



Improving outcomes: A strategy for cancer NCIN information supplement

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1.0 Chapter 1 – Introduction

- 1.1 This supplement summarises some of the information and evidence that has been used to inform the development of the Improving Outcomes: A strategy for cancer and highlights the extent to which variations in the quality of cancer services and outcomes continue to vary.
- 1.2 Throughout the report key information on cancer outcomes by cancer services and for England are provided:
- Cancer incidence, mortality and survival (chapter 2).
 - Cancer awareness, screening and routes to diagnosis (chapter 3).
 - Cancer prevalence and patient experience (chapter 4).
 - Treatment and treatment outcomes (chapter 5).
 - Cancer by demographic groups (chapter 6).
 - Statistics provided for primary care trusts (PCTs), strategic health authorities (SHAs), cancer networks and hospital trusts (appendices 1-5).
 - Data sources are referenced throughout the report and then listed at the back of the report.

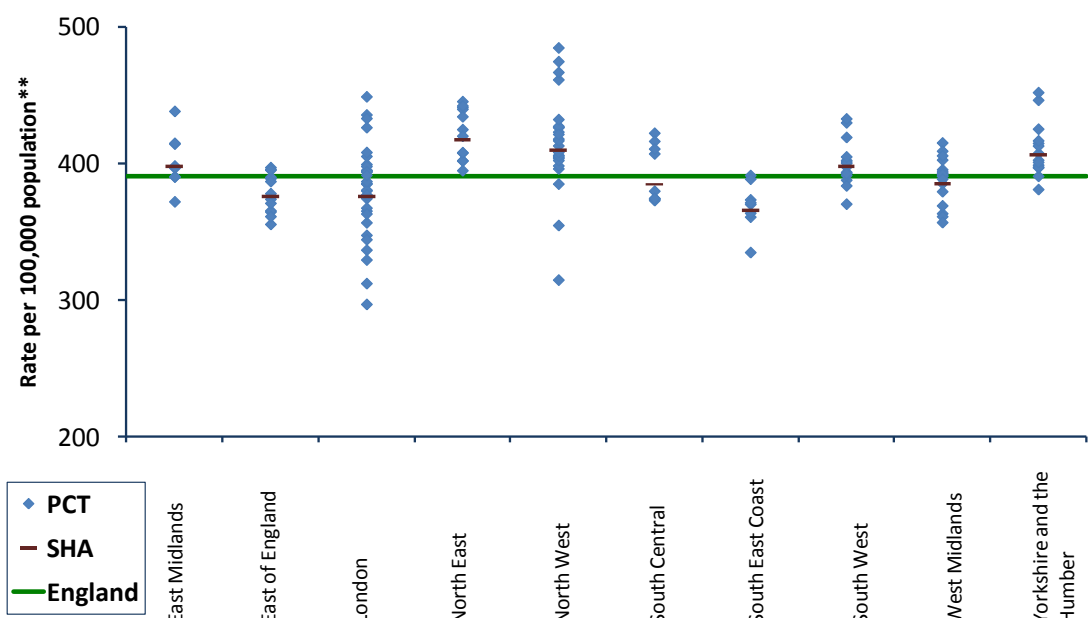
2.0 Chapter 2 – Measuring improvements in cancer outcomes

Cancer incidence

- 2.1 As the population continues to age, so the incidence of cancer continues to rise. Incidence is measured by the number (or rate) of newly diagnosed cases of cancer each year. The latest cancer incidence figures for 2008 were published in October 2010 ⁽¹⁾ and they showed that:
- There were almost 255,000 new cases of malignant cancer (excluding non-melanoma skin cancer) registered in England in 2008
 - Incidence in men was slightly higher, with around 128,000 new male cases and almost 127,000 new female cases
 - The number of newly diagnosed cases of cancer each year has increased, with a 15% rise when compared to the 221,000 cases diagnosed in 1999
 - Cancer can develop at any age, but is most common in older people. Three-quarters of cases were diagnosed in people aged 60 and over
 - The four most common cancers – breast, lung, colorectal and prostate – accounted for over half of all new cases
 - For males, the three most common cancers were prostate, lung and colorectal
 - For females the three most common cancers were breast, lung and colorectal. In 2008, lung cancer replaced colorectal cancer as the second most common site among females
 - Breast cancer accounted for nearly one in three newly diagnosed cases of cancer among women. Prostate cancer accounted for nearly one in four newly diagnosed cases of cancer among men. Lung and colorectal cancers both accounted for one in eight newly diagnosed cases of cancer
- 2.2 It has been predicted that in 2020 for all cancers combined there will be relatively little change in age-standardised incidence rates (using cancer registration data for 1974-2003). The number of new cancer cases per year in England is, however, predicted to increase to 299,000 cases in 2020. This increase is mainly due to the anticipated effects of population growth and ageing; cancer patients in 2020 will be older than today's cancer population. ⁽²⁾

- 2.3 Variation in incidence is evident across England. **Figure 1** below displays the primary care trust (PCT) and strategic health authority (SHA) incidence rates for 2006-8. The lowest incidence rates are in London and the highest are in the North West. **Appendix 1** also displays cancer incidence for all cancers for these localities. ⁽³⁾

Figure 1: Cancer incidence rates, all cancers*, 2006-2008, persons, all ages, by primary care trust (PCT)



* All malignant neoplasms excluding non-melanoma skin cancer

** Rates are the number of new cancer cases per 100,000 population, yearly average. They have been age-standardised using the European Standard Population

(3) Source: National Cancer Intelligence Network (NCIN), UK Cancer Information Service (UKCIS), accessed April 2011

Mortality

- 2.4 Cancer mortality is measured by the number (or rate) of cancer deaths each year. In 2009 there were around 127,000 cancer deaths. This is 28% of all deaths in England. The overall age-adjusted cancer mortality rate for people aged 75 and under for England decreased between 1993-1995 and 2007-2009 for both males and females (**Table 1 and, Figures 2 and 3**). ⁽⁴⁾ In 2007-2009, the rate in England was 124 deaths per 100,000 population for males, a decrease of 25%. For females, the England rate was 101 deaths per 100,000 in 2007-09, a decrease of 21% over the same period. The age-adjusted cancer mortality rate was consistently lower for females than for males over this period, although the improvement over the period was greater for males than females.

Table 1: Death rates from all cancers* in England, 1993-2009

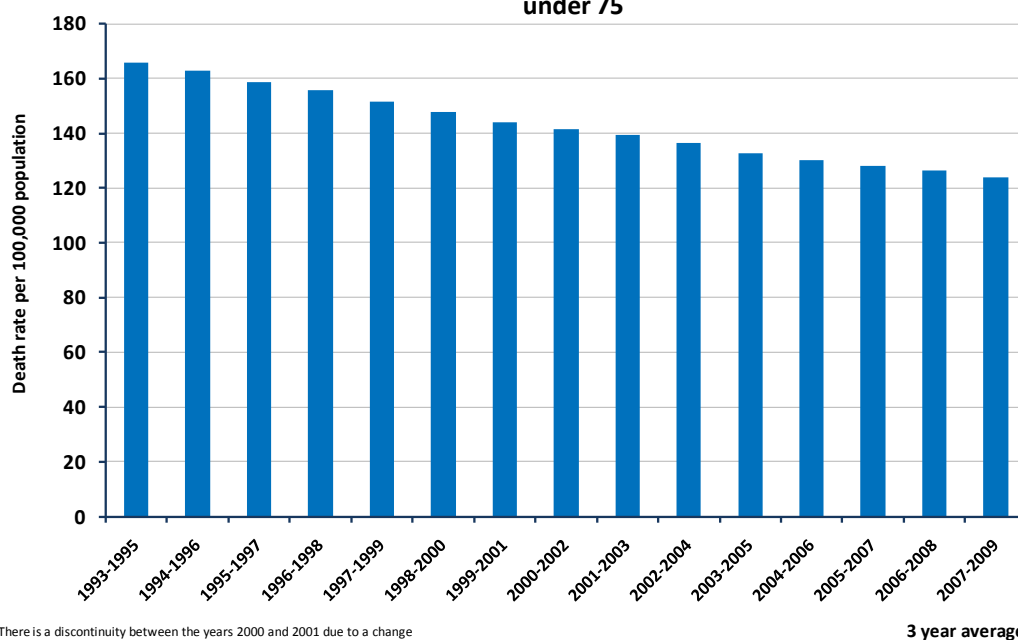
Age group		1993-5	2007-9	% change
Males	Under 75	166	124	-25%
	75 and over	2,457	2,130	-13%
	All Ages	257	204	-21%
Females	Under 75	128	101	-21%
	75 and over	1,271	1,274	0%
	All Ages	174	148	-15%
Persons	Under 75	145	112	-23%
	75 and over	1,668	1,602	-4%
	All Ages	206	172	-17%

* All malignant neoplasms excluding non-melanoma skin cancer

Rates are the number of new cancer deaths per 100,000 population. They have been age-standardised using the European Standard Population

(4) Source: ONS death registrations (ICD10 C00-97) and population estimates. Rates calculated by the Department of Health, Health Improvement Analytical Team. Chart produced by the National Cancer Intelligence Network (NCIN)

Figure 2: Death rates from all cancers* in England, 1993-2009, males, aged under 75

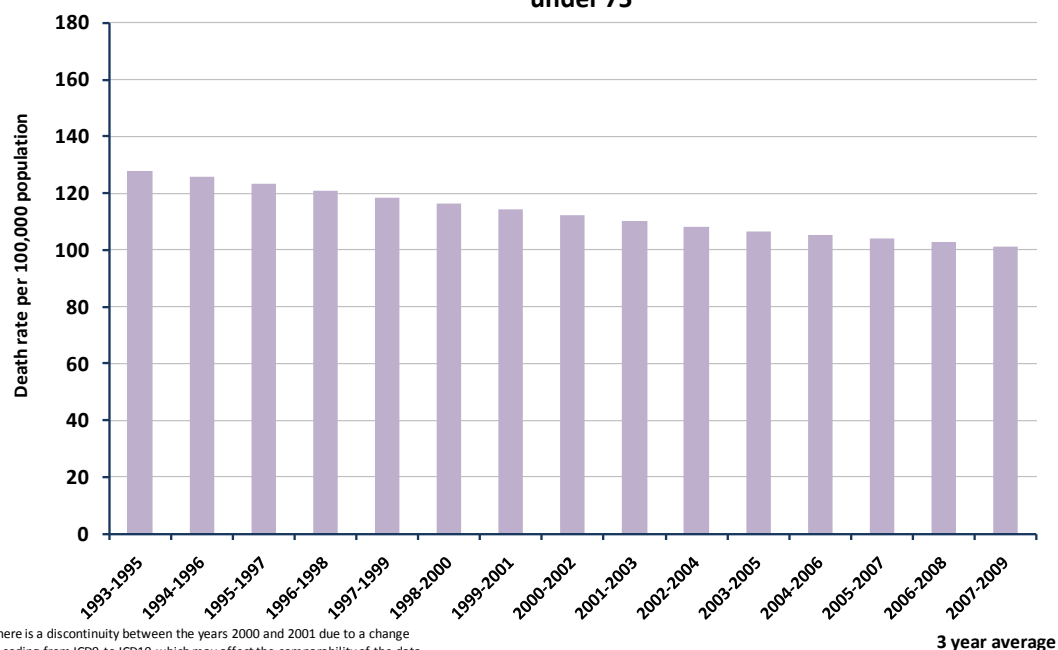


* All malignant neoplasms excluding non-melanoma skin cancer

The rates are the number of new cancer deaths per 100,000 population. They have been age-standardised using the **European Standard Population**

(4) Source: ONS death registrations (ICD10 C00-97) and population estimates. Rates calculated by the Department of Health, Health Improvement Analytical Team. Chart produced by the National Cancer Intelligence Network (NCIN)

Figure 3: Death rates from all cancers* in England, 1993-2009, females, aged under 75



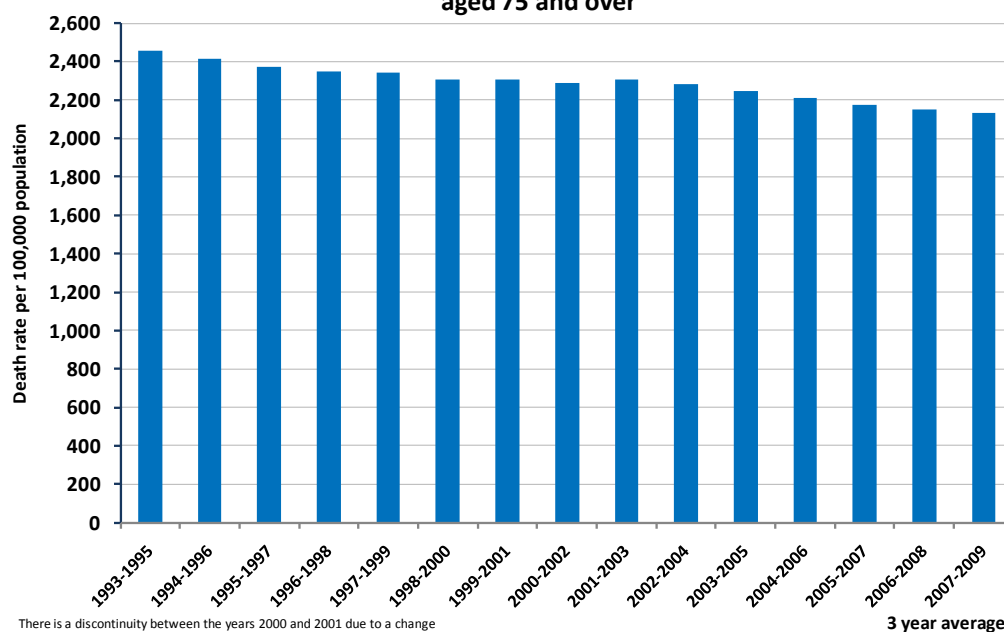
* All malignant neoplasms excluding non-melanoma skin cancer

The rates are the number of new cancer deaths per 100,000 population. They have been age-standardised using the **European Standard Population**

(4) Source: ONS death registrations (ICD10 C00-97) and population estimates. Rates calculated by the Department of Health, Health Improvement Analytical Team. Chart produced by the National Cancer Intelligence Network (NCIN)

- 2.5 It is, however, notable that the rate of reduction in cancer mortality for people aged 75 and over since 1993-1995 has been slower (**Table 1, and Figures 4 and 5**). In 2007-09, the England age-adjusted rate was 2,130 deaths per 100,000 population for males, a decrease of 13% since 1993-1995. For females, the England rate was 1,274 deaths per 100,000 in 2007-09, and remained relatively stable over the same period.

Figure 4: Death rates from all cancers* in England, 1993-2009, males, aged 75 and over

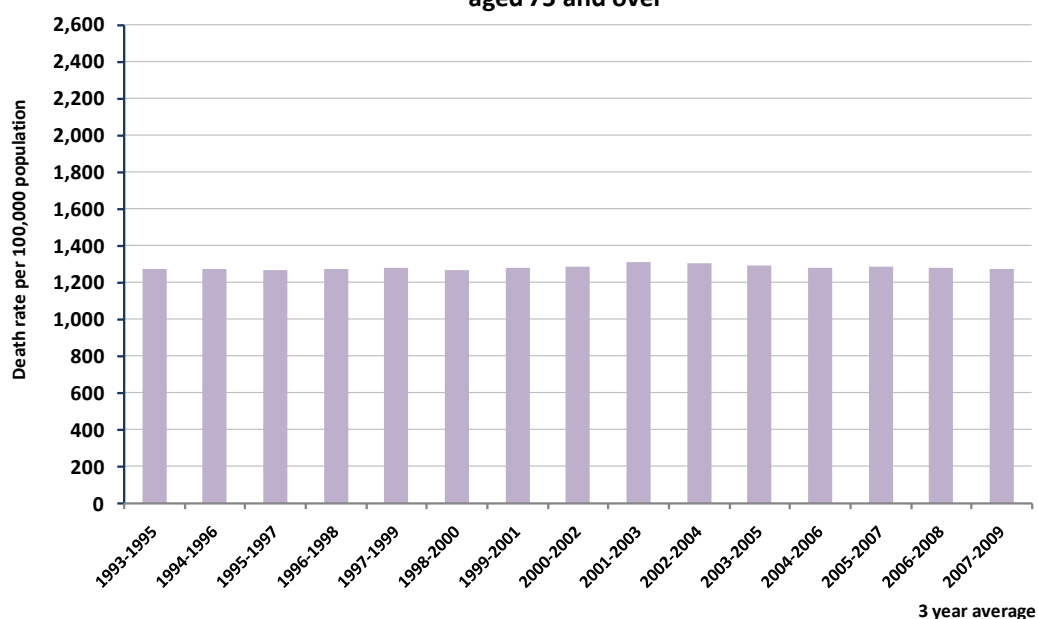


* All malignant neoplasms excluding non-melanoma skin cancer

Rates are the number of new cancer deaths per 100,000 population. They have been age-standardised using the **European Standard Population**

(4) Source: ONS death registrations (ICD10 C00-97) and population estimates. Rates calculated by the Department of Health, Health Improvement Analytical Team. Chart produced by the National Cancer Intelligence Network (NCIN)

Figure 5: Death rates from all cancers* in England, 1993-2009, females, aged 75 and over

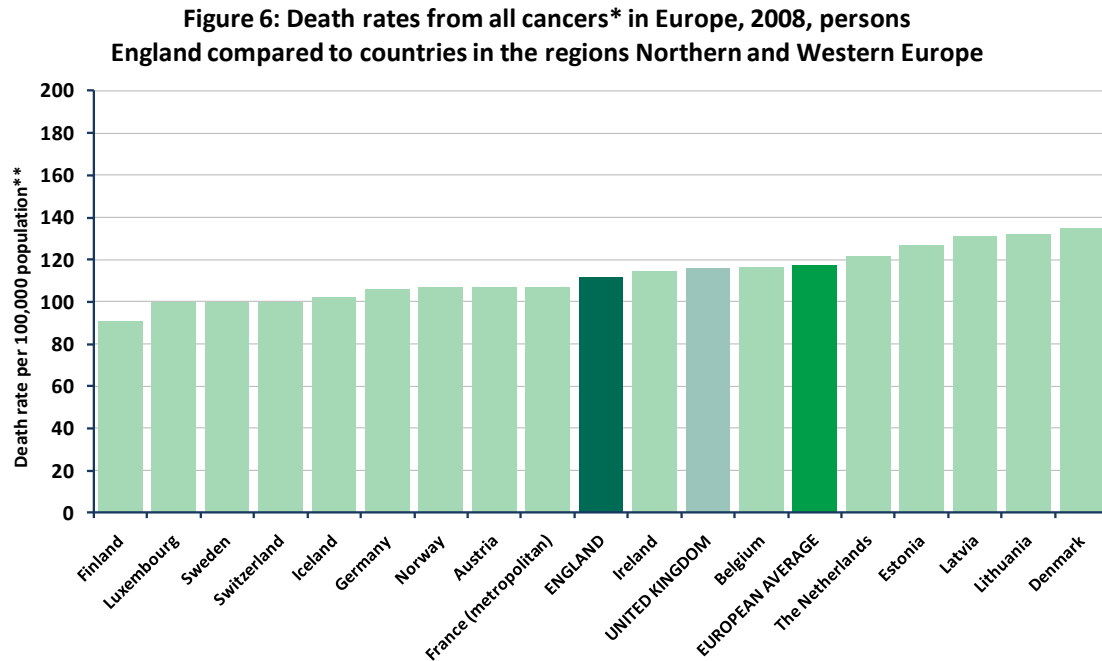


* All malignant neoplasms excluding non-melanoma skin cancer

Rates are the number of new cancer deaths per 100,000 population. They have been age-standardised using the **European Standard Population**

(4) Source: ONS death registrations (ICD10 C00-97) and population estimates. Rates calculated by the Department of Health, Health Improvement Analytical Team. Chart produced by the National Cancer Intelligence Network (NCIN)

- 2.6 **Figure 6** shows cancer mortality in England compared to other countries in Northern and Western Europe. ⁽⁵⁾ The England all cancer mortality rate is lower than the European average but higher than a number of other countries in Northern and Western Europe, such as Finland, Germany and Sweden.



