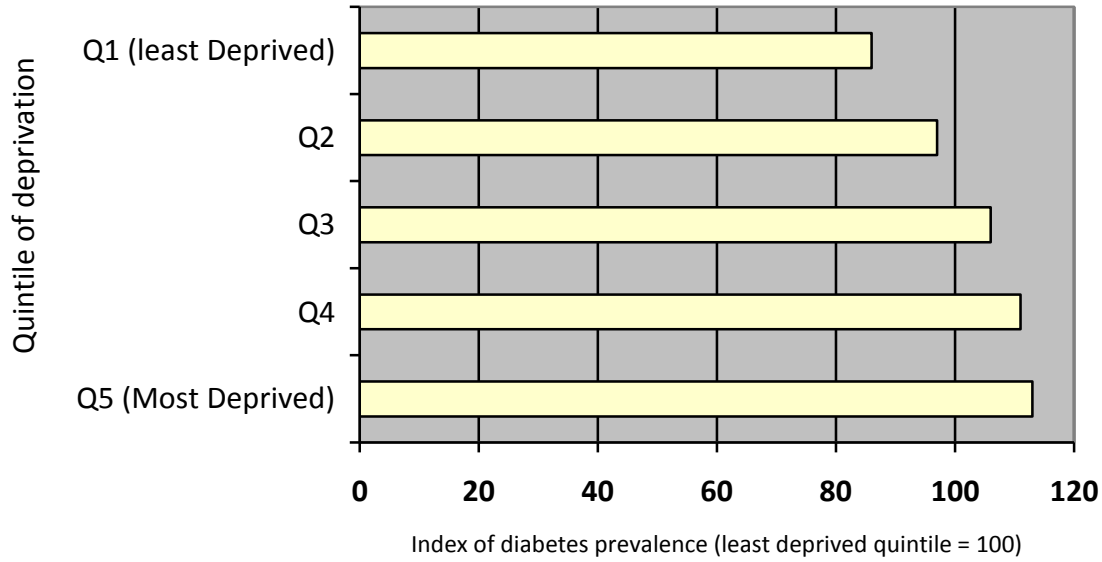

Figure 12: Prevalence of Diabetes by deprivation category: England (2007)[38]

Prevalence of diabetes by genetic heredity

76. Figure 13 (below) describes the likelihood of developing diabetes depending on whether family members have the condition. This suggests a relatively strong link between prevalence within the family and diabetes type 2, when compared with type 1 diabetes.

Type 1 Diabetes (on average)	**Type 2 Diabetes (on average)**
If a mother has the condition, the risk of developing it is about 2 %. If a father has the condition, the risk of developing it is about 8 %	If either parent has the condition, the risk of developing it is 15 %
If both parents have the condition, the risk of developing it is up to 30 %	If both parents have the condition, the risk of developing it is 75 %
If a brother or sister develops the condition, the risk of developing it is 10 %. It rises to 15 % for a non-identical twin and 40 % for an identical twin.	If a non-identical twin has the condition, the risk of developing it is 10 %. If an identical twin has the condition, the risk of developing it is 90 %.

Figure 13: The effect of genetic heredity on likelihood of developing type 1 and type 2 diabetes [39]

Prevalence of diabetes by obesity

77. Of all serious diseases, type 2 diabetes is thought to have the strongest association with obesity: obesity is thought to increase the likelihood of developing diabetes.[40] Of the 122 PCTs that responded to the Survey, 108 referred to the relationship between diabetes and obesity. For example, Lincolnshire PCT highlighted the relationship between the high prevalence of diabetes in Lincolnshire in 2009-10 (6.04%), and the high levels of obesity in Lincolnshire at the same time (30.8 per cent of adults were obese). Both figures were significantly higher than average figures for the whole of England.

Prevalence of diabetes by ethnicity

78. Forty per cent of PCTs including NHS Walsall, NHS Somerset and NHS Lincolnshire suggested that people from Asian and Black ethnic communities are more likely to have diabetes than the population as a whole. People from Asian and Black communities also tend to develop the condition at a younger age. Statistics published by Diabetes UK show that type 2 diabetes is up to six times more common in people of South Asian descent and up to three times more common among people of African and African-Caribbean origin.[41]

79. According to the Survey, after adjusting for age doctor-diagnosed diabetes is almost four times as prevalent in Bangladeshi men, and almost three times as prevalent in Pakistani and Indian men, compared with men in the general population. Among women, diabetes is more than five times as prevalent among Pakistani women, at least three times as prevalent in Bangladeshi and Black Caribbean women, and two-and-a-half times as prevalent in Indian women, compared with women in the general population. [4243] The data are represented in Figure 14 below.

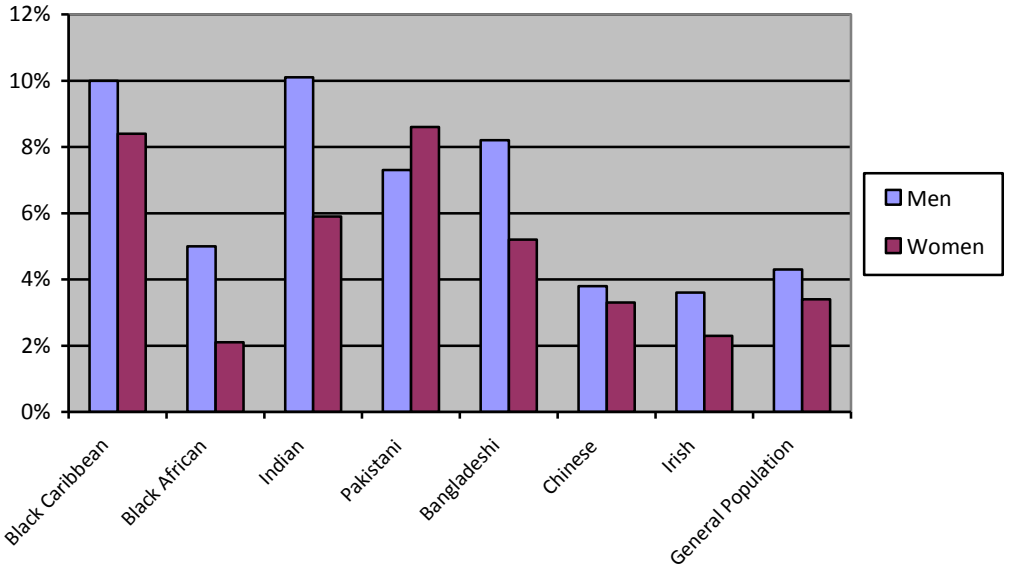

Figure 14: Prevalence of self-reported, doctor-diagnosed diabetes in England by minority ethnic group and gender (2004)[44]

Prevalence of diabetes during pregnancy

80. Diabetes that arises during the second or third trimester of pregnancy is called gestational diabetes. It can occur if a woman's body is unable to produce enough insulin to meet the extra needs of pregnancy. Gestational diabetes is thought to affect up to 5 per cent of pregnancies, and the lifetime risk of developing type 2 diabetes after gestational diabetes is at least 7 per cent.[45]

Outcomes of Diabetes

81. The risk of complications associated with diabetes can be reduced through good diabetes management. However when diabetes is not well managed, it is associated with serious complications. Diabetes is the fifth most common cause of death in the world.[46]

82. Most of the long term complications associated with diabetes are linked with type 2 diabetes. This is in part due to the fact that the actual onset of type 2 diabetes may be ten years or more before clinical diagnosis. Complications may begin five to six years before diagnosis. By the time of diagnosis, 50 per cent of people with type 2 diabetes already show signs of complications.

There is a substantial financial cost to diabetes care, as well as costs to the lives of people with diabetes. In 2006, the Department of Health estimated that up to 10 per cent of NHS expenditure could be spent on diabetes[47] – approximately £9-£10 billion a year.

