

Appendix 1b- Cancer

Introduction

In June and July 2010 the Public Health Evidence & Intelligence team undertook an analysis of premature mortality due to cancers in Halton. The team had conducted a health equity audit of cancers in 2008-9. This chapter has taken information from these reports. Additionally an assessment of local cancer screening programmes was included in the 2009-10 Public Health Annual Report.

Cancer is a disease caused by normal cells changing so that they grow in an uncontrolled way. There are over 200 different types of cancer. In Halton the four most common cancers are lung, bowel, breast and prostate. In the UK over half of cancer deaths are due to these four cancers (*Department of Health 2007*).

Whilst the evidence indicates that substantial reduction in deaths from cancers can be achieved by healthy lifestyles (in particular, quitting smoking, eating a healthy diet and not being overweight) interventions to bring about this change are long-term. Local assessment suggests capacity in secondary care is not a significant issue. In the short term the most likely way to improve survival times and reduce deaths from cancer is to get people who have symptoms to come forward for treatment faster. This may have a knock on effect to secondary care services which needs to be factored in. The Primary Care Trust (PCT) has been implementing an Early Presentation and Detection Programme as part of the Healthy Communities Collaborative – the ‘Get Checked’ project.

Cancers are the second largest single cause of death in Halton (circulatory disease is the largest single cause). Mortality rates have been decreasing over recent years. However, the PCT remains above the rates for the North West and England. The rate of improvement in Halton, especially for women, has been much lower than that of its comparator boroughs (Middlesbrough, Stockton-on-Tees and Hartlepool). The top three site-specific cancers are lung, bowel, breast (women) and prostate (men). There are various approaches to tackling cancers:

- Prevention such as measures to discourage people from starting to smoke cigarettes/tobacco or helping them to quit
- Early detection through encouraging people to identify symptoms and present to their GP as soon as possible
- Systematic screening programmes to target groups at most risk

Other relevant chapters:

- General health and mortality
- Smoking
- Alcohol
- Obesity
- Substance misuse
- Economic

Key issues and gaps

Key findings of the 2010 Halton Premature Mortality from Cancers Report were:

- Mortality.** Windmill Hill and Halton Castle wards have the highest death rates for all cancers under the age of 75. This is true for both males and females. Broadheath also has a high rate. Beechwood and Hale are statistically lower than the Halton average for female under 75 mortality. Halton's all cancers excess death rate is high compared to all comparators except Hartlepool. The individual cancers with the most number of deaths (and for which comparator data was available) were also investigated. Excess death rates are high for stomach cancer and (especially for females) for oesophageal cancer compared to statistical neighbours.
- Life expectancy.** The contribution that cancers make to the gap in life expectancy between the PCT and England has fallen (2003-05 to 2006-08). However, it remains a substantial feature, especially for females in Halton where the relative contribution remains above that of the Spearhead PCT group (at 2006-08 27% compared to 22%).
- New incidents of cancer.** The excess incidence (new cases) of cancers in Halton is high compared to its comparator boroughs. This is especially so for males, where only Middlesbrough experiences a higher excess rate. Halton has one of the highest excess incidence rates for lung cancer (both males and females), is slightly higher for male skin cancer incidence but does not experience excess breast cancer incidence. Perhaps the most stark comparison is with St Helens where incidence is much lower than in Halton for cancers as a whole, lung cancer (both males and females) and males for skin cancer.
- Risk factors.** The three main risk factors for cancer are smoking, obesity and alcohol. It is possible to estimate the contribution these make to cancer deaths overall (Table 1).

Table 1: Mortality attributable to obesity, alcohol and smoking, 2004-8

	OBESITY		ALCOHOL		SMOKING	
	Male	Female	Male	Female	Male	Female
	Observed	Observed	Observed	Observed	Observed	Observed
Halton	11	23	25	11	200	113
St Helens	16	35	30	14	271	139
PCT	27	59	55	26	472	252

Although the estimated levels of smoking have fallen to be one of the lowest of the comparator group used, it remains above the England average rate. Halton also has one of the highest alcohol-related hospital admissions rates. This is significant as, for certain cancers, the risk of developing cancer rises exponentially for individuals who both smoke and consume high levels of alcohol. This is the case with oesophageal cancer and may go some way to explaining why Halton has one of the highest rates of excess deaths from this cancer of the comparator group for both men and women. Smoking quitters data is only available for comparison at PCT level. At this level, the

PCT has greater success rates than all its comparators. It has a lower level of people setting a quit date per 100,000 population than many of its comparators but conversely, has a higher success rate per 100,000 than all comparators apart from Hartlepool.

- **Environmental factors.** It is estimated that about 2-5% of cancers are due to occupational exposure and 1-5% of cancers are due to environmental factors. This compares to 29% of cancers being due to tobacco with other lifestyle factors also being significant, as is the influence of reproductive hormones (although much less so than lifestyle behaviours).
- **Survival rates.** A new way of monitoring improvements in cancer treatment has been developed by ONS and the National Cancer Intelligence Network (NCIN). For each of the 152 primary care trusts in England and for each of the 11 years 1996–2006, an index has been constructed of one-year relative survival for all cancers combined¹. For England as a whole there has been an increase in 1-year survival. This is reflected in the local data with annual rate for Halton & St Helens PCT also rising. The PCT 1-year survival rate in 2006 was 65.2% compared to 65% for England as a whole. This was a higher rate than Halton's borough's comparator areas.