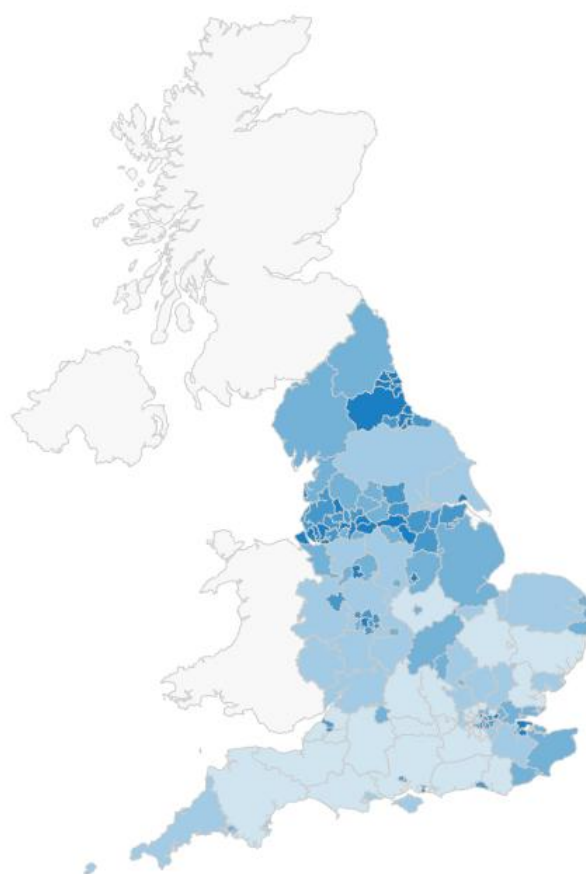
* All malignant neoplasms excluding non-melanoma skin cancer

Rates are age-standardised using the **World Standard Population

5) Source: Globocan 2008, IARC and Regional England Cancer Registries. Chart produced by the National Cancer Intelligence Network (NCIN)

- 2.7 There is considerable geographical variation in mortality within England (**Figure 7**). The highest mortality rates were in primary care trusts (PCTs) located in the north of England and lowest mortality rates were in the South. ⁽⁶⁾ Though in each region the mortality rates vary. **Appendix 2** displays cancer mortality for all cancers for all PCTs and SHAs in England for 2007-2009.

Figure 7: Cancer death rates by primary care trust (PCT)*, all cancers, all ages, persons, 2006-2008: Darkest blue on the map = highest mortality rates (based on quintiles)**



* Rates are age-standardised using the European Standard Population

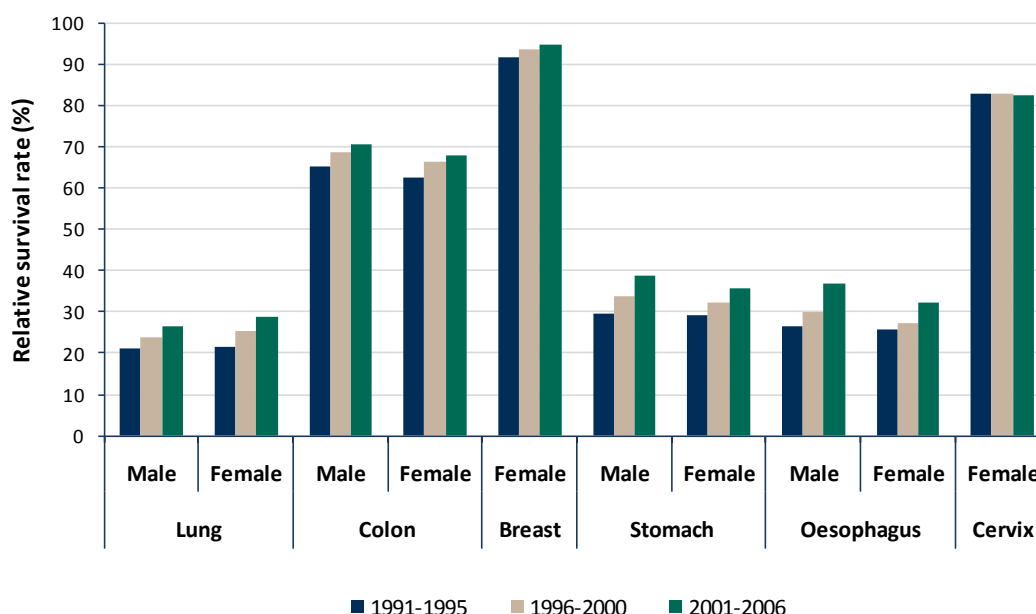
** All malignant neoplasms excluding non-melanoma skin cancer

(6) Source: National Cancer Intelligence Network (NCIN), UK Cancer Information Service (UKCIS)

Survival

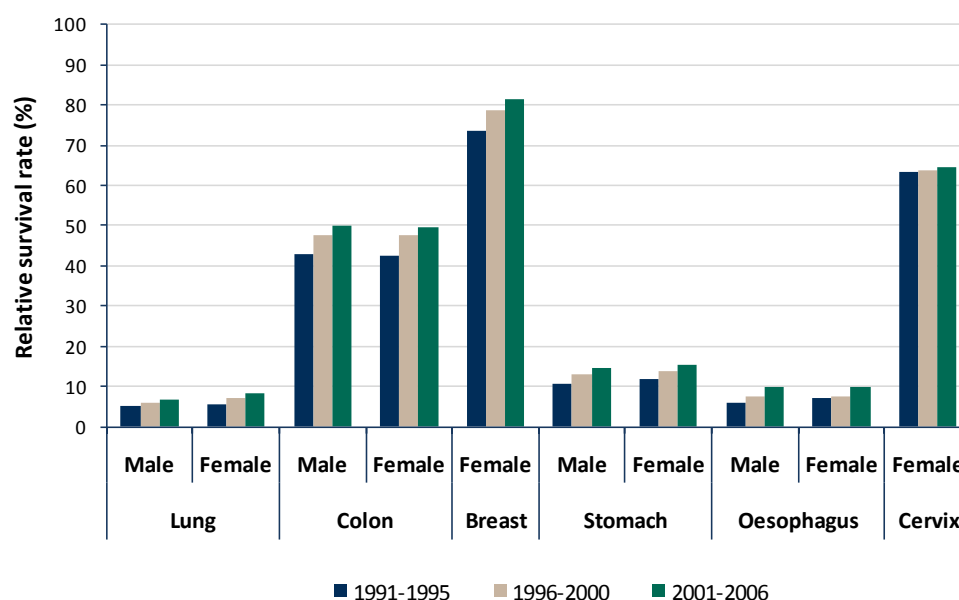
- 2.8 Cancer survival in England has also improved in recent years. **Figures 8 and 9** show one-year and five-year age-adjusted relative survival for patients diagnosed with a cancer of the lung, colon, breast (women), stomach, oesophagus and cervix (analysis produced for the Compendium of Clinical and Health Indicators for Public Health Monitoring in England which are based on a selection of cancer types). ⁽⁷⁾ These data are for patients diagnosed in England during 1991–2006 and followed up to 2007. The analysis is divided into three periods: 1991–1995, 1996–2000, and 2001–2006.
- 2.9 One- and five-year relative survival from cancers of the oesophagus, stomach, colon, lung, and breast (women) improved by 3 to 10 percentage points in adults in England diagnosed during 2001–2006 compared to those diagnosed during 1991–95.

Figure 8: One-year age-standardised relative survival by period of diagnosis, adults (aged 15-99), England



(7) Source: Office for National Statistics (ONS), London School of Hygiene and Tropical Medicine and National Cancer Intelligence Network (NCIN), Analysis produced for the Compendium of Clinical and Health Indicators for Public Health Monitoring in England which are based on a selection of cancer types. Results for bladder and prostate cancers were excluded from the analysis because of changes in pathological coding or small numbers of deaths in some age groups at the cancer network level, making the results non-interpretable.

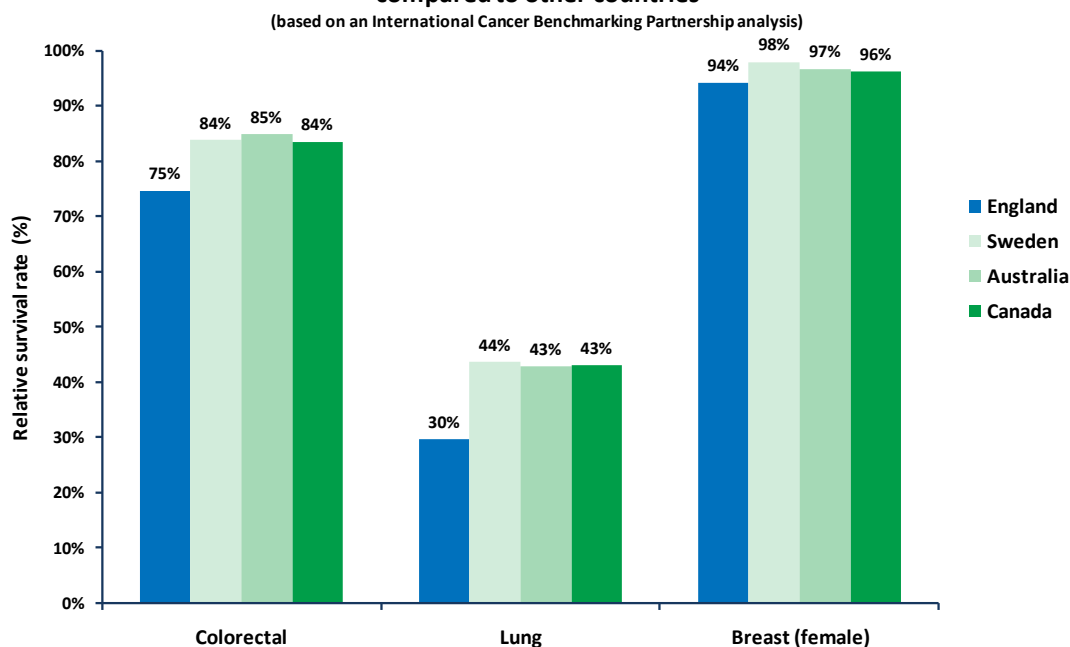
Figure 9: Five-year age-standardised relative survival by period of diagnosis, adults (aged 15-99), England



(7) Source: Office for National Statistics (ONS), London School of Hygiene and Tropical Medicine and National Cancer Intelligence Network (NCIN), Analysis produced for the Compendium of Clinical and Health Indicators for Public Health Monitoring in England which are based on a selection of cancer types. Results for bladder and prostate cancers were excluded from the analysis because of changes in pathological coding or small numbers of deaths in some age groups at the cancer network level, making the results non-interpretable.

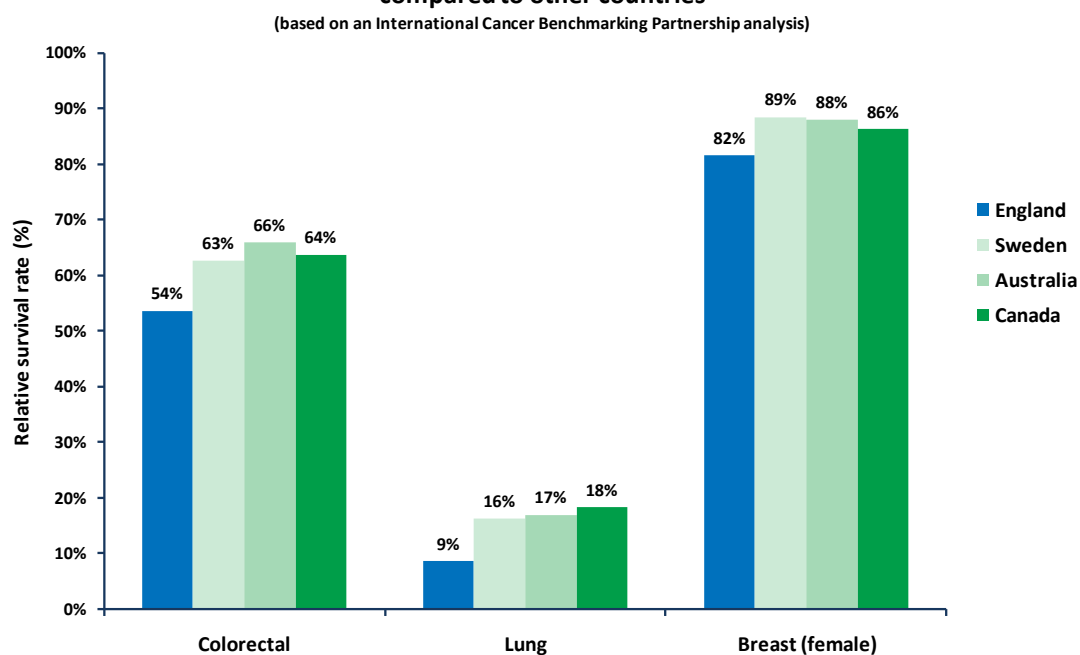
- 2.10 Survival in England is, however, significantly poorer than in comparable countries (**Figures 10 and 11**). ⁽⁸⁾ It has been estimated that if England was to achieve cancer survival rates as the European average, then 5,000 lives would be saved every year. If England were to achieve cancer survival rates at the European best, then 10,000 lives would be saved every year. ⁽⁹⁾

Figure 10: One-year cancer survival, age-standardised, 2005-2007, England compared to other countries



(8) Source: International Cancer Benchmarking Project, 'Cancer survival in Australia, Canada, Denmark, Norway, Sweden, and the UK, 1995-2007 (the International Cancer Benchmarking Partnership): an analysis of population-based cancer registry data', M P Coleman et al, The Lancet, Vol 377 January 8, 2011

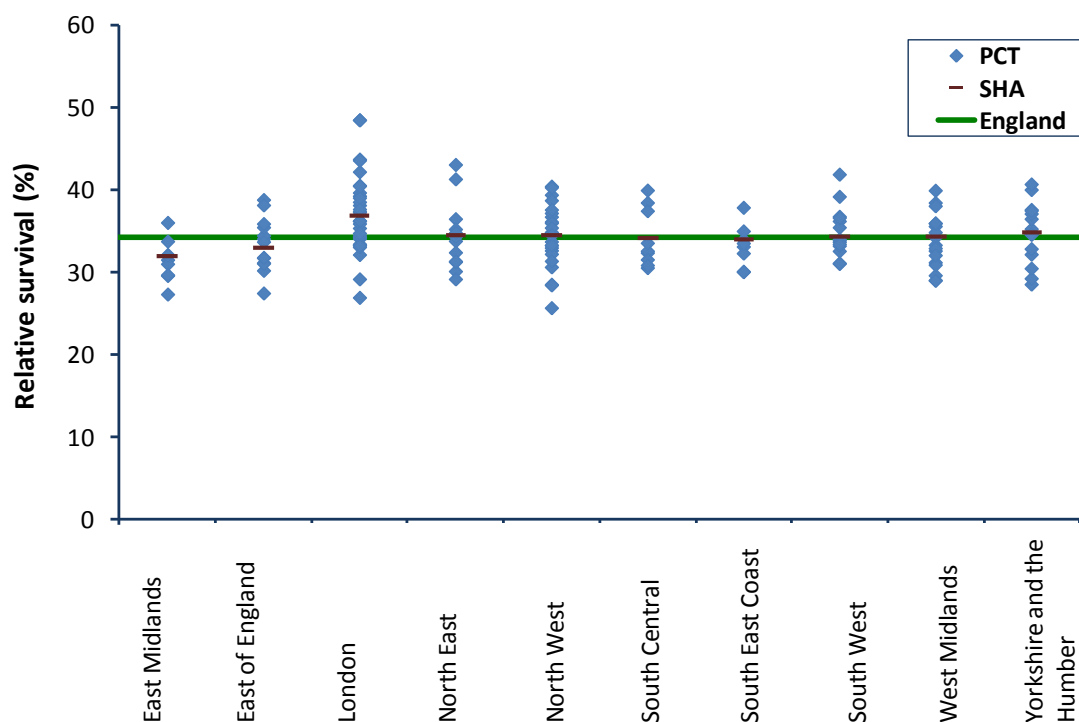
Figure 11: Five-year cancer survival, age-standardised, 2005-2007, England compared to other countries



(8) Source: International Cancer Benchmarking Project, 'Cancer survival in Australia, Canada, Denmark, Norway, Sweden, and the UK, 1995-2007 (the International Cancer Benchmarking Partnership): an analysis of population-based cancer registry data', M P Coleman et al, The Lancet, Vol 377 January 8, 2011

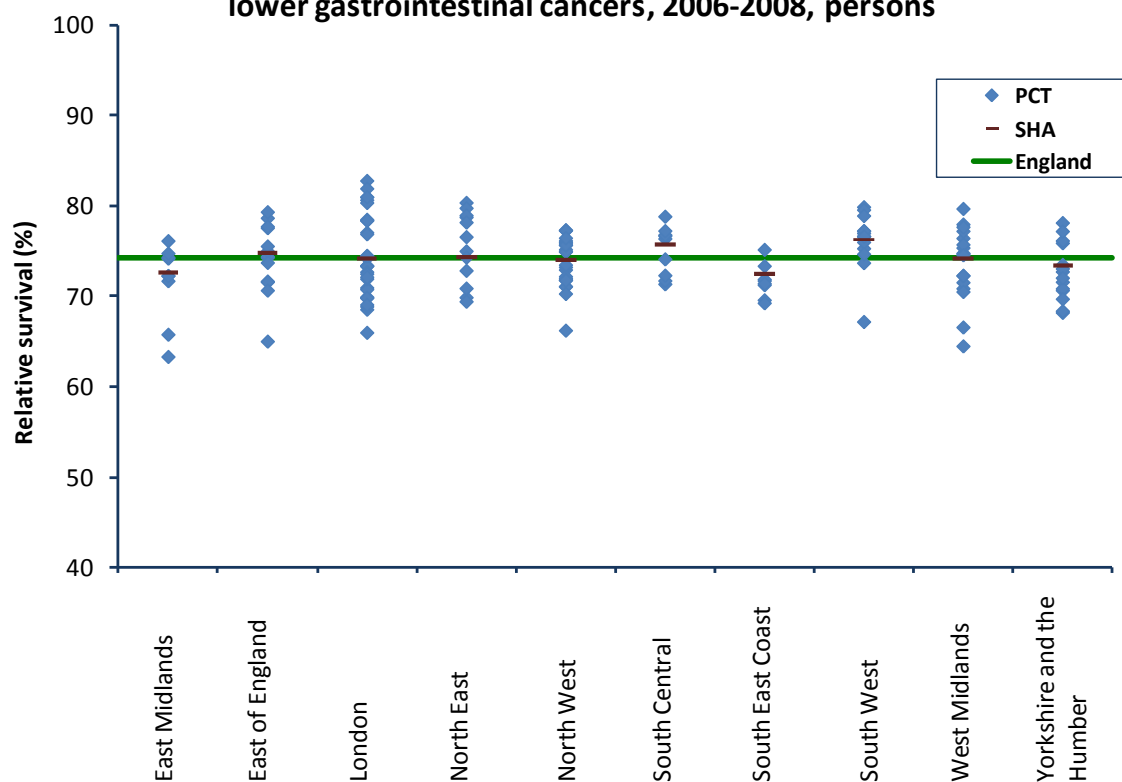
2.11 There are also significant variations in outcomes between primary care trusts (PCTs). **Figures 12 to 15** show one-year survival rates for the upper gastrointestinal (upper GI), lower gastrointestinal (lower GI), lung and breast cancers for PCTs and strategic health authorities (SHAs). ⁽¹⁰⁾ **Appendix 3** displays a one-year relative survival index for all cancers (combined) for all PCTs and SHAs in England.