83. According to the Survey, a diabetic patient faces the following health risks and conditions:

- damage to both large and small arteries
- cardiac failure
- ketoacidosis
- myocardial infarction
- kidney disease / renal failure
- retinopathy treatment
- blindness
- high blood pressure
- high risk of obesity
- heart disease
- stroke
- nerve damage and amputations leading to disability and premature mortality

Case Study - Warwickshire PCT

84. Warwickshire PCT examined relationships between diabetes, obesity and physical activity using data from the Public Health Observatories' 2011 *Health Profiles*. On its *NHS Local* website, Warwickshire PCT emphasizes the importance of physical activity, and draws a link between the

relatively low prevalence of diabetes in Warwickshire with the relatively active population.[48] On the website, Dr Vinod Patel, a local consultant physician in endocrinology and diabetes, cites the local markets and popularity of dog-walking as contributing factors. Dr Patel explains that while obesity is certainly a risk factor in diabetes, so is a low level of activity: “If you are active, even if you are obese, you are less likely to have diabetes." Dr Patel also notes that there are fewer people from ethnic minorities living in the area, and that "Studies have shown that Asian people tend to be less physically active than white Caucasians".[49]

Health Programs: Managing Diabetes

85. Programmes implemented in relation to diabetes include an agreed county-wide model for care, and improvement to community diabetes prevention services including controlling obesity levels and educating clinicians.

86. North Tyneside PCT and the West locality of Northumberland Care Trust participated in national pilot programmes for the 2011 “Year of Care,” focusing on diabetes. These pilots set out to examine how routine care can be redesigned and commissioned to support a personalized approach, including self management for people with long term conditions.

87. The Survey revealed that the PCTs were running a number of programmes to tackle diabetes. The most commonly-cited programmes are listed below:

- economic health needs assessment and modelling
- agreed local models of care
- improvements to the Community Diabetes Specialist Service, including increased staffing and robust specification and clear and agreed key performance indicators
- ongoing improvements to the structured education programme for type 2 diabetes for patients and clinicians such as DESMOND (diabetes education and self management for ongoing and newly diagnosed)
- weight management services
- stop smoking services
- NHS Health Checks
- exercise on referral
- other health and wellbeing services

88. Figure 15 opposite shows the number of PCTs who responded to the Survey that are working with different organisations to control diabetes. These organisations include hospital trusts, community health services and local authorities. Some work with voluntary groups but this number is notably lower.

Organisations	No. of PCTs
Community Health Service	109
Hospital Trusts	122
Diabetes UK	102
Voluntary Groups	69
Local Authorities	104

Figure 15: Number of PCTs working with particular organisations to control diabetes

89. Recent research by scientists at Newcastle University, led by Professor Roy Taylor, found that a low-calorie diet may cure type 2 diabetes, commonly thought to be a lifelong illness. The research demonstrated that full recovery from type 2 diabetes was possible; not through drugs but through diet alone.[50]

90. The Yorkshire and Humber PHO leads on diabetes. It has developed a tool for PCTs to measure diabetes outcomes against expenditure and to compare PCTs across England. The tool is called the Diabetes Outcomes Versus Expenditure Tool (DOVE), and can be downloaded from http://www.yhpho.org.uk/dove .

Future Plans of PCTs to tackle Diabetes

91. As with plans for obesity-related programmes, the Survey revealed that a number of PCTs were uncertain about their future plans to tackle diabetes, owing to the changes occurring under the Health and Social Care Act.

92. For example, Lincolnshire PCT stated that;

> "any future service improvements will be implemented by each GP Clinical Commissioning Group. There may be a decision to federate to put programmes into place at a countywide level as this is likely to be more cost effective. Currently the PCT as an organisation has no plans to implement any further diabetes service improvements at a countywide level. As we are currently in the process of restructuring into GP Clinical Commissioning Groups it is difficult to give a more definitive indication of possible planned improvements. However diabetes remains part of the Quality Outcome Framework and there is a number of indicators that will ensure continued good care and improvements in diabetes."

Case Study – NHS Luton

93. Some PCTs are however forging ahead with plans to tackle diabetes. For example, NHS Luton's Public Health Programme Manager said that their plans include a programme to:

> "Develop early intervention pathway and implement NICE 27 guidance – pre, during and after pregnancy. NHS Luton and Luton Borough Council 'big issue' for 2012 is childhood obesity. Improve National Child Measurement Programme through targeted individual support of family's pilot slimming

on referral voucher scheme for adults. Extend the Healthy under 5's programme to work with families".

94. NHS Luton's Lead Commissioner for Long Term Conditions also indicated that their plans include a diabetes service redesign project to be implemented in Autumn 2011. This involves a "whole system redesign of pathway to meet NICE guidelines and develop an integrated service for Luton."

Case Studies - NHS North of Tyne PCT Cluster, NHS Somerset, NHS Mid Essex

95. PCTs and clusters including NHS North of Tyne PCT Cluster, NHS Somerset and NHS Mid Essex stated that their long term plans to tackle diabetes include:

- providing a single Diabetic Retinal Screening Service
- reviewing the current provision of DESMOND structured education programme
- reviewing and revising diabetic foot care pathway
- enhancing community diabetes clinics
- further increasing training and support for GP practices
- improving helpline facilities

96. The Survey revealed that a number of PCTs plan to follow specific programmes (as listed in Figure 16 below) to efficiently control the levels and impacts of diabetes in the future.

97. 102 PCTs out of the 122 that responded to the Survey plan to follow the DESMOND structured education programme, which suggests that most PCTs support the contention that it is important that ongoing and newly-diagnosed diabetes patients should be able to understand the disease and learn to self manage it.

Programmes	**No. of PCTs**
Diabetic Retinal Screening	94
DESMOND	102
Improved help line facilities	72
Revision of foot care pathway	95
Training and Support for GPs	107

Figure 16: PCTs planning to use specific programmes to tackle diabetes in future.

4. Conclusions and Recommendations

98. The Survey shows that a wide range of factors are related to the current levels and variations in obesity and diabetes in England. Prevalence of obesity and diabetes is not uniform across England, and other factors including gender, ethnicity, time, age, deprivation, genetic heredity and pregnancy also contribute to the variations.

99. Obesity and diabetes can cause many diseases. Obese and diabetic patients are treated for a number of conditions – many of them serious. This places a significant burden on the NHS, the economy, patients and carers.

100. **Obesity programmes in particular could benefit from a more targeted approach. More research is needed on prevalence and access to programmes for at-risk populations, for example minority ethnic groups.**

101. Until recently obesity has been more prevalent among women than men in the general population. However prevalence among males has been increasing and figures from 2010 suggest that levels are now equal. **It will be important to closely monitor levels of prevalence and risk factors especially for men for whom the rate of prevalence has increased by 100% since 1993.**

102. Some female ethnic minority populations appear to have significantly higher levels of obesity prevalence than males of the same ethnic minority. This is particularly noticeable among Black African, Pakistani and Bangladeshi groups. **These variations should be kept in mind when designing programmes to provide appropriate care.**

103. Many PCTs acknowledged the problem of childhood obesity in discussions of their future plans. **It is crucial that tackling this remains a priority even with major changes to the structure of the NHS under the Health and Social Care Act.**

104. Diabetes appears to be more prevalent in men than women; the difference appears particularly apparent among some ethnic minority populations, for example Indian, Black African and Bangladeshi groups. This could provide grounds for interesting comparison with the figures for obesity among ethnic minority populations.