Recommendations for consideration by commissioners

Continue to ensure full implementation of the Cancer Reform Strategy:

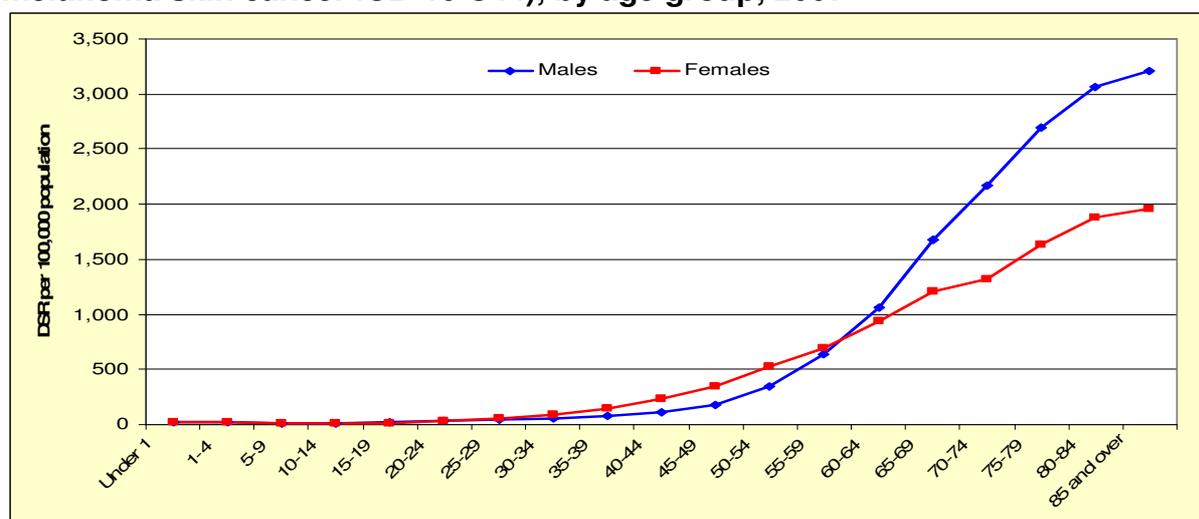
- Continue to support the Early Detection/ Healthy Communities Collaborative for Cancer in Halton to raise awareness of the signs and symptoms of cancer and promote early presentation to health services
- Implement the recommendations made in the 2009-10 Public Health Annual Report for cancer screening
- Ensure cancer prevention is part of all commissioners' approach to tackling premature deaths from cancers.
- Continue to participate in the peer review process through the cancer network
- Continue to develop and support screening programmes
- Continue to focus on reducing the prevalence of smoking within the population,
- Reducing other risk taking behaviours including alcohol and promoting better diet and more active lifestyles
- Promotion of the human papilloma virus (HPV) vaccination to young girls
- Community focussed social marketing work to understand the barriers to cancer screening through the Get Checked programme
- Improving the expertise of cancer treatment services – balancing concentration of specialist skills with improved access
- Continue to support and develop care pathways for Cancer locality teams to ensure improved access to diagnosis and treatment

Level of need in the population

Incidence

In 2007 nationally there were around 180,000 new cases of cancer registered (malignant and non-malignant) for males and 196,000 for females. Cancer is predominantly a disease of the elderly. The overall crude rates of cancer registrations – 490 per 100,000 population for males and 470 per 100,000 population for females – conceal wide differences between the sexes and across the age groups, as illustrated in Figure 1.

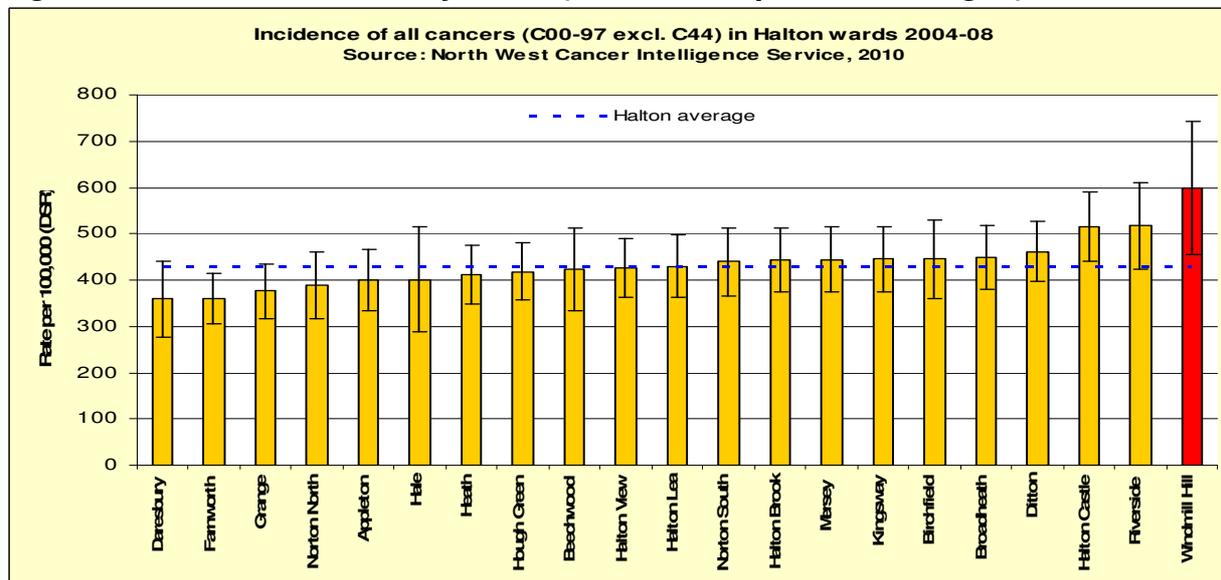
Figure 1: National incidence rates for all malignant neoplasms (excluding non-melanoma skin cancer ICD-10 C44), by age group, 2007



Source: *Cancer Statistics Registrations 2007*¹.

