Nottinghamshire County Council

Report to the Health & Wellbeing Board

7th November 2012

Agenda Item: 5

REPORT OF THE DIRECTOR OF PUBLIC HEALTH

CANCER AND NOTTINGHAMSHIRE

PURPOSE OF THE REPORT

1. This report provides information on cancer, including local incidence, mortality and survival. It outlines the current position in relation to cancer across Nottinghamshire, information on current policy, an overview of cancer mortality and survival and current service provision, as well as recommending further action.

INFORMATION AND ADVICE

What is cancer?

2. Cancer is a disease caused by normal cells changing so that they grow in an uncontrolled way. The uncontrolled growth usually causes a tumour to form. If not treated, the tumour can cause problems in one or more of the following ways:

   - Spreading into normal tissues nearby
   - Causing pressure on other body structures
   - Spreading to other parts of the body through the lymphatic system or bloodstream.

3. There are more than 200 different types of cancer, as there are many different types of cell in the body. Any of these cell types can grow into a primary cancer. Different types of cancer behave very differently. The type of cancer affects whether it is

   - Likely to grow quickly or slowly
   - Likely to produce hormones or other chemicals that change the way the body works
   - Likely to spread in the blood or lymph system
   - Likely to respond well to particular treatments.

4. Box 1 below lists the main type of cancers. Five sites: skin, breast, lung, large bowel (colorectal) and prostate, account for the majority of all new cancers. The majority of skin cancers, apart for a rare type called melanoma, are easily curable and are not included in most of the statistics in this report. Breast, large bowel, lung and prostate cancers account for over half (54%) of all new cancers excluding the non-melanoma skin cancers.

Box 1 Types of cancer

1. **Carcinoma** - cancer that begins in the skin or in tissues that line or cover internal organs.
2. **Sarcoma** - cancer that begins in bone, cartilage, fat, muscle, blood vessels, or other connective or supportive tissue.
3. **Leukaemia** - cancer that starts in blood-forming tissue such as the bone marrow and causes large numbers of abnormal blood cells to be produced and enter the blood.
4. **Lymphoma and myeloma** - cancers that begin in the cells of the immune system
5. **Central nervous system cancers** - cancers that begin in the tissues of the brain and spinal cord.

Why is cancer a public health issue?

5. Overall it is estimated that 1 in 3 people will develop cancer in their lifetime. Since the publication of the NHS Cancer Plan in 2000, death rates from cancer have fallen so there are more people who have survived cancer in the population. The latest analysis shows that at the end of 2006, there were over 200,000 cancer patients in the UK who were alive one year after their diagnosis. In total, there were 1.13 million cancer survivors in the UK who were alive up to 10 years from diagnosis at the end of 2006[i]. There are now an estimated 1.7 million people living with cancer in the UK. This number is increasing by over 3% per year, which suggests that by 2030 there could be over 4 million people living with cancer in the UK. These latest estimates are much higher than previous forecasts of cancer prevalence. This is mainly because incidence has been rising whilst the death rates have continued to fall. This trend is expected to continue over the coming years as a result of a number of factors, including an ageing population, earlier detection of cancer and continued improvements in treatment. However, there is still a gap between UK survival rates and the best rates in some other European countries[ii].

6. Cancer is the 3rd highest cause of premature death in Nottinghamshire accounting for 28.4% of deaths and is therefore an important local health priority[iii]. 23,861 people in the county are living with cancer. The local incidence and mortality rates are slightly above the average for England as a whole but this difference is not statistically significant.

7. The National Cancer Equality Initiative has published a summary of the available evidence[iv] regarding health inequalities and cancer. The authors noted that notwithstanding some notable exceptions e.g. breast cancer, cancer incidence is generally higher in:

    - deprived compared with affluent groups
    - older people compared with younger people
    - men compared with women.

8. The relationship with ethnicity varies according to cancer type and ethnic group. Survival is also worse in deprived communities, in older people and in men compared to women. The difference in survival is such that even among those cancers where incidence is higher among wealthier socioeconomic groups, death rates are higher among people from deprived communities

Who is at risk of developing cancer?

9. An individual's risk of developing cancer depends on many factors, including age, lifestyle and genetic make-up. A small number of infectious agents, especially certain viruses, play a key role in causing certain types of cancer. It is estimated that inherited factors cause up to 10% of all cancers. Factors such as the age at which a woman has her first child and the number of children she has affect the risk of the most common female cancers.

10. It is estimated that up to half of all cancer cases diagnosed in the UK could be avoided if people made changes to their lifestyle. These include:

    - stopping smoking
    - moderating alcohol intake
    - maintaining a healthy weight
    - having a high fibre diet
    - higher consumption of fruit and vegetables
    - lower consumption of red and processed meats
    - lower salt intake
    - lower saturated fat intake
    - reduced exposure to UV radiation.

11. More than a quarter of all deaths from cancer (including almost 90% of lung cancer deaths) are linked to tobacco smoking[v]. Estimates suggest that, in the UK, up to 12,500 new cancers each year could be avoided if alcohol consumption was reduced and 17,000 new cancers are linked to obesity[vi]. Cancer Research UK has carried out research into the potential impact of known lifestyle and environmental factors and a graphical representation of the impact on each tumour site is shown at **Appendix A**.

12. The Health and Wellbeing Board priorities underpin many of these issues. Improvements in the lifestyle factors highlighted above would have an impact on cancer incidence as they all contribute to increased risk of cancer at individual and population level.

NATIONAL AND LOCAL POLICY DRIVERS

13. *Improving Outcomes: a Strategy for Cancer* was published in January 2011 by the Department of Health[vii]. The government target is that an additional 5,000 lives should be saved from cancer each year by 2014/15. The main aims of the Cancer Strategy are to[viii]:

    a. reduce the incidence of cancers which are preventable, by lifestyle changes
    b. improve access to screening for all groups and introduce new screening programmes where there is evidence they will save lives and are recommended by the UK National Screening Committee

    c. achieve earlier diagnosis of cancer, to increase the scope for successful treatment – diagnosis of cancer at a later stage is generally agreed to be the single most important reason for the lower survival rates in England and

    d. make sure that all patients have access to the best possible treatment.

14. Increasing public awareness has been generated through coordinated campaigns via the National Awareness and Early Diagnosis Initiative (NAEDI). NAEDI has targeted initiatives

for 4 common cancers with high mortality rates: lung, large bowel, prostate and ovarian. There is also research via NAEDI into public attitudes and barriers and the public response to messages about cancer.

15. Although cancer is not a current priority in Nottinghamshire's Health and Wellbeing Strategy, three of the six Clinical Commissioning Groups in Nottinghamshire have included cancer in their priorities for the coming year. In addition, targets for cancer screening programmes and cancer waiting times are in place to ensure that more cancers are diagnosed at an earlier stage and, once diagnosed, treatment begins quickly.

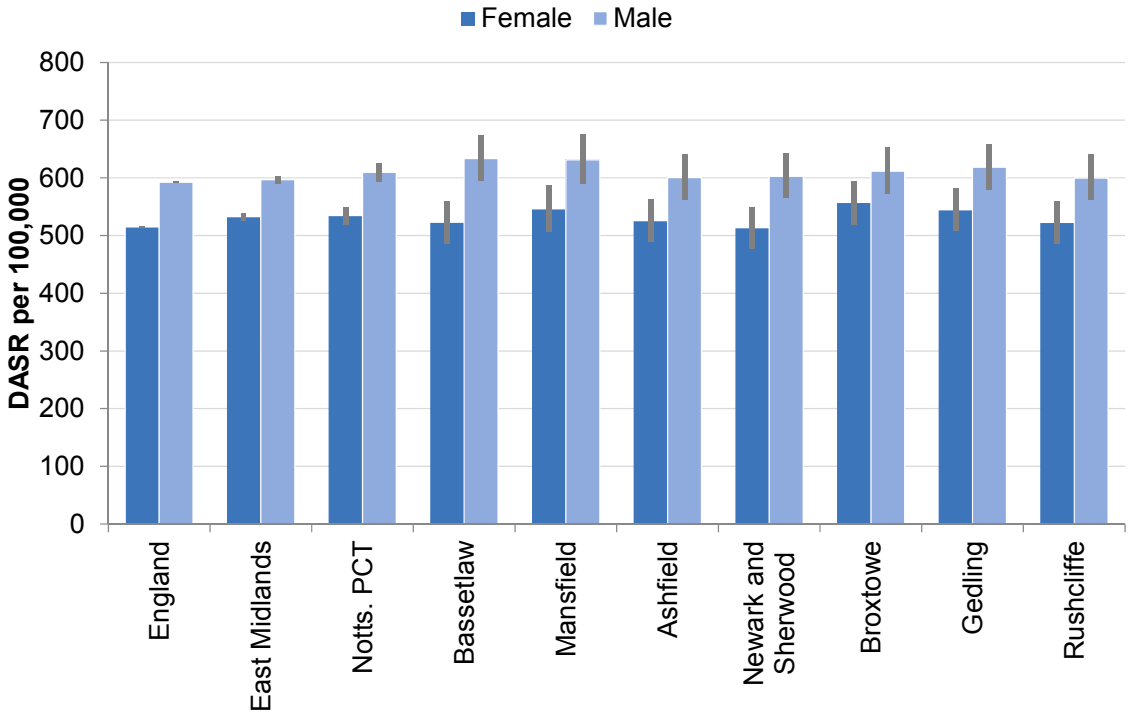
HEALTH NEED

16. As mentioned in paragraph 3 above, the UK does not compare well with the European average in respect of cancer. Incidence and mortality rates are shown across 30 countries in Europe in **Appendix B**. The UK has the 12th highest cancer incidence and the 12th highest mortality rate, both rates being above the European average. There are several countries that have lower mortality rates despite higher incidence rates, including France, Norway and Germany.

17. In Nottinghamshire County, an average of 3,571 people are diagnosed with cancer each year and 1,798 people die from the disease. Figures 1 and 2 below shows the incidence (new cases) and mortality from cancer for people aged 20 years and older between 2007 and 2009, the most recent time period for which this data is available.

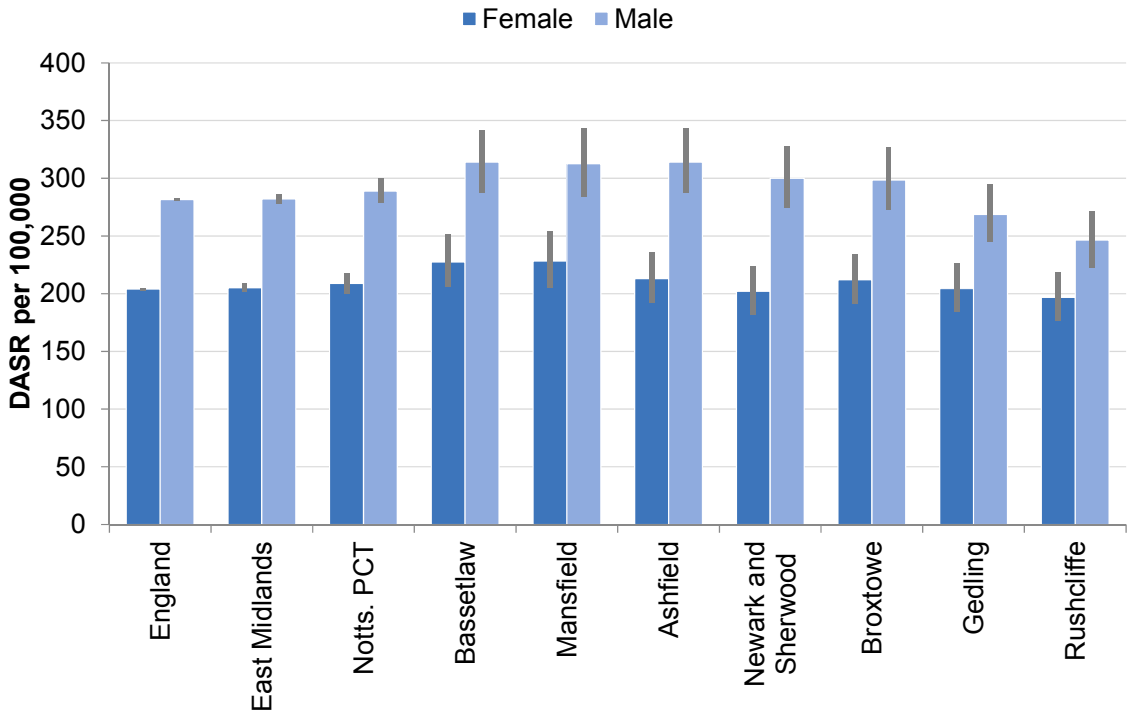
18. Both graphs indicate that Nottinghamshire has rates higher than the national average for both cancer incidence and mortality. The highest rates are in Mansfield and Ashfield and the lowest in Rushcliffe. Men have significantly worse rates for both new cases and deaths than women. Overall, more people in Mansfield die of cancer under the age of 75 years than any of the other areas in Nottinghamshire and the numbers are higher than the England average. Fewer people in Rushcliffe under the age of 75 years die of cancer than the rest of Nottinghamshire and the numbers are lower than the England average.

Figure 1 Incidence of invasive cancers for those aged 20 and over; 2007-2009; national, regional, county and district level



N.B. Data exclude non-melanoma skin cancers

Figure 2 Mortality from invasive cancers for those aged 20 and over; 2007-2009; national, regional, county and district level



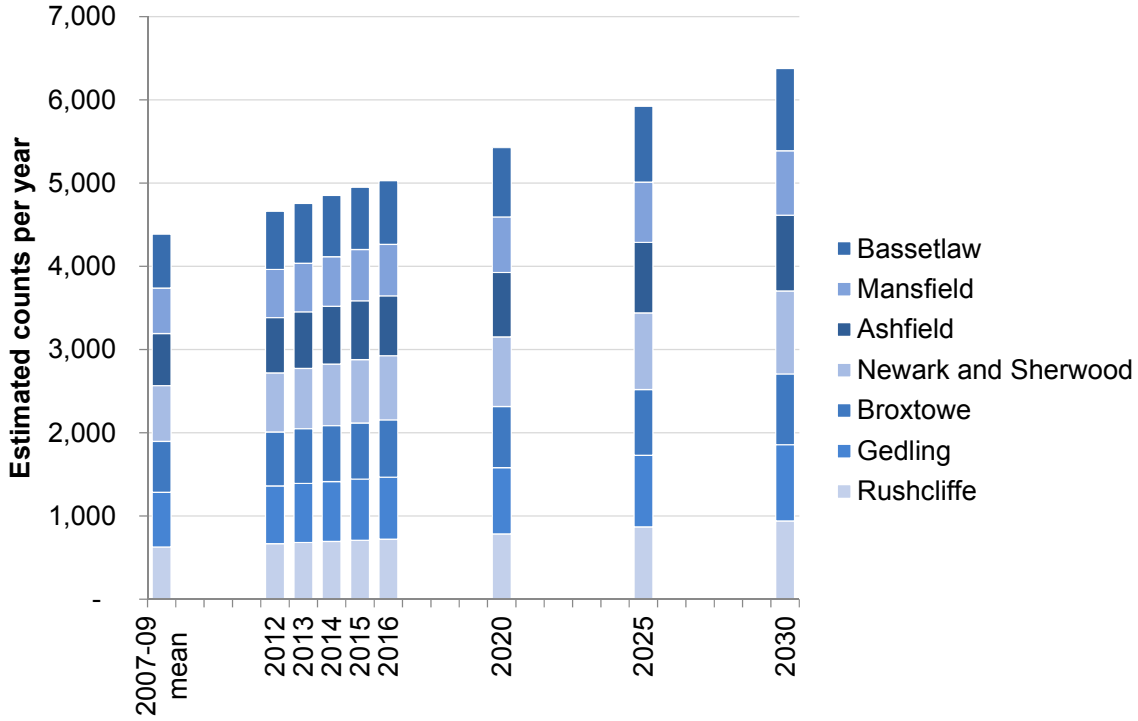
19. For men, the most common cancer in the UK is prostate cancer. For women the most common cancer is breast cancer. Lung cancer is the commonest cause of death in both men and women, accounting for 24% and 21% of deaths from cancer respectively.[ix]
20. Table 1 below shows the incidence and mortality rates of the commonest types of cancer for men and women in Nottinghamshire (2008-2010).[x] This follows the national trend.

Table 1 Incidence and mortality in 5 commonest cancers in men and women; Nottinghamshire; 2008-2010;

Tumour site	Incidence: DASR/100,000 population		Mortality: DASR/100,000 population	
	Males	Females	Males	Females
Breast	3.3	554.0	0.7	150.3
Prostate	448.3	-	131.7	-
Lung	276.3	196.3	224.7	168.7
Large bowel	270.3	209.7	104.7	85.0
Bladder	90.3	38.3	40.7	22.3
Stomach	68.0	30.7	44.3	19.0
Oesphagus	67.7	31.3	59.7	25.0
Ovary	-	84.3	-	43.0
Uterus	-	92.0	-	21.3
Pancreas	55.3	49.7	45.7	48.3

21. As discussed above, cancer incidence is rising by 1.5% per year, due to the ageing population and also the impact of the NAEDI cancer campaigns resulting in increased awareness and earlier presentation. Figure 3 below gives an indication of the estimated increase in cancer incidence by district in Nottinghamshire from 2012 to 2030.