Figure 12: One-year relative survival estimates by primary care trust, upper gastrointestinal cancers, 2006-2008, persons



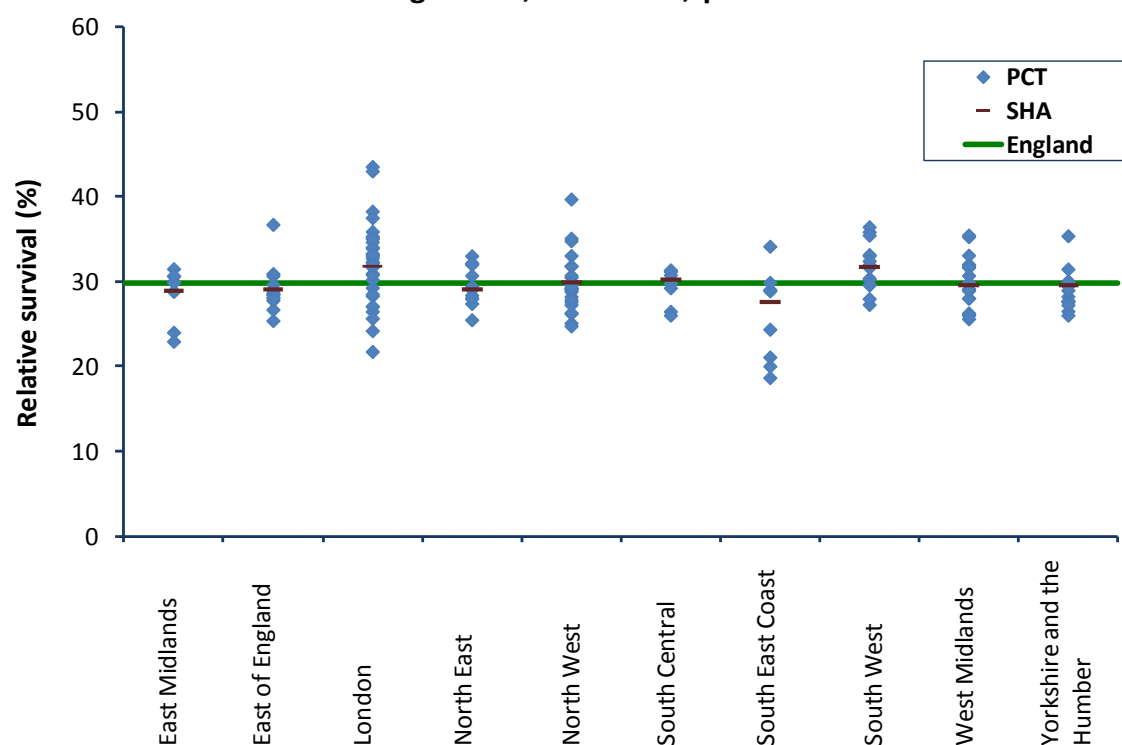
Estimates based on persons diagnosed during 2005-2007, followed up to 2008. Estimates are **not age-standardised**. Upper GI includes ICD-10 codes C15-16 & C22-25
⁽¹⁰⁾ Source: National Cancer Intelligence Network (NCIN), UK Cancer Information Service (UKCIS)

Figure 13: One-year relative survival estimates by primary care trust, lower gastrointestinal cancers, 2006-2008, persons



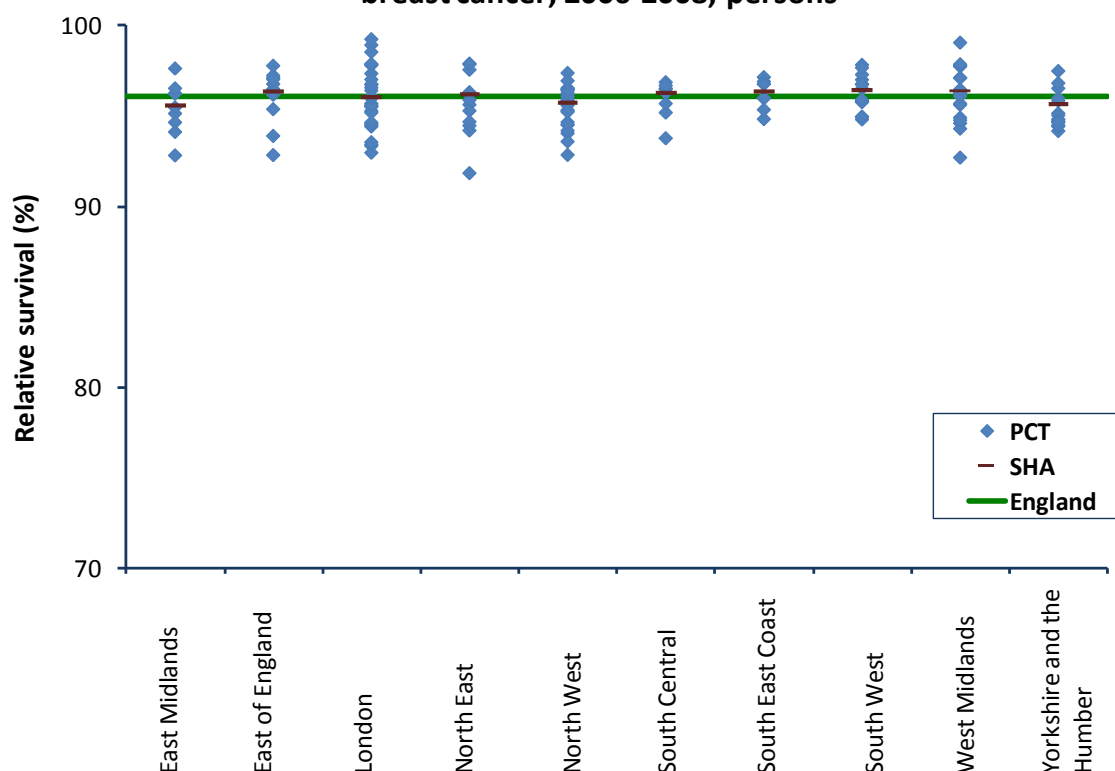
Estimates based on persons diagnosed during 2005-2007, followed up to 2008. **Estimates are not age-standardised.** Lower GI includes ICD-10 codes C17-21 & C26 (10) Source: National Cancer Intelligence Network (NCIN), UK Cancer Information Service (UKCIS)

Figure 14: One-year relative survival estimates by primary care trust, lung cancer, 2006-2008, persons



Estimates based on persons diagnosed during 2005-2007, followed up to 2008. **Estimates are not age-standardised.** Lung cancer includes ICD-10 codes C33-34 (10) Source: National Cancer Intelligence Network (NCIN), UK Cancer Information Service (UKCIS)

Figure 15: One-year relative survival estimates by primary care trust, breast cancer, 2006-2008, persons



Estimates based on persons diagnosed during 2005-2007, followed up to 2008. Estimates are not age-standardised. Breast cancer includes ICD-10 code C50 (10) Source: NCIN, UK Cancer Information Service (UKCIS)

3.0 Chapter 3 – Improving outcomes: prevention and early diagnosis

3.1 The most effective way of improving cancer outcomes is to prevent cancers developing in the first place or to diagnose them at an early stage when they are often highly treatable. Research suggests that a major explanation for poorer outcomes in England is that cancers are diagnosed at a later stage.

3.2 This chapter sets out key information on levels of public awareness, prevention, early diagnosis and the route by which they were diagnosed.

Cancer awareness

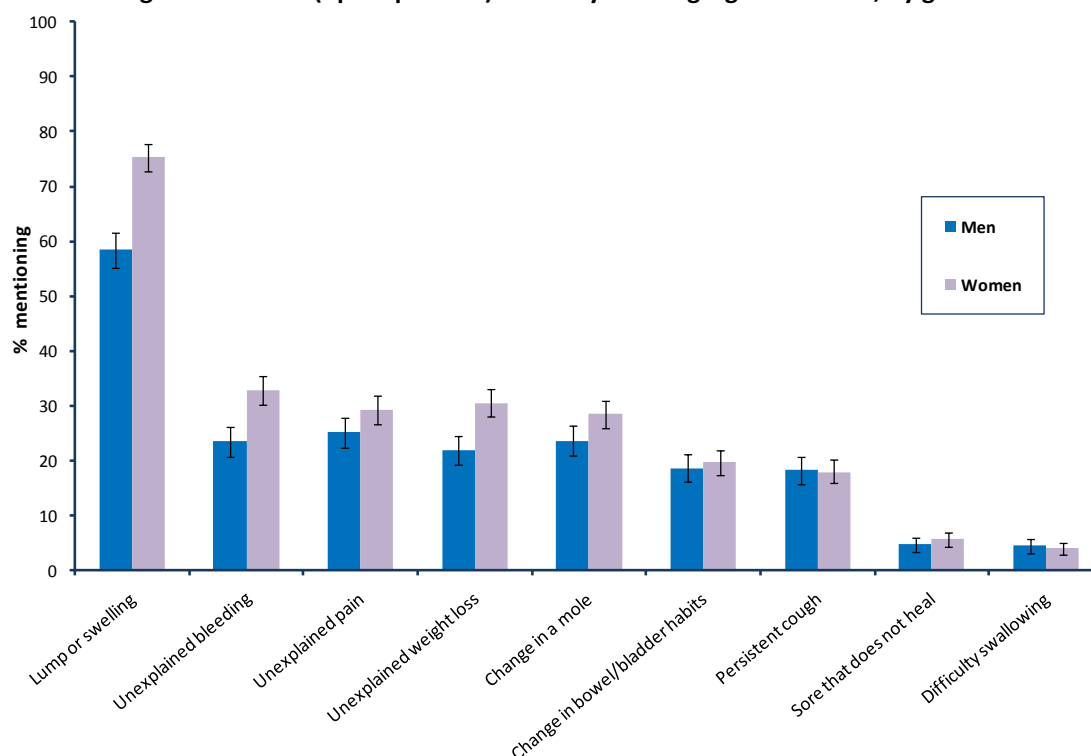
3.3 Public awareness of the potential signs and symptoms of cancer, as well as an understanding of when and how to seek help, can play an important part in ensuring that cancer is diagnosed at an early stage.

3.4 In order to assess levels of public awareness and to track changes over time, and as part of the National Awareness and Early Diagnosis Initiative (NAEDI), Cancer Research UK, University College London, King's College London and the University of Oxford have developed a tool to measure public awareness (the Cancer Awareness Measure, CAM).

3.5 The Cancer Awareness Measure (CAM) is a validated set of questions designed to reliably assess cancer awareness. The survey was carried out to assess public awareness of cancer warning signs in 2008. Both open ended (recall) and closed (recognition) questions were used

in the survey. Recall of early warning signs of cancer was good for the classic tumour symptom of lump/swelling (58.4% for males, 75.3% for females), but very poor for all other symptoms. For example, only 4.7% of males and 5.6% females recalled the warning sign “a sore that does not heal”. **Figure 16** shows recall for nine common warning signs by gender. Overall, men recalled 2.0 signs and women recalled 2.4. ⁽¹¹⁾

Figure 16: Recall (open question) for early warning signs of cancer, by gender



⁽¹¹⁾ Source: These data have been collected using the Cancer Awareness Measure (CAM). Full details of the data collection and analysis plus further information on cancer awareness are available in the original publication “Public awareness of cancer in Britain: a population-based survey of adults”, K Robb, S Stubbings, A Ramirez, U Macleod, J Austoker, J Waller, S Hiom and J Wardle (2009), British Journal of Cancer 101(Suppl 2): S18–S23

Participation in screening

- 3.6 Cancer screening remains an important way to detect cancer early, and in some cases, such as cervical screening, prevent cancers. Over 5% of all cancers are currently diagnosed via screening, but this is set to rise as the age extensions to the breast and bowel screening programmes progress. ⁽⁹⁾
- 3.7 It has been estimated that breast cancer screening saves 1,400 lives a year in England and the eligible age range is currently being extended, which should save even more lives. ⁽¹²⁾ The NHS Breast Screening Programme in 2009/10 shows that the 3 year coverage rate for women aged 53-70 was 76.9%. ⁽¹³⁾ However, there is wide variation at PCT level. Based on coverage statistics for women aged 50-70, **Table 2** shows that 25% of PCTs have a screening coverage of 75% or more. However, 21% of PCTs had less than 65% coverage. ⁽¹⁴⁾
- 3.8 The NHS Cervical Screening Programme in 2009/10 shows that nationally, the 3 year coverage rate for women aged 25 to 49 was 74.0%. For women aged between 50 and 64, the 5 year coverage rate was 78.9%. ⁽¹⁵⁾ However, again, age-appropriate coverage varies by PCT (**Table 2**). 21% of PCTs have coverage of less than 70% for females aged 25 to 49 and 5% of PCTs for women aged 50-64. ⁽¹⁴⁾

- 3.9 The NHS Bowel Cancer Screening Programme started in 2006 and has now been rolled out across England. However, coverage is lower, reflecting the late start of this programme in some parts of the country, and lower uptake rates. Early figures show that uptake was less than 60% overall. ⁽¹⁶⁾

Table 2: National screening programme coverage summary by PCT

Screening coverage	Breast		Cervical			
	3 yearly coverage 50-70 year olds		3.5 yearly coverage 25-49 year olds		5.5 yearly coverage 50-64 year olds	
	Number of PCTs	Percentage of PCTs	Number of PCTs	Percentage of PCTs	Number of PCTs	Percentage of PCTs
<50%	0	0%	0	0%	0	0%
50-54%	5	3%	0	0%	0	0%
55-59%	13	9%	4	3%	0	0%
60-64%	13	9%	5	3%	0	0%
65-69%	30	20%	23	15%	8	5%
70-74%	53	35%	45	30%	23	15%
75-79%	37	25%	71	47%	51	34%
80%+	0	0%	3	2%	69	46%
Total	151	100%	151	100%	151	100%

(14) Source: National Health Authority Information System and Bowel Cancer Screening System via Open Exeter and the Information Centre for Health and Social Care. Data collected by the NHS Cancer Screening Programme. Data relates to the situation at April 2010.

Routes to Diagnosis

- 3.10 In addition to screening, there are a variety of different routes through which patients can be diagnosed with cancer. To build a greater understanding of this the National Cancer Intelligence Network (NCIN) has produced initial analyses using data for all patients diagnosed with cancer in 2007. Existing and routinely available data sources were used to work backwards through the cancer journey to examine the sequence of events that led to each patient's cancer diagnosis. The analysis shows the proportion of patients diagnosed through each route and the corresponding survival rates. ⁽¹⁷⁾
- 3.11 Those patients first diagnosed as an emergency are likely to have more advanced cancer and therefore significantly poorer survival rates.
- 3.12 **Table 3** highlights the wide variation across different cancer types in routes to diagnosis. There are a wide range of routes through which patients can be diagnosed with cancer. These have been summarised into categories, including:
- The two week (urgent) referral pathway which GPs use when they suspect cancer.
 - The non-urgent referral pathway, which GPs use when they refer patients who are not suspected of having cancer.
 - Other outpatient appointment, where a patient is diagnosed following an outpatient appointment that is either a consultant to consultant referral, other referral, self-referral, dental referral or an unknown referral.
 - Elective inpatient, where no earlier information can be found prior to admission from a waiting list.
 - Emergency presentation, where a patient is diagnosed following attendance at accident and emergency or an emergency outpatient referral or transfer.
 - Death certificate only, where the only record of cancer for the patient is from the death certificate.

- 3.13 Across all cancers, 25% of patients are being diagnosed through the two week referral pathway, whilst 23% are presenting as emergencies. The percentage of patients in the unknown route varies by cancer type. Some of these could be private patients and there could be data quality issues which warrant further investigation.
- 3.14 The proportion of emergency presentations also varied widely between cancer types from 3% for melanoma patients to 58% for those with cancer of the brain and central nervous system. Patients aged over 80 were the most likely to present as emergencies. A socio-economic gradient was also observed, with more affluent patients being less likely to present as emergencies.

Table 3: Routes to diagnosis by cancer type, England, 2007

All Persons																	Number of patients														
	Screen detected	Two Week Wait				GP referral				Other outpatient				Inpatient elective				Emergency presentation				Death Certificate Only				Unknown				Total	
Acute leukaemia	3% 3% 4% 16% 19% 12% 15% 3% 4% 56% 59% 0% 1% 4% 5%																100%	2,551													
Bladder	32% 31% 33% 28% 27% 29% 15% 14% 16% 2% 3% 18% 19% 0% 1% 4% 5%																100%	7,665													
Brain & CNS	1% 1% 2% 17% 16% 18% 14% 13% 15% 4% 5% 58% 56% 59% 0% 1% 6% 6%																100%	4,147													
Breast	21% 20% 21% 42% 41% 42% 12% 12% 9% 9% 0% 0% 4% 5% 0% 0% 12% 12%																100%	34,232													
Cervix	14% 13% 16% 16% 15% 18% 25% 24% 16% 15% 18% 2% 1% 3% 11% 14% 0% 1% 12% 15%																100%	2,085													
Chronic leukaemia	10% 9% 11% 30% 28% 32% 12% 11% 13% 2% 2% 30% 28% 32% 1% 1% 16% 15% 17%																100%	2,869													
Colorectal	26% 25% 26% 24% 23% 24% 15% 16% 4% 4% 25% 26% 1% 1% 6% 6%																100%	27,903													
Kidney	20% 19% 21% 29% 28% 30% 18% 17% 19% 1% 2% 24% 23% 25% 1% 1% 6% 7%																100%	5,172													
Larynx	31% 28% 33% 32% 30% 34% 21% 19% 23% 1% 2% 12% 10% 14% 0% 0% 3% 4%																100%	1,583													
Lung	22% 22% 23% 20% 20% 13% 13% 1% 1% 37% 38% 1% 1% 5% 6%																100%	29,420													
Melanoma	41% 40% 42% 29% 28% 30% 11% 10% 11% 1% 1% 3% 3% 0% 0% 15% 17%																100%	8,117													
Multiple myeloma	13% 11% 14% 27% 26% 29% 15% 14% 16% 1% 2% 38% 36% 39% 0% 1% 6% 7%																100%	3,145													
Non-Hodgkin lymphoma	16% 16% 17% 30% 29% 31% 17% 16% 18% 2% 2% 28% 27% 29% 0% 1% 7% 8%																100%	7,777													
Oesophagus	25% 24% 26% 21% 20% 23% 17% 16% 18% 9% 11% 21% 20% 22% 0% 1% 4% 5%																100%	6,001													
Oral	26% 24% 27% 28% 27% 30% 30% 28% 32% 1% 1% 6% 7% 0% 1% 8% 10%																100%	3,062													
Other	14% 14% 15% 25% 26% 15% 16% 1% 2% 35% 36% 1% 1% 7% 8%																100%	27,730													
Ovary	26% 25% 27% 22% 21% 23% 15% 16% 1% 2% 29% 28% 30% 0% 1% 6% 7%																100%	5,012													
Pancreas	13% 12% 14% 18% 19% 12% 13% 2% 3% 47% 46% 49% 1% 2% 6% 6%																100%	5,989													
Prostate	20% 19% 20% 38% 39% 16% 15% 16% 3% 3% 9% 10% 0% 0% 14% 13% 14%																100%	28,362													
Stomach	17% 16% 18% 21% 20% 22% 16% 15% 17% 7% 8% 32% 31% 33% 1% 1% 5% 6%																100%	5,841													
Testis	48% 46% 51% 14% 13% 16% 16% 14% 17% 2% 3% 10% 8% 11% 0% 0% 10% 11%																100%	1,569													
Uterus	35% 34% 36% 31% 30% 32% 16% 15% 17% 1% 1% 8% 9% 0% 1% 8% 9%																100%	5,733													
All cancers	3% 3% 3% 25% 24% 24% 24% 14% 14% 2% 2% 23% 23% 1% 1% 8% 9%																100%	225,965													

(17) Source: National Cancer Intelligence Network (NCIN)

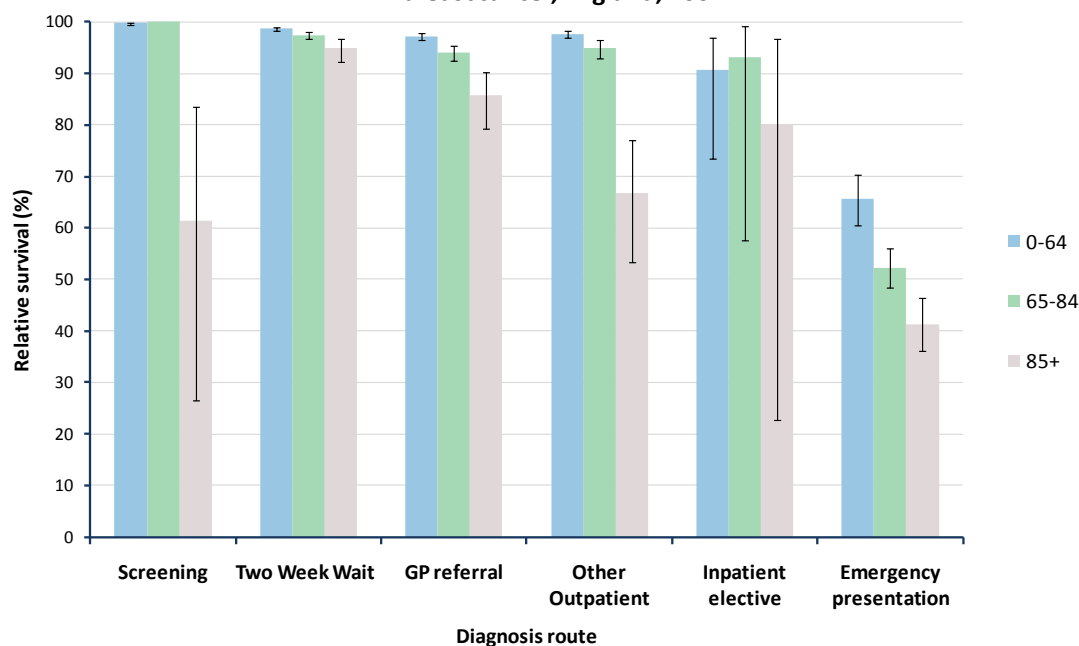
All Cancers excludes non-melanoma skin cancer (NMSC) and multiples

The table has been colour coded using a gradation in intensity to highlight data distribution and variation in the percentages, a darker colour indicates a higher value. There may be slight differences in the overall percentage of all cancer patients who are diagnosed through screening between these data and other available results which have used data directly from the screening programme. The Routes to Diagnosis work has been supplied by the English cancer registries and a range of data has been linked to patients diagnosed in 2007. It is believed that current RtD results are slightly underestimating the percentage diagnosed through screening due to the linkage process.