Local incidence also varies by ward as Figure 2 shows. However, this variation is only statistically significantly different to the Halton average rate for Windmill Hill which has a statistically higher rate.

Figure 2: Cancer Incidence by ward, (all cancers, persons, all ages) 2004-08



Screening

(information taken from 2009-10 Halton & St Helens Public Health Annual Report and PCT cancer screening reports)

The aim of a screening programme is to detect a disease earlier than if the person had waited for symptoms to develop, reducing the harm caused by the disease or its complications and the number of deaths from that disease. The tests used will identify which people have a high risk of disease, and offer those people further testing. The further test will be a diagnostic test. Those diagnosed with the disease can then start appropriate treatment earlier than they otherwise would have done had they waited until they started to have outward symptoms of disease. This increases the likelihood of the disease being cured or successfully managed, the risk of complications may be reduced and the effect the disease has on the persons life minimised. Screening is very different from clinical medicine because the health service is targeting apparently healthy people, and offering them a test to look for a disease.

There are three nationally defined screening programmes for cancer: breast, cervical and bowel.

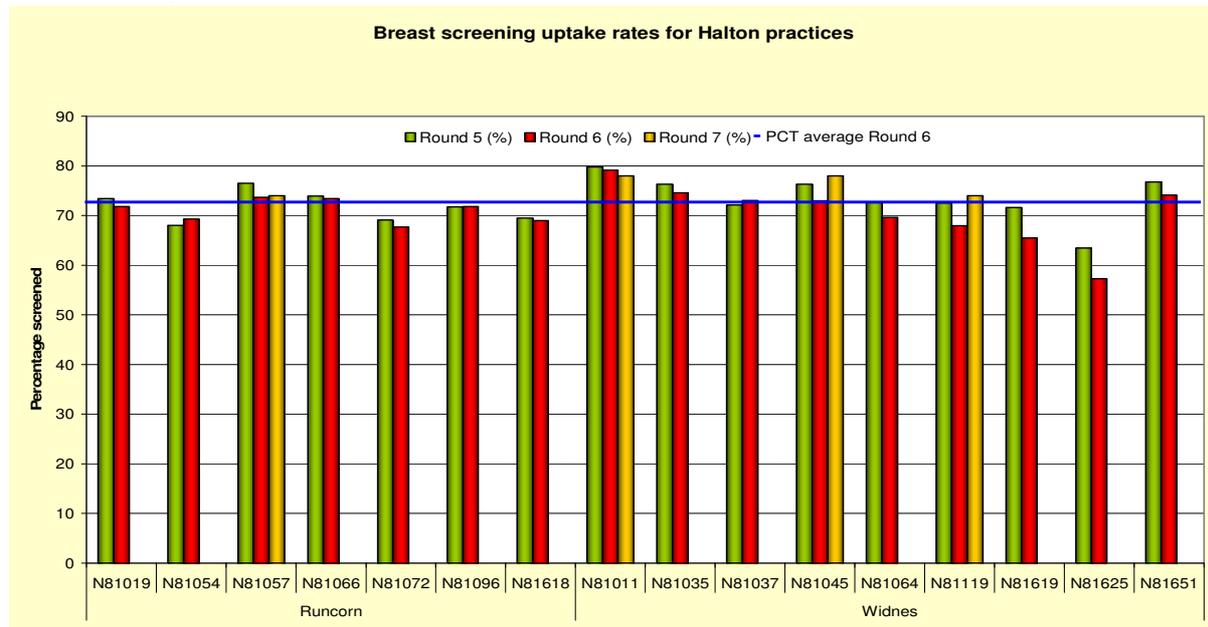
Breast Cancer Screening Programme

- Breast screening detects small, early cancers because they look different from normal breast tissue on a type of x-ray examination, known as a mammogram.
- The breast screening offer is made to women between the ages of 50-70 every three-years. After this age women can self-refer but they are not part of the automatic call-recall system. Figure 3 illustrates breast cancer screening uptake in Halton.
- Out of 1000 women who are screened for breast cancer, about 75 will be called

back for further tests. These tests may include a biopsy.

- Out of 75 women called back, 67 will be told everything is normal, and eight will have an early, treatable cancer diagnosed.

