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Outline of Uterine Cancer in the United Kingdom: Incidence, Mortality and Survival

Gynaecological Cancer SSCRG

Authors
This report has been produced by the Public Health England Knowledge and Intelligence Team (PHE KIT) for the East Midlands (formerly part of Trent Cancer Registry) the National Cancer Intelligence Network's lead for gynaecological cancers.

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Contents

Table of Figures

Table of Tables

Foreword

This report presents the latest time trends, trends by age, and regional variations in incidence, mortality and survival for malignant uterine tumours in the UK. There is also a separate section on these cases stratified according to their main morphological groups. This report has been produced by Public Health England's Knowledge and Intelligence Team (East Midlands) (formerly part of Trent Cancer Registry), the NCIN's lead for gynaecological cancers, on behalf of the NCIN Gynaecological Site Specific Clinical Reference Group (SSCRG). These data should be of interest to all those involved in the commissioning and delivery of services to prevent, diagnose, and treat uterine cancer.

Further information on uterine cancer is available from the Gynaecological Cancer Hub **www.ncin.org.uk/gynaehub** **.** This is a web-based resource providing data and intelligence on a range of gynaecological cancers. The Hub is aimed at a wide range of professionals working in the field, including NHS providers, commissioners, Strategic Cancer Networks, charities, gynaecologists and nurse specialists. It also provides information and helpful links for patients and the general public who would like to understand more about these cancers.

More information on the work of the NCIN, including other publications and cancer information tools is available from the NCIN website (**http://www.ncin.org.uk**).
Any feedback on the content of this report would be most welcome and should be sent to Jason Poole. Suggestions for further work would be particularly well received.

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Executive Summary

The key findings are

- There were on average just over 7,800 cases of uterine cancer diagnosed annually between 2007 and 2009 in the UK. This makes uterine cancer the fourth most common cancer in women and the most common gynaecological cancer. Between 2008 and 2010 there was an average of just over 1,800 deaths from uterine cancer, making uterine cancer the ninth most common cause of cancer death in women in the UK and second most common gynaecological cancer death after ovarian cancer.

- In the UK, the incidence rate has increased by 43% since 1993-1995, from 13.8 per 100,000 female population to 19.7 in 2007-2009. Rates are highest in Wales and Northern Ireland at 22.5 and 21.8 per 100,000, respectively. Mortality has also increased by 14% from 3.2 to 3.7 per 100,000.

- Recent results show that incidence rates are particularly high in some areas of England, Northern Ireland and Scotland. Likewise, mortality rates are high in some areas of England and Scotland. There is variation in survival rates across the UK with most notable differences for 5-year survival.

- Almost two thirds of uterine cancers occur in women aged 55-75 with a peak in the rates for women in their early 70s. Obesity is a significant risk factor for adenocarcinoma of the endometrium, with the effect more pronounced in postmenopausal women.

- In the UK, 77% of uterine cancers are endometrioid adenocarcinomas and 7% are clear cell and papillary serous carcinoma. The latter has increased since 1993 whilst 'miscellaneous & unspecified' cases have decreased. This may indicate an improvement in the coding of tumours. Some tumour groups are most common in either younger women (sarcomas) or older women (clear cell and papillary serous carcinoma and unclassified or unspecified tumours)

- The mortality rate increases with age, with almost two thirds of deaths occurring in women aged 70 and over. As with many cancers, later stage disease at presentation is more common with increasing age and is associated with poorer survival. Poorer general health with comorbidities in older patients may prohibit the use of effective uterine cancer treatments.

- Overall, one- and five- year survival in the UK have increased since 1993-1995 by 5.9 percentage points for one-year survival to 91.2% in 2007-2009, and by 5.6 percentage points for five-year survival to 78.5% in 2003-2005. The increases for Northern Ireland were almost twice those for the UK as a whole.

- One-year survival has particularly increased over the time period of study in women aged 55 and over. Similarly, five-year survival has increased for women in their 60s, 70s and 80s. Despite this, survival remains significantly worse in older women.

Uterine Cancer Incidence

Cancer incidence figures for the UK are presented here from 1993 onwards as data for the Northern Ireland cancer registry were not routinely collected before this date. As for the majority of cancers, the incidence of uterine cancer increases with age. Incidence rates in this section are therefore age-standardised to take account of differing population age profiles between different areas and over time. Please see Appendix 1 section 'age standardisation' for details.

The definition of uterine cancer used throughout this report includes all types of malignant tumour arising from the uterus. It is recommended that Appendix 1 section 'Definition of uterine cancer' is read for further details.