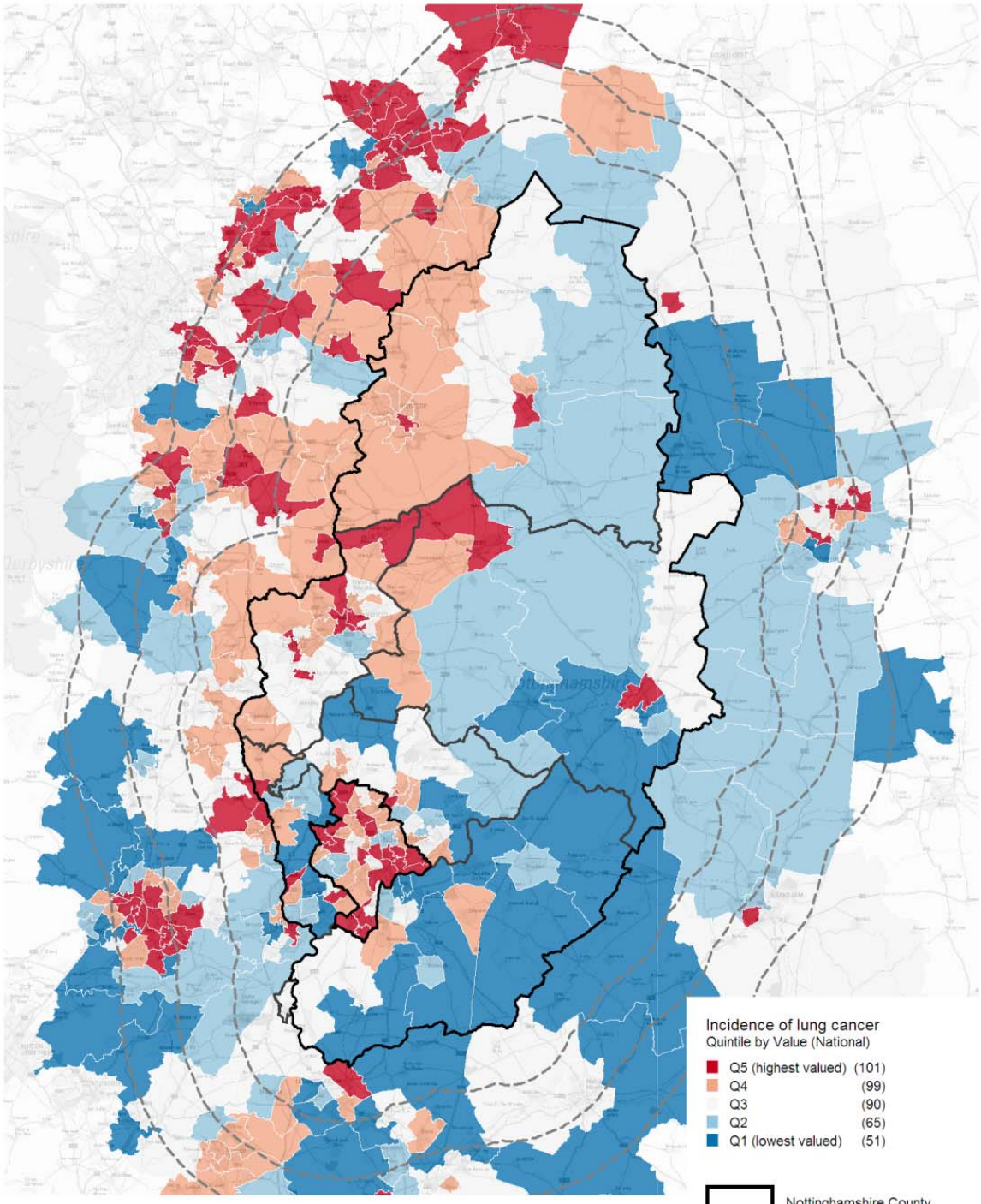
Figure 3 Estimated increase in cancer incidence in Nottinghamshire: 2012-2030



Source: PANSI/POPPI populations, NCIN (Age, Gender) incidence rates

22. The incidence of lung cancer in Nottinghamshire is higher than the England average. The higher rates occur with the highest rates of tobacco smoking prevalence, as can be seen in figure 4 below. Deaths from lung cancer are similarly distributed. Lung cancer incidence and mortality are both significantly higher in men.

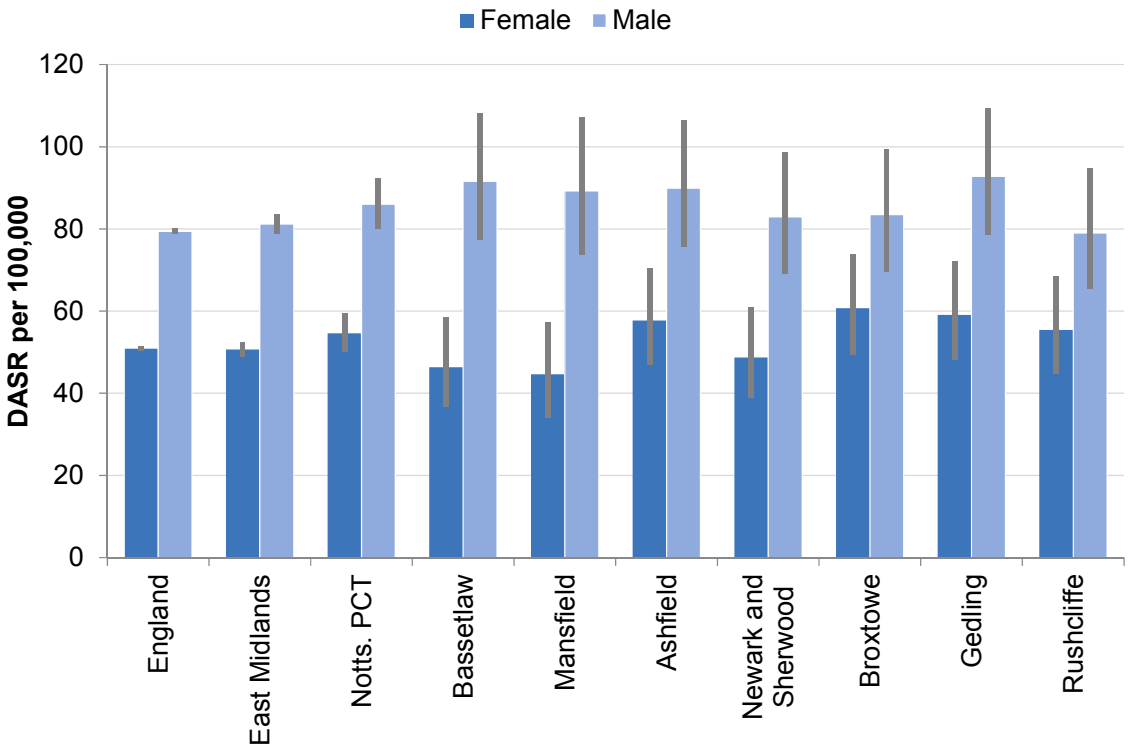
Figure 4 Incidence of lung cancer in Nottinghamshire by sub-district areas
(Lower Super Output Areas, LSOAS)



Produced by the NHS NCtPCT Public Health Intelligence Team (IB)

23. Bowel (colorectal) cancer is one of the commonest cancers in both men and women, although men have a higher incidence of the cancer than women at all ages. With the advent of the national bowel cancer screening programme in 2008, the number of people seen with early stages of the disease has increased. Figure 5 below shows the incidence of bowel cancer by district in Nottinghamshire.

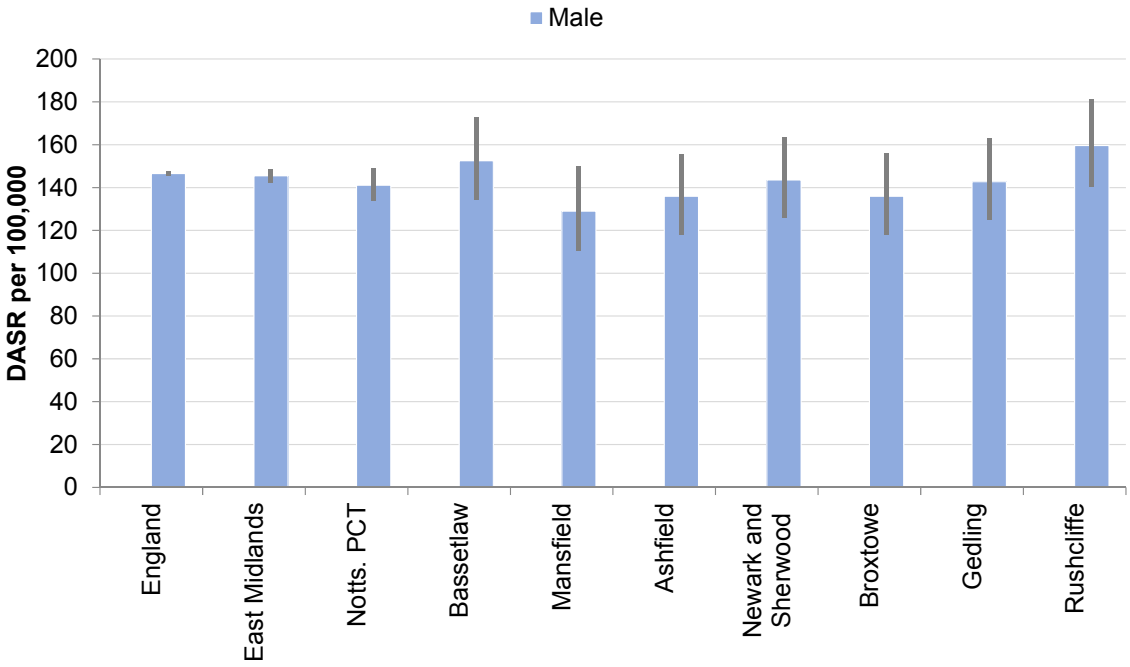
Figure 5 Incidence of colorectal cancer for those aged 20 and over; 2007-2009; national, regional, county and district level



24. The 5 year survival from prostate cancer in the UK has increased over the last three decades. There was a particular increase from 1990 onwards when testing for Prostate Specific Antigen (PSA) became available. PSA is a protein in the blood that is associated with abnormalities of the prostate, one of which may be cancer. However, the test is not very specific and two out of three men with a raised PSA level will not have any cancer cells in their prostate biopsy, while up to one in five men with prostate cancer will have a normal PSA result. Because of this, the UK National Screening Committee does not currently recommend its use for screening for prostate cancer, although many men ask for the test and it can be provided within the NHS. Use of PSA testing gives rise to a lead-time bias – this means that cancer is picked up by the screening test earlier than it would be by symptoms, which makes it look like the survival time has increased. The increased survival from prostate cancer in affluent men compared to men from lower socio-economic groups may indicate increased uptake and awareness of PSA testing, especially in private healthcare screening programmes.[xi]

25. Locally, prostate cancer incidence rates are highest in Rushcliffe and lowest in Mansfield, as shown in figure 6 below. Deaths from prostate cancer are lowest in Rushcliffe and higher in Mansfield, demonstrating the impact of deprivation highlighted in paragraph 5 above.

Figure 6 Incidence of prostate cancer for those aged 20 and over; 2007-2009; national, regional, county and district level



26. There are no significant differences between districts of Nottinghamshire in the incidence of breast cancer.

27. Many patients with cancer in one tumour site will experience spread of the disease to other organs, via the blood or lymph system. In 20% of cases, the secondary tumour (metastasis) will be in the brain and these form the commonest cause of tumours in the brain. Only 40% of brain tumours are primary tumours.

Figure 7 Trends in 1 and 5-Year Relative Survival by Site for Nottinghamshire County PCT: 1992-1996 to 2002-2006(p) Cohorts: Males

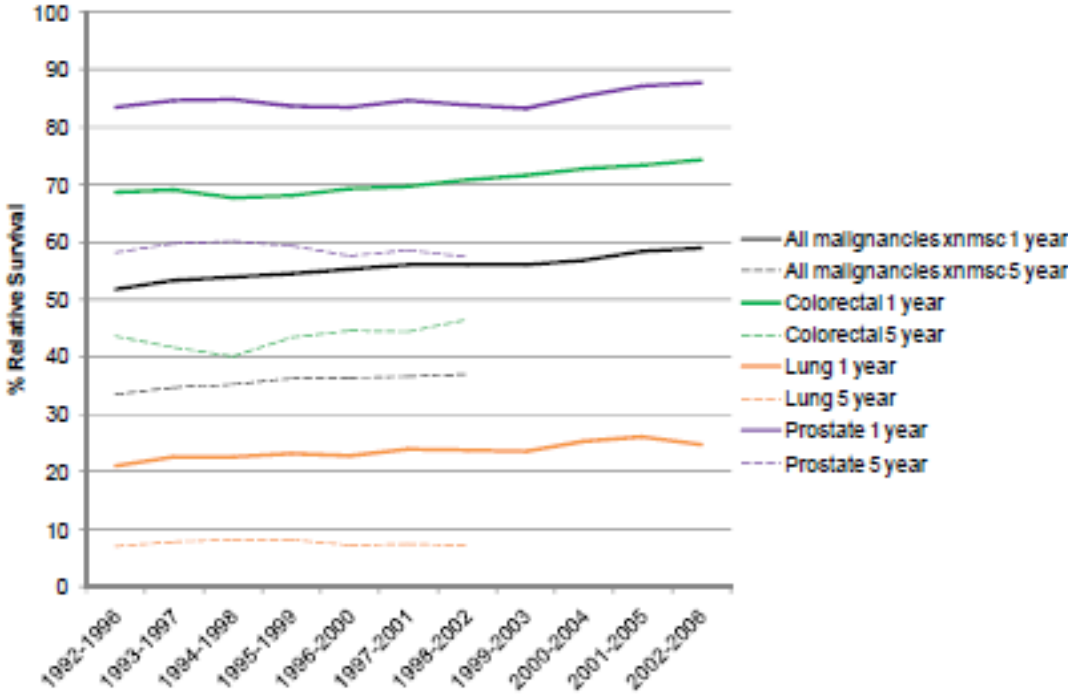
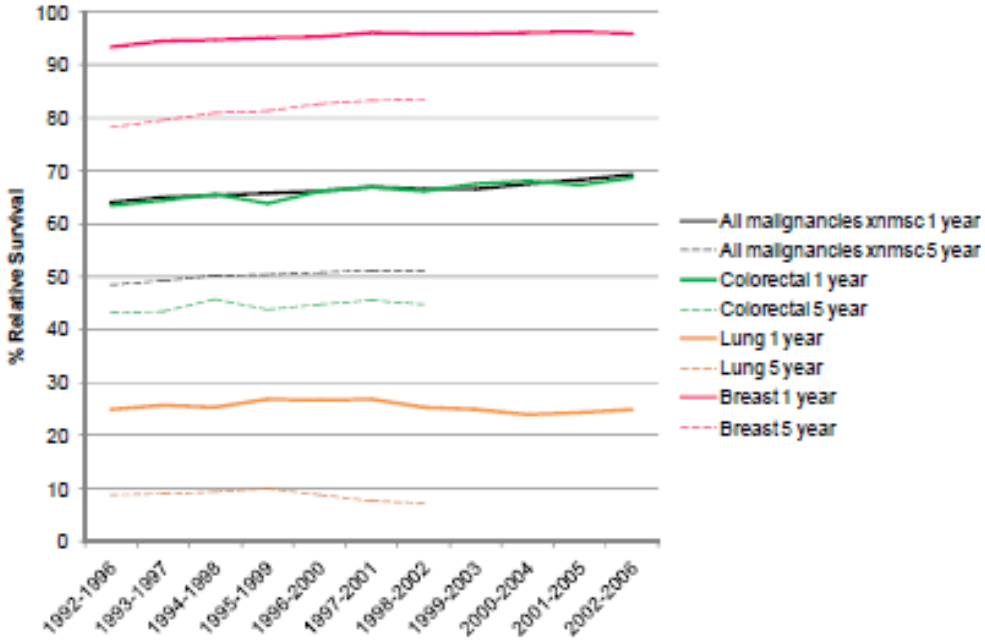


Figure 8 Trends in 1 and 5-Year Relative Survival by Site for Nottinghamshire County PCT: 1992-1996 to 2002-2006(p) Cohorts: Females

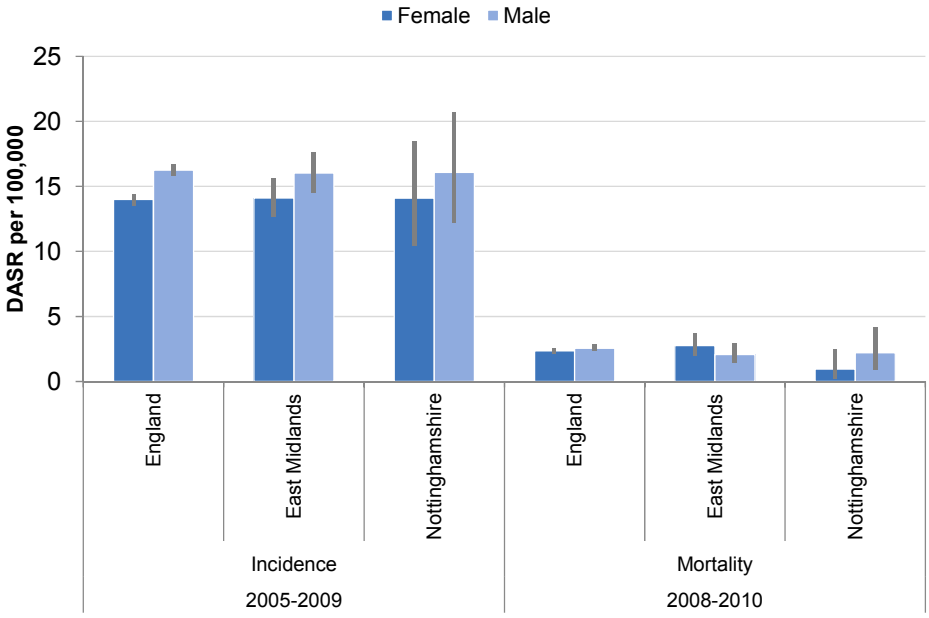


28. Nationally and locally, survival with cancer is improving gradually but five year survival for lung cancer and prostate cancer is not improving, as shown in figures 7 and 8 above. All cancers and colorectal cancer are showing the greatest improvement

Cancer in childhood

29. Figure 9 shows the rates for cancer incidence and mortality for those aged 19 and under. Nationally, cancer mortality is significantly higher in boys than girls. Because so few children are affected, it is not possible to present data at a level below that of the county as a whole and 4 years data has had to be combined.