The confidence intervals (in the grey boxes) take into account the number of patients within each group and show the range the result would be expected to fall within 95 times out of 100 were it possible to repeat the analyses

- 3.15 Importantly, for all cancer types apart from acute leukaemia, one-year relative survival rates were lower for patients presenting as emergencies than for those presenting via other routes, including the Two Week Wait urgent referral route and routine outpatient appointments. Measurement of emergency hospital presentations of new patients with cancer, which correlates closely with poor one-year survival rates, provides a new indicator for the extent of early/late diagnoses in a population.
- 3.16 An example of the survival differences by route of diagnosis, for breast cancer, is shown in **Figure 17** below, highlighting the poorer survival for those patients diagnosed through the emergency presentation route, and for women aged 85 and over.

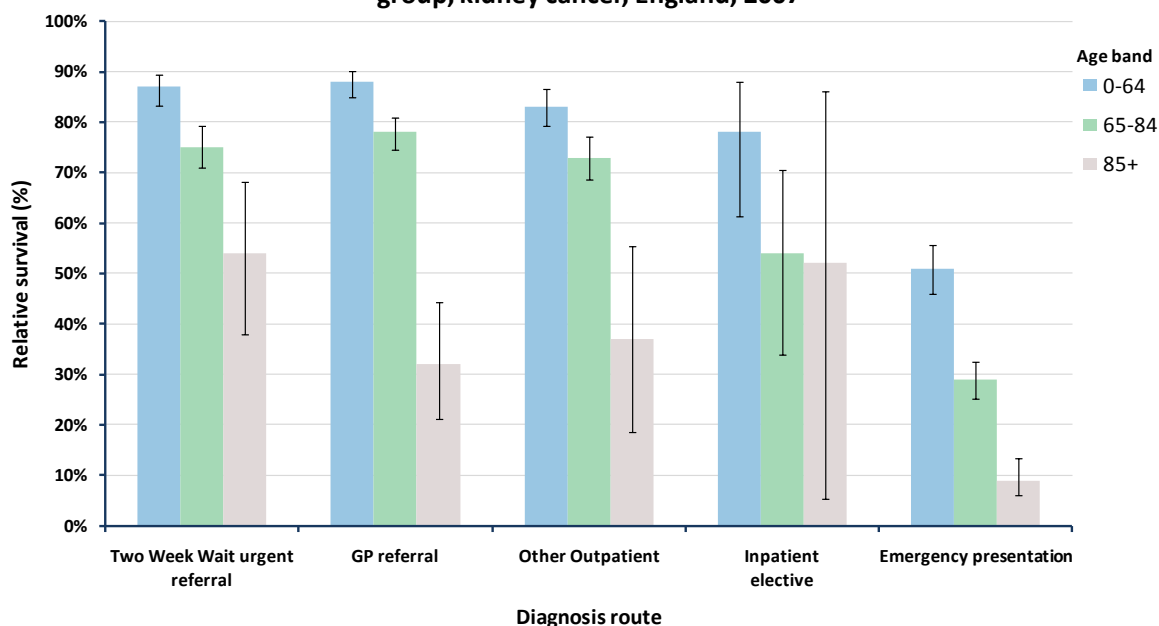
Figure 17: One-year relative survival (%) by diagnosis route and age group, breast cancer, England, 2007



(17) Source: National Cancer Intelligence Network (NCIN), Routes to diagnosis
The confidence intervals take into account the number of patients within each group and show the expected range the result would be expected to fall within 95 times out of 100 were it possible to repeat the analyses.

- 3.17 Another example (**Figure 18**) is provided below, for kidney cancer. Again this highlights similar patterns by age and route of diagnosis.

Figure 18: One-year relative survival (%) estimates by diagnosis route and age group, kidney cancer, England, 2007



(17) Source: National Cancer Intelligence Network (NCIN)

The confidence intervals take into account the number of patients within each group and show the expected range the result would be expected to fall within 95 times out of 100 were it possible to repeat the analyses.

4.0 Chapter 4 – Improving outcomes: quality of life and patient experience

4.1 This chapter sets out information on cancer prevalence and patient experience.

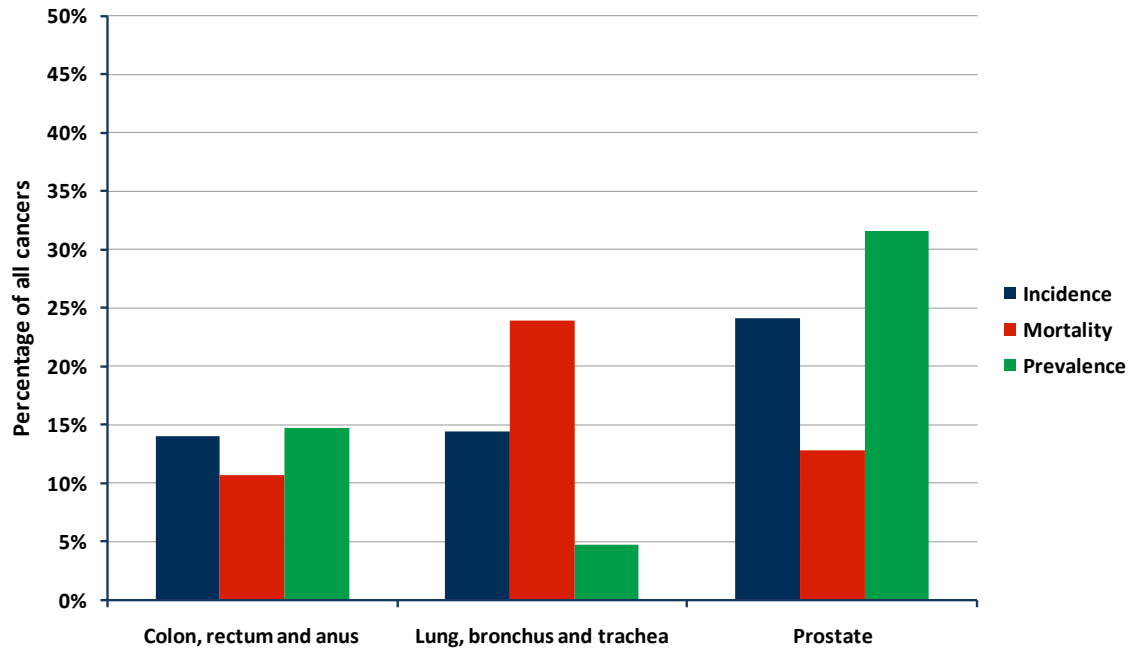
Prevalence

4.2 Cancer prevalence is the number of people, or the proportion of the population, who are alive on a specified date and have previously been diagnosed with cancer. As such it is an indicator of the burden of cancer and can help to inform health care service planning. The number of cancer survivors (people alive with a diagnosis of cancer) is increasing as incidence rises and survival improves. It was estimated that in 2008 there were just over 1.6 million people in England living with or beyond cancer (i.e. they had received a cancer diagnosis at any point in their past) and this is rising by around 3% a year. ⁽¹⁸⁾ It has been estimated that currently about 1.8 million people are living with and beyond a cancer diagnosis.

4.3 Prostate and female breast cancers were the most prevalent, accounting for 32% and 47% of male and female cancer prevalence respectively. **Figures 19 and 20** show, for each sex, the percentage of all cancer cases, deaths and cancer survivors that are accounted for by colorectal, lung, prostate and female breast cancers. For both men and women, colorectal cancer accounted for approximately 10-15% of all the three measures. In contrast, for men, lung cancer accounted for 15% of all newly diagnosed cancers, 24% of cancer deaths and for only 5% of cancer prevalence. A similar pattern was seen for female lung cancer, which accounted for only 2% of cancer prevalence in women. Prostate and female breast cancer provided further contrasts given their good survival rates, the latter accounting for 31% of newly diagnosed cancers, 16% of cancer deaths and for 47% of cancer prevalence among women.

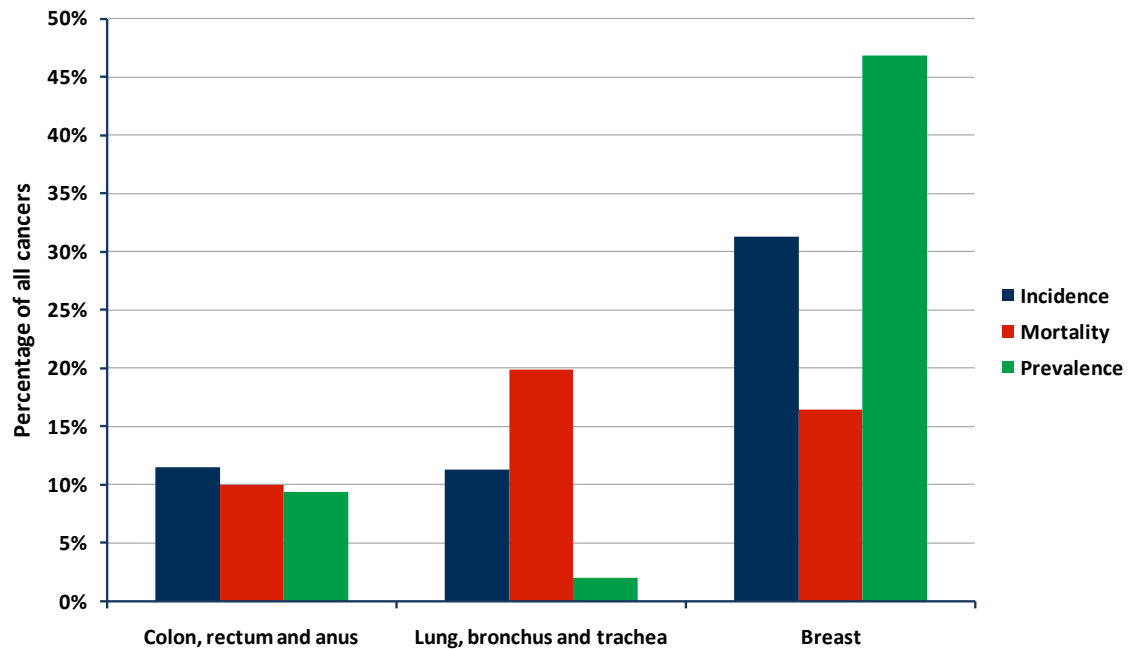
4.4 It was estimated that less than 1% of the England population aged <45 years at the end of 2008 were cancer survivors, compared with around 13% of those aged 65 years and over.

Figure 19: Percentage of total cancer incidence, mortality and prevalence for selected cancers, England, males, 2008



(18) Source: "Cancer prevalence in the United Kingdom: estimates for 2008", J Maddams, D Brewster, A Gavin, J Steward, J Elliott, M Utley and H Moller (2009), British Journal of Cancer 101 541-547 and NCIN, UK Cancer Information Service (UKCIS), accessed April 2011. Colon, rectum and anus include ICD-10 codes C18-C21. Lung, bronchus and trachea include ICD-10 codes C33-34. Prostate include ICD-10 codes C61.

Figure 20: Percentage of total cancer incidence, mortality and prevalence for selected cancers, England, females, 2008



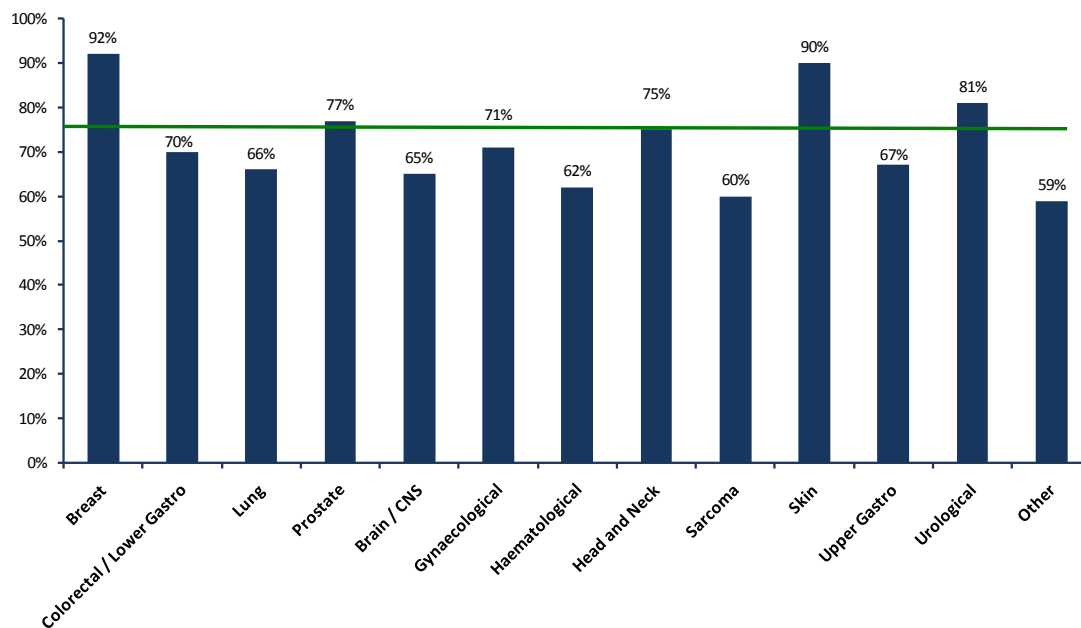
(18) Source: "Cancer prevalence in the United Kingdom: estimates for 2008", J Maddams, D Brewster, A Gavin, J Steward, J Elliott, M Utley and H Moller (2009), British Journal of Cancer 101 541-547 and NCIN, UK Cancer Information Service (UKCIS), accessed April 2011. Colon, rectum and anus include ICD-10 codes C18-C21. Lung, bronchus and trachea include ICD-10 codes C33-34. Breast includes ICD-10 codes C50.

4.5 **Appendix 4** provides cancer prevalence by cancer type and cancer network.

Patient experience

- 4.6 The National Cancer Patient Experience Survey 2010 provides an insight into the care experienced by cancer patients across England who were treated as day cases or inpatients during the first three months of 2010. 158 NHS Trusts providing cancer services identified cancer patients of which 67,713 chose to take part. The high response rate (67%) shows how willing patients are to report on their care and thereby help to improve future service quality.
(19)
- 4.7 The results show that many patients report very positively on their care. For 33 of 59 measures for which assessments were made, positive responses were reported by at least 80% of patients. For example, 90% of patients had waited less than four weeks between referral and first hospital visit, 85% reported that staff had done everything they could to control pain, 84% had confidence and trust in all of their doctors and 82% said they were always treated with dignity and respect.
- 4.8 However, for 12 of the 59 measures less than 70% of patients reported positively, showing the scope available for improvement. For example, only 61% reported that clinicians working in hospitals and the community worked well together; only 62% reported that there were enough nurses on duty when they were admitted to hospital and only 66% reported receiving written information about their cancer.
- 4.9 One of the most positive aspects of the survey relates to the care given by Clinical Nurse Specialists (CNSs). 84% of patients reported that they had been given the name of a CNS. Of these over 90% reported that the CNS had listened carefully and that they were given understandable answers from the CNS all or most of the time. Importantly, this survey shows the impact of having a CNS on patient's experience of care. Patients with a CNS reported much more favourably than those without on a range of items related to information, choice and care.
- 4.10 The results show that patient experience vary by cancer type. For instance, there was a wide variation in the proportion of patients who saw their GP no more than twice before a referral to hospital (**Figure 21**). Results ranged from 60% (sarcoma) to 92% (breast) across the specific cancer types.

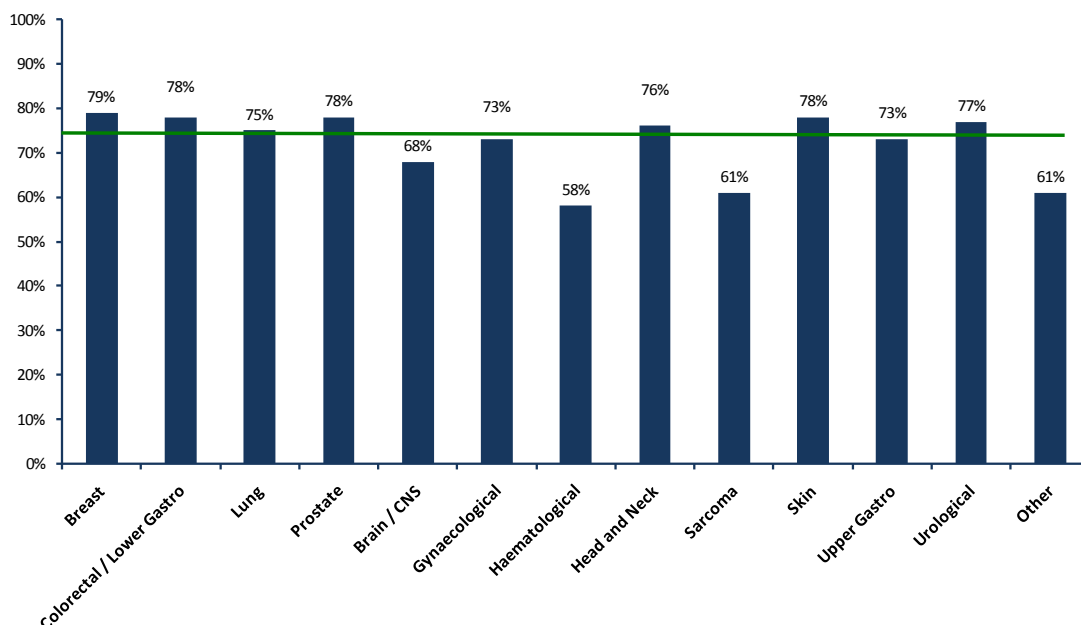
**Figure 21: Cancer patient experience survey results by cancer type,
Saw GP no more than twice before referral to hospital**



(19) Source: National Cancer Patient Experience Survey Programme – 2010: national survey report Department of Health, December 2010

- 4.11 There was also a wide variation in the proportion of patients who reported that they completely understood the explanation that they received as to what was wrong with them (**Figure 22**). Results ranged from 58% (haematological cancer) to 79% (breast cancer).