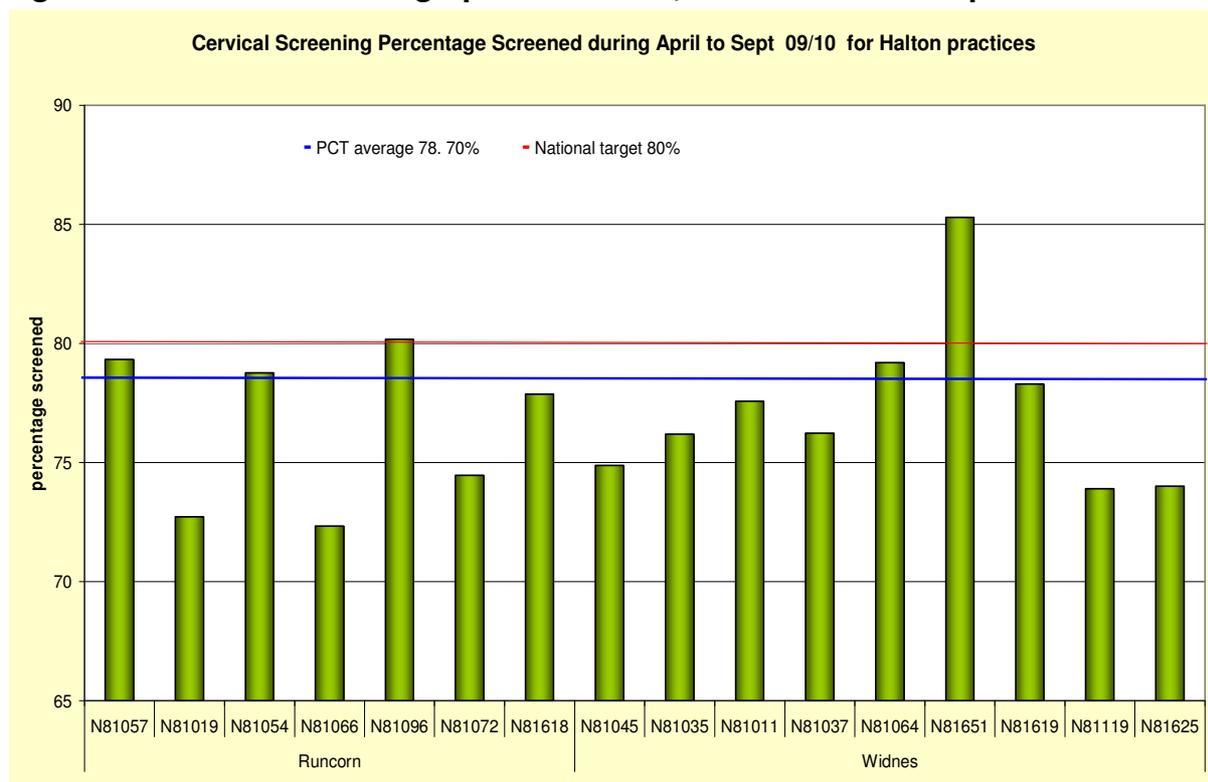
Figure 3: Breast cancer screening uptake, round 5-7, women registered with Halton GP practices



Cervical Cancer Screening Programme

- Cervical screening detects abnormal cells, before any cancer develops. The abnormal cells are found by looking at a small sample of cells with a microscope. The cells are collected using a simple technique by a doctor or nurse. Women with abnormal cells can be seen and treated at colposcopy² clinics. The treatment prevents cancer before it develops.
- The cervical cancer screening offer is made to women between the ages of 25 to 49 every three years and to women aged 50 to 64 every five years. Figure 4 illustrates cervical cancer screening uptake.
- 2 out of 100 women whose smear test is difficult to interpret at the laboratory will be asked to have a repeat smear test.
- 1 or 2 out of 100 women will be asked to have their next smear test early
- 5 out of 100 women will be referred to a colposcopy clinic for expert assessment and treatment.

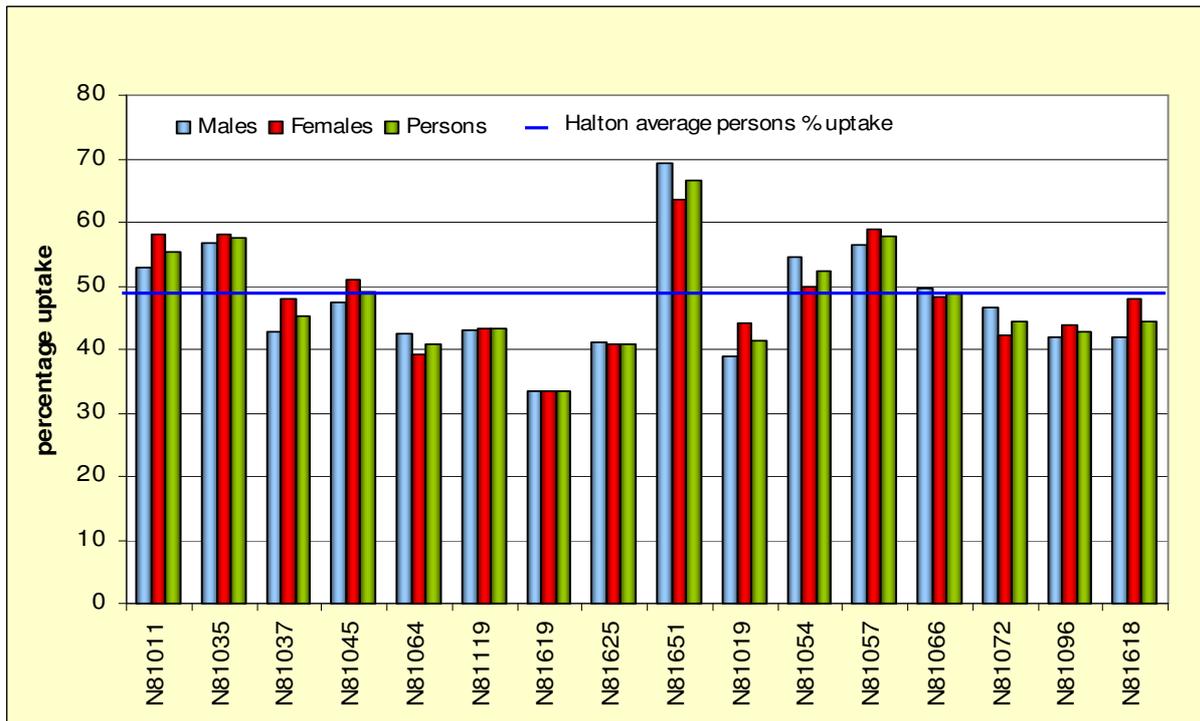
Figure 4: Cervical screening uptake 2009-10, across Halton GP practices