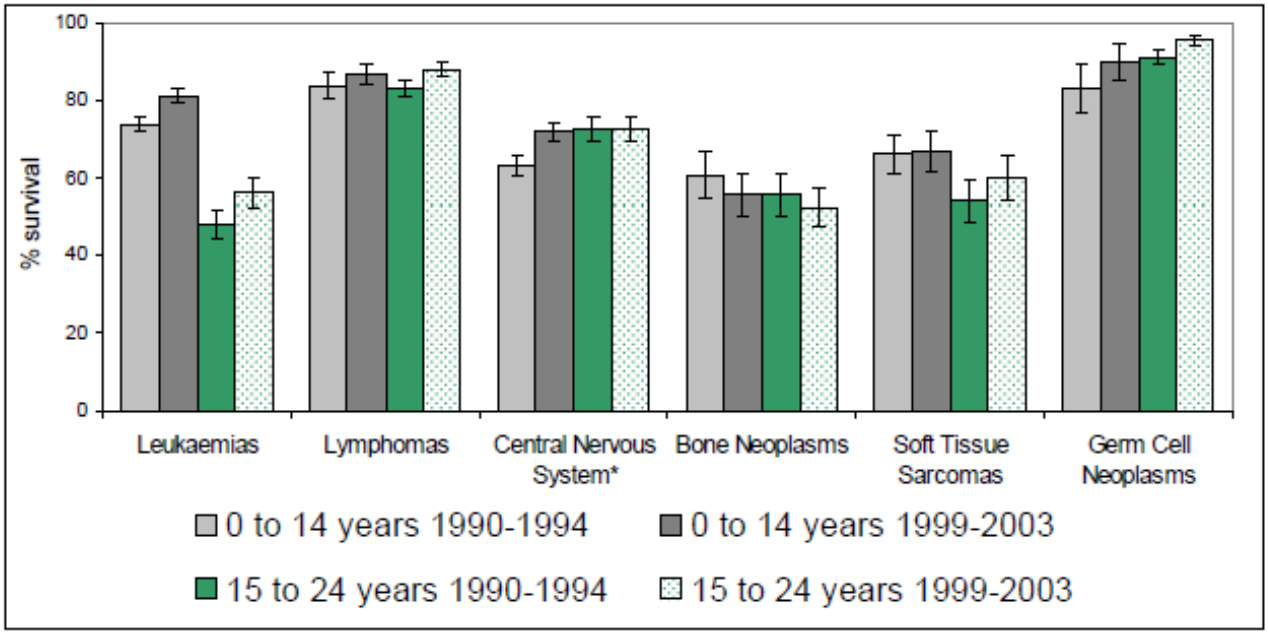
Figure 9 Incidence and mortality of all cancers for those aged under 20; 2005-2009; national, regional and county level



30. Brain tumours are the most common solid tumour in children. Leukaemia is the commonest childhood cancer overall. Of those children diagnosed with a brain tumour only 20% survive 5 years beyond diagnosis, a higher mortality rate than that of meningitis.[xii]

31. Five-year survival rates improved for most types of cancer for children and young people aged up to 24 between 1990-1994 and 1999-2003[xiii]. Survival for bone cancer decreased although this was not statistically significant in either the 0-14 or 15-24 age groups. The largest increases in survival were seen for leukaemias in both age groups. The changes in survival are shown for each of the main childhood cancers in figure 10 below.

Figure 10 5 year survival from cancer in childhood and young adulthood by main cancer group in England; 1990-1994 to 1999-200311;



*includes borderline and benign tumours. Error bars represent 95% Confidence Intervals

Expenditure on cancer:

32. It is estimated that around 5% of the NHS spend is on cancer, approximately £76 per head each year in England, costing around £4.5 billion a year in total. This would equate to approximately £45,000,000 across Nottinghamshire. It is difficult to be more precise, as the costs are spread across primary, secondary and tertiary care budgets. As well as the increase in cancer due to ageing and earlier diagnosis, new drugs and treatments for cancer are being produced, generating increased cost. Longer survival is also increasing pressure on follow up care services[xiv].

SCREENING

33. Screening is a process of identifying apparently healthy people who may be at increased risk of a disease or condition. They can then be offered information, further tests and appropriate treatment to reduce their risk and any complications arising from the disease or condition. Whilst screening has the potential to save lives and improves quality of life through early diagnosis, it is not a foolproof process and it cannot offer a guarantee of protection.

34. The Department of Health report 'Improving Outcomes: A Strategy for Cancer'[7] recognised that cancer screening was an important way to detect cancer early. Evidence suggests that when cancer is diagnosed at an early stage, survival rate is better. Over 5% of all cancers are currently diagnosed via screening. However we know that some groups and communities are not accessing this service. Factors that contribute to late detection include:

- Lack of awareness and poor knowledge of cancer symptoms
- Late presentation to GP with symptoms.

35. There are three national cancer screening programmes listed below which result in secondary prevention of cancers by detection, diagnosis and treatment:

- The NHS Breast Screening Programme
- The NHS Cervical Screening Programme
- The NHS Bowel Cancer Screening Programme.

Breast Screening Programme

36. The NHS Breast Screening Programme calls women aged 50 – 70 years for screening every three years, although there is a phased roll out currently underway to extend this from age 47 to 73. It aims to detect abnormalities which are too small to be felt by a woman herself or a doctor. A third of breast cancers are now diagnosed through screening[6]. 5-year relative survival for women with screen-detected invasive breast cancer improved significantly from 93.5 per cent in 1992/93 to 97.1 per cent in 2002/03[14]. In the UK, breast cancer mortality in middle age has been falling more steeply than in any other major European country.

37. Key points from the Nottinghamshire Annual Report are:

- Coverage at 31 March 2011 within all three Nottinghamshire PCTs exceeded the national standard of 70%. 82.7% of eligible women aged 53 to 70 in NHS Nottinghamshire County had been screened within 3 years, 75.5% of women in NHS Nottingham City and 80.5% of women in NHS Bassetlaw. Nationally 77.2% of eligible women have been screened.

- The Cancer Reform Strategy target for breast screening age extension is being rolled out at all three breast screening units, so that now women aged between 47 and 73 will all be invited every 3 years.

Cervical Screening Programme

38. Cervical screening in England is offered every three years to women aged 25 to 49 years and every five years to women aged between 50 and 64. Cervical screening takes a sample of cells from a woman's cervix for analysis and aims to detect abnormal cells which can be treated before they become cancerous. The programme aims to reduce the number of women who develop invasive cervical cancer (incidence) and the number who die from it (mortality). By regularly screening all women, conditions which might otherwise develop into invasive cancer can be indentified and treated. Early detection and treatment can prevent around 75% of cervical cancers.

39. Key points from the Nottinghamshire Annual Report are:

- Coverage in NHS Nottinghamshire County remained the highest in England with 84.3% of women aged 25-64 screened within 5 years at 31 March 2011 (85.4% at 31.3.10). 78.4% of eligible women in NHS Nottingham City had been screened at 31 March 2011 (78.9% at 31.3.10) and in NHS Bassetlaw 82.9% of women (83.9% at 31.3.10).

- Coverage in all three PCTs was comparable with or exceeded coverage in England which was 78.6% (78.9% at 31.3.10). There is a decreasing trend in coverage nationally; particularly in younger women aged 25-49.

Bowel Cancer Screening Programme

40. Bowel cancer screening is offered to men and women aged between 60 and 69 on a 3 yearly basis. Bowel cancer screening can also detect polyps. These small growths in the bowel wall are not cancers, but may develop into cancers over time. Once polyps are detected they can easily be removed thus reducing the risk of bowel cancer developing. The Bowel Cancer Screening Programme is currently being extended nationally to offer two additional rounds of screening and will soon include those up to age 73.

41. Regular bowel cancer screening has been shown to reduce the risk of dying from bowel cancer by 16 per cent.

42. Key points from the Nottinghamshire Annual Report are:

- The Nottinghamshire programme started in Bassetlaw in February 2008, Nottinghamshire County (South) from March 2008 and Nottingham City from April 2008. Screening started in Ashfield, Mansfield, Newark & Sherwood in January 2009.

- Uptake in NHS Nottinghamshire County is 60%, in NHS Nottingham City approximately 50% and 58% in NHS Bassetlaw, comparable to the national uptake of 54.8%.

43. The Annual reports for all three cancer screening programmes is attached as an Annex to this report

END OF LIFE CARE

44. The White Paper Liberating the NHS[14] states that:

> "In end-of-life care, we will move towards a national choice offer to support people's preferences about how to have a good death, and we will work with providers, including hospices, to ensure that people have the support they need"

45. In 2009/10, 28% of deaths of patients registered with NHS Nottinghamshire County GPs and 29% of deaths of patients registered with NHS Bassetlaw GPs were from cancer. The proportion of deaths due to cancer decreased with increasing age, from 37% among those aged under 65 to 15% in those aged over 85. Over half of the people died in hospital, as shown in table 11 below.

46. Many of these people have no clinical need of hospital care and most people would prefer to die in their own home or could be supported in a community setting. A higher proportion of people dying from cancer die in their own residence and a lower proportion of people die in hospital compared with respiratory disease, cardiovascular disease and other causes.

The age group most likely to die in hospital are those aged 65 to 84. Without advance recognition, planning and coordination of care during the last years of life, the majority of deaths will continue to occur in hospital.

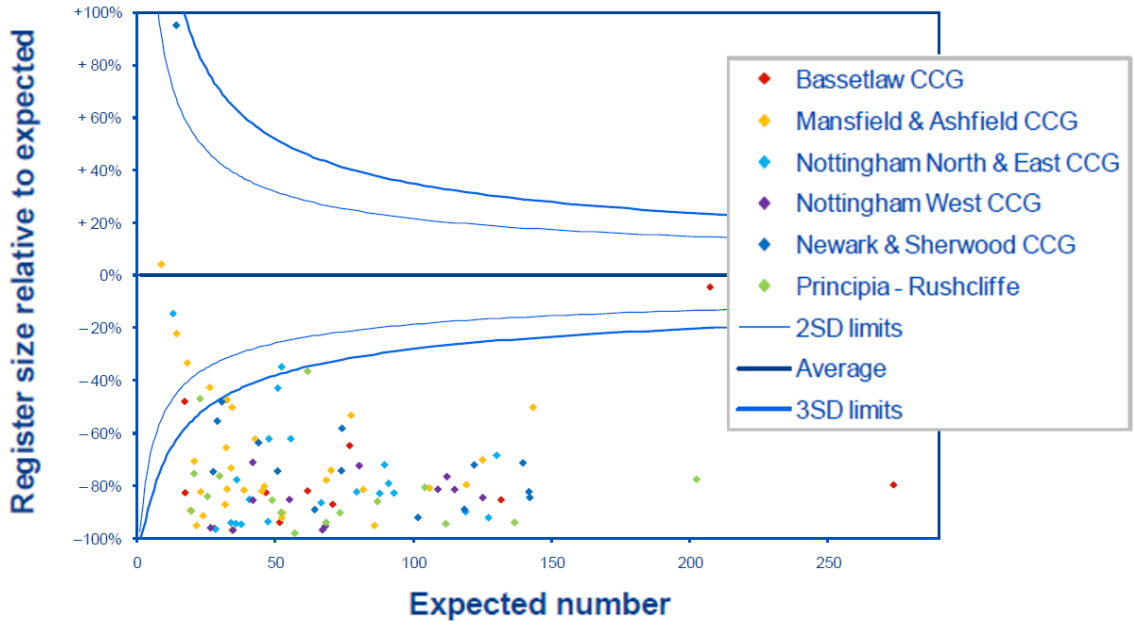
Table 11 Place of death from cancer in NHS Nottinghamshire County and NHS Bassetlaw; 2008-2010 (actual numbers)

Place of death	Nottinghamshire County	Bassetlaw
Home	547	94
Care home	279	54
Hospital	859	125
Hospice	132	61
Total	**1843**	**337**

Source: http://www.endoflifecare-intelligence.org.uk/end_of_life_care_profiles/pct_pdf_profiles.aspx

47. It is estimated that between 58% and 75% of all deaths could be anticipated, and these people should be offered the opportunity of advance care planning. In Nottinghamshire only a small proportion of people with end of life care needs are actually identified (see Figure 11 below), which limits the opportunity for advance care planning for those who may wish to make a positive choice with regard to where they are cared for and where they die. Those practices lying outside the 3 standard deviation (SD) limits on the 'funnel plot' had significantly fewer people on their palliative care registers than expected.

Figure 11 Number of people on palliative care registers in Nottinghamshire as a proportion of number expected for a typical population; March 2011



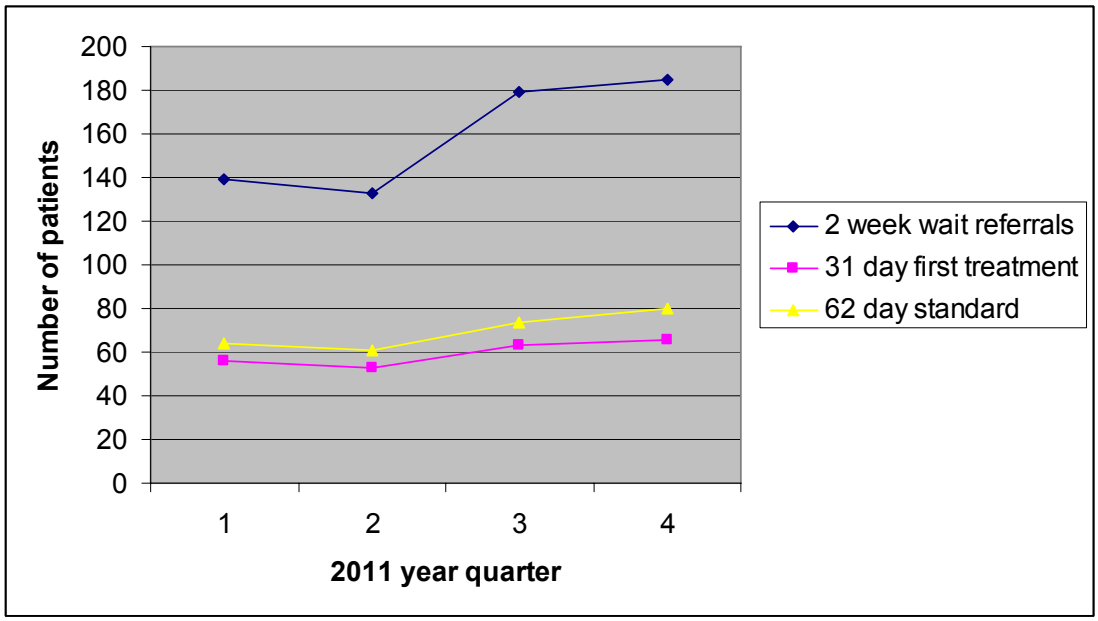
Source: Nottinghamshire County Public Health Information and Intelligence using data sources from QOF (Quality and Outcomes Framework), NHS Information Centre and PHIU Doncaster model

CURRENT COMMISSIONING INITIATIVES

48. Currently the East Midlands Cancer Network (EMCN) leads on strategic developments with regard to cancer. The EMCN is made up of oncologists in secondary care, Macmillan nurses, public health, primary care and patient representatives. The EMCN also provides guidance quality requirements for cancer services locally and supports improvements across the care pathway and training initiatives for staff. The EMCN also administers the Cancer Drugs Fund on behalf of all PCTs in the East Midlands, with a Panel dedicated to reviewing all requests and developing policies for selected drugs to minimise the delays for patients. Strategic Networks for cancer will continue under the new NHS Commissioning Board arrangements, although they are likely to be smaller and have more generic than specialised staff. Many other aspects of cancer treatment, such as radiotherapy, are currently commissioned by the East Midlands Specialised Commissioning Group. This too will be coordinated by the NHS Commissioning Board from 1 April 2013, who will also be commissioning chemotherapy on a national basis.

49. The local impact of the recent NAEDI campaigns indicate that there has been an increase in referrals for patients with suspected lung and large bowel cancer. Two campaigns related to lung cancer have been completed. The results of the first 'cough' campaign showed an increase in requests for Chest X-rays of 50% at both Sherwood Forest and Nottingham University Hospitals, and this increase has also resulted in more patients with lung cancer receiving treatment, as shown in Figure 12 below.

Figure 12 **Rates of two week wait referrals and patients going on to receive treatment in 31 and 62 days**



50. The second bowel cancer awareness campaign is still under way, but the first campaign resulted in increases in the demand for endoscopy of the lower bowel of between 30% and 90% at local providers.

51. The East Midlands Teenage and Young Adults Integrated Cancer Service will be launched later this year. This is an integrated Principal Treatment Centre between Nottingham University Hospitals and University Hospitals of Leicester, providing new specialist facilities and expert medical, nursing and psychosocial care for those between 13-24 years

diagnosed with cancer. The new facilities will be launched at Nottingham City Hospital Campus (NUH), Queens Medical Centre Campus (NUH) and Leicester Royal Infirmary (UHL). District General Hospitals across the region are working in partnership with both trusts and the EMCN, so that patients aged 19 years and above can choose to access the Principal Treatment Centre or have access to services that meet their age specific care needs more locally, dependant on the type of cancer they have.

FUTURE PLANS

52. Further action is required at all points along the cancer pathway: Primary prevention initiatives already highlighted in the Health and Wellbeing Strategy to tackle smoking, excess alcohol use and obesity all support the primary prevention of cancer, as shown in **Appendix A**.

53. Local implementation of the NAEDI programme requires ongoing work with both local residents, to increase awareness of the symptoms that may be associated with cancer, and also with GPs, to improve the uptake of 2 week wait appointments. In addition, further work needs to be done with providers to ensure that facilities are available for the increase in the number of investigations required, both as a result of the NAEDI campaigns and the increase in the number of people with most types of cancer as a result of the ageing population.

54. Further training is required for all those caring for patients with cancer to enable better recognition, planning and coordination for patients requiring end of life care, to ensure they receive this care in their preferred place.

RECOMMENDATIONS

It is recommended that the Health and Wellbeing Board:

a. Note the content of the report
b. Endorse the promotion of the key primary prevention measures for cancer
c. Endorse the promotion of the National Awareness and Early Detection Initiative locally, especially the awareness of key symptoms among local residents.

DR CHRIS KENNY
Director for Public Health

For any enquiries about this report please contact:
Dr Mary Corcoran
Public Health

Constitutional Comments (SLB 09/10/2012)

55. The Health and Wellbeing Board is the appropriate body to consider the content of this report.

Financial Comments (RWK 12/10/2012)

56. There are no additional financial implications arising from the report. The actions proposed in the reports will be met from within the existing budgets of the organisations involved. ”

Background Papers

None.

Electoral Division(s) and Member(s) Affected

All.