105. The data suggests that diabetes – particularly type 2 diabetes – is more prevalent among more deprived populations. **This indicates that attempts to tackle diabetes need to take into account wider socio-economic determinants.**

106. Obesity and diabetes are closely linked. PCTs have recognised this and in many cases are tackling them together. **It may be useful for some programmes related to obesity and diabetes**

to be run as a single programme: this could help patients with obesity and diabetes tackle both conditions in an integrated way.

107. **Education and health promotion programmes for both patient and carer require further development, as both obesity and diabetes involve a great deal of self care.**

108. The volume of data received in response to the Survey demonstrates that a great deal of information has been collected at PCT level. PCTs and Public Health Observatories have monitored the public health of the population closely and there is clearly important analysis to be done on these data. It is vital that such significant data sets, knowledge and expertise are not lost with the abolition of these bodies; data collection should continue as closely as possible in accordance with current formats in order to effectively assess change over time and avoid disruption to vital measurements.

109. It was notable that the information relating to obesity was greater in volume but less standardised than that relating to diabetes. There were standardised models and schemes for identifying risk (e.g. the Diabetes Area Classification) and tools to compare expenditure and outcomes across England (e.g. the DOVE tool). This suggests that standardised measurements and risk assessments relating to diabetes are more advanced than those relating to obesity. **It would be helpful if standardised measurements and tools relating to obesity could be developed and published on a similar scale.**

110. **NHS bodies could make more easily-accessible information available regarding the costs and effectiveness of their programmes and partnerships that aim to tackle obesity and diabetes.**

111. It is a cause for concern that many PCTs were unable to describe their future plans for tackling obesity and diabetes owing to the changes currently underway in the NHS. **Continuity of research and programme implementation is necessary if obesity and diabetes are to be effectively treated and prevented.**

112. There are challenges in presenting this report as capturing the state of play amongst PCTs in July 2011. The Survey was sent to the newly-formed PCT Clusters as co-ordinating organisations. Some responses were received from the Clusters while others were received directly from PCTs. The resulting variation in responses means that standardisation is difficult.

113. It is important that the organisations set up in shadow form under the Health and Social Care Act remain accountable to Parliament and the public. **Access to information and intelligence on the future delivery and costs of healthcare services in England is imperative if obesity and diabetes are to be effectively prevented, treated and controlled.**

5. Survey Results – PCT costs, spending and GP count

114. In addition to the specific questions analysed in the main body of the report, the Survey requested information relating to PCT costs, spending on obesity/diabetes and number of GPs. The aim was to obtain a snapshot of the information held by PCTs, before they are abolished in 2013 as proposed under the Health and Social Care Act. The data are listed by PCT cluster/PCT in the annexes.+

Spend on Obesity and Diabetes (Annex III)

115. The Survey revealed that costs relating to diabetes are more clearly quantified and organised than those associated with obesity. PCTs were unable to provide detailed information on obesity costs, compared to diabetes costs. This reflects the relative clarity of diabetes information compared with information on obesity. PCTs work with a set agenda and budget for diabetes, while the cost of obesity services expenditure is interdependent with expenditure on other services.

PCT Costs (Annex IV)

116. The Survey requested the administration costs for running each PCT. Of the 122 PCTs that responded to the Survey, 48 did not use the heading of '*administration costs*': instead they provided figures for '*management costs,'* which include staff costs only.

117. 14 PCTs provided their '*net operating costs'*. The operating costs statement shows the income and expenditure between the commissioning of health care and services and the PCTs own provision of health care and services. In other words, the *net operating cost* is the PCT's total expenditure, less any income.

118. 23 PCTs provided costs under other headings, for example *running costs*, and *staff costs*, submitted as part of their annual accounts.

119. 37 PCTs did not provide any information regarding their costs.

120. The results of the Survey demonstrate variation in the way PCTs collate costs data.

GP Count (Annex V)

121. Approximately 35 per cent of PCTs provided the total number of GPs; less than 2 per cent provided the number of GP practices. The information gathered is presented in Annex V.

Annex I – PCT Survey

The Survey was conducted under the Freedom of Information Act and was sent out to all Primary Care Trust clusters in July 2011. They clusters either forwarded the FOI requests to each individual PCT or collected the information and responded centrally on behalf of the PCTs. The Survey spelled out a range of questions with the aim to addresses a gap in understanding the challenges and potential opportunities for PCTs working to tackling obesity and diabetes. The Survey included the following questions:

1. What are the administration costs for running each PCT in .....PCT cluster for each of the last 5 years.

2. A breakdown of the personnel employed by each PCT in .....PCT cluster for each of the last 5 years.

3. The number of GPs covered by each PCT in .....PCT cluster

4. What as the remit of each PCT in .....PCT cluster and has this changed in the last 2 years?

5. Who is the lead for a) obesity and b) diabetes in .....PCT cluster?

6. How much has been spent by each PCT in .....PCT cluster on programmes relating to a) obesity and b) diabetes for each of the last 5 years.

7. What figures relating to a) prevalence and b) outcomes are available regarding obesity for each of the last 5 years for each PCT in .....PCT cluster.

8. What figures relating to a) prevalence and b) outcomes are available regarding diabetes for each of the last five years for each PCT in .....PCT cluster.

9. What organizations does .....PCT cluster work with in relation to a) obesity and b) diabetes.

10. What programmes / services have been implemented in relation to a) obesity and b) diabetes in each of the last five years for each PCT in the .....PCT cluster?

11. What plans are there for future programmes relating to a) obesity and b) diabetes in .....PCT cluster?

Annex II – Prevalence of obesity and diabetes

Primary Care Trusts / Clusters	Prevalence for Obesity (%)	Prevalence for Diabetes (%)
Leicestershire PCT Cluster	26.85	6.90
Leicester City PCT		
Leicestershire County and Rutland PCT		
Lincolnshire PCT Cluster	**26.20**	**5.30**
Lincolnshire Teaching PCT Cluster		
Northamptonshire & Milton Keynes	**24.70**	**4.60**
Northamptonshire PCT		
Milton Keynes PCT		
Nottinghamshire	24.80	5.30
Nottingham City PCT	27.60	4.90
Nottinghamshire County Teaching PCT		
Bedfordshire and Luton	**24.30**	**5.40**
Bedfordshire PCT		
Luton PCT	26.70	6.40
Cambridgeshire & Peterborough	**24**	**4.90**
Cambridgeshire PCT		
Peterborough PCT		
Hertfordshire	**23.20**	**4.80**
Hertfordshire PCT		
North Essex	**25.80**	**5.60**
Mid Essex PCT		
North East Essex PCT		
West Essex PCT		
Suffolk	**26**	**5**
Suffolk PCT		
Inner North East London		
City and Hackney Teaching PCT		
Newham PCT	21.20	7
Tower Hamlets PCT		
North Central London		
Barnet PCT	16.80	5.50
Camden PCT	13.30	3.60
Enfield PCT		
Haringey Teaching PCT		
Islington PCT		
South West London		
Croydon PCT	19.30	5.60
Kingston PCT		
Richmond and Twickenham PCT	14.30	3.20
Sutton and Merton PCT		3.80
Wandsworth Teaching PCT		3.80