**Figure 22: Cancer patient experience survey results by cancer type,
Patient completely understood explanation of what was wrong**



(19) Source: National Cancer Patient Experience Survey Programme – 2010: national survey report, Department of Health, December 2010

4.12 The survey also reveals significant variations between patient groups. In general, the following groups report less favourably on their care:

- Younger (age 16-25 years) and older (age over 75 years) patients
- Those who were diagnosed more than a year ago
- Women
- Patients from black and minority ethnic groups
- Non-heterosexuals
- Those living in London
- Patients living in the most deprived areas
- Patients with some long term conditions other than cancer

4.13 Variations in experience of care by the NHS can be marked. Although for most of the questions in the survey the “middle 60%” (i.e. those Trusts between the 20th and 80th percentiles) are not widely separated, the differences between the best and the worst trusts can be very wide. For example in one Trust only 30% of patients thought there was always/nearly always enough nurses on duty, while in another the figure was 89% (national, 62%). The percentage of patients who reported they had received information about financial help (when it was necessary) from their hospital varied from 24% to 74% across trusts (national, 50%).

Measuring outcomes for cancer survivors

4.14 Cancer survivors have particular support needs, including the management of ongoing side effects or the late effects of treatment and help returning to work. It is important to measure the quality of care provided to cancer survivors. In this respect the outcomes reported by patients are as important as clinical indicators.

4.15 In order to improve understanding of the quality of life outcomes for cancer survivors, the National Cancer Survivorship Initiative (NCSI) is developing a national survey of cancer survivors to be piloted in 2011. The information provided by this survey, the national cancer patient experience survey and the wider routine use of Patient Reported Outcomes Measures (PROMs) with cancer survivors, will enable commissioners and providers to better understand how services can improve outcomes for cancer survivors.

5.0 Chapter 5 – Improving outcomes: better treatment

5.1 The quality of treatment available to cancer patients is also an important determinant of outcomes. Information about the treatments available and the outcomes delivered is necessary for patients to make informed choices, for commissioners to effectively performance manage services and for healthcare professionals to be free to introduce improvements.

5.2 This chapter sets out key information on the quality of cancer treatment and the teams that deliver it on key issues such as specialisation, choice of procedure and submission of outcomes data to clinical audits.

Ensuring appropriate specialisation

5.3 Many surgical procedures for cancer require high levels of specialist expertise and it is therefore important that they are only undertaken by teams who perform a high number of similar procedures. Examples of this include urological and oesophagogastric surgery.

- 5.4 A total of 7,111 major urological procedures were undertaken in 2009/10 (**Table 4**).⁽²⁰⁾ The Improving Outcomes Guidance for urological cancers recommended that all radical prostatectomies (for prostate cancer) and cystectomies (for bladder cancer) should be undertaken in centres carrying out at least 50 such procedures in total each year.
- 5.5 Hospital Episode Statistics (HES) show that prostatectomies and/or cystectomies were undertaken in a total of 144 trusts in 2009/10. The table shows the proportion of procedures that took place in trusts performing different numbers of procedures per year. As can be seen, 90% of all urological procedures were carried out in 59 centres undertaking at least 50 urological procedures per year, and a further 4% in hospitals dealing with at least 40 procedures. However, 4% of all urological procedures were carried out in hospitals undertaking fewer than ten procedures per year and a further 2% in hospitals undertaking between 10 and 39 procedures.

Table 4: Major urological operations, England

Number of major urological procedures	2008-2009			2009-2010		
	No of Trusts	Total major procedures	Percentage of procedures	No of Trusts	Total major procedures	Percentage of procedures
1-9	65	229	4%	68	254	4%
10-19	9	138	2%	8	101	1%
20-29	2	46	1%	1	22	0%
30-39	4	147	2%	2	70	1%
40-49	6	275	4%	6	265	4%
50+	57	5,454	87%	59	6,399	90%
Total	143	6,289	100%	144	7,111	100%

(20) Source: Hospital Episode Statistics, National Cancer Services Analytical Team (NatCanSAT)

- 5.6 A total of 3,504 major oesophagogastric procedures were undertaken in 2009/10 (**Table 5**). The Improving Outcomes Guidance for upper gastrointestinal cancer recommended that these procedures should be concentrated in centres dealing with a catchment population of at least 1 million to achieve the best possible outcomes. If this guidance had been fully implemented, one would therefore expect that services would be delivered from a maximum of 50 centres. In practice, HES shows that these procedures are spread across 134 NHS trusts.

Table 5: Major oesophagogastric operations, England

Number of major oesophagogastric procedures	2008-2009			2009-2010		
	No of Trusts	Total major procedures	Percentage of procedures	No of Trusts	Total major procedures	Percentage of procedures
1-9	77	259	7%	76	253	7%
10-19	11	155	4%	9	137	4%
20-29	9	216	6%	7	173	5%
30-39	8	271	7%	4	145	4%
40-49	10	455	12%	8	370	11%
50+	28	2,344	63%	30	2,426	69%
Total	143	3,700	100%	134	3,504	100%

(20) Source: Hospital Episode Statistics, National Cancer Services Analytical Team (NatCanSAT)

- 5.7 An important part of commissioning is to ensure that treatment is performed according to the appropriate level of specialisation. **Appendix 5** shows the number of specific procedures which have been recorded by provider, as well as the change in volume observed over the past year. It is important to recognise that these are recorded procedures. Providers may want to examine their data recording practices as well as their clinical practice when considering these data.

Ensuring that patients are able to make a choice of treatment

- 5.8 For some forms of cancer, there may be a range of appropriate treatment options available. An example of this is in colorectal cancer, where operations can be performed on an open or laparoscopic (keyhole) basis. Laparoscopic surgery is less invasive, resulting in shorter recovery times and less time in hospital.
- 5.9 The National Institute for Health and Clinical Excellence (NICE) has recommended that laparoscopic surgery should be offered to all suitable patients. However, the availability of suitably trained surgeons has in the past been a block to offering all patients this choice, resulting in a waiver being put in place on the NICE guidance. Concerted efforts have been made to build capability within the surgical workforce, including through the provision of the Lapco training programme. As result, the waiver was lifted in October 2010.
- 5.10 Hospital Episode Statistics (HES) data reveal that the proportion of laparoscopic colorectal resections has increased (**Table 6**), reflected by an increase in elective resections. There was no change in the percentage of emergency resections carried out laparoscopically. ⁽²⁰⁾

Table 6: Percentage of laparoscopic colorectal resections, England

Admission Type	2008/09	2009/10
Elective	24%	31%
Emergency	7%	7%
Overall	19%	23%

(20) Source: Hospital Episode Statistics, National Cancer Services Analytical Team (NatCanSAT)

Treatment outcomes data

- 5.11 Patients, commissioners and healthcare professionals all have an interest in understanding variations in the quality of treatment and the outcomes achieved. Clinical audit provides a valuable mechanism for assessing variations in treatment.
- 5.12 There are currently five nationally designated clinical audits relating to different cancers. The intention is that all acute NHS trusts that provide any type of service for relevant groups of cancer patients should participate in these audits, collecting and reporting a complete dataset on each of their patients. This will allow valid comparisons to be made between trusts, taking account of case-mix variations (e.g. stage of disease, age and co-morbidity). These comparisons should in turn help to drive up quality.
- 5.13 Participation in clinical audits has improved, although there are still a number of providers who are not submitting expected numbers (**Table 7**).

Table 7: Audit Participation and stage completeness for England

Audit	Audit participation					Stage completeness				
	% of trusts >75% of expected numbers	No. of trusts >75% of expected numbers	trusts between 25% and 75% of expected numbers	Total no. of trusts in audit	No. of participants	Completeness (of eligible patients registered)	National	Cancer Network range lower	Cancer Network range upper	Audit period
National Lung Cancer Audit (LUCADA)	93%*	140 *	10*	150*	29,802*		81%	56%	97%	2009/2010
National Colorectal Cancer Audit (NBOCAP)	68%	94	34	138	18,853	68%	76%			2008/9
National Head and Neck Cancer Audit (DAHNO)					5,248	89%	70% ²	18% ²	100% ²	2008/9
Oesophagogastric Cancer Audit	52%	79	58	152	16,264	71%	73% ³	26%	93%	2009/2010
Mastectomy and Breast Reconstruction Audit PROMS.	57%	80	51	141*	18,216	81%	n/a	n/a	n/a	2007/2008

* Excluding participating tertiary trusts (because analysis by place first seen does not reflect their true involvement) and trusts with 0 expected cases

² % where T and N value recorded

³ % where M-stage after CT scan

- 5.14 Despite the absence of full coverage, the audits are now beginning to yield valuable information highlighting areas requiring further action or investigation as well as providing valuable information about the service for specific cancers in England.
- 5.15 The National Lung Cancer Data Audit (LUCADA) 2010. ⁽²¹⁾ showed that:
- 14% of patients with non-small-cell lung cancer underwent a surgical resection compared to 11% in 2007. The percentage undergoing a surgical resection has increased in recent years, with data in previous audits consistent with data from the NCIN's report on major surgical resections for 2004-2006, which showed that 9% of all lung cancers (including small-cell) received a major surgical resection. However, experts suggest that a figure of around 20% should be achievable, although this is dependent on patients presenting, and being referred, when their disease is operable and they are fit for surgery. Within England, resection rates varied between cancer networks from 8.5% to 20.3%.
 - Active anti-cancer treatment (i.e. surgery, chemotherapy or radiotherapy) is offered to 59% of lung cancer patients in England and Wales, compared to 54% in 2008. The figure varies between networks from 41% to 69% but a much higher variation is seen between trusts
 - Histological confirmation (i.e. a diagnosis made by taking a sample of tissue or cells) of the cancer diagnosis was made in 76% of cases in 2009, an increase from 72% in 2008 and for the first time achieving above the 75% mark which is considered a reasonable benchmark for acceptable practice. There was also wide variation observed across networks from 64% to 87% and wider variation shown across trusts. In Scotland, histological confirmation was made in 78% of lung cancer cases.
 - The percentage of patients who received a CT scan before bronchoscopy increased from 76% in 2008 to 81% in 2009 in England and Wales. The percentage was higher in both Scotland and Northern Ireland at 86% and 87% respectively.
- 5.16 The National Colorectal Cancer Audit in 2009 ⁽²¹⁾ indicated that:
- Around 60% of patients undergo a major resection with resection rates varying widely across cancer networks from around 12% to around 80%. Data from the NCIN's report on major surgical resections indicated that around 66% of patients undergo a major surgical

- resection. Poor reporting of surgery in the audit may account for some of the lower rates seen. This poor reporting is being investigated as part of the development of the audit.
- 82% of patients were discussed at a multidisciplinary team (MDT) meeting. Again variation was seen across cancer networks, with 99% of patients being discussed in some networks.
 - Dukes stage was submitted for less than 55% of cases. However, a duke's stage could be derived for over 76% of cases.
 - Over 32% of rectal cancer cases received pre-op radiotherapy, although wide variation between cancer networks was seen from 0% to 74%.
- 5.17 The National Head and Neck Cancer Audit (DAHNO) for 2008-2009 ⁽²¹⁾ shows:
- 95% of patients were discussed by an MDT, an increase from 93% in 2008 and 74% in 2007.
 - Where chest imaging data is submitted, over 85% of patients have this performed prior to the cancer care plan.
 - 70% of patients submitted had T and N staging recorded, whilst 60% had performance status reported. Co-morbidity was only reported for 32% of cases.
 - The goal for the coming year should be to ensure the provision of full reports including case-mix data. This will ensure meaningful analyses of outcomes, with further benefits for patient care.
- 5.18 The Oesophago-gastric Cancer Audit 2010 ⁽²¹⁾ shows that:
- Over 36% of patients in the Audit had a curative treatment plan. For patients with an active treatment plan, 80% (excluding squamous cell carcinomas) had surgery as part of their treatment plan.
 - 89% of patients were reported to have a CT scan as part of their treatment. However, the proportion was typically 95% when excluding patients too frail for a surgical resection. Current guidelines recommend that all patients have a CT scan.
 - Among patients with a curative treatment plan, 62% of patients with an oesophageal or Siewert type tumour were recorded as having an EUS investigation and 49% of patients with a stomach tumour or a Siewert II/III tumour were recorded as having a staging laparoscopy.
 - Approximately 85% of patients who began neoadjuvant therapy went on to have a surgical resection with curative intent.
 - Palliative radiotherapy was recorded for 1,171 patients, with 92% completing their prescribed course. Palliative chemotherapy was recorded for 2,450 patients, with 53% completing their prescribed course.
- 5.19 The Mastectomy and Breast Reconstruction Audit 2010 ⁽²¹⁾ shows that:
- 8% of mastectomy only patients stated a lack of local availability was the reason why they did not have immediate breast reconstruction.
 - 34% of mastectomy-only patients who were offered immediate reconstruction said that not having enough information about breast reconstruction contributed to their decision to not have immediate reconstruction.
 - One in ten women had an inpatient complication post mastectomy. For women having mastectomy without reconstruction, one in ten were readmitted for unplanned treatment or surgery after their primary admission, and one in five required antibiotic treatment for a suspected wound infection post-discharge.
 - For women having reconstruction, one in six were readmitted for unplanned treatment or surgery after their primary admission, and one in four required antibiotic treatment for a suspected wound infection post-discharge.

- The audit shows that surgical care & short-term outcomes need to be improved and highlights the importance of timely and comprehensive information to women on immediate and delayed reconstruction.

Bed days and length of stay

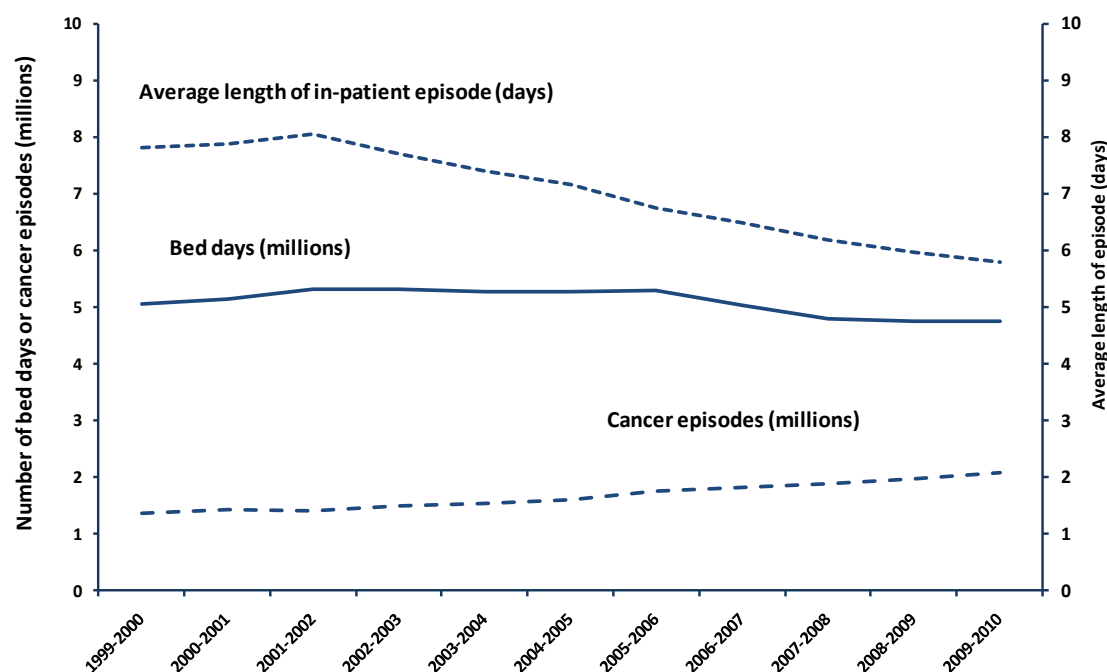
- 5.20 The number of hospital bed days have decreased 6% (5.1 to 4.8 million annually) between 1999-2000 and 2009-2010, freeing up hospital resources and saving money. This is a major achievement given the context of rising incidence. For example, cancer episodes have increased 51% (1.4 to 2.1 million annually) between 1999-2000 and 2009-2010. A cancer episode is a single episode of care under a single consultant, a typical admission may involve more than one cancer episode. The average length of a cancer episode has decreased by 26% (7.8 days to 5.8 days) between 1999-2000 and 2009-2010 (**Table 8 and Figure 23**). ⁽²⁰⁾

Table 8: Average length of ordinary episode (days)

Admission Method	1999-2000	2009-2010	% change
Elective	6.1	4.9	-20%
Emergency	9.2	6.1	-33%
Other	7.6	5.5	-28%
Transfer	15.4	14.0	-9%
All	7.8	5.8	-26%

(20) Source: Hospital Episode Statistics, National Cancer Services Analytical Team (NatCanSAT). Data are England only.

Figure 23: Overall trend in bed days and cancer episodes



(20) Source: Hospital Episode Statistics, National Cancer Services Analytical Team (NatCanSAT). Data are England only, data extracted 2010

- 5.21 Decreases in the length of stay have been observed for all admissions but the decrease in length of stay for episodes following emergency admissions has been greater than for episodes following elective admissions.