HWB47

Nottingham and Nottinghamshire

(City, County and Bassetlaw)

Cancer Screening Programmes

Annual Report

May 2012

Reviewing performance data from 2009-2011

Report Produced by -
Nicola Lane – Public Health Manger NHS Nottinghamshire County
Claire Probert – Senior Public Health Manager NHS Nottinghamshire County

NOTTINGHAM and NOTTINGHAMSHIRE CANCER SCREENING PROGRAMMES ANNUAL REPORT MAY 2012

Review of performance data 2009-2011

TABLE OF CONTENTS

Executive summary

NHS Nottinghamshire County commissions all National Screening Committee recommended Cancer Screening Programmes on behalf of three PCTS, NHS Nottinghamshire County, NHS Nottingham City and NHS Bassetlaw. These are:

- The NHS Cervical Screening Programme
- The NHS Breast Screening Programme
- The NHS Bowel Cancer Screening Programme

As the lead screening commissioner, NHS Nottinghamshire County is responsible for ensuring that all cancer programmes are working effectively, that new initiatives are implemented, and that key performance indicators are achieved and maintained.

The Cancer Reform Strategy[1], published in 2007, outlined future changes aimed at improving and expanding cancer screening. These recommendations included:

- ensuring that women are informed of their cervical screening result within two weeks of their test being taken
- extending the breast screening programme to nine screening rounds between the ages of 47 and 73 and implementing the use of digital mammography
- age extension of bowel cancer screening to invite men and women aged 70-73 years old

The purpose of this report is to review the performance of each cancer screening programme in Nottinghamshire. This report covers two years data, 2009/10 and 2010/11 and also describes the plans to further develop the programmes to ensure that the recommendations of the Cancer Reform Strategy are met.

Key achievements by programme

Cervical Screening Programme

- Coverage in NHS Nottinghamshire County remained the highest in England with 84.3% of women aged 25-64 screened within 5 years at 31 March 2011 (85.4% at 31.3.10). 78.4% of eligible women in NHS Nottingham City had been screened at 31 March 2011 (78.9% at 31.3.10) and in NHS Bassetlaw, the figure was 82.9% of women (83.9% at 31.3.10).

- Coverage in all three Nottinghamshire PCTs was comparable with or exceeds coverage in England which was 78.6% (78.9% at 31.3.10). There is a decreasing trend in coverage nationally, particularly in younger women aged 25-49.

Breast Screening Programme

- Coverage at 31 March 2011 within all three Nottinghamshire PCTs exceeded the national standard of 70%. 82.7% of eligible women aged 53 to 70 in NHS Nottinghamshire County had been screened within 3 years, 75.5% of women in NHS Nottingham City and 80.5% of women in NHS Bassetlaw. Nationally 77.2% of eligible women were screened as of 31 March 2011.

- Breast screening age extension is being rolled out across all three breast screening units in Nottinghamshire, in line with the Cancer Reform Strategy objective.

Bowel Cancer Screening Programme

- The Nottinghamshire programme started in Bassetlaw in February 2008, in Nottinghamshire County (South) in March 2008 and Nottingham City in April 2008. Screening began in Ashfield, Mansfield, Newark and Sherwood in January 2009.

[1] The Cancer Reform Strategy, Department of Health, December 2007

- Uptake in NHS Nottinghamshire County is around 60%, in NHS Nottingham City it is around 50% and is around 58% in NHS Bassetlaw, comparable with a national uptake of 54.8%

Local organisational structure

Locally, the Cancer Screening Programmes are overseen by multidisciplinary working groups, specific to each programme. Working group membership includes representatives from public health, provider trusts, the call and recall service, laboratories, regional quality assurance organisations, relevant PCT representatives and lay members as appropriate. The role and function of the working groups is to review programme standards against set targets and manage any developments, incidents and significant events within the relevant screening programme. Working groups support the development of appropriate protocols, develop screening pathways, problem solve local issues and oversee health promotion initiatives aimed at increasing uptake of each screening programme locally. A particular focus for all cancer screening programme working groups is to address inequalities in uptake and outcomes for specific groups within the population.

These groups are:

- **Breast Screening Liaison Group**
  Chair: Claire Probert, Senior Public Health Manager, NHS Nottinghamshire County

- **District Cervical Cytology Working Group**
  Chair: Dr Kate Allen, Consultant in Public Health/Screening Commissioner, NHS Nottinghamshire County

- **Bowel Screening Working Group**
  Chair: Claire Probert, Senior Public Health Manager, NHS Nottinghamshire County

Bassetlaw is considered within these groups. However services for diagnosis and treatment linked to the screening programmes are provided within South Yorkshire. Therefore performance of these aspects of the screening programmes are overseen by working groups in South Yorkshire.

Quality Assurance for each of the cancer screening programmes is coordinated by East Midlands Quality Assurance Reference Centre (QARC). Each QARC is active in monitoring performance, supporting developments in the programmes and coordinating regular visits to all elements of the screening programmes. Acute services for Bassetlaw come under the North East Yorkshire Humber QARC.

Data within the report

A variety of data sources has been used within the report. For the incidence and prevalence of cancer screening the UK Cancer Information Service (UKCIS) was used as a primary source of data. http://www.ncin.org.uk/cancer_information_tools/ukcis.aspx. UKCIS is a national web-based reporting tool, which spans across the NHS national network, providing the user access to cancer rates. This will enable directly standardized rates (DSR) to be calculated based on PCT population size. Data has been pooled into 3 years rolling to show general trend against the English average.

NHS CERVICAL SCREENING PROGRAMME

Background

The aim of the NHS Cervical Screening Programme (NHSCSP) is to reduce the number of women who develop invasive cervical cancer (incidence) and to reduce the number of women who die from the disease (mortality). Screening detects abnormalities within the cervix that could, if left untreated, develop into cancer.

The NHSCSP calls women for screening every 3 or 5 years depending on their age. Women aged 25 – 49 are called for screening every 3 years and women aged 50 – 64 are called every 5 years.

Call and recall for all women eligible for screening in Nottinghamshire is managed by a third party provider, NHS Shared Business Services (SBS). Services previously provided by a PCT call and recall service were centralised across the region during 2011.

Laboratory services are provided by Derby Royal Hospital NHS Trust for NHS Nottinghamshire County and NHS Nottingham City and by Sheffield Teaching Hospital NHS Foundation Trust for NHS Bassetlaw. In both cases samples are taken to the lead laboratory for screening via local transport services.

Colposcopy services have remained localised and auto-referral systems have been maintained from both the Derby and Sheffield laboratories. These systems send all reports of abnormal results requiring investigation directly to colposcopy units in order to initiate the required referral for an outpatient appointment. This link operates between the Derby laboratory and colposcopy units at Nottingham University Hospital (NUH) and Sherwood Forest Hospital Foundation Trust (SFHFT) and from the Sheffield laboratory into Doncaster and Bassetlaw Hospital.

Cervical cancer incidence and mortality

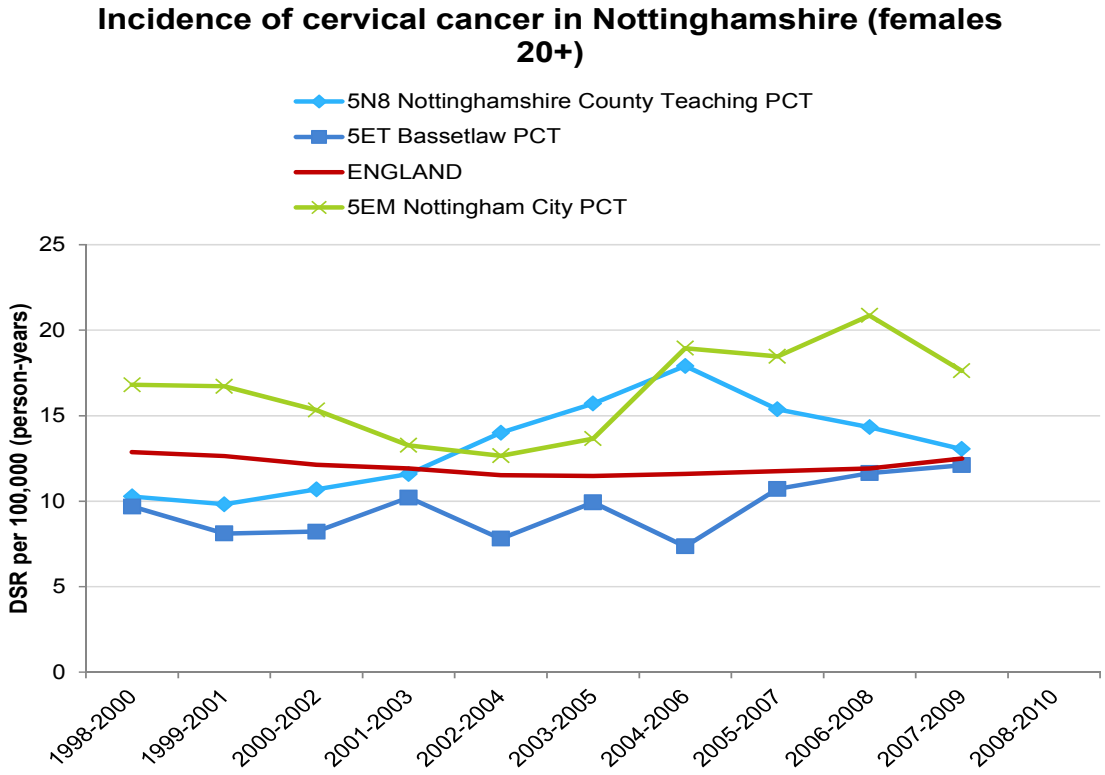


Figure 1 - Source: UK Cancer Information Service (UKCIS)

Nationally the incidence of cervical cancer remains steady. In NHS Nottinghamshire County, numbers of new cases of cervical cancer peaked during 2004-2006, followed by a gradual decline. Nottingham City had a peak in cervical cancer during 2006-2008 however recent figures shows that the number has recently declined for both City & County and are reducing back towards the national trend. NHS. NHS Bassetlaw has a lower incidence of cervical cancer than the national average however has recently moved in-line with the national average.

Figure 2 Source: UK Cancer Information Service (UKCIS)

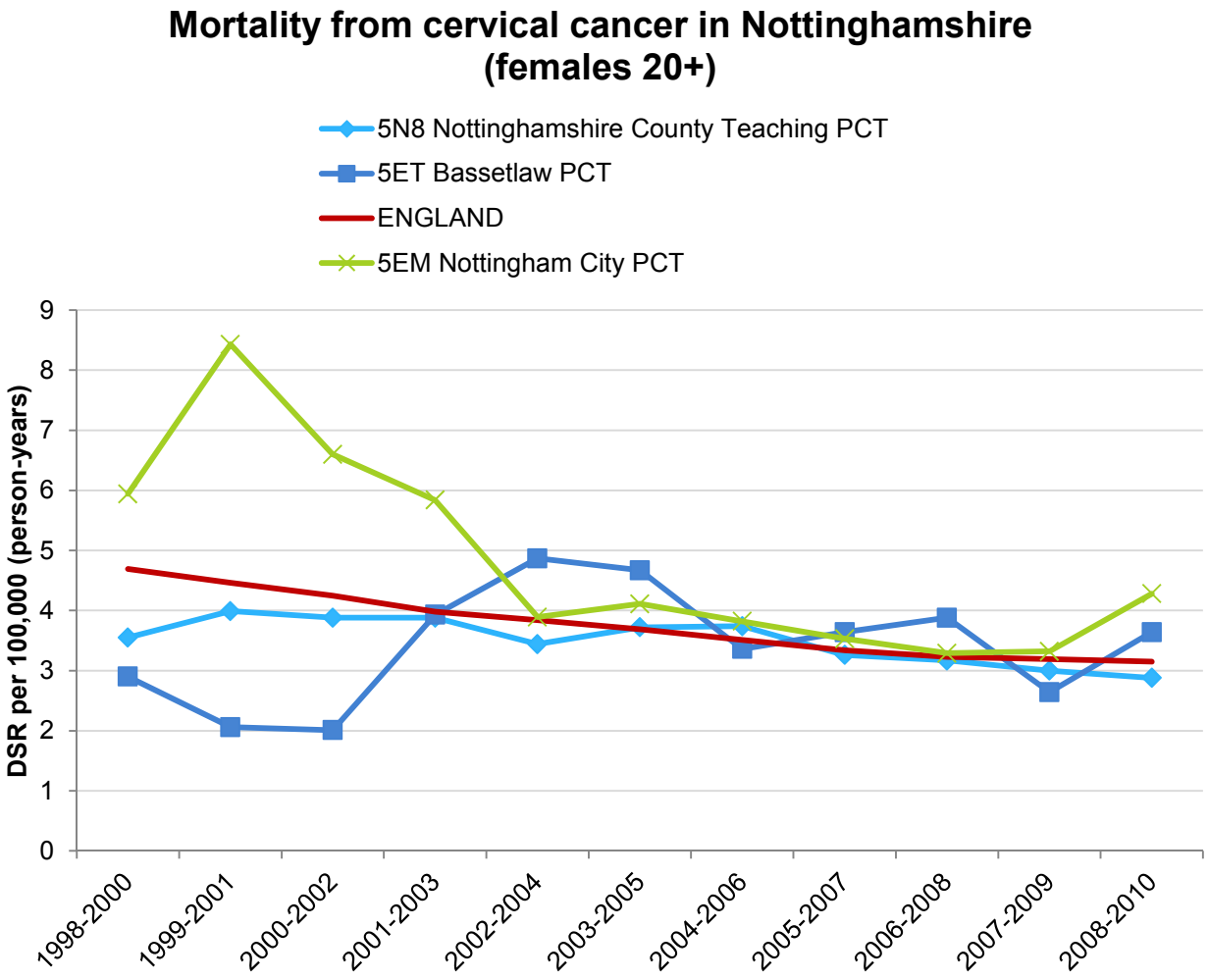


Figure 2 shows mortality from cervical cancer nationally has been on a decline. NHS Nottinghamshire County follows the national trend and is just below national average. NHS Nottingham City was significantly above national average in 1999-2001 but has since reduced mortality until recently when there has been a rise in mortality. NHS Bassetlaw has varied pattern of mortality relating to cervical cancer but has also recently seen a significant increase which has taken Bassetlaw above the national average. Numbers in Nottinghamshire County are low around 40 cases per year.

Programme Performance

Coverage

Coverage is calculated as the number of women in an age group who have had an adequate screening test within the last five years, as a percentage of the eligible population in that age group. The national target is at least 80% coverage of eligible women. Nationally, the number of eligible women who attend for cervical screening is decreasing year on year and this is reflected across Nottinghamshire also.

Jade Goody's cervical cancer diagnosis and subsequent death in March 2009 resulted in an increase in women attending for cervical screening both nationally and locally. However this has not had a sustained impact on screening coverage rates.

Coverage by age group

Data by age group shows a slight decrease in coverage in most age groups over the last three years. Coverage for younger women continues to be substantially lower, particularly in NHS Nottingham City, where coverage for those aged 25-49 decreased to 72.5% in 2010-11. It is known that coverage is

lowest in young women aged 25-29 and this is of particular concern. Table 1 and Figure 3 illustrate the trends and comparisons in coverage over recent years. For detailed age breakdown of coverage see Appendix 1.

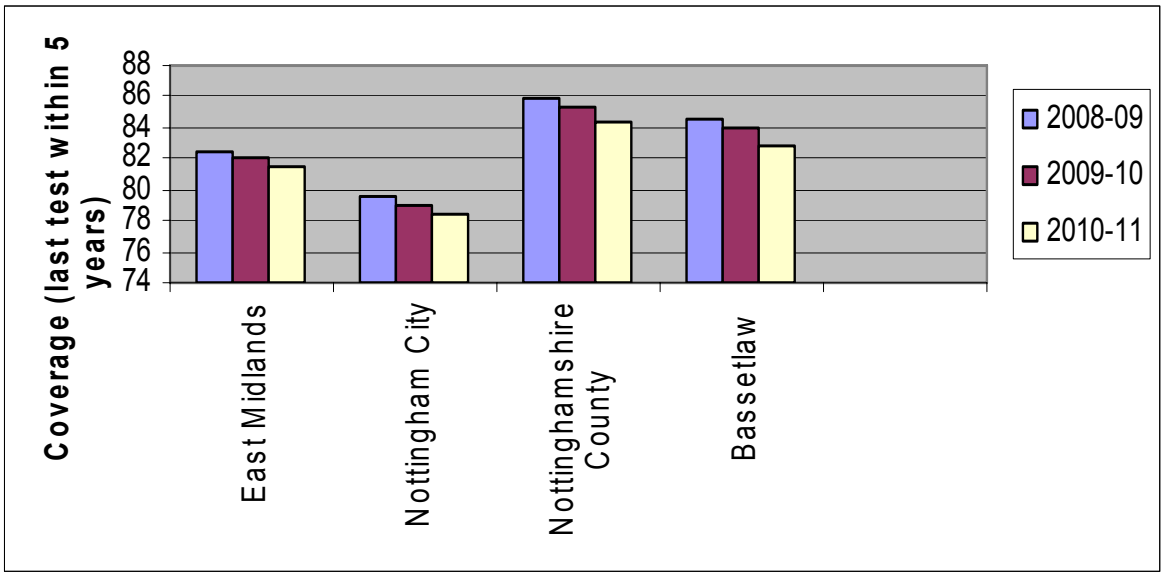
Table 1: Coverage (as % of eligible women) by age band, 2008 to 2011

		Coverage by area (%)			
Year	Age group	East Midlands	NHS Nottingham City	NHS Nottinghamshire County	NHS Bassetlaw
2008-09	25-49	76.7	73.8	81.2	79.0
	50-64	82.7	81.7	85.2	83.8
	25-64	82.4	79.6	85.8	84.5
2009-10	25-49	77.6	73.1	81.6	79.7
	50-64	81.9	81.2	84.4	82.6
	25-64	82.1	78.9	85.4	83.9
2010-11	25-49	76.9	72.5	80.4	78.7
	50-64	80.4	79.2	82.3	80.7
	25-64	81.4	78.4	84.3	82.9

Source: *KC53,*

Age 25-49 less than 3.5 years since last adequate test, age 50-64 and 25-64 less than 5 years since last adequate test

Figure 3: Percentage 5 year coverage by PCT at 31 March 2011 2008-2011 (all ages)



Source: *Cervical Screening Statistical Bulletins 2009/10 and 2010/1*

Cancer Reform Strategy – turn around times

The Cancer Reform Strategy pledged that women would receive their cervical screening results within two weeks of the date of their test by December 2010. The national standard is that 98% of women receive their result within 14 days of the date of test, known as the 14 day turn around time.