Primary Care Trusts / Clusters (cont)	Prevalence for Obesity (%)	Prevalence for Diabetes (%)
County Durham and Darlington		
County Durham PCT	26.20	6
Darlington PCT		
Tees	**24.50**	**5.30**
Hartlepool PCT		
Middlesborough PCT		
Redcar and Cleaveland PCT		
Stockton-on-Tees Teaching PCT		
Cumbria PCT Cluster		
Cumbria PCT	18.80	5.37
Greater Manchester PCT Cluster	**19.24**	**4.92**
Aston, Leigh and Wigan PCT		
Bolton PCT	25.10	6.60
Bury PCT		
Heywood, Middleton and Rochdale PCT		
Manchester PCT	25.80	5.45
Oldham PCT		
Salford PCT		
Trafford PCT		
Lancashire PCT Cluster	**11**	**5.70**
Blackburn and Darwen Care Trust Plus		
Blackpool PCT		
Central Lancashire PCT		
East Lancashire PCT		
North Lancashire PCT		
Merseyside PCT Cluster	**22**	**5.20**
Halton and St Helens PCT		
Knowsley PCT		
Liverpool PCT	21.90	5.30
Sefton PCT		
Berkshire PCT Cluster		
Berkshire East PCT		
Oxfordshire and Buckinghamshire	**20.40**	**4.70**
Buckinghamshire PCT		
Oxfordshire PCT		
SHIP PCT Cluster		
Southampton City PCT	9.20	3.80
Hampshire PCT	10.05	4.99
Isle of Wight NHS PCT	11.30	4.60
Portsmouth City Teaching	10.70	4.90

Primary Care Trusts / Clusters (cont)	Prevalence for Obesity (%)	Prevalence for Diabetes (%)
Kent		
Eastern and Coastal Kent	24	5.9
Medway Teaching PCT	25.3	6.1
West Kent PCT		
Surrey PCT Cluster	**19.5**	**4.5**
Surrey PCT		
Sussex PCT Cluster	**22.7**	**5.5**
Brighton and Hove City Teaching PCT		
East Sussex Downs and Weald PCT		
Hastings and Rother PCT		
West Sussex PCT		
Bath, NE Somerset & Wiltshire		
Bath and North East Somerset PCT	21.90	4.2
Wiltshire PCT		
Bournemouth, Poole and Dorset	**22.6**	**4.2**
Bournemouth and Poole Teaching PCT		
Dorset PCT		
Bristol, N Somerset & S Gloucestershire	**22.5**	**4.5**
Bristol PCT		
North Somerset PCT		
South Gloucestershire PCT		
Cornwall and Isles of Scilly PCT	**23.6**	**5.4**
Gloucestershire & Swindon	**24.8**	**5.3**
Gloucestershire PCT		
Swindon PCT		
Somerset PCT		**5.50**
Arden PCT Cluster	11.45	4.46
Coventry Teaching PCT		
Warwickshire PCT		
Birmingham		
Birmingham East and North PCT	23.4	6.3
Heart of Birmingham Teaching PCT	23.4	8.5
Solihull Birmingham PCT		
South Birmingham PCT	23.4	5.4
Black Country PCT Cluster		
Dudley PCT	21.30	4.77
Sandwell PCT	27.70	5.70
Walsall Teaching PCT	27.50	5.06
Wolverhampton PCT	24.80	5.90
Staffordshire PCT Cluster		
North Staffordshire PCT		
South Staffordshire PCT		
Stoke on Trent PCT		

Primary Care Trusts / Clusters (cont)	Prevalence for Obesity (%)	Prevalence for Diabetes (%)
West Mercia PCT Cluster	**26.80**	**5.60**
Herefordshire PCT		
Shropshire County PCT		
Telford and Wrekin PCT		
Worcestershire PCT		
Bradford PCT Cluster	**21.6**	**6.7**
Bradford and Airedale PCT		
Calderdale, Kirklees and Wakefield	**21.6**	**5.6**
Calderdale PCT		
Kirklees PCT		
Wakefield District PCT		
East Riding of Yorkshire PCT Cluster	**23.9**	**5.8**
East Riding of Yorkshire PCT		
Hull PCT		
North East Lincolnshire Care Trust Plus		
North Lincolnshire		
Leeds PCT Cluster	**20.6**	**4.7**
Leeds PCT		
North Yorkshire and York	**23.4**	**4.7**
North Yorkshire and York PCT		
South Yorkshire & Bassetlaw PCT Cluster		
Barnsley PCT		
Bassetlaw PCT	27.60	5.90
Doncaster PCT		
Rotherham PCT	27	5.96
Sheffield PCT		
North of Tyne	**23**	**5.8**
North Tyneside PCT		
Newcastle PCT		
Northumberland PCT		

Annex III – PCT spend on obesity and diabetes 2010-11*

Primary Care Trusts / Clusters	Amount spent on Obesity (£)	Amount spend on Diabetes (£)
Leicestershire PCT Cluster		28,705,000
Leicester City PCT		12,923,000
Leicestershire County and Rutland PCT		15,782,000
Lincolnshire PCT Cluster		**15,226,000**
Lincolnshire Teaching PCT Cluster		
Northamptonshire & Milton Keynes		
Northamptonshire PCT		
Milton Keynes PCT		
Nottinghamshire		
Nottingham City PCT		
Nottinghamshire County Teaching PCT	368,799	798,818
Bedfordshire and Luton	327,686	4,798,240
Bedfordshire PCT		
Luton PCT	327,686	4,798,240
Cambridgeshire & Peterborough	**1,595,886**	**2,930,000**
Cambridgeshire PCT		
Peterborough PCT		
Hertfordshire		
Hertfordshire PCT		2,080,000
North Essex		
Mid Essex PCT		
North East Essex PCT	625,000	7,940,000
West Essex PCT	43,000	190,951,
Suffolk	**952,275**	**67,353.62**
Suffolk PCT		
Inner North East London		
City and Hackney Teaching PCT	1,545,000	1,152,000
Newham PCT	427,600	348,900
Tower Hamlets PCT	1,382,577	220,000
North Central London		
Barnet PCT		2,020,000
Camden PCT		2,370,000
Enfield PCT	600,000	1,410,000
Haringey Teaching PCT	2,170,000	1,490,000
Islington PCT	5,550,000	1,620,000

Primary Care Trusts / Clusters (cont)	Amount spent on Obesity (£)	Amount spend on Diabetes (£)
South West London		**3,595,000**
Croydon PCT	437,000	
Kingston PCT		
Richmond and Twickenham PCT	36,536	2,022,000
Sutton and Merton PCT		
Wandsworth Teaching PCT		
County Durham and Darlington		
County Durham PCT	1,946,000	17,200,000
Darlington PCT		
Tees		
Hartlepool PCT	276,106	
Middlesborough PCT		
Redcar and Cleaveland PCT	780,960.64	
Stockton-on-Tees Teaching PCT	695,000	
Cumbria PCT Cluster		
Cumbria PCT	114,709	9,692,000
Greater Manchester PCT Cluster	1,423,064	7,100,000
Aston, Leigh and Wigan PCT		
Bolton PCT		
Bury PCT		
Heywood, Middleton and Rochdale PCT		
Manchester PCT		
Oldham PCT		
Salford PCT		
Trafford PCT		
Lancashire PCT Cluster	**509,465**	**287,195**
Blackburn and Darwen Care Trust Plus		
Blackpool PCT		
Central Lancashire PCT		
East Lancashire PCT		
North Lancashire PCT		
Merseyside PCT Cluster		
Halton and St Helens PCT		
Knowsley PCT		
Liverpool PCT		
Sefton PCT		
Berkshire PCT Cluster		
Berkshire East PCT		
Oxfordshire and Buckinghamshire		
Buckinghamshire PCT		
Oxfordshire PCT		