Bowel Cancer Screening Programme

- Bowel screening detects polyps which are cancers, or could develop into cancers. Samples of faeces have to be collected at home with a simple kit, and are posted to a laboratory. The laboratory tests for blood in the faeces. People with a positive test are asked to have a specialist examination of their bowel with a colonoscope³. The examination is done under anaesthetic. The colonoscope will find polyps, which may be cancers or “pre cancers”. Over half of the cancers found are at an early, easily treatable, stage. Polyps can be removed before they develop into cancer.
- The bowel cancer screening offer is made to men and women aged 60 to 69 every two years. Figure 5 illustrates screening uptake.
- Out of 100 people who complete a bowel screening kit in their home, about 2 will have a positive test for blood. These people will be invited to a screening centre to discuss the test with a specially trained nurse.
- Out of 20 people seen at the screening centre, 16 will need a colonoscopy examination.
- Out of 16 people having a colonoscopy, eight will be told everything is normal, 6 will have polyps that can be treated before any cancer develops, and 2 will be told they have a cancer that needs treatment.

Figure 5: Bowel cancer screening uptake 2007-08, across Halton GP practices



Hospital admissions

There is significant variation at ward level for hospital admissions due to cancers as can be seen in Figure 6. This may be due to differences in age and gender structure of each ward. As Figure 7 shows cancer hospital admission rates increase with age, being rare in persons under the age of 50. Also, some but not all cancers are associated with deprivation. Thus the level of both incidence, admissions and mortality will be a reflection of these complex inter-relationships.

Figure 6: Admissions to hospital due to cancers, by ward, 2009-10

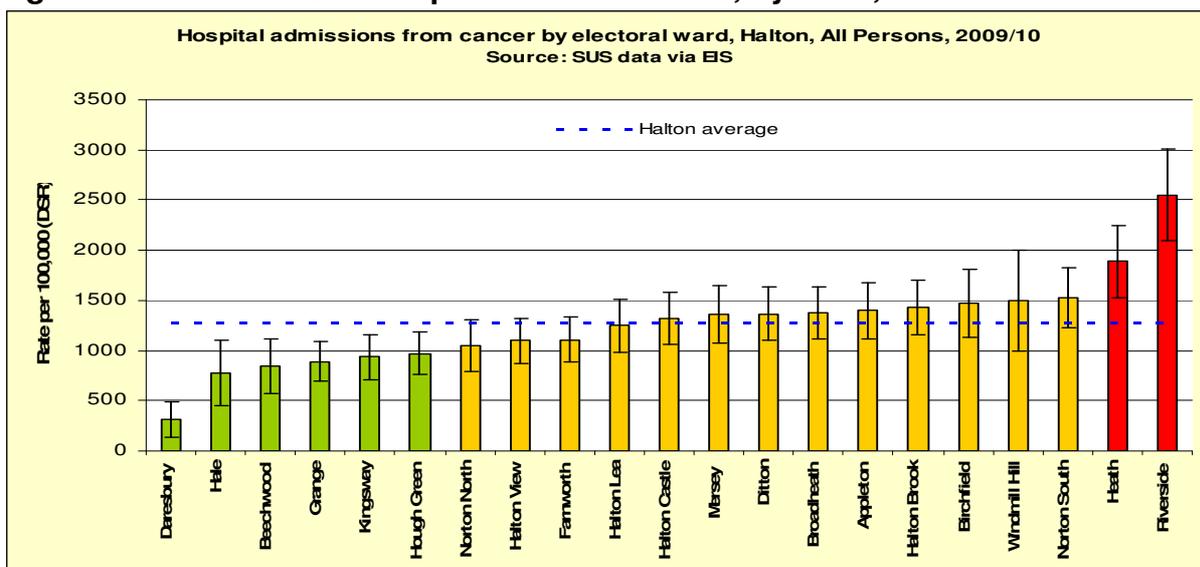
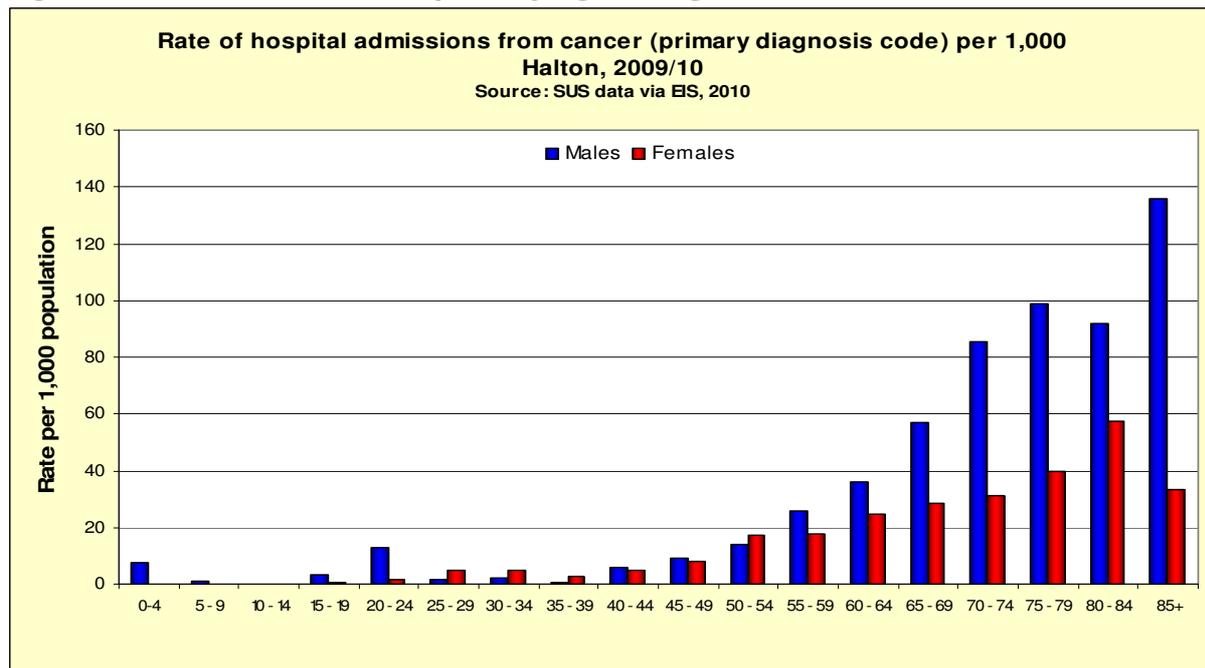