Data was previously collected for time taken from the date of screening to the *availability* of the result i.e the date the result letter was sent to the woman by the call and recall office. This is shown for Nottinghamshire PCTs in Table 2.

Table 2: Time from screening to availability of result

	Area/PCT	Number of results letters sent	% sent within 2 weeks	% sent between 2 and 4 weeks	% sent between 4 and 6 weeks	% sent over 6 weeks
2009-10	England	3,504,088	44.6	27.1	14.1	14.2
	East Midlands	280,420	50.3	24.6	10	15.0
	Bassetlaw	6,803	46.8	42.8	9.8	0.5
	Nottingham City	19.494	21.8	45.4	10.4	22.3
	Nottinghamshire	42,502	46.2	35.9	5.9	9.1
2010-11	England	3,584,418	82.8	14.6	1.8	0.8
	East Midlands	292,453	83.8	15.5	0.5	0.2
	Bassetlaw	7,110	66.3	27.7	5.5	0.5
	Nottingham City	20,726	36.7	62.1	1.1	0.1
	Nottinghamshire	47,181	56.7	42.4	0.6	0.3

Source: *Cervical Screening Statistical Bulletins 2009/10 and 2010/11*

Table 2 shows that although the PCTs were some distance from achieving the target of 14 days turn around in 2009-2010, this was inline with the national average. Laboratories were beginning to equip themselves to achieve the new target and PCTs worked with sample takers to ensure that tests were transported as soon as possible to laboratories. In 2010-2011, results had improved significantly across England and the East Midlands. However in Nottinghamshire there was still considerable improvement required to achieve national targets.

Cytology laboratory performance

Prior to 2010, samples were processed and read at three laboratories, namely Doncaster and Bassetlaw Hospital (for NHS Bassetlaw samples), Sherwood Forest Hospital (SFHFT) and Nottingham University Hospital (NUH). Following reviews in Nottinghamshire and South Yorkshire, it was agreed that cytology laboratory services should be centralised. Cytology services in South Yorkshire and Bassetlaw were all transferred to the Royal Hallamshire Hospital in April 2010. Laboratory services provided in Derbyshire and Nottinghamshire were centralised at Derby Royal Hospitals, transferring from SFHFT in February 2011 and from NUH in June 2011. Both transfers had an impact on 14 day turn around times within the laboratories. There were a number of issues which have also been identified which have impacted on the 14 day turn around times including:

- practices 'batching' samples to send to the laboratory, incurring additional delays
- ensuring transport links on to the Derby laboratory
- staffing levels at the Derby laboratory
- delays specific to the laboratory at Sheffield, incurred as a result of the HPV triage pilot process.

By March 2012, performance against the 98% standard for receipt of results was achieved in NHS Bassetlaw but not in NHS Nottingham City or NHS Nottinghamshire County. Measures have been put in place, including a review of transport arrangements, following up delays with practices and additional resource within the laboratories to improve performance to ensure achievement of the target.

The detailed performance data relating to laboratories providing cytology services to Nottinghamshire women is summarised in Appendix Table 2. Performance data is reviewed regularly by the District Cervical Cytology Cytology Working Group and the QARC, with actions taken to address concerns at an early stage.

Colposcopy Performance

Overall the performance of the colposcopy units service the women of Nottinghamshire is good and most standards have been achieved. Where national standards were not met in 2009/2010, there has been significant improvement in performance in the colposcopy units for 2010/2011. The direct referral system has helped achieve the waiting times to colposcopy.

Table 3: Colposcopy performance 2009/10

	NUH		SFHT	Doncaster and Bassetlaw Hospitals			
	City Hospital	QMC	Kings Mill, Newark	Bassetlaw DGH	Doncaster GUM	Doncaster RI	Retford Hospital
>90% women with high grade result seen ≤ 4 weeks	97	96.5	85.2	91.2	83.3	97.9	92.6
All colposcopists to see ≥ 50 new cases p.a.	Yes	Yes		Yes	Yes	Yes	Yes
100% women to be informed of biopsy result ≤ 8 weeks	99.8	96.3	93.6	100	100	99.4	97.8
DNA rate < 15%	16.8	10.1	7.1	13.2	23.7	18.2	19.4

Source: KC65 - Colposcopy Clinics: Referrals, Treatments and Outcomes

Table 4: Colposcopy performance 2010/11

	NUH		SFHT	Doncaster and Bassetlaw Hospitals			
	City Hospital	QMC	Kings Mill, Newark	Bassetlaw DGH	Doncaster GUM	Doncaster RI	Retford Hospital
>90% women with high grade result seen ≤ 4 weeks	98.0	99.6	97.9	96.7	86.6	100	95.5
All colposcopists to see ≥ 50 new cases p.a.	Yes	Yes		Yes	Yes	Yes	Yes
100% women to be informed of biopsy result ≤ 8 weeks	100	97.0	95.1	95.4	96.2	100	100
DNA rate < 15%	14.0	7.8	7.9	11.5	13.4	20.6	15.6

Source: KC65 - Colposcopy Clinics: Referrals, Treatments and Outcomes

In those units not achieving the biopsy result standard, liaison between East Midlands Quality Assurance Reference Centre (QARC) and the unit indicated that the most frequent cause relates to reduced secretarial staffing. Occasionally there may be delayed reports from the associated histopathology provider. This performance has been addressed with units by the QARC.

The areas where there have been challenges in achieving national standards are detailed below, together with developments to address these.

Waiting times: >90% women with high grade result seen ≤ 4 weeks
Failure to achieve waiting time standards has been found to relate to poor documentation of the date the first apportionment was offered or complex booking systems. All colposcopy units now operate a direct referral system, whereby positive cytology results are sent directly to colposcopy and an outpatient's appointment is generated. This has improved the availability of appointments within four weeks. In some cases staff sickness has lead to problems in the achievement of the target for appointments within four weeks.

Informing of biopsy result: 100% women to be informed of biopsy result ≤ 8 weeks
It is important that women receive the results of their biopsy promptly to minimise anxiety and to ensure timely follow up. Over half the trusts in 2010-11 fell short of the biopsy result target and this will continue to be monitored. NUH reported problems in relation to pathology and laboratory administrative staffing. These issues have now been resolved and improvements are expected. Similar issues exist in Doncaster and Bassetlaw.

Do Not Attend Rates: DNA rate < 15%
Performance data indicates high DNA rates for follow up appointments in some units. An approach recently adopted is to encourage women to attend by sending reminders one week prior to the appointment. The impact of this approach is being monitored.

Current & Future Developments

Cancer Reform Strategy - automation

The Cancer Reform Strategy highlighted the intention to use 'new technologies' including automation of cytology reporting, once the research evidence supports this approach'. The Derby Cytology Laboratory has been involved in a trial of one such technology in 2009-10, looking at the accuracy of automated screening for the detection of underlying disease. The overall evaluation of the technology did not support the use of automation for primary screening. However, the results are to be evaluated to explore for the potential use of the 'no further review' category as a pre-screening tool. This would equate to 25% of samples being screened as negative with no manual screening required and this would have a significant impact on the workload of the cytology laboratories.

HPV Testing

Human Papilloma Virus (HPV) virus is common, with around 100 identified strains. Following infection with HPV, the virus is usually cleared naturally by the body. However in a small minority of cases, infection is not cleared and particular strains of the virus are known to cause cervical cancer. Following the evaluation of a pilot scheme of HPV testing of cytology samples, the National Screening Committee have recommended that HPV testing to be incorporated into the Cervical Screening Programme nationally. The new process will see HPV tests carried out on samples from women whose result is borderline or shows mild abnormality. The result of the HPV test will determine the future treatment or management required and ultimately will lead to fewer women requiring repeated, long term follow up.

Locally, HPV testing has been rolled out across NHS Bassetlaw and it is envisaged that this will occur across the rest of Nottinghamshire during 2012.

NHS BREAST SCREENING PROGRAMME

Background

The aim of the NHS Breast Screening Programme (NHSBSP) is to reduce mortality from breast cancer by detecting small changes in breast tissue at an early stage. Early detection allows more successful and less invasive treatment.

The NHSBSP offers screening to women aged 50–70 every three years. However, currently there is a trial underway offering screening to women aged 47 – 49 and 71 - 73. Women aged over 70 years and not part of the trial are able to access screening if they self refer. Women are invited to attend for screening once every three years, using a call and recall system based on the Exeter Patient Registration System. This is administered by Nottingham Breast Institute for all three Nottinghamshire PCTs.

Breast screening is provided by:

- **Nottingham University Hospitals NHS Trust (NUH):** The Nottingham Breast Institute at Nottingham City Campus, Ropewalk House (located in the city centre) and mobile provision serving rural areas and Newark

- **Sherwood Forest Hospitals NHS Foundation Trust (SFHFT):** at The Breast Unit, Kings Mill Hospital (KMH)

- **Doncaster and Bassetlaw Hospitals NHS Foundation Trust (DBT**): Bassetlaw District General Hospital (BDGH)

The initial screening process consists of two-view mammography. From this initial screen women may be recalled for further assessment. Women attending for their first screen are approximately three times more likely to be recalled for assessment than those who have been screened previously.

The screening programme is commissioned by NHS Nottinghamshire County on behalf of NHS Nottingham City and NHS Bassetlaw.

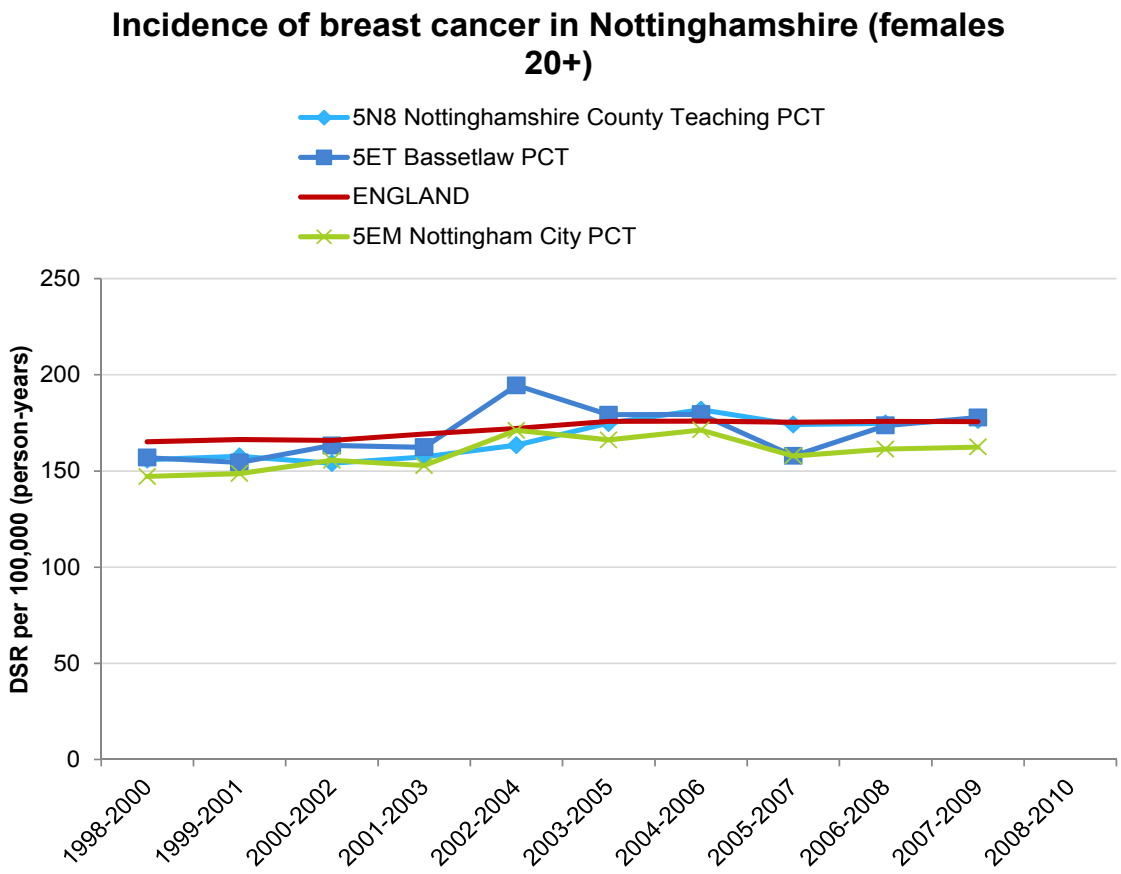
Quality standards relating to the various element of the screening programme, provided by the organisations detailed above are monitored and supported by two regional Quality Assurance Reference Centres:

- **East Midlands Quality Assurance Centre** monitors and supports NUH and SFHT breast screening units.
- **South Yorkshire and Humber Quality Assurance Centre** monitors and supports the BDGH breast unit.

There is a robust external quality assurance programme underpinning the programme on behalf of the national NHSBSP. Each PCT has an action plan in place to address any issues raised through that process. The Nottinghamshire Breast Screening Liaison Group meets biannually to oversee and performance manage the programme in conjunction with the provider units. Bassetlaw PCT links with the Doncaster steering group.

Incidence and mortality of breast cancer

Figure 4 Source: UK Cancer Information Service (UKCIS)



National data relating to breast screening shows that NHS Nottinghamshire County & NHS Bassetlaw are following the national trend with breast cancer incidence. NHS Nottingham City has a slightly lower incidence of breast cancer than the national average.

Figure 5 Mortality from Breast Cancer below has seen some small increases over time but generally has remained stable and following the national downward trend. NHS Nottinghamshire County & NHS Bassetlaw is slightly above national average.

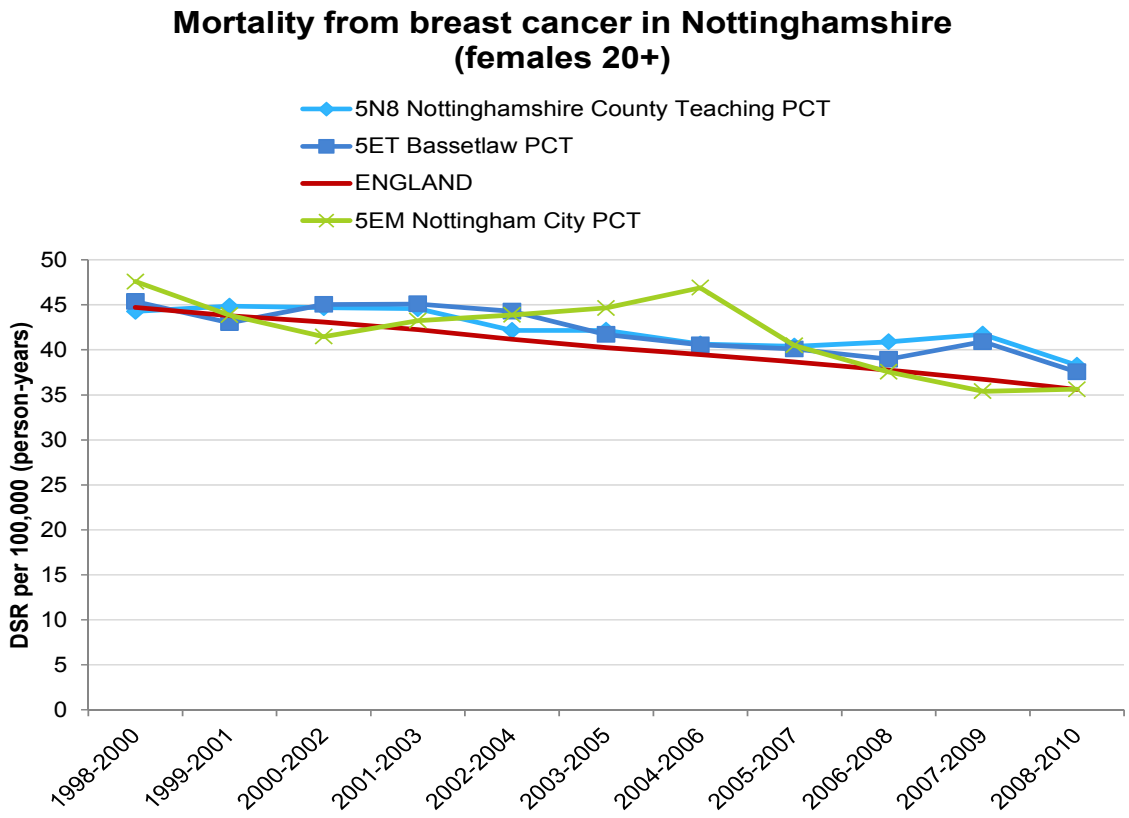


Figure 5 Source: UK Cancer Information Service (UKCIS)

Programme performance

During the reporting period 2009-11, all units continued to perform well against the minimum national standards required and in many cases exceeding performance targets set. The small cancer detection rates are particularly important in reducing mortality and both Nottinghamshire units (Nottingham Breast Unit and the Welcome Unit at Kings Mill) are performing well in this respect. Performance against Key Performance Indicators is shown Appendix 3.