Primary Care Trusts / Clusters (cont)	Amount spent on Obesity (£)	Amount spend on Diabetes (£)
SHIP PCT Cluster		
Southampton City PCT	180,749	4,561,000
Hampshire PCT	518,376	27,279,000
Isle of Wight NHS PCT	69,488.25	4,349,000
Portsmouth City Teaching	444,208	5,200,000
Kent		
Eastern and Coastal Kent		
Medway Teaching PCT		
West Kent PCT		
Surrey PCT Cluster		
Surrey PCT		
Sussex PCT Cluster		
Brighton and Hove City Teaching PCT		
East Sussex Downs and Weald PCT		
Hastings and Rother PCT		
West Sussex PCT		
Bath, NE Somerset & Wiltshire		
Bath and North East Somerset PCT	820,555	
Wiltshire PCT		
Bournemouth, Poole and Dorset		
Bournemouth and Poole Teaching PCT		
Dorset PCT		
Bristol, N Somerset & S Gloucestershire		
Bristol PCT		
North Somerset PCT		
South Gloucestershire PCT		
Cornwall and Isles of Scilly PCT		
Gloucestershire & Swindon	**1,155,888**	**11,100,000**
Gloucestershire PCT		
Swindon PCT		
Somerset PCT	**734,200**	**15,259,661**
Arden PCT Cluster		
Coventry Teaching PCT	2,303,000	7,140,000
Warwickshire PCT		
Birmingham		
Birmingham East and North PCT		
Heart of Birmingham Teaching PCT		
Solihull Birmingham PCT		
South Birmingham PCT		8,400,000

Primary Care Trusts / Clusters (cont)	Amount spent on Obesity (£)	Amount spend on Diabetes (£)
Black Country PCT Cluster		
Dudley PCT	443,229	8,000,000
Sandwell PCT	340,357	10,700,000
Walsall Teaching PCT	1,200,000	769,000
Wolverhampton PCT	927,000	1,082,000
Staffordshire PCT Cluster		
North Staffordshire PCT		
South Staffordshire PCT		
Stoke on Trent PCT		
West Mercia PCT Cluster		
Herefordshire PCT		
Shropshire County PCT		
Telford and Wrekin PCT		
Worcestershire PCT		
Bradford PCT Cluster		
Bradford and Airedale PCT		
Calderdale, Kirklees and Wakefield		
Calderdale PCT		
Kirklees PCT		
Wakefield District PCT		
East Riding of Yorkshire PCT Cluster		
East Riding of Yorkshire PCT		
Hull PCT		
North East Lincolnshire Care Trust Plus		
North Lincolnshire		
Leeds PCT Cluster		
Leeds PCT		
North Yorkshire and York		
North Yorkshire and York PCT	649,328	15,600,000
South Yorkshire & Bassetlaw PCT Cluster		
Barnsley PCT	332,000	5,079,000
Bassetlaw PCT		2,849,000
Doncaster PCT		
Rotherham PCT		
Sheffield PCT		
North of Tyne	**2,000,000**	**8,000,000**
North Tyneside PCT		
Newcastle PCT		
Northumberland PCT		

*Note: Many PCTs were unable to provide the costs of obesity services expenditure on the grounds that it is interdependent within expenditure on other service.

Annex IV PCT Costs 2010-11

Primary Care Trusts / Clusters	Management Costs* (£)	Net Operating Costs* (£)
Leicestershire PCT Cluster		
Leicester City PCT	9,870	
Leicestershire County and Rutland PCT	18,150	
Lincolnshire PCT Cluster	**1,184,111**	
Lincolnshire Teaching PCT Cluster		
Northamptonshire & Milton Keynes		
Northamptonshire PCT		
Milton Keynes PCT	9,320,000	
Nottinghamshire		1,040,021,000
Nottingham City PCT		
Nottinghamshire County Teaching PCT	18,689,000	
Bedfordshire and Luton	14,226,000	
Bedfordshire PCT		
Luton PCT	5,107,292	
Cambridgeshire & Peterborough		
Cambridgeshire PCT	8,715,000	
Peterborough PCT	10,609,000	
Hertfordshire	**13,760,000**	
Hertfordshire PCT		
North Essex		
Mid Essex PCT		
North East Essex PCT		
West Essex PCT		
Suffolk	**8,007,000**	
Suffolk PCT		
Inner North East London		
City and Hackney Teaching PCT		527,257,000
Newham PCT		564,426,000
Tower Hamlets PCT		522,773,000
North Central London		
Barnet PCT		584,529,000
Camden PCT	8,382,000	
Enfield PCT	7,464,000	
Haringey Teaching PCT	6,674,000	
Islington PCT	8,761,000	
South West London		
Croydon PCT		
Kingston PCT		
Richmond and Twickenham PCT		
Sutton and Merton PCT	14,536,325	
Wandsworth Teaching PCT	8,543,000	

Primary Care Trusts / Clusters (cont)	Management Costs* (£)	Net Operating Costs* (£)
County Durham and Darlington		
County Durham PCT	10,833,000	
Darlington PCT	11,479,000	
Tees		
Hartlepool PCT		184,920,000
Middlesborough PCT		300,860,000
Redcar and Cleaveland PCT		300,900,000
Stockton-on-Tees Teaching PCT		335,835,000
Cumbria PCT Cluster		
Cumbria PCT		
Greater Manchester PCT Cluster	**15,847,000**	
Aston, Leigh and Wigan PCT	8,239,000	
Bolton PCT		
Bury PCT		
Heywood, Middleton and Rochdale PCT		
Manchester PCT		
Oldham PCT		
Salford PCT		
Trafford PCT		
Lancashire PCT Cluster	**7,993,000**	
Blackburn and Darwen Care Trust Plus		
Blackpool PCT		
Central Lancashire PCT		
East Lancashire PCT		
North Lancashire PCT		
Merseyside PCT Cluster		
Halton and St Helens PCT		
Knowsley PCT	22,465,000	
Liverpool PCT		
Sefton PCT		
Berkshire PCT Cluster		
Berkshire East PCT		
Oxfordshire and Buckinghamshire		
Buckinghamshire PCT		
Oxfordshire PCT		
SHIP PCT Cluster		
Southampton City PCT	12,220,000	
Hampshire PCT	22,465,000	
Isle of Wight NHS PCT	11,710,000	
Portsmouth City Teaching	4,546,000	

Primary Care Trusts / Clusters (cont)	Management Costs* (£)	Net Operating Costs* (£)
Kent		
Eastern and Coastal Kent		
Medway Teaching PCT		
West Kent PCT		
Surrey PCT Cluster		
Surrey PCT		
Sussex PCT Cluster		
Brighton and Hove City Teaching PCT	7,464,000	
East Sussex Downs and Weald PCT		
Hastings and Rother PCT		
West Sussex PCT		
Bath, NE Somerset & Wiltshire		
Bath and North East Somerset PCT	11,659,000	
Wiltshire PCT		
Bournemouth, Poole and Dorset		
Bournemouth and Poole Teaching PCT		
Dorset PCT		
Bristol, N Somerset & S Gloucestershire		
Bristol PCT		
North Somerset PCT		
South Gloucestershire PCT		
Cornwall and Isles of Scilly PCT		
Gloucestershire & Swindon	**10,981,000**	
Gloucestershire PCT		
Swindon PCT		
Somerset PCT		
Arden PCT Cluster		
Coventry Teaching PCT	13,238,000	
Warwickshire PCT	10,994,000	
Birmingham		
Birmingham East and North PCT		
Heart of Birmingham Teaching PCT		
Solihull Birmingham PCT		
South Birmingham PCT	11,108,000	
Black Country PCT Cluster		
Dudley PCT	8,178,000	
Sandwell PCT	9,162,000	
Walsall Teaching PCT		455,159,000
Wolverhampton PCT	11,358,000	
Staffordshire PCT Cluster		
North Staffordshire PCT		
South Staffordshire PCT		
Stoke on Trent PCT		

Primary Care Trusts / Clusters (cont)	Management Costs* (£)	Net Operating Costs* (£)
West Mercia PCT Cluster		
Herefordshire PCT		13,888,000
Shropshire County PCT		
Telford and Wrekin PCT		
Worcestershire PCT		
Bradford PCT Cluster		
Bradford and Airedale PCT		
Calderdale, Kirklees and Wakefield		
Calderdale PCT	7,074,000	
Kirklees PCT		
Wakefield District PCT		
East Riding of Yorkshire PCT Cluster		
East Riding of Yorkshire PCT		
Hull PCT		
North East Lincolnshire Care Trust Plus		
North Lincolnshire		
Leeds PCT Cluster		
Leeds PCT		
North Yorkshire and York		
North Yorkshire and York PCT		
South Yorkshire & Bassetlaw PCT Cluster		
Barnsley PCT	7,074,000	
Bassetlaw PCT	4,249,000	
Doncaster PCT	13,888,000	
Rotherham PCT		433,775,000
Sheffield PCT		988,515,000
North of Tyne	**17,659,000**	
North Tyneside PCT	4,257,000	
Newcastle PCT	6,544,000	
Northumberland PCT	6,858,000	

*The operating cost statement shows the total of income and expenditure between the commissioning of health care and services and the PCTS own provision of health care and services.