6.0 Chapter 6 – Improving outcomes: reducing inequalities

Awareness

- 6.1 **Figures 24, 25 and 26** show the number of cancer warning signs recalled (based on an open ended question) for a range of socio-demographic groups. They show that awareness is lower in men, those with a lower socioeconomic status and ethnic minority groups. Although awareness increases with age up to 64, it then drops off in the 65 and over group, despite the fact that this is the group most at risk of developing cancer. ⁽¹¹⁾

Figure 24: Recall and recognition of cancer warning signs by age

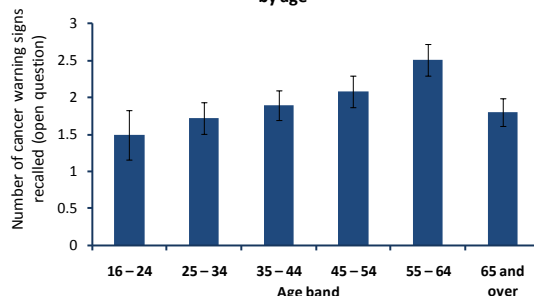


Figure 25: Recall and recognition of cancer warning signs by ethnicity

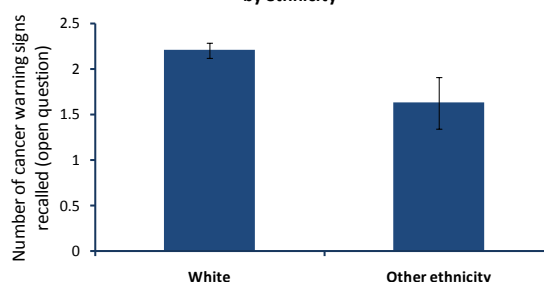
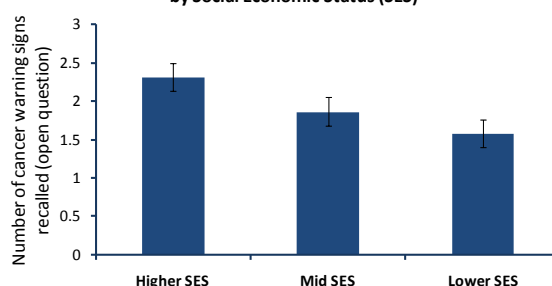


Figure 26: Recall and recognition of cancer warning signs by Social Economic Status (SES)



(11) Source: These data have been collected using the Cancer Awareness Measure (CAM). Full details of the data collection and analysis plus further information on cancer awareness are available in the original publication "Public awareness of cancer in Britain: a population-based survey of adults", K Robb, S Stubbings, A Ramirez, U Macleod, J Austoker, J Waller, S Hiom and J Wardle (2009), British Journal of Cancer 101(Suppl 2): S18-S23

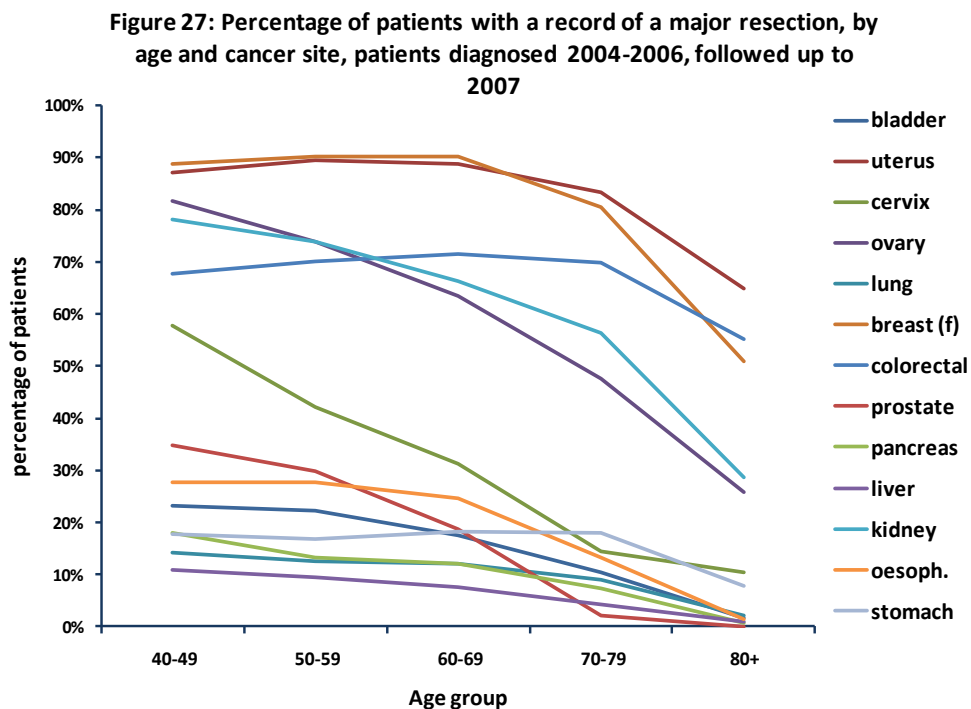
Access to treatment

- 6.2 Different groups in society appear to have different rates of access to treatment, although differences in sub-types of cancer affects the suitability for major resections. For example, the percentage of NHS treated patients that had a record of a major resection decreases with age. ⁽²²⁾

- For cervical cancer patients, 58% of patients aged 40-49 had a record of a major resection compared to 10% of patients aged 80 and over.

- For ovarian cancer patients, the percentage ranged from 82% for patients under 50 to 26% for those aged 80+.
- For kidney cancer patients, 78% of patients aged 40-49 had a record of a major resection compared to just 29% of patients aged 80 and over.
- For prostate cancer patients, 35% of patients aged 40-49 had a record of a major resection compared to less than 0.5% of patients aged 80 and over.
- Overall, less than 2% of patients aged over 80 who were diagnosed with cancer of the lung, prostate, pancreas, liver, oesophagus or bladder had a record of a major resection.

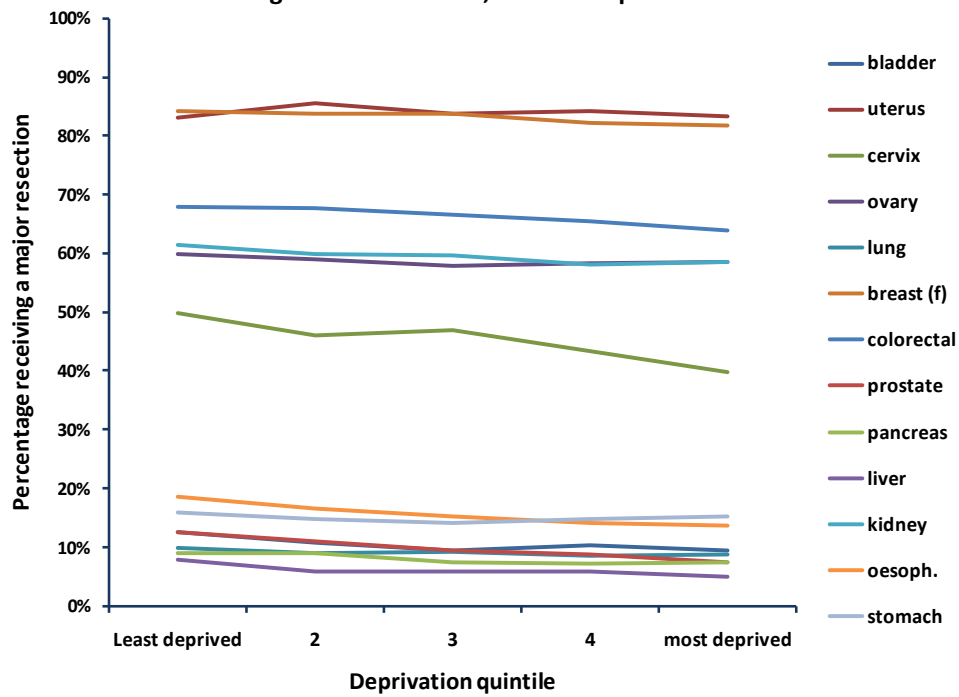
6.3 **Figure 27** shows how major resection rates decrease with age.



(22) Source: National Cancer Intelligence Network (NCIN), NHS treated cancer patients receiving major surgical resections

6.4 For deprivation, **figure 28** shows that there was little difference in the overall major resection rates for patients of all ages by deprivation groups. Cervical cancer showed the biggest difference between major resection rates for the most deprived and least deprived quintiles, with 50% of the least deprived NHS treated patients having a record of a major resection compared to 40% of the most deprived. Resection rates for patients treated within a private hospital are not included, which may affect overall percentage of patients by deprivation quintile (as the proportion of patients treated in a private hospital is likely to be strongly associated with socio-economic status).

Figure 28: Percentage of patients with a record of a major resection, by cancer site and deprivation quintile, patients diagnosed 2004-2006, followed up to 2007



(22) Source: National Cancer Intelligence Network (NCIN), NHS treated cancer patients receiving major surgical resections

Appendix 1: Cancer incidence by primary care trust (PCT) and strategic health authority (SHA), all cancers, all ages, persons, 2006-2008**

Primary Care Trust	Number of cases per year	Age-standardised rate*	95% confidence interval	
Q30 North East SHA	14,251	417.4	413.4	421.5
5D7 Newcastle PCT	1,402	441.1	427.2	455.0
5D8 North Tyneside PCT	1,138	425.0	410.1	439.8
5D9 Hartlepool PCT	508	439.8	417.1	462.5
5E1 Stockton-on-Tees Teaching PCT	951	407.8	392.5	423.1
5J9 Darlington PCT	540	402.0	381.6	422.3
5KF Gateshead PCT	1,159	445.4	430.0	460.8
5KG South Tyneside PCT	924	442.3	425.1	459.5
5KL Sunderland Teaching PCT	1,529	420.2	407.7	432.7
5KM Middlesbrough PCT	725	434.4	415.5	453.2
5ND County Durham PCT	2,755	402.2	393.2	411.1
5QR Redcar and Cleveland PCT	801	408.1	391.2	425.0
TAC Northumberland Care Trust	1,820	394.9	384.0	405.8
Q31 North West SHA	36,323	409.8	407.3	412.3
5F5 Salford PCT	1,271	484.8	468.8	500.7
5F7 Stockport PCT	1,565	413.0	400.8	425.3
5HG Ashton, Leigh and Wigan PCT	1,553	406.1	394.2	418.0
5HP Blackpool PCT	870	426.4	409.2	443.7
5HQ Bolton PCT	1,293	403.8	390.8	416.8
5J2 Warrington PCT	871	354.8	340.9	368.6
5J4 Knowsley PCT	827	461.4	442.7	480.1
5J5 Oldham PCT	1,075	423.1	408.3	438.0
5JX Bury PCT	948	418.0	402.3	433.7
5LH Tameside and Glossop PCT	1,294	426.5	412.8	440.3
5NE Cumbria Teaching PCT	2,875	385.1	376.6	393.6
5NF North Lancashire Teaching PCT	1,961	396.2	385.4	407.0
5NG Central Lancashire PCT	2,358	404.5	394.9	414.2
5NH East Lancashire Teaching PCT	1,911	398.4	387.8	409.0
5NJ Sefton PCT	1,707	416.7	404.7	428.8
5NK Wirral PCT	1,912	427.3	415.7	439.0
5NL Liverpool PCT	2,416	474.7	463.4	485.9
5NM Halton and St Helens PCT	1,575	421.4	409.2	433.7
5NN Western Cheshire PCT	1,341	402.3	389.4	415.3
5NP Central and Eastern Cheshire PCT	2,012	314.8	306.6	323.1
5NQ Heywood, Middleton and Rochdale PCT	985	405.6	390.7	420.5
5NR Trafford PCT	1,168	432.3	417.5	447.1
5NT Manchester PCT	1,927	466.8	454.3	479.3
TAP Blackburn with Darwen Teaching Care Trust	609	408.3	389.2	427.5

Primary Care Trust	Number of cases per year	Age-standardised rate*	95% confidence interval	
Q32 Yorkshire and The Humber SHA	26,851	406.7	403.8 -	409.6
5EF North Lincolnshire PCT	864	397.5	381.7 -	413.3
5H8 Rotherham PCT	1,338	407.6	394.6 -	420.6
5J6 Calderdale PCT	995	398.9	384.2 -	413.6
5JE Barnsley PCT	1,304	446.4	432.1 -	460.8
5N1 Leeds PCT	3,724	425.3	417.1 -	433.4
5N2 Kirklees PCT	1,874	390.8	380.3 -	401.2
5N3 Wakefield District PCT	1,723	414.8	403.2 -	426.4
5N4 Sheffield PCT	2,711	412.9	403.6 -	422.3
5N5 Doncaster PCT	1,616	416.7	404.6 -	428.9
5NV North Yorkshire and York PCT	4,322	381.1	374.2 -	388.0
5NW East Riding Of Yorkshire PCT	2,008	397.0	386.5 -	407.5
5NX Hull Teaching PCT	1,318	452.0	437.5 -	466.5
5NY Bradford and Airedale Teaching PCT	2,201	402.5	392.6 -	412.5
TAN North East Lincolnshire Care Trust Plus	852	401.0	384.8 -	417.1
Q33 East Midlands SHA	22,753	398.2	395.1 -	401.3
5EM Nottingham City PCT	1,236	438.3	423.5 -	453.1
5ET Bassetlaw PCT	606	390.4	372.0 -	408.9
5N6 Derbyshire County PCT	3,995	396.8	389.4 -	404.1
5N7 Derby City PCT	1,211	414.4	400.3 -	428.4
5N8 Nottinghamshire County Teaching PCT	3,571	398.3	390.5 -	406.1
5N9 Lincolnshire Teaching PCT	4,351	414.9	407.4 -	422.4
5PA Leicestershire County and Rutland PCT	3,376	372.1	364.6 -	379.6
5PC Leicester City PCT	1,156	390.2	376.8 -	403.6
5PD Northamptonshire Teaching PCT	3,251	397.4	389.3 -	405.4
Q34 West Midlands SHA	26,976	385.7	383.0 -	388.5
5CN Herefordshire PCT	1,037	363.4	349.8 -	377.0
5M1 South Birmingham PCT	1,647	415.2	403.1 -	427.3
5M2 Shropshire County PCT	1,586	361.2	350.4 -	372.1
5M3 Walsall Teaching PCT	1,311	395.6	382.7 -	408.4
5MD Coventry Teaching PCT	1,393	394.0	381.6 -	406.5
5MK Telford and Wrekin PCT	734	391.0	374.5 -	407.6
5MV Wolverhampton City PCT	1,202	390.8	377.5 -	404.2
5MX Heart Of Birmingham Teaching PCT	860	393.0	377.4 -	408.6
5PE Dudley PCT	1,643	392.3	381.0 -	403.6
5PF Sandwell PCT	1,379	385.4	373.2 -	397.6
5PG Birmingham East and North PCT	1,866	402.7	391.6 -	413.7
5PH North Staffordshire PCT	1,070	356.9	344.0 -	369.8
5PJ Stoke on Trent PCT	1,313	409.1	395.9 -	422.4
5PK South Staffordshire PCT	3,114	379.5	371.6 -	387.4
5PL Worcestershire PCT	3,022	388.7	380.4 -	397.0
5PM Warwickshire PCT	2,660	369.2	360.8 -	377.5
TAM Solihull Care Trust	1,138	405.8	391.5 -	420.0

Primary Care Trust	Number of cases per year	Age-standardised rate*	95% confidence interval	
Q35 East of England SHA	28,524	376.1	373.4 -	378.7
5GC Luton PCT	711	364.6	348.9 -	380.4
5P1 South East Essex PCT	1,880	389.0	378.3 -	399.8
5P2 Bedfordshire PCT	1,923	390.0	379.8 -	400.3
5PN Peterborough PCT	754	395.3	378.6 -	412.0
5PP Cambridgeshire PCT	2,890	386.9	378.6 -	395.3
5PQ Norfolk PCT	4,408	378.1	371.2 -	384.9
5PR Great Yarmouth and Waveney PCT	1,349	397.1	384.1 -	410.2
5PT Suffolk PCT	3,149	374.0	366.1 -	381.9
5PV West Essex PCT	1,435	395.7	383.5 -	407.9
5PW North East Essex PCT	1,752	365.5	354.9 -	376.0
5PX Mid Essex PCT	1,757	371.0	360.7 -	381.2
5PY South West Essex PCT	1,711	355.6	345.5 -	365.6
5QV Hertfordshire PCT	4,805	361.3	355.2 -	367.4
Q36 London SHA	28,144	376.2	373.6 -	378.8
5A4 Havering PCT	1,198	380.1	367.0 -	393.1
5A5 Kingston PCT	662	399.4	381.2 -	417.5
5A7 Bromley PCT	1,497	374.4	362.9 -	385.9
5A8 Greenwich Teaching PCT	859	394.8	379.0 -	410.6
5A9 Barnet PCT	1,364	365.3	353.6 -	376.9
5AT Hillingdon PCT	1,026	367.5	354.1 -	380.8
5C1 Enfield PCT	1,103	356.7	344.2 -	369.2
5C2 Barking and Dagenham PCT	688	405.3	387.0 -	423.7
5C3 City and Hackney Teaching PCT	688	395.1	377.6 -	412.7
5C4 Tower Hamlets PCT	613	408.2	388.7 -	427.7
5C5 Newham PCT	712	385.4	368.8 -	402.1
5C9 Haringey Teaching PCT	731	393.9	377.0 -	410.8
5H1 Hammersmith and Fulham PCT	563	385.1	366.0 -	404.1
5HX Ealing PCT	1,031	347.5	335.0 -	360.1
5HY Hounslow PCT	808	380.6	365.2 -	396.0
5K5 Brent Teaching PCT	876	336.7	323.6 -	349.9
5K6 Harrow PCT	793	312.2	299.3 -	325.1
5K7 Camden PCT	730	397.9	380.7 -	415.2
5K8 Islington PCT	668	449.0	428.7 -	469.2
5K9 Croydon PCT	1,410	386.9	375.0 -	398.8
5LA Kensington and Chelsea PCT	554	297.0	282.2 -	311.8
5LC Westminster PCT	733	329.5	315.2 -	343.8
5LD Lambeth PCT	916	435.7	418.8 -	452.6
5LE Southwark PCT	884	394.0	378.4 -	409.6
5LF Lewisham PCT	947	426.4	410.2 -	442.6
5LG Wandsworth PCT	990	433.1	416.6 -	449.5
5M6 Richmond and Twickenham PCT	793	391.5	375.3 -	407.8
5M7 Sutton and Merton PCT	1,512	363.2	352.2 -	374.2
5NA Redbridge PCT	955	344.3	331.4 -	357.3
5NC Waltham Forest PCT	776	376.8	361.1 -	392.6
TAK Bexley Care Trust	1,065	377.1	363.5 -	390.7

Primary Care Trust	Number of cases per year	Age-standardised rate*	95% confidence interval	
Q38 South East Coast SHA	21,749	365.6	362.6 -	368.5
5L3 Medway PCT	1,116	391.3	377.9 -	404.8
5LQ Brighton and Hove City PCT	1,118	388.7	374.8 -	402.7
5P5 Surrey PCT	5,157	360.9	355.0 -	366.8
5P6 West Sussex PCT	4,322	363.7	357.0 -	370.5
5P7 East Sussex Downs and Weald PCT	1,837	335.0	325.3 -	344.6
5P8 Hastings and Rother PCT	1,085	370.2	356.3 -	384.1
5P9 West Kent PCT	3,279	373.5	365.9 -	381.2
5QA Eastern and Coastal Kent PCT	3,836	371.4	364.3 -	378.6
Q37 South Central SHA	19,193	384.9	381.7 -	388.2
5CQ Milton Keynes PCT	954	407.2	392.1 -	422.3
5FE Portsmouth City Teaching PCT	911	422.3	405.8 -	438.8
5L1 Southampton City PCT	1,014	416.3	400.9 -	431.8
5QC Hampshire PCT	6,541	373.9	368.5 -	379.3
5QD Buckinghamshire PCT	2,381	373.0	364.1 -	381.9
5QE Oxfordshire PCT	3,019	410.7	402.0 -	419.4
5QF Berkshire West PCT	1,928	379.9	369.9 -	389.9
5QG Berkshire East PCT	1,575	374.3	363.4 -	385.2
5QT Isle of Wight NHS PCT	870	374.6	359.0 -	390.2
Q39 South West SHA	29,853	398.2	395.5 -	401.0
5A3 South Gloucestershire PCT	1,291	397.5	384.7 -	410.4
5F1 Plymouth Teaching PCT	1,340	429.9	416.1 -	443.7
5FL Bath and North East Somerset PCT	920	387.9	372.6 -	403.3
5K3 Swindon PCT	887	391.4	376.2 -	406.6
5M8 North Somerset PCT	1,128	370.4	357.2 -	383.6
5QH Gloucestershire PCT	3,146	383.8	375.7 -	391.9
5QJ Bristol PCT	1,913	432.8	421.1 -	444.5
5QK Wiltshire PCT	2,477	402.3	392.8 -	411.9
5QL Somerset PCT	3,116	393.7	385.2 -	402.2
5QM Dorset PCT	2,850	401.3	391.8 -	410.7
5QN Bournemouth and Poole Teaching PCT	1,871	419.2	407.4 -	431.1
5QP Cornwall and Isles of Scilly PCT	3,341	400.3	392.0 -	408.6
5QQ Devon PCT	4,675	392.9	385.9 -	399.8
TAL Torbay Care Trust	896	405.0	388.2 -	421.8

* Rates are age-standardised using the European Standard Population

** All malignant neoplasms excluding non-melanoma skin cancer

Source: NCIN, UK Cancer Information Service (UKCIS), accessed April 2010

Appendix 2: Cancer mortality by primary care trust (PCT) and strategic health authority (SHA), all cancers, all ages, persons, 2007-2009**