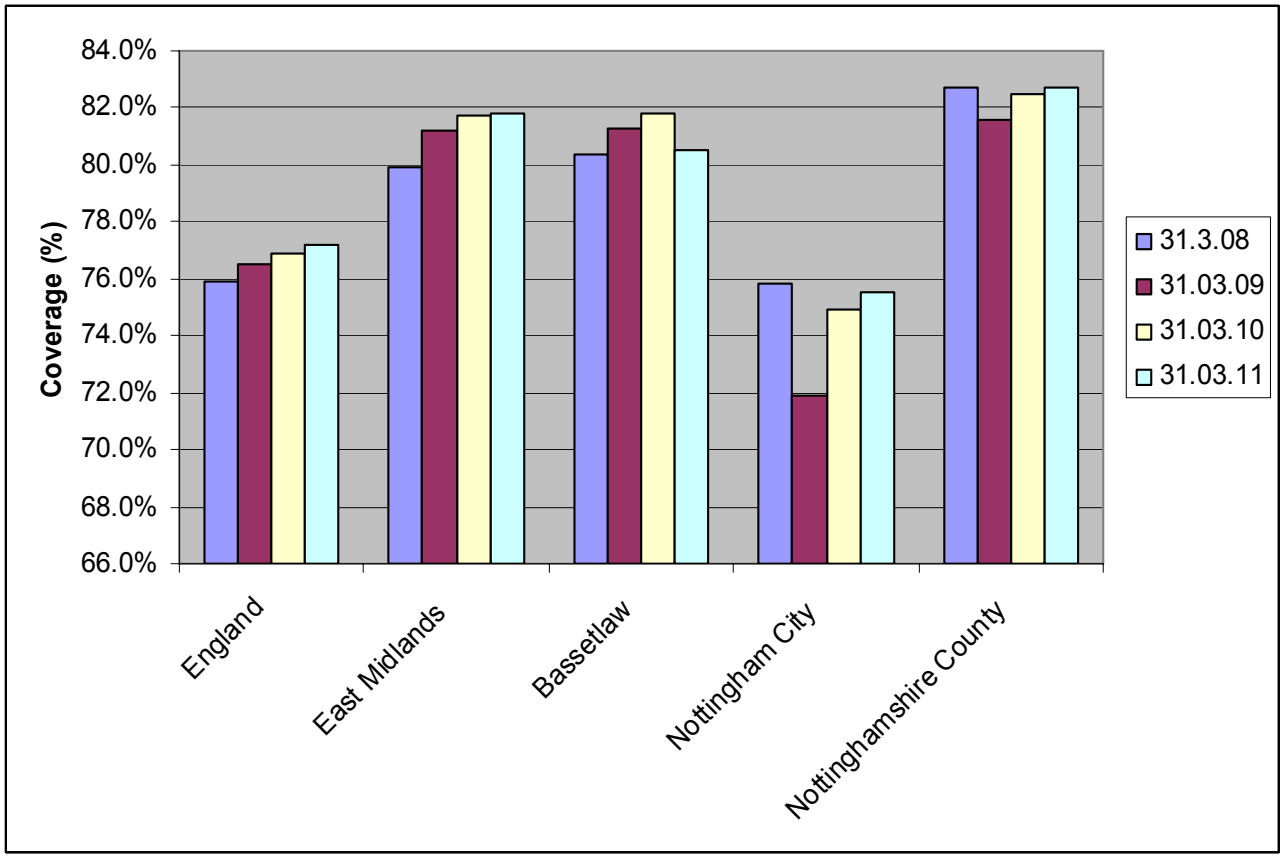
Coverage

Coverage is defined as the percentage of women resident and eligible for screening at a particular point in time who have been screened within the last 3 years and have a recorded result. As women may be called between their 50th and 53rd birthday coverage is calculated for women aged 53-70 years. The minimum national standard is 70% of eligible women should be screened. Figure 6 shows the percentage coverage for the three Nottinghamshire PCTs compared to the regional and national rate.

Coverage exceeds the national standard of 70% overall. There is some variation year to year partly as a result of slight changes in numbers screened each year of the three year screening cycle. During 2009 as a result of staff shortages there was slippage within the breast screening programme at NUH which had an impact on coverage for the 08/09 financial year.

Uptake for the prevalent first round of screening at Doncaster was slightly below the 70% target in 2010-11 (this target is based on the *screening unit* and is not for NHS Bassetlaw – see Appendix 3). A health promotion group has been established in Bassetlaw to review uptake for breast screening in the area.

Figure 6: Annual percentage coverage for breast screening for England, East Midlands, Bassetlaw, Nottingham City and Nottinghamshire County, 2008 - 2011



Source: Breast Screening Statistical Bulletins 2009/10 and 2010/11

Screening round length

Eligible women within the screening age range are invited every 3 years for breast screening. The minimum national standard is that at least 90% of women are first offered appointments within 36 months, with a target of 100%. During 2009/10 performance of the Nottingham Breast Unit fell below this and only screened 60% of women within 36 months. This was as a result of staffing shortages and uneven numbers within the 3 year screening round. A recovery plan was implemented to address the slippage and also to equalise numbers across the three year screening schedule. Data for 2010/11 indicates that performance is now above the national standard (see Appendix 3)

Benign biopsy rates

Benign biopsy rates at all three screening units exceed the minimum rate expected within the prevent screening round. This has been investigated and is not due to a failure of the assessment process but is as a result of the diagnosis of 'high risk lesions' on initial needle biopsy, which require surgical excision.

The report following the Quality Assurance (QA) visit to the Doncaster screening unit in May 2012 highlighted a low rate of biopsy as a concern. The QA report also highlighted concerns about the small cancer detection rate which fall below the minimum standard expected during 2010/11. This is being investigated and will be addressed as part of an action plan to be developed as a result of the QA report.

Screening results and screening to assessment waits

The minimum national standard is that >90% of women receive their screening test result within two weeks of undergoing screening, with a target of 100%. NUH and SFHFT Breast Screening Units achieved 96.3% and 99.6% respectively

The screening to assessment minimum national standard is for >90% of women requiring further assessment receive this assessment within 3 weeks of their screening, with a target of 100% NUH and SFHFT Breast Screening Units achieved 91.9% and 94.6% respectively.

The performance at Doncaster against the target for screening to assessment within three weeks also falls slightly below the 90% target. This is indicative however of patient choice and does not reflect the first available appointment offered.

Current and future developments

Age extension

Currently there is a trial underway, offering screening to women aged 47 – 49 and 71 – 73. The age extension trial is being implemented through a randomised programme. Practices will have either the younger or older cohort of women within the extension invited but not both. This randomisation will be rolled out over two screening rounds before fully extending to all women within the 47 to 73 age group.

Digital mammography

The Cancer Reform Strategy recommended that every breast unit should have at least one digital set of equipment for assessment. The screening units at SFHFT and Doncaster are both fully digital while at NUH has digital equipment available for assessment at Nottingham City Hospital but not elsewhere. A business case to convert other sites and the mobile units to have digital equipment is being progressed through NUH and it is hoped that the service there will be converted to be digital during 2012.

High risk screening

The Cancer Reform Strategy recommended that the surveillance of women at high risk of developing breast cancer should be transferred to become part of the national breast screening programme. Surveillance is currently undertaken at a local level, with varying standards and protocols. This recommendation was reiterated in the Improving Outcomes; A Strategy for Cancer[2] published in January 2011. It reported that the NHSBSP would manage the surveillance of women at higher risk across England, following national standards and protocols. This ensures that this group of women received a consistent and high quality service. Following successful pilots, work is underway to ensure that national standards are in place from April 2013. Discussions have been taking place on a regional basis to implement these arrangements locally. However further clarity is still required from the national programme regarding implementation.

Independent Review of the NHSBSP

In October 2011, Professor Sir Mike Richards (National Cancer Director) announced in a letter to the British Medical Journal that he would undertake a review of the evidence underpinning breast screening working with Harpal Kumar, Chief Executive of Cancer Research UK. The review is to include analysis of all relevant research including randomised control trials and observational studies relevant to breast screening. Independent advisors will carry out the review and the review report is expected in 2012. The report will be presented to the Advisory Committee on Breast Cancer

[2] Improving Outcomes: A Strategy for Cancer ,Department of Health January 2011

Screening. An update will be included in next year's annual report when the findings have been reported.

NHS BOWEL CANCER SCREENING PROGRAMME

Background

The aim of the NHS Bowel Cancer Screening Programme (NHSBCSP) is to reduce deaths from colorectal cancer. By identifying relevant changes in people before symptoms have developed, treatment can be offered at a time when it is most effective. Early detection allows more successful and less invasive treatment. Screening also enables the detection and removal of adenomatous polyps which are precursor lesions of colorectal cancer.

The NHSBCSP began in England in July 2006 and has been rolled out in stages across the county. The Nottinghamshire programme rolled out as shown:

- NHS Bassetlaw from February 2008
- NHS Nottinghamshire County (South) from March 2008
- NHS Nottingham City from April 2008
- NHS Nottingham County (North from January 2009

The Bowel Cancer Screening Eastern Regional Hub sends out invitation letters to all eligible men and women on behalf of the East Midlands and Eastern regions. A week later, individuals are sent faecal occult blood (FoBT) testing kits with a pre-paid envelope to return the completed test to the Bowel Cancer Screening Eastern Regional Hub.

Patients with a positive (abnormal) FoBT result are invited to an appointment with a specialist nurse in a screening clinic (part of the Screening Centre) to discuss their results. At the consultation, the specialist screening nurse will offer an appointment within two weeks for a colonoscopy. This is the routine investigation for the programme. The Nottinghamshire Bowel Cancer Screening Centre is based at the City Hospital Campus of NUH but operates a satellite clinic at Kings Mill Hospital, within SFHFT. People living in Bassetlaw who receive a positive test result are seen in the screening centre at Doncaster Hospital. Depending on the findings of the colonoscopy, patients will be offered screening again in two years time, entered into a surveillance programme or referred for treatment at a local hospital.

Incidence and mortality of bowl (colorectal) cancer

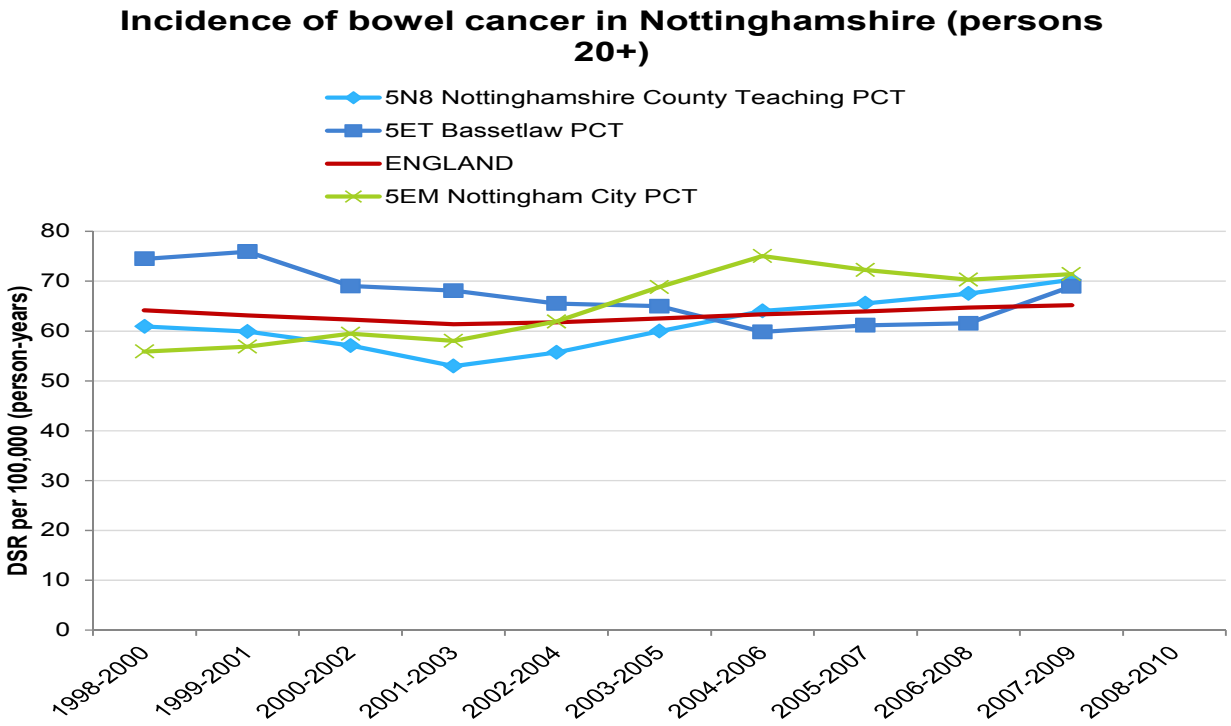


Figure 7 Source: UK Cancer Information Service (UKCIS)

Incidence of bowel cancer has been steadily on the increase in NHS Nottinghamshire County. Both NHS Nottingham City & NHS Bassetlaw have seen a drop in incidence but has recently been increasing to the national average and now all three PCT are above the national average.

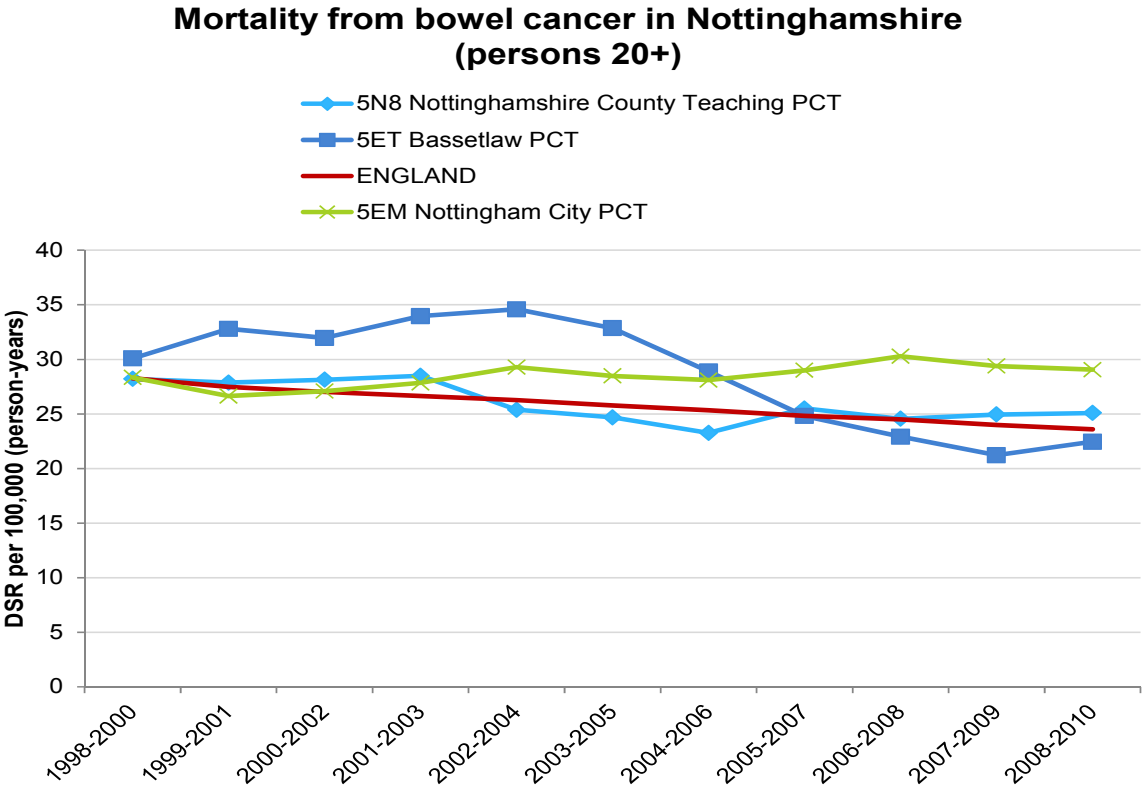


Figure 8 Source: UK Cancer Information Service (UKCIS)

Mortaility from bowel cancer nationally has been on a steady decline. NHS Nottinghamshire County is following the national trend. NHS Nottingham City is at a steady rate which is signifcantly higher than the national trend. NHS Bassetlaw was significantly higher than the national trend but is now lower.

Programme performance

In Nottinghamshire, the Bowel Cancer Screening Working Group reviews local programme performance against national targets, manages programme developments and oversees investigation and implementation of learning from incidents. Appendix 4 details performance for 2009, 2010 and 2011 for the Nottinghamshire Screening Centre and the South Yorkshire and Bassetlaw Screening Centre.

Screening Uptake

Uptake is defined as the proportion of men and women aged 60 to 69 years invited to participate in bowel cancer screening who return a completed and adequate kit. The NHSBCSP aims for an uptake rate of 60%. Uptake rates over the last four years are shown in Table 4.

Table 4: Annual % uptake of bowel cancer screening in Nottinghamshire and Nottingham City

	2008	2009	2010	2011
Nottingham City	**46.8%**	**45.4%**	**52%**	**48.8%**
Nottinghamshire County	**59.6%**	**57.7%**	**61.6%**	**60.5%**
Total Nottingham City and County	**55.3%**	**55.2%**	**59.5%**	**57.6%**

Source: Nottingham Bowel Cancer Screening Centre statistics

In Nottingham City uptake in 2011 was 48.8%, significantly lower than the desired aspiration level of 60%. Across Nottinghamshire County, uptake has been over 60% for the last two years. However, this hides the variation between the districts that make up the county.

In 2010 in order to address low uptake rates, NHS Nottingham City commissioned a local social enterprise to promote participation in the bowel screening programme specifically with local black and ethnic minority groups. A health promotion campaign was also run across the county to promote the screening programme in April 2011. While this resulted in a small increase in uptake, it did generate a large number of self referrals from people aged 70+ which had an impact on the performance of the Screening Centre at NUH.

In 2011, a health equity audit of the NHSBCSP in Nottinghamshire was completed and the information obtained will support the targeted work required to improve uptake and outcomes in groups identified as not participating in the programme. This is required to maximize the benefits of the programme, detecting bowel cancer early and reduce the related inequalities.

Current & future developments

Cancer Reform Strategy – age extension

The Cancer Reform Strategy outlined the plan for age extension of the NHSBCSP. It committed to extend the screening programme to people aged 60 – 73, introducing two further rounds of screening. Essential performance criteria for current waiting times and capacity need to be met to start age extension locally. An application has been made to implement the age extension in Nottinghamshire but to date it has not been approved because of concerns regarding waiting times within the symptomatic endoscopy service. A further bid will be submitted and the age extension will be implemented as soon as approval is given by the National Bowel Cancer Screening Programme Office.

Flexible Sigmoidoscopy

In March 2011, the UK National Screening Committee (UK NSC) recommended that a screening programme for bowel cancer using flexible sigmoidoscopy be introduced alongside the existing national bowel cancer screening programme. This decision was based on UK NSC criteria for introducing a new screening programme and from a three month public consultation. Flexible sigmoidoscopy will be provided as a one-off test, with the aim of detecting bowel polyps and cancers before any symptoms develop, using endoscopy to inspect the bowel. Clinical and cost-effectiveness modelling show that a one-off flexible sigmoidoscopy screen for bowel cancer in men and women aged 55 to 64 could reduce the incidence of colorectal cancer by 33% and mortality by 43% in those screened. [3]

In April 2011 the NHSBCSP announced that flexible sigmoidoscopy will be rolled out across England over the next few years. Men and women will be offered the one off test at age 55, in addition to the current FoBT for those aged 60 – 73 already in place. A bid has been submitted to implement the flexible sigmoidoscopy programme within Nottinghamshire during the first wave of roll out of the national initiative. The National Screening Committee has indicated that areas must first age extend before approval of flexible sigmoidoscopy bids.