Figure 7: Admissions to hospital by age and gender, 2009-10



Mortality

Overall there has been a reduction in deaths under the age of 75 (often referred to as premature deaths) from cancers. This pattern can be seen in Figures 8 (males) and Figure 9 (females). For the mortality rate in males, the local authority started at a lower rate in 1993 than two of its comparator boroughs, Middlesbrough and Hartlepool, and has maintained this position. For females the local authority was lower than all comparator boroughs in 1993 but improvements have been made to a greater extent in Hartlepool and Stockton-on-Tees. Only the rate in Middlesbrough remains higher than Halton by 2006-08. However, what this also demonstrates is that not only is the reduction less for women than for men, but that compared to England and Halton's statistical neighbours, the reductions for both sexes have been much less marked than for its comparators.

Figure 8: Cancer mortality trends for males, deaths under 75 years, 3-year rolling averages 1993-95 to 2006-08

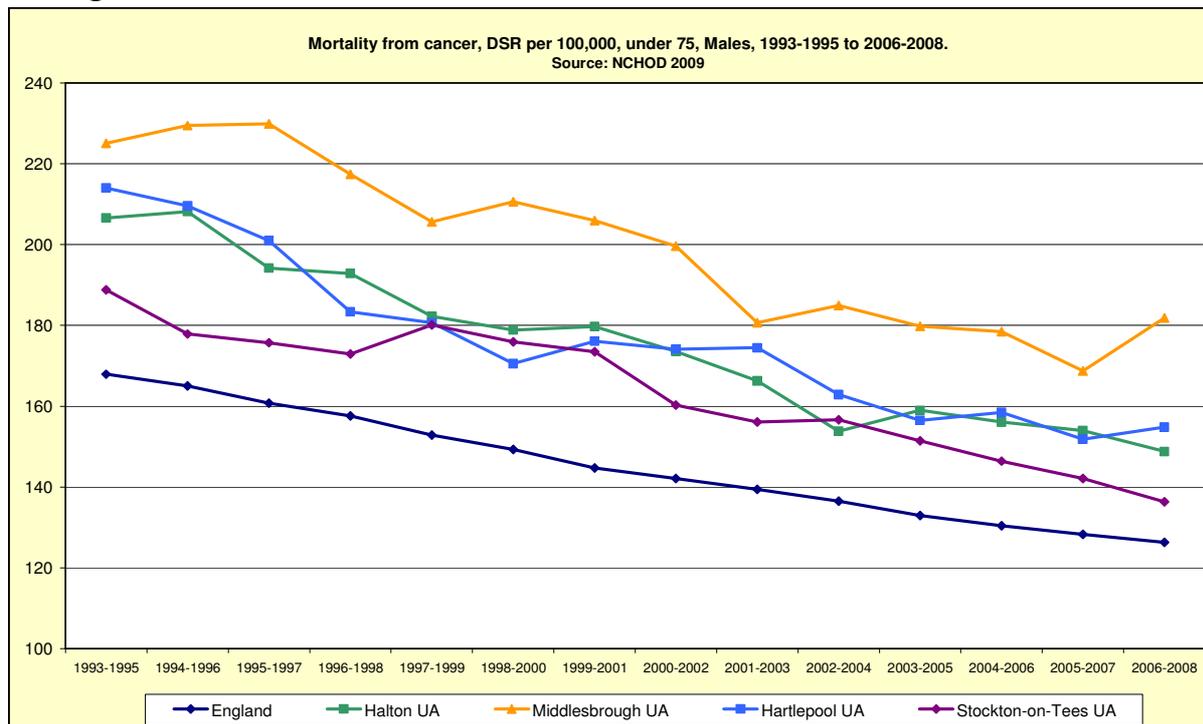
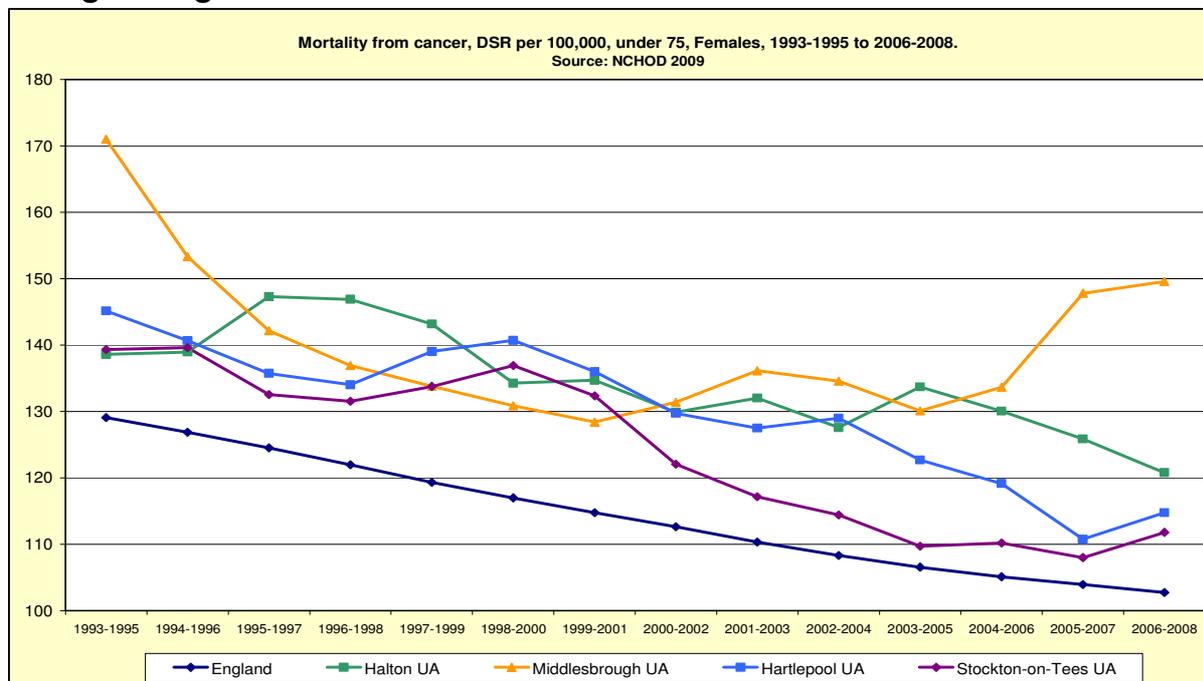