The basis of the detail definition of PCT management costs is that it is based on the staff costs only.

Annex V – number of GPs/practices

Primary Care Trusts / Clusters	No. Of GP Practices	Number of GPs
Leicestershire PCT Cluster		
Leicester City PCT		164
Leicestershire County and Rutland PCT		336
Lincolnshire PCT Cluster	**102**	
Lincolnshire Teaching PCT Cluster		
Northamptonshire & Milton Keynes		
Northamptonshire PCT		405
Milton Keynes PCT		151
Nottinghamshire		
Nottingham City PCT		
Nottinghamshire County Teaching PCT		413
Bedfordshire and Luton		
Bedfordshire PCT		
Luton PCT		188
Cambridgeshire & Peterborough		
Cambridgeshire PCT		130
Peterborough PCT		610
Hertfordshire		**1003**
Hertfordshire PCT		
North Essex		
Mid Essex PCT		
North East Essex PCT		297
West Essex PCT		185
Suffolk		
Suffolk PCT		
Inner North East London		
City and Hackney Teaching PCT		258
Newham PCT		267
Tower Hamlets PCT		267
North Central London		
Barnet PCT		309
Camden PCT		235
Enfield PCT		211
Haringey Teaching PCT		209
Islington PCT		220
South West London		
Croydon PCT		
Kingston PCT		
Richmond and Twickenham PCT		82
Sutton and Merton PCT		
Wandsworth Teaching PCT		

Primary Care Trusts / Clusters (cont)	No. Of GP Practices	Number of GPs
County Durham and Darlington		
County Durham PCT		289
Darlington PCT		49
Tees		
Hartlepool PCT		
Middlesborough PCT		
Redcar and Cleaveland PCT		
Stockton-on-Tees Teaching PCT		
Cumbria PCT Cluster		
Cumbria PCT		550
Greater Manchester PCT Cluster		**496**
Aston, Leigh and Wigan PCT		
Bolton PCT		
Bury PCT		
Heywood, Middleton and Rochdale PCT		
Manchester PCT		
Oldham PCT		
Salford PCT		
Trafford PCT		
Lancashire PCT Cluster		**860**
Blackburn and Darwen Care Trust Plus		
Blackpool PCT		
Central Lancashire PCT		
East Lancashire PCT		
North Lancashire PCT		
Merseyside PCT Cluster		
Halton and St Helens PCT		
Knowsley PCT		
Liverpool PCT		
Sefton PCT		
Berkshire PCT Cluster		
Berkshire East PCT		
Oxfordshire and Buckinghamshire		
Buckinghamshire PCT		
Oxfordshire PCT		
SHIP PCT Cluster		
Southampton City PCT		237
Hampshire PCT		1223
Isle of Wight NHS PCT		116
Portsmouth City Teaching		165
Kent		
Eastern and Coastal Kent		
Medway Teaching PCT		
West Kent PCT		

Primary Care Trusts / Clusters (cont)	No. Of GP Practices	Number of GPs
Surrey PCT Cluster		
Surrey PCT		
Sussex PCT Cluster		
Brighton and Hove City Teaching PCT		
East Sussex Downs and Weald PCT		
Hastings and Rother PCT		
West Sussex PCT		
Bath, NE Somerset & Wiltshire		
Bath and North East Somerset PCT		
Wiltshire PCT		
Bournemouth, Poole and Dorset		
Bournemouth and Poole Teaching PCT		
Dorset PCT		
Bristol, N Somerset & S Gloucestershire		
Bristol PCT		
North Somerset PCT		
South Gloucestershire PCT		
Cornwall and Isles of Scilly PCT		
Gloucestershire & Swindon		**88**
Gloucestershire PCT		
Swindon PCT		
Somerset PCT		**440**
Arden PCT Cluster		
Coventry Teaching PCT		283
Warwickshire PCT		469
Birmingham		
Birmingham East and North PCT		
Heart of Birmingham Teaching PCT		
Solihull Birmingham PCT		
South Birmingham PCT		61
Black Country PCT Cluster		
Dudley PCT		222
Sandwell PCT	69	
Walsall Teaching PCT		193
Wolverhampton PCT		169
Staffordshire PCT Cluster		
North Staffordshire PCT		
South Staffordshire PCT		
Stoke on Trent PCT		
West Mercia PCT Cluster		
Herefordshire PCT		
Shropshire County PCT		
Telford and Wrekin PCT		
Worcestershire PCT		

Primary Care Trusts / Clusters (cont)	No. Of GP Practices	Number of GPs
Bradford PCT Cluster		**393**
Bradford and Airedale PCT		
Calderdale, Kirklees and Wakefield		
Calderdale PCT		
Kirklees PCT		
Wakefield District PCT		
East Riding of Yorkshire PCT Cluster		
East Riding of Yorkshire PCT		
Hull PCT		
North East Lincolnshire Care Trust Plus		
North Lincolnshire		
Leeds PCT Cluster		
Leeds PCT		
North Yorkshire and York		
North Yorkshire and York PCT		
South Yorkshire & Bassetlaw PCT Cluster		
Barnsley PCT		144
Bassetlaw PCT		89
Doncaster PCT		
Rotherham PCT		140
Sheffield PCT		538
North of Tyne		
North Tyneside PCT		167
Newcastle PCT		201
Northumberland PCT		248

Annex VI – Diabetes area classification

Characteristics of the PCT groups within the diabetes area classification

Group	No. of PCTs in group	Characteristics of group
Orange	46	An average proportion of the population aged 40+ years with a range of deprivation levels.
Yellow	52	A greater proportion of the population aged 40+ years with generally low levels of deprivation.
Indigo	10	Relatively young population with substantially greater than average proportion of the population from Black and Asian ethnic groups. Higher than average deprivation.
Purple	25	Relatively young population and high levels of deprivation.
Blue	19	Young population with average deprivation and slightly high than average population from Asian and Black ethnic groups.

- Diabetes prevalence is forecast to increase relatively slowly in the **purple** and **blue** groups, because these areas have relatively young populations which are becoming younger.
- The **indigo** group has the highest number of deaths between the ages of 20 and 79 years that are attributable to diabetes. This can be explained by a young population, higher than average mortality rates at all ages and high prevalence of diabetes (especially among 40 to 59yrs age group).
- The lowest percentage of deaths attributable to diabetes is in the **yellow** group. This can be explained by lower mortality rates and a greater proportion of people with diabetes being over the age of 60 years.