Trends in incidence, United Kingdom, 1993-1995 to 2007-2009

Between 2007 and 2009 there was an average of just over 7,800 cases diagnosed annually in the UK. This makes uterine cancer the fourth most common cancer[1] in women and the most common gynaecological cancer ahead of ovarian cancer[2] and cervical cancer[3] (20,941 and 9,329 between 2007 and 2009, respectively). The age-standardised incidence rate in the UK has increased by 43%, from 13.8 per 100,000 female population in 1993-1995 to 19.7 in 2007-2009. Since 1993-1995, England, Scotland and Wales had similar increases in incidence as the UK; however, in Northern Ireland incidence has increased by 64%.

When comparing across countries, historically Wales has consistently higher incidence when compared to the UK average. In 2007-2009, both Wales and Northern Ireland had higher incidence rates than the UK average; 22.5 and 21.8 per 100,000 female population compared to 19.7, respectively. Since 2005-2007, the incidence rate in Scotland has been lower than the UK average; in 2007-2009 the rate was 18.3 per 100,000 female population. The England rate has been very similar to the UK average given that around 83% of diagnoses are for these residents.

Unopposed oestrogen is mainly a risk factor for type 1 endometrioid cancer of the uterus, the most common form of uterine cancer [4]. Unopposed oestrogen is the presence of this hormone in the body without the inhibiting effects of progesterone, another hormone which regulates the female reproductive organs. There is a lower risk of developing uterine cancer when progesterone is present naturally, such as during pregnancy (nulliparity is a risk factor) and the luteal phase of a normal menstrual cycle, or as a form of medication. In light of this, the oral contraceptive, both the combined and the progesterone only pill, and other progesterone-containing forms of contraception, may protect against the development of uterine cancer. This reduction is most effective for younger women and for a limited number of years after usage has stopped [5] [6]. Although oral contraceptive use has increased substantially since the 1960s, it does not appear to have had a similar stabilising effect on the incidence of uterine cancer as it has for ovarian cancer [2]; rather, the incidence of uterine cancer has been steadily increasing.

The most significant risk factor for oestrogen related uterine cancers is being overweight (Body Mass Index (BMI) of 25-30) or obese (BMI >30), as this has been found to lead to increased levels of oestrogen in the body [5] [7] [8]. In England, obesity prevalence has increased from 16% of women in 1993 to 26% in 2011, although this trend appears to have slowed in recent years [9]. There have been similar increases in obesity among women of all ages in Scotland from 26% in 2003 to 29% in 2010 [10]. Obesity prevalence has also increased in Northern Ireland, from around 19% in 1997 to 22% of women in 2011-2012 [11] and in Wales from 18% in 2003-2004 to 22% of women in 2011 [12]. While increasing trends in obesity coincide with increasing uterine cancer incidence, the differences in obesity prevalence between the UK countries do not appear to explain the differences in incidence

rates. Scotland has the lowest rate of uterine cancer incidence than elsewhere in the UK but some of the highest rates of obesity, whereas for Wales and Northern Ireland the opposite is true.

There are other clinical factors which may underlie changing trends in uterine cancer incidence, such as an increased use of tamoxifen to treat breast cancer, which increases the risk of developing a malignancy of the uterus in women treated with this hormone therapy [7].

There have also been changes in the rate of hysterectomy for sterilisation or treatment of conditions such as heavy menstrual bleeding, with a decline in these procedures to treat such conditions since the mid 1990s in English trusts [13]. This means that more postmenopausal women still have a uterus and therefore remain at risk of developing the disease, which may account for the increase in incidence. In the past, fewer women would have been at risk due to higher hysterectomy rates. However, it has not been possible to exclude women from the calculation of incidence rates, who are no longer at risk due to having had their womb removed. This means that historical incidence rates underestimate the rate of uterine cancer, more so than in more recent years [14]. If it was possible to remove hysterectomised women, this may result in a less pronounced increase in the incidence rates. Notwithstanding, the increasing use of alternative treatments for menorrhagia over the past 20 years, including the extensive use of the intrauterine progesterone contraceptive device (Mirena coil) and endometrial ablative techniques, will have had an inhibitory impact on the rate of endometrial carcinoma, to at least partially counteract the impact of falling hysterectomy rates.

Variation in the incidence of uterine cancer is most likely due to variation in the prevalence of both risk and protective factors historically as well as the prevalence of hysterectomised women (there remains large variation in the rate of hysterectomies in England [15]). This variation may explain some of the geographical differences in incidence and mortality presented at UK country level and sub-national level throughout the report.