[3] Once-only flexible sigmoidoscopy screening in prevention of colorectal cancer, Atkin WS et al, Lancet, May 2010

NHS Changes and Reforms

Currently the NHS Nottinghamshire PCT cluster commissions all National Screening Committee (NSC) recommended cancer screening programmes. Screening programmes are commissioned in line with patients' legal rights to nationally approved treatments and programmes as described in the NHS Constitution. Failure to commission and provide services could result in legal challenge.

From April 2013, the responsibility for commissioning of all NSC screening programmes will pass to the NHS Commissioning Board (NHSCB) using national service specifications. The local arrangements are yet to be defined but may be discharged through Public Health England (PHE).

Whilst the NHSCB will be the lead commissioner there will be an overlap of interests between NHSCB, PHE, Clinical Commissioning Groups (CCGs) and the Director of Public Health (Director of Public Health) in the Local Authority. This overlap arises from the;

- complexity of screening pathways which usually involve multiple providers including general practice.
- CCGs' interest in the quality and performance of screening programmes that are provided for their registered populations
- the eventual referral of patients from a screening pathway into a CCG commissioned diagnostic and treatment service.
- potential for screening programme developments to impact both positively and negatively on other hospital services (for example equipment purchased for a screening programme may also benefit other hospital services)
- a scrutiny role for the DPH in the local authority to assess coverage and quality of all screening programmes provided to the local population. In addition, both cervical and breast screening indicators are within the Public Health Outcomes Framework and will therefore be the part of the responsibility of local authorities.

Conclusion

Currently across Nottingham and Nottinghamshire (including Bassetlaw), there are robust structures and processes in place to ensure effective high quality cancer screening programmes for the local population. As commissioning of programmes transfers to the NHSCB, it will be important to maintain current oversight of all programmes, ensure effective performance management and support the ongoing developments within each programme.

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September 2012

Appendices

Appendix 1 –Cervical Cancer Screening Coverage Data

Coverage data NHS Bassetlaw 2009-2010

		Ceased for reasons of:					
Age Group at 31.3.11	**Resident Population**	**Clinical (no cervix)**	**Age**	**Other reason**	**Eligible Population**	**No of women screened in last 5 years**	**Coverage (%) < 5 yrs since last adequate test**
Under 20	12383	0	0	0	12383	13	0.1%
20 - 24	3053	1	0	0	3052	266	8.7%
25 - 29	2996	2	0	3	2994	2260	75.5%
30 - 34	2978	5	0	6	2973	2467	83.0%
35 - 39	3676	37	0	13	3639	3161	86.9%
40 - 44	4267	178	0	21	4089	3560	87.1%
45 - 49	4250	353	0	22	3897	3435	88.1%
50 - 54	3762	527	0	26	3235	2763	85.4%
55 - 59	3546	747	0	38	2799	2308	82.5%
60 - 64	3991	1078	712	172	2913	2316	79.5%
65 - 69	3093	835	1590	277	2258	1333	59.0%
70 - 74	2544	665	1353	293	1879	184	9.8%
75 - 79	2024	425	1079	417	1599	26	1.6%
80 and Over	3110	281	1184	374	2829	7	0.2%
25 - 64	29466	2927	712	301	26539	22270	83.9%
All Ages	55673	5134	5918	1662	50539	24099	47.7%

Coverage data NHS Nottingham City 2009-2010

		Ceased for reasons of:					
Age Group at 31.3.11	**Resident Population**	**Clinical (no cervix)**	**Age**	**Other reason**	**Eligible Population**	**No of women screened in last 5 years**	**Coverage (%) < 5 yrs since last adequate test**
Under 20	40804	0	0	0	40804	15	0.0%
20 - 24	24497	2	0	0	24495	521	2.1%
25 - 29	15082	9	0	8	15073	9765	64.8%
30 - 34	11462	21	0	8	11441	9075	79.3%
35 - 39	10701	118	0	13	10583	8788	83.0%
40 - 44	10548	324	0	40	10224	8745	85.5%
45 - 49	10046	708	0	68	9338	7932	84.9%
50 - 54	8346	1031	0	95	7315	6088	83.2%
55 - 59	6946	1271	0	108	5675	4614	81.3%
60 - 64	6529	1498	1104	343	5031	3928	78.1%
65 - 69	5236	1293	2540	580	3943	2136	54.2%
70 - 74	4848	1106	2622	737	3742	176	4.7%
75 - 79	4378	905	2262	1066	3473	23	0.7%
80 and Over	7147	528	2598	817	6619	15	0.2%
25 - 64	**79660**	**4980**	**1104**	**683**	**74680**	**58935**	**78.9%**
All Ages	166570	8814	11126	3883	157756	61821	39.2%

Coverage data NHS Nottinghamshire County 2009-2010

		Ceased for reasons of:					
Age Group at 31.3.11	**Resident Population**	**Clinical (no cervix)**	**Age**	**Other reason**	**Eligible Population**	**No of women screened in last 5 years**	**Coverage (%) < 5 yrs since last adequate test**
Under 20	72458	1	0	0	72457	19	0.0%
20 - 24	19013	2	0	0	19011	687	3.6%
25 - 29	19651	14	0	5	19637	14993	76.4%
30 - 34	19527	67	0	21	19460	16773	86.2%
35 - 39	22859	281	0	46	22578	19910	88.2%
40 - 44	25803	975	0	71	24828	21987	88.6%
45 - 49	25424	1923	0	116	23501	20760	88.3%
50 - 54	22124	2850	0	163	19274	16732	86.8%
55 - 59	20453	3725	0	169	16728	14112	84.4%
60 - 64	22201	5106	4078	808	17095	13961	81.7%
65 - 69	17741	4457	9082	1642	13284	7999	60.2%
70 - 74	14873	3580	8218	2076	11293	637	5.6%
75 - 79	12579	2484	6990	2687	10095	95	0.9%
80 and Over	20224	1512	7832	2634	18712	41	0.2%
25 - 64	**178042**	**14941**	**4078**	**1399**	**163101**	**139228**	**85.4%**
All Ages	334930	26977	36200	10438	307953	148706	48.3%

Coverage data NHS Bassetlaw 2010-2011

		Ceased for reasons of:					
Age Group at 31.3.11	**Resident Population**	**Clinical (no cervix)**	**Age**	**Other reason**	**Eligible Population**	**No of women screened in last 5 years**	**Coverage (%) < 5 yrs since last adequate test**
Under 20	12269	0	0	0	12269	6	0.0%
20 - 24	3089	1	0	0	3088	198	6.4%
25 - 29	3036	2	0	3	3034	2224	73.3%
30 - 34	2959	11	0	4	2948	2479	84.1%
35 - 39	3511	43	0	7	3468	3013	86.9%
40 - 44	4211	155	0	14	4056	3521	86.8%
45 - 49	4306	358	0	21	3948	3438	87.1%
50 - 54	3878	512	0	20	3366	2889	85.8%
55 - 59	3507	687	0	29	2820	2220	78.7%
60 - 64	4025	1078	924	302	2947	2263	76.8%
65 - 69	3230	890	1704	418	2340	1129	48.2%
70 - 74	2524	662	1406	335	1862	156	8.4%
75 - 79	2069	454	1085	441	1615	26	1.6%
80 and Over	3173	331	1302	434	2842	7	0.2%
25 - 64	29433	2846	924	400	26587	22047	82.9%
All Ages	55787	5184	6421	2028	50603	23569	46.6%

Coverage data NHS Nottingham City 2010-2011

		Ceased for reasons of:					
Age Group at 31.3.11	**Resident Population**	**Clinical (no cervix)**	**Age**	**Other reason**	**Eligible Population**	**No of women screened in last 5 years**	**Coverage (%) < 5 yrs since last adequate test**
Under 20	40213	0	0	0	40213	24	0.1%
20 - 24	25242	2	0	0	25240	391	1.5%
25 - 29	14507	8	0	5	14499	9277	64.0%
30 - 34	11713	25	0	5	11688	9287	79.5%
35 - 39	10179	89	0	14	10090	8424	83.5%
40 - 44	10353	298	0	24	10055	8557	85.1%
45 - 49	9930	668	0	64	9262	7868	84.9%
50 - 54	8439	978	0	80	7461	6198	83.1%
55 - 59	6989	1213	0	99	5776	4487	77.7%
60 - 64	6566	1466	1464	494	5100	3833	75.2%
65 - 69	5165	1301	2571	765	3864	1802	46.6%
70 - 74	4720	1095	2633	670	3625	182	5.0%
75 - 79	4283	898	2213	1064	3385	29	0.9%
80 and Over	7101	644	2815	943	6457	14	0.2%
25 - 64	**78676**	**4745**	**1464**	**785**	**73931**	**57931**	**78.4%**
All Ages	165400	8685	11696	4227	156715	60373	38.5%

Coverage data NHS Nottinghamshire County 2010-2011

		Ceased for reasons of:					
Age Group at 31.3.11	**Resident Population**	**Clinical (no cervix)**	**Age**	**Other reason**	**Eligible Population**	**No of women screened in last 5 years**	**Coverage (%) < 5 yrs since last adequate test**
Under 20	72778	1	0	0	72777	10	0.0%
20 - 24	19317	2	0	0	19315	473	2.4%
25 - 29	19852	16	0	12	19836	14567	73.4%
30 - 34	19929	61	0	19	19868	17050	85.8%
35 - 39	21890	279	0	36	21611	18972	87.8%
40 - 44	25726	929	0	57	24797	21984	88.7%
45 - 49	26063	1917	0	93	24146	21394	88.6%
50 - 54	22820	2846	0	134	19974	17345	86.8%
55 - 59	20671	3643	0	157	17028	13733	80.6%
60 - 64	22227	5016	5452	1401	17211	13565	78.8%
65 - 69	18659	4697	9904	2372	13962	6983	50.0%
70 - 74	14919	3708	8365	2141	11211	561	5.0%
75 - 79	12615	2576	6989	2734	10039	92	0.9%
80 and Over	20677	1846	8738	3012	18831	37	0.2%
25 - 64	**179178**	**14707**	**5452**	**1909**	**164471**	**138610**	**84.3%**
All Ages	338143	27537	39448	12168	310606	146766	47.3%

Appendix 2: Cytology Laboratory Performance

Parameter	*Derby*		*Nottingham City*		*Kings Mill*		*Doncaster*		*Sheffield*	
	09/10	*10/11*	*09/10*	*10/11*	*09/10*	*10/11*	*09/10*	*10/11*	*09/10*	*10/11*
Laboratory Workload	***n/a***	***75,287***	***46,889***	***49,700***	***20,251***	***18,561***	***25,719***	***n/a***	***n/a***	***89,947***
PPV * *09/10 Standard 74.2-90.3%* *10/11 Standard 77.0 -90.0%*	***n/a***	***94.2***	***88.8***	***n/a***	***94.1***	***92.5***	***87.6***	***n/a***	***n/a***	***81.7***
Low Grade (Mild/Borderline) Detection Rate *09/10 Standard 3.9 - 7.4%* *10/11 Standard 3.6 – 7.4%*	***n/a***	***4.4***	***5.8***	***5.2***	***4.2***	***3.6***	***7.1***	***n/a***	***n/a***	***3.4***
High Grade (Moderate or worse) Detection Rate *09/10 Standard 0.8 - 1.5%* *10/11 Standard 0.7 – 1.3%*	***n/a***	***0.8***	***0.9***	***1.0***	***1.0***	***0.9***	***1.3***	***n/a***	***n/a***	***1.0***
Inadequate rate	***n/a***	***1.5***	***3.5%***	***2.5***	***1.7***	***1.5***	***0.5***	***n/a***	***n/a***	***1.5***
Laboratory Turnaround Times %	***n/a***							***n/a***	***n/a***	
0-2 weeks		***99.8***	***52.5***	***69.8***	***99.9***	***100***	***71.4***			***83.9***
3-4 weeks		***0.2***	***21.5***	***29.9***	***0.1***	***0***	***28.4***			***15.3***
5-6 weeks		***0***	***8.9***	***0.2***	***0***		***0.1***			***0.7***
7-8 weeks			***6.0***	***0***	***0***		***0***			***0.1***
9-10 weeks			***10.5***	***0***	***0***		***0***			***0***
Over 10 weeks			***0.6***	***0***	***0***		***0***			***0***

* PPV – Positive Predictive Value is a measure of the laboratories ability to predict CIN[4]2 (cervical squamous intraepithelial neoplasia) or more severe abnormality from tests with a result of moderate or more severe dyskaryosis

[4] A condition in which moderately abnormal cells grow on the thin layer of tissue that covers the cervix. These abnormal cells are not malignant (cancer) but may become cancer. Also called cervical squamous intraepithelial neoplasm

Appendix 3:

Breast Cancer Screening Programme – Programme Standards 2008-2011

	Nottingham			North Nottingham			Doncaster				
	2008/09	**2009/10**	**2010/11**	**2008/09**	**2009/10**	**2010/11**	**2008/09**	**2009/10**	**2010/11**	**Min**	**Target**
Programme uptake *Percentage of women invited who attend*											
- prevalent round	74.2%	75.9%	77.5%	80.4%	77.3%	79.7%	76%	74%	**69%**		
- incident round	89.1%	88.9%	89.1%	90.4%	90.8%	91.4%	88%	89%	86%	70%	80%
- overall	76.0%	77.4%	77.4%	78.9%	78.4%	79.7%	77%	76%	74%		
Recall to Assessment *for further x-rays for review in clinic*											
- prevalent round	7.2%	6.1%	6.0%	7.1%	5.8%	6.8%	4.8%	6.8%	7.6%	<10%	<7%
- incident round	2.3%	2.2%	1.9%	2.4%	2.7%	2.3%	1.9%	2.3%	2.4%	<7%	<5%
Early recall *% women recommended for early recall after assessment*											
- overall	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.02%	0.01%	0.01%	<0.5%	≤0.25%
Benign biopsy rate *per 1000 women screened*											
- prevalent round	**3.8**	**3**	0.7	**3.8**	0.9	0.9	**1.6**	**2.4**	0.6	<1.5	<1.0
- incident round	0.2	0.6	0.2	0.6	0.5	0.7	0.3	0.4	0.3	<1.0	<0.75
Invasive cancer detection rate *per 1000 women screened*											
- prevalent round	6.4	6.7	5.4	8.6	5.7	7.0	7.0	4.8	5.4	≥2.7	≥3.6

- incident round	6.1	6.2	6.1	6.0	6.4	5.9	5.0	4.7	4.8	≥3.1	≥4.2
Small cancer detection rate *Cancers <15mm per 1000 women screened*											
- prevalent round	4.1	3.5	2.4	4.8	2.8	3.5	3.7	2.4	**1.2**	≥1.5	≥2.0
- incident round	4.2	4	4.4	3.7	4.3	3.6	2.4	3.2	3.3	≥1.7	≥2.5
Standardised detection ratio *takes account of age of women screened*											
- prevalent round	1.54	1.75	1.43	2.38	1.53	1.77	2.16	1.25	1.66		
- incident round	1.49	1.46	1.41	1.42	1.54	1.38	1.27	1.20	1.22	≥0.85	≥1.0
- overall	1.50	1.51	1.42	1.55	1.54	1.44	1.40	1.21	1.29		
Preoperative diagnosis rate *% of cancers diagnosed cytologically or histologically without surgery*											
- overall	94.5%	98.0%	95.9%	94.4%	100.0%	92.6%	100%	97%	97%	≥80%	≥90%
DCIS detection rate *cancers which are in situ carcinoma per 1000 women*											
- prevalent round	1.50	1.00	**0.00**	2.90	0.90	0.90	1.1	1.2	0.6	≥0.4	NA
- incident round	1.50	1.10	1.30	2.00	1.10	1.30	0.5	0.8	0.8	≥0.5	NA
Round length *% women offered appointment within 36 months of previous screen*											
- overall	91.5%	**60.6%**	99.1%	96.7%	97.9%	95.4%	**89.90%**	99.64%	99.07%	≥90%	100%
% women offered appointment within 38 months of previous screen											
- overall	99.2%	99.4%	99.3%	99.3%	99.6%	99.4%	97.80%	99.69%	99.70%		
Screening to results *% women sent result within 2 weeks - overall*	98.6%	98.6%	97.3%	99.2%	99.1%	98.8%	99.36%	99.27%	99.10%	≥90%	100%

Screening to assessment *% women who attend assessment clinic within 3 weeks of mamogram*	97.5%	98.4%	92.6%	99.7%	98.6%	94.2%	96.31*%	**89.10%**	**89.80%**	≥90%	100%

Appendix 4 – Bowel Cancer Screening Programme Performance

Nottinghamshire NHS BCSP PROGRAMME PERFORMANCE- 2009						
Quality Standard	**National Target**	**National Standard**	**Jan-Mar 10**	**Apr-June 10**	**July-Sept 10**	**Oct-Dec 10**
Colonoscopies Performed			119	106	171	205
Completion rate to caecum, terminal ileum or anastamosis	≥97%	≥ 90%	100%	94.26%	96.47%	96.04%
Average wait (in days) from +ve FOBt to SSP clinic	≥14 Days		7.3	8.2	10.53	11.02
Average wait (in days) from SSP clinic to colonoscopy	≥ 14 Days		5.19	7.95	13.25	18.76
Average wait (in days) from colonoscopy to SSP result clinic	≥ 21days		10.27	13.86	17.85	16.5
Adenoma detection rate	≥ 40%	≥ 35%	41.7%	44.7%	41.64%	41.61%
Cancer detection rate	11%		8.97%	14.83%	7.26%	7.69%
Polyp retrieval rate	≥95%	≥ 90%	87.47%	84.82%	92.93%	92.11%
Number of initial invites			12341	13442	13393	13982
Number of kits returned			8317	7832	7921	7878
Positivity			1.63%	2.48%	3.05%	2.58%
Uptake - FOBt			56.28%	55.14%	55.08%	54.28%
Uptake colonoscopy	88%	85%	91.2%	90.37%	86.79%	84.86%
Adverse events						
Post polypectomy bleeds			1	2	3	2
Perforations						