Source: Yorkshire and Humber PHO (2008) Diabetes Area Classification for PCTs: Classification of PCTs based on risk factors for diabetes. Available online: http://www.yhpho.org.uk/resource/item.aspx?RID=9951 [accessed 06 Mar 2012]

Annex VII – Diabetes community health profiles

PCT Name	Colour classification
Ashton, Leigh and Wigan PCT	Orange
Barking and Dagenham PCT	Purple
Barnet PCT	Blue
Barnsley PCT	Orange
Bassetlaw PCT	Orange
Bath and North East Somerset PCT	Yellow
Bedfordshire PCT	Orange
Berkshire East PCT	Orange
Berkshire West PCT	Orange
Bexley Care Trust	Orange
Birmingham East and North PCT	Purple
Blackburn With Darwen PCT	Purple
Blackpool PCT	Orange
Bolton PCT	Purple
Bournemouth and Poole PCT	Yellow
Bradford and Airedale PCT	Purple
Brent Teaching PCT	Indigo
Brighton and Hove City Teaching PCT	Orange
Bristol PCT	Purple
Bromley PCT	Yellow
Buckinghamshire PCT	Yellow
Bury PCT	Orange
Calderdale PCT	Orange
Cambridgeshire PCT	Orange
Camden PCT	Blue
Central and Eastern Cheshire PCT	Yellow
Central Lancashire PCT	Orange
City and Hackney Teaching PCT	Indigo
Cornwall and Isles Of Scilly PCT	Yellow
County Durham PCT.	Orange
Coventry Teaching PCT	Purple
Croydon PCT	Blue
Cumbria PCT	Yellow
Darlington PCT	Orange
Derby City PCT	Purple
Derbyshire County PCT	Yellow
Devon PCT	Yellow
Doncaster PCT	Orange
Dorset PCT	Yellow
Dudley PCT	Orange

Group	Characteristics of group
Orange	An average proportion of the population aged 40+ years with a range of deprivation levels.
Yellow	A greater proportion of the population aged 40+ years with generally low levels of deprivation.
Indigo	Relatively young population with substantially greater than average proportion of the population from Black and Asian ethnic groups. Higher than average deprivation.
Purple	Relatively young population and high levels of deprivation.
Blue	Young population with average deprivation and slightly high than average population from Asian and Black ethnic groups.

PCT Name (cont.)	Colour classification
Ealing PCT	Indigo
East and North Hertfordshire PCT	Orange
East Lancashire PCT	Orange
East Riding Of Yorkshire PCT	Yellow
East Sussex Downs and Weald PCT	Yellow
Eastern and Coastal Kent PCT	Yellow
Enfield PCT	Blue
Gateshead PCT	Orange
Gloucestershire PCT	Yellow
Great Yarmouth and Waveney PCT	Yellow
Greenwich Teaching PCT	Blue
Halton and St Helens PCT	Orange
Hammersmith and Fulham PCT	Blue
Hampshire PCT	Yellow
Haringey Teaching PCT	Blue
Harrow PCT	Indigo
Hartlepool PCT	Orange
Hastings and Rother PCT	Yellow
Havering PCT	Yellow
Heart Of Birmingham Teaching PCT	Indigo
Herefordshire PCT	Yellow
Heywood, Middleton and Rochdale PCT	Purple
Hillingdon PCT	Blue
Hounslow PCT	Indigo
Hull PCT	Purple
Isle Of Wight NHS PCT	Yellow
Islington PCT	Blue
Kensington and Chelsea PCT	Blue
Kingston PCT	Blue
Kirklees PCT	Orange
Knowsley PCT	Purple
Lambeth PCT	Blue
Leeds PCT	Orange
Leicester City PCT	Indigo
Leicestershire County and Rutland PCT	Yellow
Lewisham PCT	Blue
Lincolnshire PCT	Yellow
Liverpool PCT	Purple
Luton PCT	Purple
Manchester PCT	Purple
Medway PCT	Orange
Mid Essex PCT	Yellow
Middlesbrough PCT	Purple
Milton Keynes PCT	Orange
Newcastle PCT	Purple
Newham PCT	Indigo
Norfolk PCT	Yellow
North East Essex PCT	Yellow
North East Lincolnshire PCT	Orange
North Lancashire PCT	Yellow
North Lincolnshire PCT	Orange
North Somerset PCT	Yellow
North Staffordshire PCT	Yellow
North Tees PCT	Orange
North Tyneside PCT	Yellow
North Yorkshire and York PCT	Yellow

PCT Name (cont.)	Colour classification
Northamptonshire Teaching PCT	Orange
Northumberland Care Trust	Yellow
Nottingham City PCT	Purple
Nottinghamshire County Teaching PCT	Yellow
Oldham PCT	Purple
Oxfordshire PCT	Orange
Peterborough PCT	Orange
Plymouth Teaching PCT	Orange
Portsmouth City Teaching PCT	Orange
Redbridge PCT	Indigo
Redcar and Cleveland PCT	Orange
Richmond and Twickenham PCT	Blue
Rotherham PCT	Orange
Salford PCT	Purple
Sandwell PCT	Purple
Sefton PCT	Yellow
Sheffield PCT	Orange
Shropshire County PCT	Yellow
Solihull Care Trust	Yellow
Somerset PCT	Yellow
South Birmingham PCT	Purple
South East Essex PCT	Yellow
South Gloucestershire PCT	Yellow
South Staffordshire PCT	Yellow
South Tyneside PCT	Orange
South West Essex PCT	Orange
Southampton City PCT	Purple
Southwark PCT	Blue
Stockport PCT	Yellow
Stoke On Trent PCT	Purple
Suffolk PCT	Yellow
Sunderland Teaching PCT	Orange
Surrey PCT	Yellow
Sutton and Merton PCT	Blue
Swindon PCT	Orange
Tameside and Glossop PCT	Orange
Telford and Wrekin PCT	Orange
Torbay Care Trust	Yellow
Tower Hamlets PCT	Indigo
Trafford PCT	Orange
Wakefield District PCT	Orange
Walsall Teaching PCT	Purple
Waltham Forest PCT	Blue

Group	Characteristics of group
Orange	An average proportion of the population aged 40+ years with a range of deprivation levels.
Yellow	A greater proportion of the population aged 40+ years with generally low levels of deprivation.
Indigo	Relatively young population with substantially greater than average proportion of the population from Black and Asian ethnic groups. Higher than average deprivation.
Purple	Relatively young population and high levels of deprivation.
Blue	Young population with average deprivation and slightly high than average population from Asian and Black ethnic groups.

PCT Name (cont)	Colour classification
Wandsworth Teaching PCT	Blue
Warrington PCT	Orange
Warwickshire PCT	Yellow
West Essex PCT	Yellow
West Hertfordshire PCT	Yellow
West Kent PCT	Yellow
West Sussex PCT	Yellow
Western Cheshire PCT	Yellow
Westminster PCT	Blue
Wiltshire PCT	Yellow
Wirral PCT	Yellow
Wolverhampton City PCT	Purple
Worcestershire PCT	Yellow

Source**: Yorkshire and the Humber PHO (2008) Diabetes Area Classification for PCTs: PCT classification final lookup colours. Available online: http://www.yhpho.org.uk/resource/item.aspx?RID=9950 [accessed 06 Mar 2012]**

Sources

[1] **Foresight** 2007. Tackling obesities: future choices — project report. London: The Stationery Office, Available online: http://www.bis.gov.uk/foresight/our-work/projects/published-projects/tackling-obesities/reports-and-publications [accessed 15 March 2012]

[2] **Wanless, D** 2004. Securing good health for the whole population: final report. London: The Stationery Office. Available online: http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4074426 [accessed 15 March 2012]

[3] **National Audit Office** 2001. Tackling Obesity in England. London: The Stationery Office. Available online: http://www.nao.org.uk/publications/0001/tackling_obesity_in_england.aspx [accessed 15 March 2012]

[4] **Diabetes UK** 2011. Diabetes in the UK 2011/2012: Key Statistics on Diabetes. Available online: http://www.diabetes.org.uk/Documents/Reports/Diabetes-in-the-UK-2011-12.pdf [accessed 15 March 2012]

[5] Ibid. - *using data from NHS Information Centre 2011.Quality and Outcomes Framework (QOF) data tables 2010/11.*

[6] See note 4.