Primary Care Trust	Number of deaths per year	Age-standardised rate*	95% confidence interval	
Q30 North East SHA	7,757	205.1	202.4	207.9
5D7 Newcastle PCT	763	216.1	206.7	225.5
5D8 North Tyneside PCT	606	204.3	194.4	214.1
5D9 Hartlepool PCT	301	240.2	224.0	256.4
5E1 Stockton-on-Tees Teaching PCT	514	202.3	191.9	212.7
5J9 Darlington PCT	292	193.2	179.7	206.6
5KF Gateshead PCT	598	207.6	197.6	217.7
5KG South Tyneside PCT	516	220.7	209.1	232.3
5KL Sunderland Teaching PCT	872	221.3	212.5	230.1
5KM Middlesbrough PCT	403	222.8	209.7	235.8
5ND County Durham PCT	1,520	200.2	194.1	206.2
5QR Redcar and Cleveland PCT	422	196.3	185.0	207.5
TAC Northumberland Care Trust	951	180.1	173.2	187.0
Q31 North West SHA	18,674	191.4	189.8	193.1
5F5 Salford PCT	644	223.9	213.5	234.3
5F7 Stockport PCT	734	174.2	166.5	181.8
5HG Ashton, Leigh and Wigan PCT	806	196.2	188.2	204.2
5HP Blackpool PCT	462	204.3	192.9	215.6
5HQ Bolton PCT	630	182.5	174.0	191.0
5J2 Warrington PCT	473	178.8	169.2	188.3
5J4 Knowsley PCT	428	218.4	206.0	230.9
5J5 Oldham PCT	563	203.8	193.8	213.9
5JX Bury PCT	444	178.8	168.9	188.8
5LH Tameside and Glossop PCT	647	196.5	187.5	205.5
5NE Cumbria Teaching PCT	1,476	176.1	170.7	181.6
5NF North Lancashire Teaching PCT	1,017	176.9	170.2	183.7
5NG Central Lancashire PCT	1,170	183.7	177.4	190.0
5NH East Lancashire Teaching PCT	996	187.3	180.3	194.2
5NJ Sefton PCT	887	188.9	181.2	196.5
5NK Wirral PCT	1,019	203.5	195.9	211.2
5NL Liverpool PCT	1,308	240.2	232.3	248.0
5NM Halton and St Helens PCT	842	211.5	203.0	220.0
5NN Western Cheshire PCT	664	174.4	166.4	182.5
5NP Central and Eastern Cheshire PCT	1,176	167.8	162.0	173.6
5NQ Heywood, Middleton and Rochdale PCT	485	184.4	174.7	194.2
5NR Trafford PCT	503	167.9	159.1	176.8
5NT Manchester PCT	961	219.6	211.2	228.0
TAP Blackburn with Darwen Teaching Care Trust	339	211.5	198.1	224.9

Primary Care Trust	Number of deaths per year	Age-standardised rate*	95% confidence interval	
Q32 Yorkshire and The Humber SHA	13,536	184.8	182.9 -	186.7
5EF North Lincolnshire PCT	470	196.7	186.0 -	207.3
5H8 Rotherham PCT	720	201.5	192.7 -	210.3
5J6 Calderdale PCT	488	176.2	166.8 -	185.6
5JE Barnsley PCT	688	219.2	209.5 -	229.0
5N1 Leeds PCT	1,821	187.2	182.0 -	192.4
5N2 Kirklees PCT	942	179.3	172.5 -	186.2
5N3 Wakefield District PCT	868	190.7	183.1 -	198.3
5N4 Sheffield PCT	1,373	187.8	181.7 -	193.8
5N5 Doncaster PCT	832	195.1	187.1 -	203.0
5NV North Yorkshire and York PCT	2,117	164.2	160.0 -	168.5
5NW East Riding Of Yorkshire PCT	976	169.2	162.8 -	175.6
5NX Hull Teaching PCT	710	224.2	214.3 -	234.1
5NY Bradford and Airedale Teaching PCT	1,081	179.0	172.5 -	185.4
TAN North East Lincolnshire Care Trust Plus	450	188.5	178.0 -	199.1
Q33 East Midlands SHA	11,172	174.7	172.7 -	176.6
5EM Nottingham City PCT	650	212.8	202.8 -	222.8
5ET Bassetlaw PCT	328	193.2	180.7 -	205.6
5N6 Derbyshire County PCT	1,916	168.5	164.0 -	173.1
5N7 Derby City PCT	592	182.6	173.6 -	191.6
5N8 Nottinghamshire County Teaching PCT	1,798	178.8	173.8 -	183.8
5N9 Lincolnshire Teaching PCT	2,088	173.5	169.0 -	178.0
5PA Leicestershire County and Rutland PCT	1,626	158.0	153.4 -	162.7
5PC Leicester City PCT	577	179.1	170.3 -	187.9
5PD Northamptonshire Teaching PCT	1,597	177.8	172.6 -	183.0
Q34 West Midlands SHA	13,872	178.1	176.3 -	179.9
5CN Herefordshire PCT	520	160.7	152.1 -	169.2
5M1 South Birmingham PCT	830	186.9	179.1 -	194.7
5M2 Shropshire County PCT	849	169.3	162.3 -	176.3
5M3 Walsall Teaching PCT	666	183.3	174.9 -	191.7
5MD Coventry Teaching PCT	726	184.4	176.2 -	192.6
5MK Telford and Wrekin PCT	384	191.3	180.1 -	202.6
5MV Wolverhampton City PCT	647	189.2	180.2 -	198.1
5MX Heart Of Birmingham Teaching PCT	424	186.2	175.6 -	196.8
5PE Dudley PCT	828	176.5	169.3 -	183.8
5PF Sandwell PCT	777	200.3	191.7 -	208.8
5PG Birmingham East and North PCT	958	185.8	178.6 -	193.0
5PH North Staffordshire PCT	584	174.8	166.3 -	183.4
5PJ Stoke on Trent PCT	767	221.7	212.2 -	231.1
5PK South Staffordshire PCT	1,549	170.2	165.2 -	175.3
5PL Worcestershire PCT	1,440	162.6	157.5 -	167.6
5PM Warwickshire PCT	1,396	172.3	166.9 -	177.8
TAM Solihull Care Trust	529	163.3	154.8 -	171.8

Primary Care Trust	Number of deaths per year	Age-standardised rate*	95% confidence interval	
Q35 East of England SHA	14,175	165.1	163.4 -	166.7
5GC Luton PCT	365	177.8	167.0 -	188.6
5P1 South East Essex PCT	967	172.8	166.1 -	179.5
5P2 Bedfordshire PCT	924	170.6	164.0 -	177.1
5PN Peterborough PCT	347	167.4	156.9 -	177.9
5PP Cambridgeshire PCT	1,328	157.6	152.5 -	162.6
5PQ Norfolk PCT	2,224	163.9	159.6 -	168.1
5PR Great Yarmouth and Waveney PCT	670	171.1	163.1 -	179.2
5PT Suffolk PCT	1,509	155.2	150.4 -	160.0
5PV West Essex PCT	713	172.3	164.6 -	180.0
5PW North East Essex PCT	920	166.2	159.5 -	172.8
5PX Mid Essex PCT	849	162.2	155.7 -	168.7
5PY South West Essex PCT	952	178.8	172.0 -	185.7
5QV Hertfordshire PCT	2,407	162.0	158.1 -	165.9
Q36 London SHA	13,452	166.8	165.1 -	168.5
5A4 Havering PCT	644	181.0	172.4 -	189.6
5A5 Kingston PCT	288	157.9	146.9 -	169.0
5A7 Bromley PCT	718	156.5	149.4 -	163.5
5A8 Greenwich Teaching PCT	441	191.5	180.7 -	202.4
5A9 Barnet PCT	650	151.7	144.5 -	158.8
5AT Hillingdon PCT	512	168.4	159.6 -	177.1
5C1 Enfield PCT	546	162.9	154.7 -	171.1
5C2 Barking and Dagenham PCT	382	209.5	196.6 -	222.4
5C3 City and Hackney Teaching PCT	301	166.4	155.1 -	177.6
5C4 Tower Hamlets PCT	324	213.8	199.8 -	227.9
5C5 Newham PCT	342	182.3	170.9 -	193.7
5C9 Haringey Teaching PCT	345	183.5	172.0 -	195.0
5H1 Hammersmith and Fulham PCT	270	175.0	162.3 -	187.6
5HX Ealing PCT	511	161.7	153.4 -	170.1
5HY Hounslow PCT	379	171.5	161.3 -	181.8
5K5 Brent Teaching PCT	429	156.6	147.8 -	165.3
5K6 Harrow PCT	378	133.8	125.7 -	142.0
5K7 Camden PCT	333	174.7	163.5 -	185.9
5K8 Islington PCT	315	205.7	192.1 -	219.2
5K9 Croydon PCT	618	151.8	144.7 -	159.0
5LA Kensington and Chelsea PCT	252	121.1	112.0 -	130.2
5LC Westminster PCT	306	127.0	118.5 -	135.6
5LD Lambeth PCT	424	200.6	189.2 -	212.0
5LE Southwark PCT	426	184.1	173.6 -	194.6
5LF Lewisham PCT	450	196.6	185.7 -	207.5
5LG Wandsworth PCT	435	183.4	172.9 -	194.0
5M6 Richmond and Twickenham PCT	324	145.4	135.7 -	155.0
5M7 Sutton and Merton PCT	726	158.2	151.2 -	165.1
5NA Redbridge PCT	465	153.3	144.9 -	161.6
5NC Waltham Forest PCT	365	169.5	159.1 -	180.0
TAK Bexley Care Trust	554	172.6	163.8 -	181.3

Primary Care Trust	Number of deaths per year	Age-standardised rate*	95% confidence interval	
Q38 South East Coast SHA	11,281	164.8	162.9 -	166.7
5L3 Medway PCT	600	195.6	186.4 -	204.9
5LQ Brighton and Hove City PCT	606	188.6	179.3 -	198.0
5P5 Surrey PCT	2,473	150.9	147.3 -	154.5
5P6 West Sussex PCT	2,237	160.4	156.2 -	164.5
5P7 East Sussex Downs and Weald PCT	983	148.8	142.9 -	154.7
5P8 Hastings and Rother PCT	643	185.2	176.1 -	194.3
5P9 West Kent PCT	1,658	168.4	163.5 -	173.3
5QA Eastern and Coastal Kent PCT	2,081	175.4	170.7 -	180.0
Q37 South Central SHA	9,001	160.2	158.2 -	162.2
5CQ Milton Keynes PCT	438	175.6	165.9 -	185.3
5FE Portsmouth City Teaching PCT	448	186.0	175.5 -	196.6
5L1 Southampton City PCT	497	184.0	174.1 -	193.9
5QC Hampshire PCT	3,149	157.1	153.7 -	160.4
5QD Buckinghamshire PCT	1,076	149.1	143.7 -	154.4
5QE Oxfordshire PCT	1,313	157.5	152.4 -	162.7
5QF Berkshire West PCT	875	156.4	150.2 -	162.6
5QG Berkshire East PCT	755	162.3	155.4 -	169.3
5QT Isle of Wight NHS PCT	449	167.6	157.8 -	177.3
Q39 South West SHA	14,190	162.7	161.0 -	164.3
5A3 South Gloucestershire PCT	570	157.0	149.3 -	164.7
5F1 Plymouth Teaching PCT	638	182.9	174.2 -	191.5
5FL Bath and North East Somerset PCT	434	157.5	148.2 -	166.7
5K3 Swindon PCT	427	170.8	161.1 -	180.4
5M8 North Somerset PCT	548	149.9	142.1 -	157.7
5QH Gloucestershire PCT	1,534	164.6	159.5 -	169.6
5QJ Bristol PCT	927	189.2	181.7 -	196.6
5QK Wiltshire PCT	1,124	158.6	152.9 -	164.2
5QL Somerset PCT	1,473	156.6	151.7 -	161.6
5QM Dorset PCT	1,334	153.6	148.3 -	158.9
5QN Bournemouth and Poole Teaching PCT	874	161.6	154.7 -	168.5
5QP Cornwall and Isles of Scilly PCT	1,611	166.7	161.7 -	171.8
5QQ Devon PCT	2,250	161.0	156.8 -	165.1
TAL Torbay Care Trust	447	169.7	159.7 -	179.8

* Rates are age-standardised using the European Standard Population

** All malignant neoplasms excluding non-melanoma skin cancer

Source: NCIN, UK Cancer Information Service (UKCIS), accessed April 2010

**Appendix 3: One-year survival index (%) for all cancers combined:
all adults (aged 15-99 years), primary care trusts by government
office region (GOR), England, 2006**

Those PCTs with a double lined border had a lower index than the England average and the difference was statistically significant. These fall outside the 99.8% confidence limits on the funnel plots. See

<http://www.statistics.gov.uk/pdffdir/canpct0910.pdf> for more information.

Primary Care Trust	One year all cancer survival index*
North East GOR	
County Durham	63.4
Darlington	62.4
Gateshead	65.2
Hartlepool	60.0
Middlesbrough	63.8
Newcastle	64.0
North Tees	63.8
North Tyneside	64.0
Northumberland	65.6
Redcar and Cleveland	63.8
South Tyneside	63.0
Sunderland Teaching	61.0
North West GOR	
Ashton, Leigh and Wigan	61.9
Blackburn with Darwen	61.8
Blackpool	61.9
Bolton	62.7
Bury	63.5
Central and Eastern Cheshire	62.2
Central Lancashire	62.6
Cumbria	64.6
East Lancashire Teaching	59.6
Halton and St Helens	65.2
Heywood, Middleton and Rochdale	63.7
Knowsley	64.9
Liverpool	63.8
Manchester	61.8
North Lancashire Teaching	62.5
Oldham	60.7
Salford	64.8
Sefton	65.5
Stockport	63.7
Tameside and Glossop	61.5
Trafford	62.5
Warrington	62.4
Western Cheshire	63.3
Wirral	61.8

Primary Care Trust	One year all cancer survival index*
Yorkshire and The Humber GOR	
Barnsley	61.7
Bradford and Airedale Teaching	65.4
Calderdale	62.9
Doncaster	61.1
East Riding of Yorkshire	67.1
Hull Teaching	62.8
Kirklees	64.9
Leeds	65.6
North East Lincolnshire	63.8
North Lincolnshire	63.4
North Yorkshire and York	68.0
Rotherham	63.3
Sheffield	63.2
Wakefield District	63.2
East Midlands GOR	
Bassetlaw	63.2
Derby City	65.2
Derbyshire County	64.0
Leicester City	60.3
Leicestershire County and Rutland	64.1
Lincolnshire Teaching	63.8
Northamptonshire Teaching	63.3
Nottingham City	64.3
Nottinghamshire County Teaching	65.9
West Midlands GOR	
Birmingham East and North	66.2
Coventry Teaching	64.7
Dudley	66.3
Heart of Birmingham Teaching	66.0
Herefordshire	67.0
North Staffordshire	64.3
Sandwell	63.5
Shropshire County	67.0
Solihull	69.1
South Birmingham	67.9
South Staffordshire	68.0
Stoke on Trent	64.0
Telford and Wrekin	64.5
Walsall Teaching	67.2
Warwickshire	66.6
Wolverhampton City	66.7
Worcestershire	68.2

Primary Care Trust	One year all cancer survival index*
East of England GOR	
Bedfordshire	64.7
Cambridgeshire	66.9
East and North Hertfordshire	68.0
Great Yarmouth and Waveney	66.2
Luton	62.2
Mid Essex	66.4
Norfolk	66.4
North East Essex	65.1
Peterborough	63.0
South East Essex	66.0
South West Essex	66.1
Suffolk	65.5
West Essex	63.2
West Hertfordshire	64.7
London GOR	
Barking and Dagenham	59.4
Barnet	66.2
Bexley	67.3
Brent Teaching	66.5
Bromley	69.0
Camden	64.9
City and Hackney Teaching	63.8
Croydon	66.1
Ealing	66.5
Enfield	63.9
Greenwich Teaching	61.5
Hammersmith and Fulham	70.3
Haringey Teaching	63.1
Harrow	66.0
Havering	61.2
Hillingdon	64.5
Hounslow	67.7
Islington	62.4
Kensington and Chelsea	69.5
Kingston	65.8
Lambeth	63.0
Lewisham	63.5
Newham	56.3
Redbridge	61.4
Richmond and Twickenham	65.0
Southwark	63.2
Sutton and Merton	66.8
Tower Hamlets	58.7
Waltham Forest	56.5
Wandsworth	67.4
Westminster	70.1

Primary Care Trust	One year all cancer survival index*
South East Coast GOR	
Berkshire East	65.5
Berkshire West	65.4
Brighton and Hove City	59.7
Buckinghamshire	65.5
East Sussex Downs and Weald	65.4
Eastern and Coastal Kent	64.7
Hampshire	66.9
Hastings and Rother	60.7
Isle of Wight National Health Service	64.3
Medway	61.7
Milton Keynes	62.7
Oxfordshire	67.4
Portsmouth City Teaching	63.4
Southampton City	66.2
Surrey	65.4
West Kent	64.8
West Sussex	63.5
South West GOR	
Bath and North East Somerset	66.0
Bournemouth and Poole	68.8
Bristol	65.0
Cornwall and Isles of Scilly	66.6
Devon	67.4
Dorset	67.8
Gloucestershire	67.0
North Somerset	68.0
Plymouth Teaching	64.9
Somerset	65.7
South Gloucestershire	67.5
Swindon	64.9
Torbay	65.9
Wiltshire	65.8

* One year cancer survival index calculated by the LSHTM

Source: LSHTM (ONS and NCIN) A cancer survival index for primary care trusts

Appendix 4 – Cancer prevalence, England, 31st December 2006

Five-year cancer prevalence by cancer site, England, 31st December 2006

Cancer Site	Males			Females			Persons		
	No. of Patients	Age-standardised proportion**	95% confidence interval	No. of Patients	Age-standardised proportion**	95% confidence interval	No. of Patients	Age-standardised proportion**	95% confidence interval
C00-C14 & C30-C32: Head and neck	13,552	48.9	48.0 - 49.7	5,985	18.7	18.2 - 19.2	19,537	33.0	32.6 - 33.5
C15: Oesophagus	4,652	16.0	15.5 - 16.5	2,307	6.3	6.0 - 6.6	6,959	10.9	10.6 - 11.1
C16: Stomach	5,092	16.8	16.3 - 17.3	2,622	6.8	6.5 - 7.1	7,714	11.4	11.1 - 11.6
C18-C20: Colorectum	42,086	138.6	137.2 - 139.9	33,214	87.6	86.6 - 88.6	75,300	110.7	109.9 - 111.6
C22: Liver	1,099	3.9	3.7 - 4.1	579	1.8	1.6 - 1.9	1,678	2.8	2.6 - 2.9
C25: Pancreas	1,565	5.4	5.2 - 5.7	1,540	4.5	4.3 - 4.8	3,105	5.0	4.8 - 5.1
C33-C34: Trachea, bronchus and lung	13,656	45.5	44.7 - 46.2	10,669	31.0	30.3 - 31.6	24,325	37.4	37.0 - 37.9
C43: Malignant melanoma	13,497	48.3	47.5 - 49.1	17,561	58.4	57.5 - 59.3	31,058	53.2	52.5 - 53.8
C45: Mesothelioma	1,330	4.5	4.2 - 4.7	320	0.9	0.8 - 1.1	1,650	2.6	2.5 - 2.7
C50: Breast	937	3.1	2.9 - 3.3	147,807	480.1	477.6 - 482.6	148,744	251.7	250.4 - 253.0
C53: Cervix uteri				8,223	30.0	29.4 - 30.7			
C54-C55: Uterus				19,569	60.9	60.1 - 61.8			
C56: Ovary				13,005	43.6	42.8 - 44.3			
C61: Prostate	108,243	347.8	345.8 - 349.9						
C62: Testis	7,751	30.6	29.9 - 31.3						
C64-C66 & C68: Kidney	8,867	31.0	30.3 - 31.6	5,253	16.2	15.7 - 16.7	14,120	23.1	22.7 - 23.5
C67: Bladder	16,248	51.7	50.9 - 52.6	5,106	12.7	12.3 - 13.0	21,354	30.0	29.6 - 30.5
C70-C72: Brain and other parts of CNS	3,007	11.9	11.5 - 12.4	2,172	8.5	8.1 - 8.8	5,179	10.2	9.9 - 10.5
C81: Hodgkin disease	2,939	11.5	11.1 - 12.0	2,236	8.5	8.2 - 8.9	5,175	10.0	9.7 - 10.3
C82-C85 & C96: Non-Hodgkin lymphoma	12,898	45.6	44.8 - 46.4	11,309	34.4	33.7 - 35.1	24,207	39.7	39.2 - 40.2
C88 & C90: Myeloma	4,277	14.5	14.1 - 15.0	3,404	9.6	9.3 - 10.0	7,681	11.9	11.6 - 12.1
C91-C95: Leukaemia	8,225	29.8	29.2 - 30.5	5,792	18.7	18.2 - 19.2	14,017	23.9	23.5 - 24.4
Other Malignant Neoplasms [^]	12,595	45.5	44.7 - 46.3	17,901	57.9	57.0 - 58.8	30,496	51.8	51.2 - 52.4
C00-C97 excl. C44: All malignant neoplasms (excl. non-melanoma skin cancer)	282,516	951.0	947.5 - 954.5	316,574	997.0	993.4 - 1000.6	599,090	961.5	959.0 - 964.0

*Age-standardised proportion to the European Standard Population. Age-standardised proportions are shown per 100,000 population.