Figure 9: Cancer mortality trends for females, deaths under 75 years, 3-year rolling averages 1993-95 to 2006-08



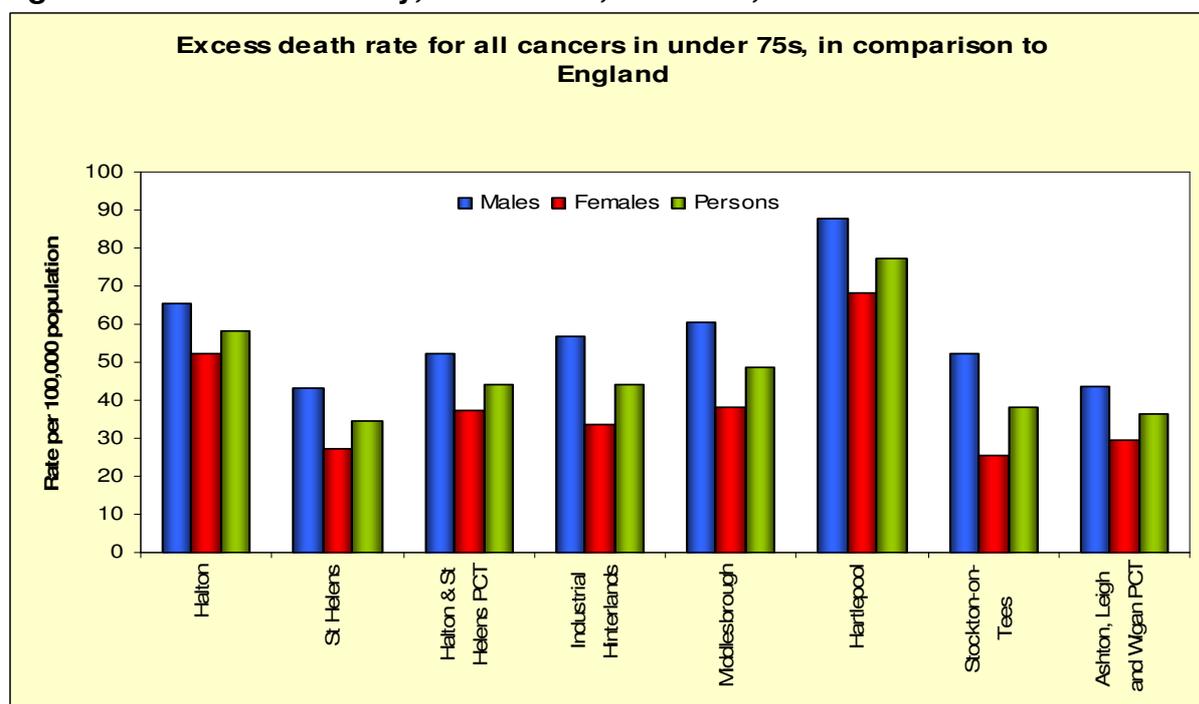
Windmill Hill and Halton Castle have the highest death rates from all cancers under 75 for both males and females. Using the PCT and Office of National Statistics (ONS) group averages this is a statistically significantly higher level for Halton Castle for

females. Windmill Hill also experiences statistically significantly higher rates of cancers in males compared to the PCT and ONS averages.