[7] **South East Public Health Observatory** [website]: Obesity. Available online: http://www.apho.org.uk/resource/view.aspx?RID=78580 [accessed 15 March 2012]

[8] *Adapted from* **World Health Organisation** 2012. BMI Classification. Available online: http://apps.who.int/bmi/index.jsp?introPage=intro_3.html [accessed 15 March 2012]

[9] **Department of Health** 2011. Obesity General Information. Available online: http://www.dh.gov.uk/en/Publichealth/Obesity/DH_078098 [accessed 15 March 2012]

[10] **World Health Organisation** [website]: The WHO Child Growth Standards. Available online: http://www.who.int/childgrowth/standards/en/ [accessed 15 March 2012]

[11] **Diabetes Health Intelligence/NHS Diabetes/Yorkshire and Humber Public Health Observatory** 2012. Diabetes Community Health Profile: Bassetlaw PCT. Available online: http://yhpho.york.ac.uk/diabetesprofiles/PDF2012/5ET_Diabetes%20Profile.pdf [accessed 15 March 2012]

[12] **Diabetes UK** 2009. Diabetes Symptoms. Available online: http://www.diabetes.org.uk/Guide-to-diabetes/Introduction-to-diabetes/Signs_and_symptoms/ [Accessed 15 March 2012]

[13] **National Diabetes Health Intelligence & Yorkshire and Humber Public Health Observatory** 2008. Diabetes Area Classification for PCTs: Classification of PCTs based on risk factors for diabetes. Available online: www.yhpho.org.uk/resource/view.aspx?RID=9949 [Accessed 15 March 2012]

[14] **National Institute for Health and Clinical Excellence** 2006. Obesity: quick reference guide 1 for local authorities, schools and early years providers, workplaces and the public (NICE Clinical guideline 43) Available online: http://www.nice.org.uk/nicemedia/live/11000/30363/30363.pdf [accessed: 15 March 2012]

[15]**National Institute for Health and Clinical Excellence** 2006 Obesity: guidance on the prevention, identification, assessment and management of overweight and obesity in adults and children (NICE Clinical Guideline 43). Pg 23. Available online: http://www.nice.org.uk/nicemedia/live/11000/30365/30365.pdf [accessed 15 March 2012]

[16] **National Institute for Health and Clinical Excellence** [website]: NICE Pathways Online: http://pathways.nice.org.uk/ [accessed 15 March 2012]

[17] **NHS Information Centre 2011**. Statistics on Obesity, Physical Activity and Diet: England, 2011 Report. Available online: http://www.ic.nhs.uk/statistics-and-data-collections/health-and-lifestyles/obesity/statistics-on-obesity-physical-activity-and-diet-england-2011 [accessed 15 March 2012]

[18] **National Obesity Observatory** [website]: Trends in obesity prevalence. Available online: http://www.noo.org.uk/NOO_about_obesity/trends [accessed 15 March 2012]

[19] Ibid.

[20] See note 17. *2010 data from*: NHS Information Centre 2012. Statistics on obesity, physical activity and diet: England, 2012. Available online: http://www.ic.nhs.uk/webfiles/publications/003_Health_Lifestyles/OPAD12/Statistics_on_Obesity_Physical_Activity_and_Diet_England_2012.pdf [accessed 15 March 2012]

[21] **Gatineau M, Mathrani S.** 2011 Obesity and Ethnicity. Oxford: National Obesity Observatory. Availaible online: http://www.noo.org.uk/NOO_pub/briefing_papers [accessed 15 March 2012]; and NHS Information Centre 2006. Statistics on Obesity, Physical Activity and Diet: England, 2006. Available online: http://www.ic.nhs.uk/statistics-and-data-collections/health-and-lifestyles/obesity/statistics-on-obesity-physical-activity-and-diet-england-2006 [accessed 15 March 2012]

[22] **Stewart, D.** 2009. NHS Walsall Healthy Weight Programme Report, November 2009. Walsall: Walsall Teaching Primary Care Trust. Pg 11.

[23] Ibid.

[24] Ibid.

[25] See note 17.

[26] Ibid. – Table 7.10.

[27] Ibid. – Table 7.11

[28] **Eastwood, C.** 2009 Health Needs Assessment: Obesity. NHS West Kent. Available online: http://www.kmpho.nhs.uk/commissioning/needs-assessments/?assetdet956323=99112&p=3 [accessed 15 March 2012]

[29] **Department of Health** [website]: Obesity. Available online: http://www.dh.gov.uk/en/Publichealth/Obesity/index.htm [Accessed 21 December 2011]

[30] See note 1.; *also* **Campbell, D**. 2007. Obesity crisis to cost £45bn a year. *The Observer,* Sunday 14 October 2007. Available online: http://www.guardian.co.uk/society/2007/oct/14/health.medicineandhealth [accessed 22 March 2012]

[31] See note 17.

[32] Ibid.

[33] Ibid.

[34] **Department of Health** 2007 National Service Framework for Diabetes. Available online: http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/Browsable/DH_4899874 [Accessed 15 March 2012]

[35] **NHS Information Centre** 2011. Prescribing for Diabetes in England: 2005/6 to 2010/11.Available online: http://www.ic.nhs.uk/webfiles/publications/prescribing%20diabetes%20200506%20to%20201011/Prescribing_for_Diabetes_in_England_20056_to_201011.pdf [accessed 15 March 2012]

[36] **Diabetes Health Intelligence/Yorkshire and Humber Public Health Observatory** 2009. Inequalities in Diabetes and Obesity Prevalence in England. Available online: www.yhpho.org.uk/resource/view.aspx?RID=73474 [Accessed 20 March 2012]

[37] See note 35.

[38] **Department of Health** 2007. National Service Framework for Diabetes. Chapter 1: Setting the Scene – Who gets diabetes – health inequalities. Available online: http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/Browsable/DH_4899830 [Accessed 5 Mar 2012]

[39] **Diabetes UK** 2010. Diabetes in the UK 2010: Key statistics. Available online: http://www.diabetes.org.uk/Documents/Reports/Diabetes_in_the_UK_2010.pdf [accessed 20 March 2012]

[40] **Williams, G and Pickup**, J.C 2004. Handbook of Diabetes, (3rd edition). Oxford: Blackwell Publishing

[41] See note 4.

[42] **Department of Health** 2007 National Service Framework for Diabetes. Available online: http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/Browsable/DH_4899874 [Accessed 15 March 2012]

[43] **NHS Information Centre** 2006. Health Survey for England 2004 Vol 1: health of minority ethnic groups. Available online: http://www.ic.nhs.uk/webfiles/publications/healthsurvey2004ethnicfull/HealthSurveyforEnglandVol1_210406_PDF.pdf [Accessed 15 March 2012]

[44] Ibid.

[45] See note 4.

[46] Ibid.

[47] **Roberts, S.** 2006. Turning the Corner: Improving Diabetes Care. Department of Health. Available online: http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_4136011.pdf [accessed 15 March 2012]

[48] **NHS Local**: Warwickshire [website]: Can physical activity lower your chances of getting diabetes? Available online: http://nhslocal.nhs.uk/story/can-physical-activity-lower-your-chances-getting-diabetes [accessed 15 March 2012]

[49] Ibid.

[50] **Lim, E.L, K. G. Hollingsworth, B. S. Aribisala, M. J. Chen, J. C. Mathers & R. Taylor** 2011. Reversal of type 2 diabetes: normalisation of beta cell function in association with decreased pancreas and liver triacylglycerol. *Diabetologia DOI 10.1007/s00125-011-2204-7*. Available online: http://www.diabetologia-journal.org/Lim.pdf [accessed 5 Mar 2012]

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