[^]All other malignant neoplasms includes the following ICD-10 codes: C17, C21, C23-C24, C26, C37-C41, C46-C49, C51-C52, C57-C58, C60, C63, C69, C73-C80, C97.

Source: One, Five and Ten-year Cancer Prevalence, UK, 31st December 2006, NCIN, Thames Cancer Registry and MacMillan Cancer Support, <http://www.ncin.org.uk/publications/default.aspx>

Cancer prevalence by cancer network, All cancers*, Persons, 31st December 2006

Cancer Network	One-year cancer prevalence			Five-year cancer prevalence			Ten-year cancer prevalence		
	No. of Patients	Age-standardised proportion**	95% confidence interval	No. of Patients	Age-standardised proportion**	95% confidence interval	No. of Patients	Age-standardised proportion**	95% confidence interval
N01 Lancashire and South Cumbria	5,295	270.7	263.2 - 278.3	18,904	961.7	947.6 - 975.7	29,215	1472.9	1455.6 - 1490.1
N02 Greater Manchester and Cheshire	10,475	293.8	288.0 - 299.5	35,094	983.0	972.6 - 993.4	54,666	1518.9	1506.1 - 1531.7
N03 Merseyside & Cheshire	6,539	257.5	251.1 - 264.0	23,800	939.3	927.1 - 951.5	37,320	1458.6	1443.6 - 1473.6
N06 Yorkshire Cancer Network	8,513	271.2	265.3 - 277.1	31,997	1019.8	1008.4 - 1031.1	49,843	1574.6	1560.6 - 1588.5
N07 Humber & Yorkshire Coast	3,777	267.4	258.6 - 276.3	13,755	969.8	953.1 - 986.5	21,032	1474.4	1454.0 - 1494.8
N08 North Trent	6,023	265.5	258.5 - 272.4	20,790	925.2	912.3 - 938.0	31,874	1410.1	1394.4 - 1425.9
N11 Pan Birmingham	5,678	260.4	253.4 - 267.4	21,155	968.5	955.2 - 981.9	33,613	1523.5	1506.9 - 1540.0
N12 Arden	2,925	239.8	230.9 - 248.8	11,489	933.1	915.7 - 950.5	18,447	1479.2	1457.6 - 1500.9
N20 Mount Vernon	3,623	245.0	236.8 - 253.2	12,435	850.6	835.3 - 865.8	19,907	1356.2	1337.2 - 1375.3
N21 West London	4,167	229.5	222.4 - 236.6	15,937	878.0	864.2 - 891.8	25,936	1417.9	1400.5 - 1435.2
N22 North London	3,699	241.6	233.6 - 249.5	14,199	923.7	908.3 - 939.2	22,807	1471.2	1452.0 - 1490.5
N23 North East London	3,446	238.1	229.9 - 246.3	12,436	847.7	832.5 - 862.8	19,996	1356.1	1337.1 - 1375.1
N24 South East London	4,099	271.5	262.9 - 280.0	14,553	964.5	948.6 - 980.5	22,996	1508.5	1488.7 - 1528.2
N25 South West London	4,401	267.2	259.1 - 275.3	16,687	1007.5	991.9 - 1023.1	26,974	1615.4	1595.9 - 1634.8
N26 Peninsula	6,674	280.1	272.9 - 287.2	24,254	1014.6	1001.2 - 1028.1	37,604	1553.4	1537.0 - 1569.9
N27 Dorset	3,207	301.9	290.6 - 313.3	12,160	1115.6	1094.3 - 1137.0	19,379	1734.9	1708.7 - 1761.1
N28 Avon, Somerset & Wiltshire	6,647	274.8	267.9 - 281.6	24,917	1026.2	1013.1 - 1039.3	39,181	1599.9	1583.6 - 1616.1
N29 3 Counties	3,767	264.6	255.8 - 273.4	13,637	950.8	934.3 - 967.4	21,483	1482.6	1462.1 - 1503.0
N30 Thames Valley	7,542	285.5	279.0 - 292.1	28,433	1075.4	1062.8 - 1088.0	45,206	1696.8	1681.2 - 1712.4
N31 Central South Coast	6,853	266.4	259.8 - 273.0	25,648	991.5	978.9 - 1004.1	41,147	1575.1	1559.4 - 1590.8
N32 Surrey, West Sussex & Hampshire	3,596	247.1	238.7 - 255.4	12,848	889.3	873.6 - 905.0	21,157	1446.2	1426.5 - 1466.0
N33 Sussex	3,899	233.9	226.0 - 241.8	14,084	852.9	838.0 - 867.9	22,758	1351.6	1333.1 - 1370.2
N34 Kent & Medway	5,241	252.5	245.4 - 259.6	18,496	893.7	880.5 - 906.9	28,509	1366.2	1350.1 - 1382.4
N35 Greater Midlands	6,249	253.2	246.7 - 259.7	22,781	922.1	909.8 - 934.4	35,803	1434.7	1419.6 - 1449.9
N36 North of England	10,496	269.3	264.0 - 274.6	38,212	982.9	972.8 - 993.0	58,887	1504.7	1492.3 - 1517.0
N37 Anglia	10,606	292.8	287.0 - 298.6	37,114	1026.3	1015.5 - 1037.0	56,127	1541.8	1528.8 - 1554.9
N38 Essex	5,116	277.7	269.8 - 285.6	17,157	938.0	923.5 - 952.4	26,211	1423.9	1406.2 - 1441.5
N39 East Midlands	13,350	270.8	266.1 - 275.6	45,970	933.1	924.3 - 941.8	70,367	1416.0	1405.4 - 1426.6
England ^d	165,905	266.3	265.0 - 267.6	599,090	961.5	959.0 - 964.0	939,063	1493.5	1490.4 - 1496.6

* All malignant neoplasms excluding non-melanoma skin cancer **Age-standardised proportion to the European Standard Population. Age-standardised proportions are shown per 100,000 population.

1 Cancer survivors were assigned a cancer network based on their postcode of residence at time of diagnosis. It was not possible to map all patients to a cancer network due to incomplete or missing postcodes, therefore the sum of the patients from the English and Scottish cancer networks may be less than the total number of patients for the respective countries.

Source: One, Five and Ten-year Cancer Prevalence, UK, 31st December 2006, NCIN, Thames Cancer Registry and MacMillan Cancer Support

Appendix 5: Procedures by hospital trust, 2008-2009 and 2009-2010

Trust Name	Major Urological Procedures		Major Oesophagogastric Procedures	
	2008-2009	2009-2010	2008-2009	2009-2010
East Midlands SHA Total				
Chesterfield Royal Hospital NHS Foundation Trust	2	3	0	3
Derby Hospitals NHS Foundation Trust	71	82	46	47
Kettering General Hospital NHS Trust	4	1	4	3
Northampton General Hospital NHS Trust	70	63	36	22
Nottingham University Hospitals NHS Trust	80	139	122	130
Sherwood Forest Hospitals NHS Foundation Trust	2	2	1	1
United Lincolnshire Hospitals NHS Trust	92	86	13	17
University Hospitals Of Leicester NHS Trust	58	56	40	65
East of England SHA Total				
Basildon and Thurrock University Hospitals NHS Foundation Trust	18	13	12	7
Bedford Hospital NHS Trust	2	1	2	0
Cambridge University Hospitals NHS Foundation Trust	232	237	105	79
East and North Hertfordshire NHS Trust	39	83	15	13
Essex Rivers Healthcare NHS Trust	57	71	6	0
Hinchingbrooke Health Care NHS Trust	0	0	0	0
Ipswich Hospital NHS Trust	3	8	16	9
James Paget University Hospitals NHS Foundation Trust	6	4	6	4
Luton and Dunstable Hospital NHS Foundation Trust	17	16	19	9
Mid Essex Hospital Services NHS Trust	5	5	31	46
Norfolk and Norwich University Hospital NHS Trust	125	172	83	63
Papworth Hospital NHS Foundation Trust	0	0	0	1
Peterborough and Stamford Hospitals NHS Foundation Trust	2	5	4	1
Southend University Hospital NHS Foundation Trust	41	39	3	2
The Princess Alexandra Hospital NHS Trust	9	4	2	2
The Queen Elizabeth Hospital King's Lynn NHS Trust	2	6	6	5
West Hertfordshire Hospitals NHS Trust	60	43	23	34
West Suffolk Hospitals NHS Trust	6	4	1	3
London SHA Total				
Barking, Havering and Redbridge Hospitals NHS Trust	68	71	40	60
Barnet and Chase Farm Hospitals NHS Trust	84	111	4	0
Barts and The London NHS Trust	4	5	71	66
Chelsea and Westminster Hospital NHS Foundation Trust	5	4	39	36
Ealing Hospital NHS Trust	3	0	1	0
Epsom and St Helier University Hospitals NHS Trust	4	10	4	0
Great Ormond Street Hospital For Children NHS Trust	2	8	3	6
Guy's and St Thomas' NHS Foundation Trust	163	307	93	82
Homerton University Hospital NHS Foundation Trust	0	0	4	13
Imperial College Healthcare NHS Trust	189	171	73	59
King's College Hospital NHS Foundation Trust	137	103	35	22
Kingston Hospital NHS Trust	3	5	0	1
Mayday Healthcare NHS Trust	4	1	0	1
Newham University Hospital NHS Trust	2	3	0	0
North Middlesex University Hospital NHS Trust	11	5	4	2
North West London Hospitals NHS Trust	33	47	3	5
Royal Brompton and Harefield NHS Trust	0	0	2	0
Royal Free Hampstead NHS Trust	15	14	5	6
Royal National Orthopaedic Hospital NHS Trust	2	0	0	0
South London Healthcare NHS Trust	10	7	7	13
St George's Healthcare NHS Trust	61	76	6	6
The Hillingdon Hospital NHS Trust	0	1	1	2
The Lewisham Hospital NHS Trust	0	0	0	1
The Royal Marsden NHS Foundation Trust	173	205	84	90
The Whittington Hospital NHS Trust	4	1	1	2
University College London Hospitals NHS Foundation Trust	73	103	49	29
West Middlesex University Hospital NHS Trust	5	2	0	2
Whipps Cross University Hospital NHS Trust	75	80	2	2

Trust Name	Major Urological Procedures		Major Oesophagogastric Procedures	
	2008-2009	2009-2010	2008-2009	2009-2010
North East SHA Total				
City Hospitals Sunderland NHS Foundation Trust	114	122	4	1
County Durham and Darlington NHS Foundation Trust	1	3	3	1
Gateshead Health NHS Foundation Trust	3	3	2	4
North Tees and Hartlepool NHS Foundation Trust	8	6	2	4
Northumbria Healthcare NHS Foundation Trust	1	3	7	9
South Tees Hospitals NHS Foundation Trust	122	126	80	60
South Tyneside NHS Foundation Trust	0	0	1	0
The Newcastle Upon Tyne Hospitals NHS Foundation Trust	161	175	159	144
North West SHA Total				
Aintree University Hospitals NHS Foundation Trust	3	6	53	48
Blackpool, Fylde and Wyre Hospitals NHS Foundation Trust	7	6	30	6
Bolton Hospitals NHS Trust	5	7	3	2
Central Manchester University Hospitals NHS Foundation Trust	39	99	23	29
Christie Hospital NHS Foundation Trust	54	74	1	0
Countess Of Chester Hospital NHS Foundation Trust	1	4	7	3
East Cheshire NHS Trust	2	0	3	3
East Lancashire Hospitals NHS Trust	36	42	37	23
Lancashire Teaching Hospitals NHS Foundation Trust	95	130	21	78
Liverpool Women's NHS Foundation Trust	1	2	0	0
Mid Cheshire Hospitals NHS Foundation Trust	4	7	3	4
North Cumbria Acute Hospitals NHS Trust	1	1	28	37
Pennine Acute Hospitals NHS Trust	50	9	73	45
Royal Liverpool and Broadgreen University Hospitals NHS Trust	94	91	11	9
Royal Liverpool Childrens NHS Trust	1	1	1	2
Salford Royal NHS Foundation Trust	59	42	42	49
Southport and Ormskirk Hospital NHS Trust	6	8	6	4
St Helens and Knowsley Hospitals NHS Trust	9	31	0	3
Stockport NHS Foundation Trust	93	90	18	5
Tameside Hospital NHS Foundation Trust	0	0	25	22
The Cardiothoracic Centre - Liverpool NHS Trust	0	0	101	104
University Hospital Of South Manchester NHS Foundation Trust	90	63	32	17
University Hospitals Of Morecambe Bay NHS Trust	4	3	29	5
Warrington and Halton Hospitals NHS Foundation Trust	0	1	8	3
Wirral University Teaching Hospital NHS Foundation Trust	45	78	5	2
Wrightington, Wigan and Leigh NHS Foundation Trust	3	2	2	3
South Central SHA Total				
Basingstoke and North Hampshire NHS Foundation Trust	4	6	12	16
Buckinghamshire Hospitals NHS Trust	78	70	2	0
Hampshire PCT	0	0	1	0
Heatherwood and Wexham Park Hospitals NHS Foundation Trust	84	137	3	0
Horton Nhs Treatment Centre	1	0	0	0
Isle of Wight NHS PCT	0	4	2	0
Milton Keynes Hospital NHS Foundation Trust	4	2	1	2
Oxford Radcliffe Hospitals NHS Trust	54	85	115	93
Portsmouth Hospitals NHS Trust	80	55	44	48
Royal Berkshire NHS Foundation Trust	87	116	24	14
Southampton University Hospitals NHS Trust	63	82	74	86
Winchester and Eastleigh Healthcare NHS Trust	9	8	2	0
South East Coast SHA Total				
Ashford and St Peter's Hospitals NHS Trust	51	84	4	2
Brighton and Sussex University Hospitals NHS Trust	60	66	52	40
Dartford and Gravesham NHS Trust	21	15	2	2
East Kent Hospitals University NHS Foundation Trust	84	124	9	4
East Sussex Hospitals NHS Trust	61	68	2	5
Frimley Park Hospital NHS Foundation Trust	4	10	7	4
Maidstone and Tunbridge Wells NHS Trust	48	82	71	90
Medway NHS Foundation Trust	61	98	2	1
Royal Surrey County Hospital NHS Trust	54	72	61	70
Surrey and Sussex Healthcare NHS Trust	19	13	0	2
Western Sussex Hospitals NHS Trust	18	22	16	15

Trust Name	Major Urological Procedures		Major Oesophagogastric Procedures	
	2008-2009	2009-2010	2008-2009	2009-2010
South West SHA Total				
Dorset County Hospital NHS Foundation Trust	13	5	1	6
Gloucestershire Hospitals NHS Foundation Trust	79	81	48	52
Great Western Hospitals NHS Foundation Trust	1	2	1	3
North Bristol NHS Trust	227	235	7	8
Northern Devon Healthcare NHS Trust	3	0	2	1
Plymouth Hospitals NHS Trust	75	92	49	94
Poole Hospital NHS Foundation Trust	2	1	1	3
Royal Cornwall Hospitals NHS Trust	6	1	20	26
Royal Devon and Exeter NHS Foundation Trust	80	88	48	47
Royal United Hospital Bath NHS Trust	50	55	8	5
Salisbury NHS Foundation Trust	49	46	1	0
South Devon Healthcare NHS Foundation Trust	7	8	1	2
Taunton and Somerset NHS Foundation Trust	44	58	3	3
The Royal Bournemouth and Christchurch Hospitals NHS Foundation Trust	56	96	49	38
United Bristol Healthcare NHS Trust	3	7	97	97
Weston Area Health NHS Trust	1	1	0	1
Yeovil District Hospital NHS Foundation Trust	2	0	1	0
West Midlands SHA Total				
Birmingham Children's Hospital NHS Foundation Trust	0	2	3	2
Birmingham Women's NHS Foundation Trust	2	2	0	0
Burton Hospitals NHS Trust	0	0	1	2
Dudley Group Of Hospitals NHS Trust	0	5	79	52
George Eliot Hospital NHS Trust	2	3	3	2
Heart Of England NHS Foundation Trust	211	183	60	74
Hereford Hospitals NHS Trust	0	2	7	0
Mid Staffordshire NHS Foundation Trust	3	1	1	0
Sandwell and West Birmingham Hospitals NHS Trust	8	10	9	4
Shrewsbury and Telford Hospital NHS Trust	50	59	11	3
South Warwickshire General Hospitals NHS Trust	1	0	0	1
The Midlands Nhs Treatment Centre	1	1	0	0
The Royal Orthopaedic Hospital NHS Foundation Trust	0	1	0	0
The Royal Wolverhampton Hospitals NHS Trust	69	105	12	3
University Hospital Birmingham NHS Foundation Trust	151	154	79	83
University Hospital Of North Staffordshire NHS Trust	48	45	100	73
University Hospitals Coventry and Warwickshire NHS Trust	106	55	76	68
Walsall Hospitals NHS Trust	1	6	4	4
Worcestershire Acute Hospitals NHS Trust	95	95	3	0
Yorkshire and The Humber SHA Total				
Airedale NHS Trust	2	3	3	1
Barnsley Hospital NHS Foundation Trust	3	1	2	1
Bradford Teaching Hospitals NHS Foundation Trust	116	93	62	57
Calderdale and Huddersfield NHS Foundation Trust	5	7	7	5
Doncaster and Bassetlaw Hospitals NHS Foundation Trust	7	6	55	50
Harrogate and District NHS Foundation Trust	3	0	0	0
Hull and East Yorkshire Hospitals NHS Trust	100	130	76	74
Leeds Teaching Hospitals NHS Trust	143	153	122	142
Mid Yorkshire Hospitals NHS Trust	78	90	5	19
Northern Lincolnshire and Goole Hospitals NHS Foundation Trust	25	1	31	1
Scarborough and North East Yorkshire Health Care NHS Trust	0	1	5	1
Sheffield Childrens NHS Foundation Trust	0	1	1	3
Sheffield Teaching Hospitals NHS Foundation Trust	151	174	68	91
The Rotherham NHS Foundation Trust	3	4	2	0
York Hospitals NHS Foundation Trust	17	5	23	7

Source: Hospital Episode Statistics, National Cancer Services Analytical Team (NatCanSAT).

Data Sources

For more information about cancer statistics and their definitions, please refer to our ‘What cancer statistics are available, and where can I find them?’. This is available on the NCIN website

<http://www.ncin.org.uk/home.aspx>

- 1) Cancer Registrations in England 2008, Statistical Bulletin, Office for National statistics
<http://www.statistics.gov.uk/pdfdir/can1010.pdf>
- 2) The future burden of cancer in England: incidence and numbers of new patients in 2020, H Møller, L Fairley, V Coupland, C Okello, M Green, D Forman, B Møller and F Bray, British Journal of Cancer (2007) 96, 1484–1488. doi:10.1038/sj.bjc.6603746
www.nature.com/bjc/journal/v96/n9/full/6603746a.html
- 3) National Cancer Intelligence Network (NCIN), UK Cancer Information Service (UKCIS)
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