Excess deaths

Excess deaths refer to the number of deaths above that which would be expected if the area death rate were the same of the England rate. This has therefore been calculated to applying the England age-specific rates to the borough populations for each age group then comparing this figure to the observed number of deaths in the gender/age band. In order to compare the borough against its comparators these numbers were then converted into directly standardised rates.

Figure 10: excess mortality, all cancers, under 75, 2004-08



As with incidence Halton experiences relatively high excess cancer mortality overall. This is particularly marked for stomach and oesophageal cancers, two cancers associated with high levels of alcohol consumption (although other factors also contribute to these cancers). However, the excess death rates are lower than Halton's comparators for lung cancer. It is worth noting that Halton experiences higher rates in all but colorectal cancer compared to St Helens, its nearest neighbour and the other borough covered by the PCT.

An analysis of the impact of three major lifestyle factors on cancer mortality revealed that Halton had a higher burden of deaths caused by smoking, alcohol misuse and obesity than St Helens of England. This was most marked for tobacco. Details of this analysis can be found in the full report.

Current services in relation to need

See also section on levels of need regarding cancer screening programmes and uptake.

Prevention and awareness measures. The PCT “Get Checked” campaign, which includes: community development work with volunteers in defined neighbourhoods, marketing and advertising campaign with evidence based early detection messages across a wider footprint. “Health Checks” - Health checks for all adults in Halton and St Helens via NHS venues, mobile cancer awareness events using the cancer network cancer vehicle “iVan”

Screening. Three cancer screening programmes serve adults in Halton:

- Breast Screening will be extended to all women between 47 and 73 over the next 5 or more years. The current programme, serving women 50-69 years old, was offered to over 8,000 women last year and identified about 60 early breast cancers.
- Bowel Screening is taken up by about half of all men and women between 60 and 69 years old. About 1 in 50 people are called up for follow up, and 10 new cancers were found last year.
- Cervical Screening identifies early, pre cancer when it can be treated easily. All women will get their results within 14 days from December 2010.

Treatment. Survival with cancer is improving each year, and survival rates with cancer are high in Halton and St Helens PCT for many cancers, although for some, there is a social gradient to survival. Local cancer clinicians work with networks across Merseyside and Cheshire to make sure our patients get the most up to date treatment.

Peer review. Halton and St Helens PCT under takes a peer review in relation to specific cancers each year, where actions are needed the PCT will support the locality teams and specialist Multi Disciplinary Team

Cancer support groups. Halton and St Helens PCT commissions numerous voluntary sector groups to support patients with current cancer diagnosis or patients who are in remission

Strategic direction. Halton and St Helens PCT chairs the Eastern Sector locality group whose main function is to drive commissioning decisions and implement peer review recommendations. Members include Warrington and Knowsley PCT, community and Secondary care partners

Cheshire & Merseyside Cancer Network: Cancer dashboard. The cancer dashboard will be outcome driven, with agreed milestones for each PCT. The network will assist them in supporting the gathering of evidence for the individual measures, including measures by practice. It is envisaged that action plans will be developed and

adopted by PCT boards as appropriate and recommendations will be made to commissioners. A key element of the cancer dashboard will be the development of a database that PCTs and practices can access to review performance and to create reports.

The cancer dashboard will:

- Collate primary care equity audits for urgent referrals in the PCT by practice- this will include, review of referring patterns linked to deprivation, number of referrals, cancer yield. This is different than the primary care audits.
- Capture data within templates for survival, mortality, incidence, screening and staging data and will identify key trends and variations.
- Provide PCT reporting in a template that will demonstrate compliance with national and local baseline assessments identified within the Cancer Reform Strategy.
- Provide information about screening performance at GP practice and PCT level, templates for GP practices will be made available.
- Capture action plans to enable Commissioners to make decisions on services.
- Test other performance measures around commissioning such as length of stay analysis and other commissioning priorities.

Evidence of what works

Department of Health (2007) [Cancer Reform Strategy](#)

National Institute for Clinical Excellence (NICE)

[Diagnosis and Treatment of Lung Cancer](#) (CG24, February 2005)

[Referral Guidelines for Suspected Cancer](#) (CG27 June 2005)

[Prostate Cancer Diagnosis and Treatment](#) (CG58 February 2008)

[Early and locally Advanced Breast Cancer Diagnosis and Treatment](#) (CG80 February 2009)

[Guidance on Cancer Services: Improving Outcomes in Colorectal Cancers Manual Update](#) (2004)

National Screening Committee

(See also tobacco, obesity, alcohol for evidence of interventions to support the major lifestyle risk factors associated with cancer)

Unmet needs and service gaps

See Current Services section which outlines improvements to be made.

Further needs assessment required

- Continue to monitor key elements of cancer performance and make this data widely available to stakeholders, including making it publically available via *Instant Atlas* on the PCT website
- Review and update the 2008 Cancer Health Equity Audit during 2011
- Continue to provide practices with regular performance data including screening reports
- Carry out an analysis of local screening performance against that of the North west, England and other standard comparators.

Key contacts and further links

ⁱ *Cancer Statistics Registrations 2007, Office for National Statistics*