Nottinghamshire NHS BCSP PROGRAMME PERFORMANCE- 2010

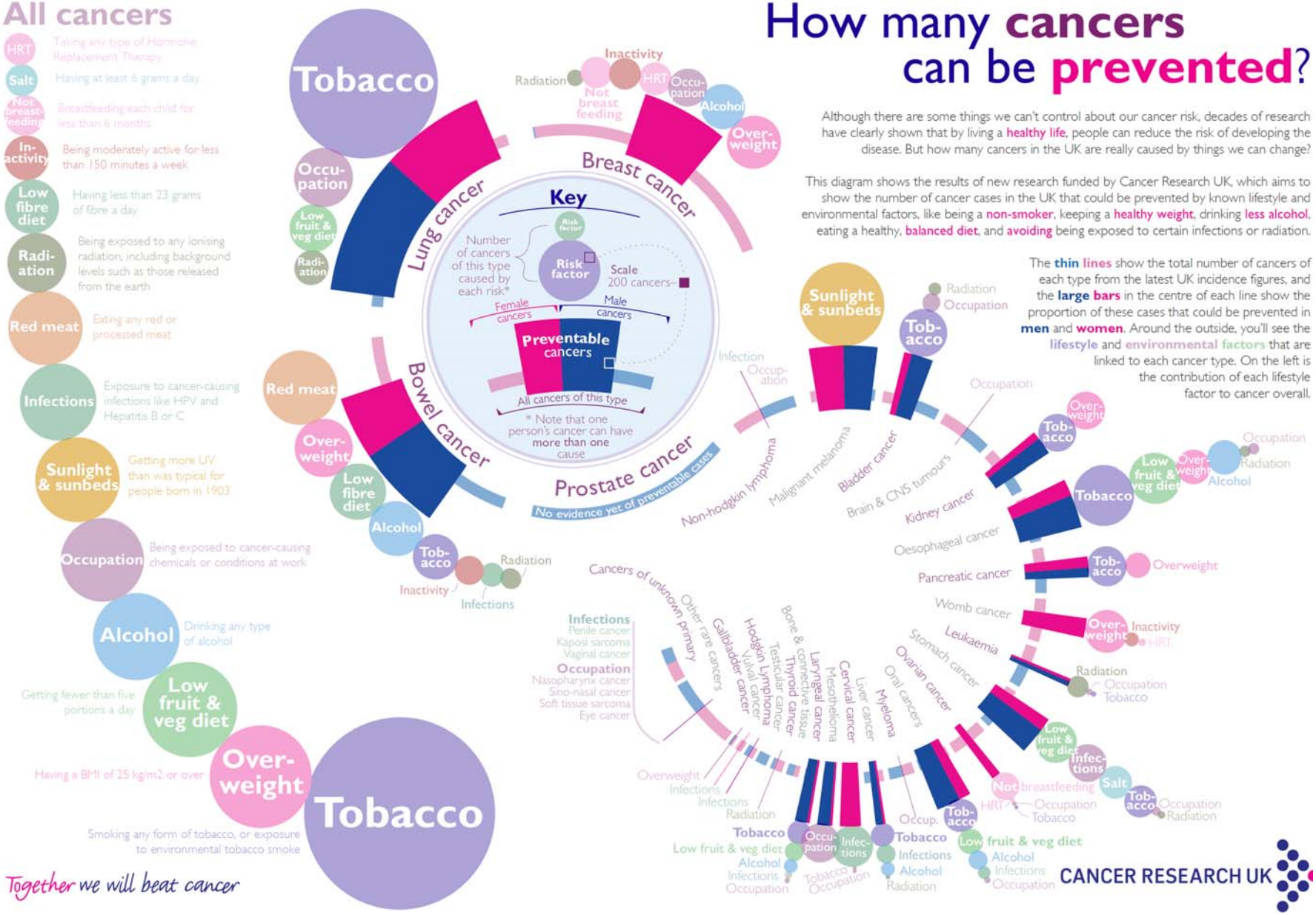
Quality Standard	National Target	National Standard	Jan-Mar 10	Apr-June 10	July-Sept 10	Oct-Dec 10
Colonoscopies Performed			245	182	234	195
Completion rate to caecum, terminal ileum or anastamosis	≥97%	≥ 90%	96.5%	96.84%	98.55%	96.12%
Average wait (in days) from +ve FOBt to SSP clinic	≥14 Days		8.53	8.44	8.88	7.57
Average wait (in days) from SSP clinic to colonoscopy	≥ 14 Days		14.48	8.19	6.67	8.8
Average wait (in days) from colonoscopy to SSP result clinic	≥ 21days		15.48	14.62	12.91	12.88
Adenoma detection rate	≥ 40%	≥ 35%	46.42%	39.43%	34.57%	54.74%
Cancer detection rate	11%		8.97%	14.83%	7.26%	7.69%
Polyp retrieval rate	≥95%	≥ 90%	86.28%	87.71%	92.39%	93.49%
Number of initial invites			12162	13526	13510	12628
Number of kits returned			8958	8738	8884	7865
Positivity			2.34%	2.4%	2.57%	2.85%
Uptake - FOBt			56.04%	64.42%	60.13%	57.2%
Uptake - Colonoscopy	88%	85%	91.2%	90.37%	86.79%	84.86%
Adverse events						
Post polypectomy bleeds			3	0	3	5
Perforations			1			

Nottinghamshire NHS BCSP PROGRAMME PERFORMANCE- 2011

Quality Standard	National Target	National Standard	Jan-Mar 11	Apr-June 11	July-Sept 11	Oct-Dec 11
Colonoscopies Performed			223	210	236	207
Completion rate to caecum, terminal ileum or anastamosis	≥97%	≥ 90%	96.63%	96.87%	98.42%	96%
Average wait (in days) from +ve FOBt to SSP clinic	≥14 Days		8.95	10.27	7.44	9.03
Average wait (in days) from SSP clinic to colonoscopy	≥ 14 Days		6.87	9.56	8.46	12.84
Average wait (in days) from colonoscopy to SSP result clinic	≥ 21days		11.33	13.89	12.63	15.36
Adenoma detection rate	≥ 40%	≥ 35%	40.10%	49.27%	40.37%	47.61%
Cancer detection rate	11%		10.3%	9.04%	5.08%	8.69%
Polyp retrieval rate	≥95%	≥ 90%	83.33%	94.26%	95.38%	97.69%
Number of initial invites			13095	12455	13140	13325
Number of kits returned			9580	9504	8075	7233
Positivity			2.22%	2.54%	2.32%	2.64%
Uptake - FOBt			62.4%	61.15%	52%	55.58%
Uptake - Colonoscopy	88%	85%	88.39%	86.26%	83.81%	88.66%
Adverse events						
Post polypectomy bleeds			1	0	1	2
Perforations						

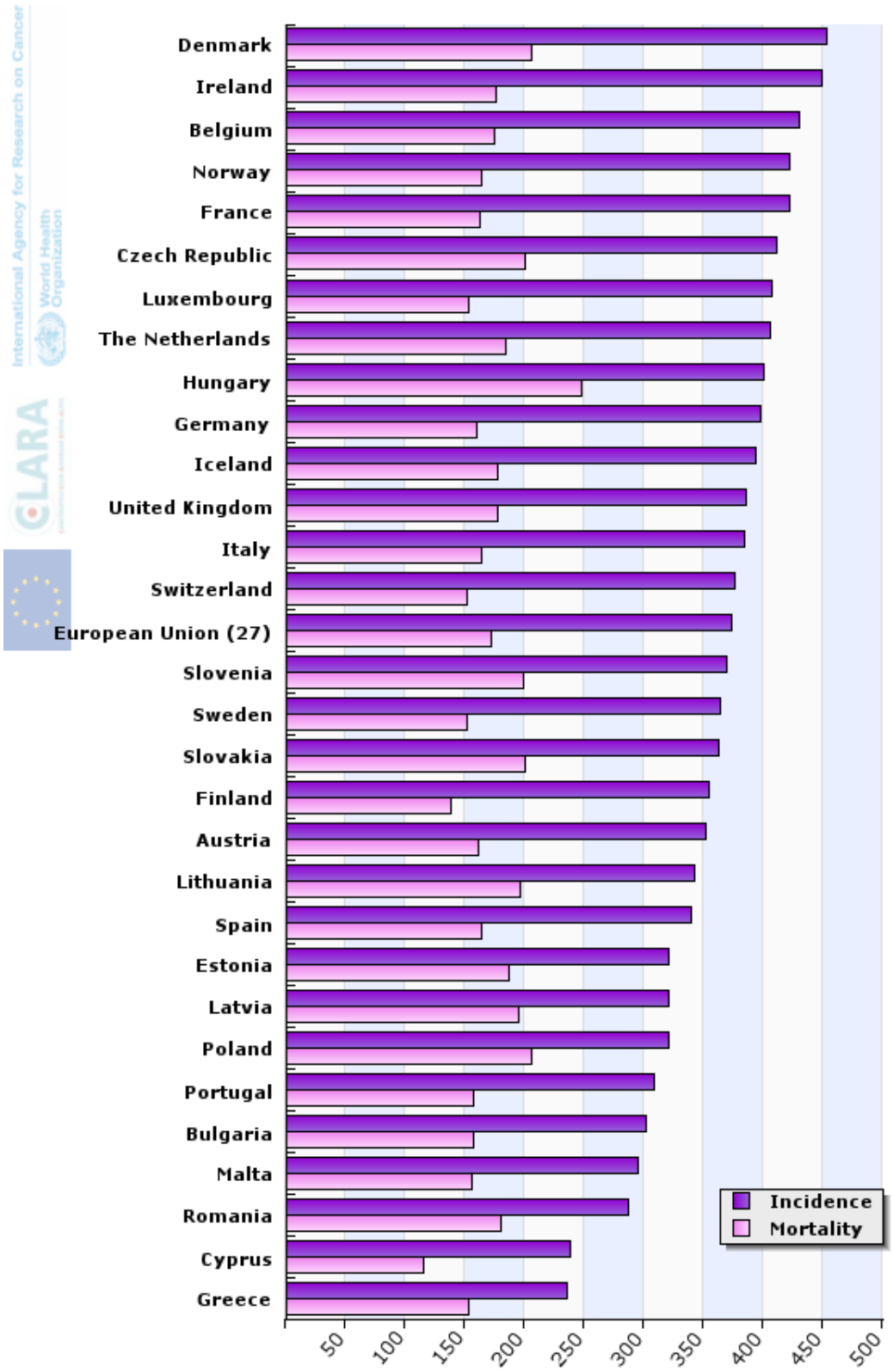
South Yorkshire and Bassetlaw NHS BCSP PROGRAMME PERFORMANCE- 2008-2011

Quality Standard	April – Dec 08	Jan – Dec 09	Jan – Dec 10	Jan – Dec 11
Colonoscopies Performed	634	866	957	1423
Completion rate to caecum, terminal ileum or anastamosis	601	813	918	1341
Average wait (in days) from +ve FOBt to SSP clinic	99.63%	100%	99.07%	98.25%
Average wait (in days) from SSP clinic to colonoscopy	94.23%	63.46%	97.11%	97.53%
Adenoma detection rate	51.02%	55.09%	45.25%	45.92%
Cancers detected	84	104	91	121
Polyp retrieval rate	95.27%	94.18%	92.46%	94.29%
Number of initial invites	96864	81323	97344	120925
Number of kits returned	51667	51275	64781	71803
Positivity	1.76%	1.72%	1.67%	2.08%
Uptake	55.18%	56.35%	62.18%	53.54%
Adverse incidents	19	13	10	15


How many cancers can be prevented?
Although there are some things we can't control about our cancer risk, decades of research have clearly shown that by living a healthy life, people can reduce the risk of developing the disease. But how many cancers in the UK are really caused by things we can change?
This diagram shows the results of new research funded by Cancer Research UK, which aims to show the number of cancer cases in the UK that could be prevented by known lifestyle and environmental factors, like being a non-smoker, keeping a healthy weight, drinking less alcohol, eating a healthy, balanced diet, and avoiding being exposed to certain infections or radiation.
The thin lines show the total number of cancers of each type from the latest UK incidence figures, and the large bars in the centre of each line show the proportion of these cases that could be prevented in men and women. Around the outside, you'll see the lifestyle and environmental factors that are linked to each cancer type. On the left is the contribution of each lifestyle factor to cancer overall.
All cancers
HRT Taking any type of Hormone Replacement Therapy
Salt Having at least 6 grams a day
Not breast-feeding Breastfeeding each child for less than 6 months
In-activity Being moderately active for less than 150 minutes a week
Low fibre diet Having less than 23 grams of fibre a day
Radi-ation Being exposed to any ionising radiation, including background levels such as those released from the earth
Red meat Eating any red or processed meat
Infections Exposure to cancer-causing infections like HPV and Hepatitis B or C
Sunlight & sunbeds Getting more UV than was typical for people born in 1903
Occupation Being exposed to cancer-causing chemicals or conditions at work
Alcohol Drinking any type of alcohol
Low fruit & veg diet Getting fewer than five portions a day
Over-weight Having a BMI of 25 kg/m2 or over
Tobacco Smoking any form of tobacco, or exposure to environmental tobacco smoke
Key
Risk factor
Number of cancers of this type caused by each risk*
Scale 200 cancers
Female cancers
Male cancers
Preventable cancers
All cancers of this type
* Note that one person's cancer can have more than one cause
Lung cancer
Breast cancer
Bowel cancer
Prostate cancer
No evidence yet of preventable cases
Tobacco
Occu-pation
Low fruit & veg diet
Radi-ation
Radiation
Not breast feeding
Inactivity
HRT
Occu-pation
Alcohol
Over-weight
Red meat
Over-weight
Low fibre diet
Alcohol
Tob-acco
Radiation
Inactivity
Infections
Infection
Occup-ation
Non-hodgkin lymphoma
Malignant melanoma
Sunlight & sunbeds
Radiation
Occupation
Tob-acco
Occupation
Bladder cancer
Brain & CNS tumours
Kidney cancer
Oesophageal cancer
Pancreatic cancer
Womb cancer
Leukaemia
Stomach cancer
Ovarian cancer
Oral cancers
Myeloma
Cervical cancer
Liver cancer
Laryngeal cancer
Mesothelioma
Bone & connective tissue
Thyroid cancer
Testicular cancer
Hodgkin Lymphoma
Vulval cancer
Gallbladder cancer
Other rare cancers
Cancers of unknown primary
Over-weight
Tob-acco
Tobacco
Low fruit & veg diet
Alcohol
Occupation
Over-weight
Tob-acco
Overweight
Over-weight
Inactivity
HRT
Radiation
Occupation
Tobacco
Low fruit & veg diet
Infec-tions
Salt
Not breastfeeding
HRT
Occupation
Tobacco
Tob-acco
Occupation
Radiation
Occup.
Tob-acco
Low fruit & veg diet
Alcohol
Infections
Occupation
Tobacco
Occu-pation
Infec-tions
Tobacco
Infections
Alcohol
Radiation
Tobacco
Low fruit & veg diet
Alcohol
Infections
Occupation
Tobacco
Occupation
Infections
Infections
Radiation
Overweight
Infections
Penile cancer
Kaposi sarcoma
Vaginal cancer
Occupation
Nasopharynx cancer
Sino-nasal cancer
Soft tissue sarcoma
Eye cancer
Together we will beat cancer
CANCER RESEARCH UK

APPENDIX B

Estimates of cancer incidence and mortality in Europe in 2008; male and female combined



Estimated incidence and mortality from All sites but non-melanoma skin cancer in both sexes, 200 Age Standardised Rate (European) per 100,000

Source: J. Ferlay, D.M. Parkin, E. Steliarova-Foucher. Estimates of cancer incidence and mortality in Europe in 2008. Eur J Cancer 2010;46(4):765–81.

REFERENCES

[i] National Cancer Intelligence Network (NCIN) One, Five and Ten Year Cancer Prevalence June 2010

[ii] Cancer Research (2011) MPs call for action on cancer survival rates and treatment gaps http://info.cancerresearchuk.org/news/archive/cancernews/2011-03-02-MPs-call-for-action-on-cancer-survival-rates-and-treatment-gaps-

[iii] NHS Intelligence Network (2012) National End of Life Care Profiles for Primary Care Trusts Nottinghamshire County National End of Life Care Programme

[iv] Reducing cancer inequality:evidence, progress and making it happen: a report by the National Cancer Equality Initiative; DH 2010 http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/@ps/documents/digitalasset/dh_114354.pdf

[v] Cancer Research (2007) Cancer Stats Mortality – UK http://publications.cancerresearchuk.org/downloads/product/cs_pdf_mortality_june_2007.pdf

[vi] Parkin, D.M. Cancers attributable to consumption of alcohol in the UK in 2010. Br J Cancer, 6 Dec 2011; 105 (S2):S14-S18; doi: 10.1038/bjc.2011.476

[vii] DH (2011) Improving outcomes a strategy for cancer http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/documents/digitalasset/dh_123394.pdf

[viii] Cancer Research UK (2012) Joint Strategic needs assessments template for cancer http://www.dh.gov/en/Publicationsandstatitics/Publications/PublicationsStatistics/DH_127378

[ix] Cancer research (2011) Cancer mortality for common cancers http://info.cancerresearchuk.org/cancerstats/mortality/cancerdeaths/#Top3

[x] Data from Ian – cancer registry I think – will confirm

[xi] Cross T, McPhail S (2008) Prostate Cancer: Diagnosis and Treatment (Supplement): An Assessment of Need. National Collaborating Centre for Cancer http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0009280/

[xii] Brain Research Trust (2012) Brain Tumours http://www.brt.org.uk/brain-tumours

[xiii] National Cancer Intelligence Network: Survival of Children, Teenagers and Young Adults with Cancer in England; 2011.Cancer in England; 2011.

[xiv] Cancer Research (2012) NCRI Session: The cost of cancer care http://scienceblog.cancerresearchuk.org/2008/10/21/ncri-session-the-cost-of-cancer-care/

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