Table 1 Trends in incidence by UK country, 1993-1995 to 2007-2009

Year	United Kingdom			England			Scotland		
	Number of cases	ASIR	95% CI	Number of cases	ASIR	95% CI	Number of cases	ASIR	95% CI
1993-1995	14,843	13.8	(13.5, 14.0)	12,369	13.8	(13.5, 14.0)	1,236	13.0	(12.2, 13.8)
1994-1996	15,260	14.1	(13.8, 14.3)	12,697	14.0	(13.7, 14.3)	1,319	14.0	(13.2, 14.8)
1995-1997	15,662	14.4	(14.2, 14.6)	12,993	14.3	(14.0, 14.6)	1,407	14.8	(14.0, 15.6)
1996-1998	16,027	14.6	(14.4, 14.9)	13,298	14.5	(14.3, 14.8)	1,451	15.2	(14.4, 16.0)
1997-1999	16,487	15.0	(14.8, 15.3)	13,625	14.9	(14.6, 15.1)	1,484	15.4	(14.6, 16.3)
1998-2000	17,209	15.5	(15.3, 15.8)	14,291	15.5	(15.2, 15.7)	1,460	15.1	(14.3, 16.0)
1999-2001	17,993	16.1	(15.9, 16.4)	14,923	16.0	(15.8, 16.3)	1,529	15.8	(15.0, 16.6)
2000-2002	18,434	16.4	(16.1, 16.6)	15,353	16.3	(16.1, 16.6)	1,542	15.6	(14.8, 16.5)
2001-2003	18,936	16.7	(16.4, 16.9)	15,787	16.7	(16.4, 16.9)	1,572	15.7	(14.9, 16.6)
2002-2004	19,367	16.9	(16.7, 17.2)	16,129	16.9	(16.6, 17.2)	1,599	15.9	(15.1, 16.8)
2003-2005	20,296	17.7	(17.4, 17.9)	16,882	17.6	(17.3, 17.9)	1,702	16.9	(16.1, 17.8)
2004-2006	20,900	18.1	(17.8, 18.3)	17,408	18.0	(17.8, 18.3)	1,720	16.9	(16.1, 17.8)
2005-2007	21,990	18.9	(18.6, 19.2)	18,329	18.9	(18.6, 19.2)	1,763	17.0	(16.2, 17.9)
2006-2008	22,788	19.4	(19.1, 19.6)	18,947	19.3	(19.1, 19.6)	1,819	17.3	(16.5, 18.1)
2007-2009	23,454	19.7	(19.4, 19.9)	19,399	19.6	(19.3, 19.9)	1,959	18.3	(17.5, 19.1)

Year	Wales			Northern Ireland		
	Number of cases	ASIR	95% CI	Number of cases	ASIR	95% CI
1993-1995	888	15.4	(14.3, 16.5)	350	13.3	(11.9, 14.8)
1994-1996	900	15.5	(14.4, 16.6)	344	13.1	(11.7, 14.6)
1995-1997	917	15.6	(14.5, 16.7)	345	13.1	(11.7, 14.6)
1996-1998	927	15.9	(14.8, 17.0)	351	13.2	(11.8, 14.7)
1997-1999	1,012	17.5	(16.4, 18.7)	366	13.6	(12.2, 15.1)
1998-2000	1,067	18.1	(17.0, 19.3)	391	14.4	(13.0, 16.0)
1999-2001	1,118	19.0	(17.9, 20.3)	423	15.5	(14.0, 17.1)
2000-2002	1,081	17.9	(16.8, 19.1)	458	16.6	(15.1, 18.3)
2001-2003	1,081	17.8	(16.7, 18.9)	496	17.8	(16.2, 19.5)
2002-2004	1,124	18.2	(17.1, 19.4)	515	18.1	(16.5, 19.8)
2003-2005	1,179	19.1	(18.0, 20.3)	533	18.6	(17.0, 20.3)
2004-2006	1,236	20.3	(19.1, 21.5)	536	18.3	(16.7, 19.9)
2005-2007	1,322	21.3	(20.1, 22.6)	576	19.6	(18.0, 21.4)
2006-2008	1,403	22.4	(21.2, 23.7)	619	20.8	(19.1, 22.5)
2007-2009	1,435	22.5	(21.3, 23.8)	661	21.8	(20.1, 23.6)

ASIR is (directly) age-standardised incidence rate per 100,000 female population

95% CI is 95% confidence interval for calculated rate

Source: UK Cancer Information Service

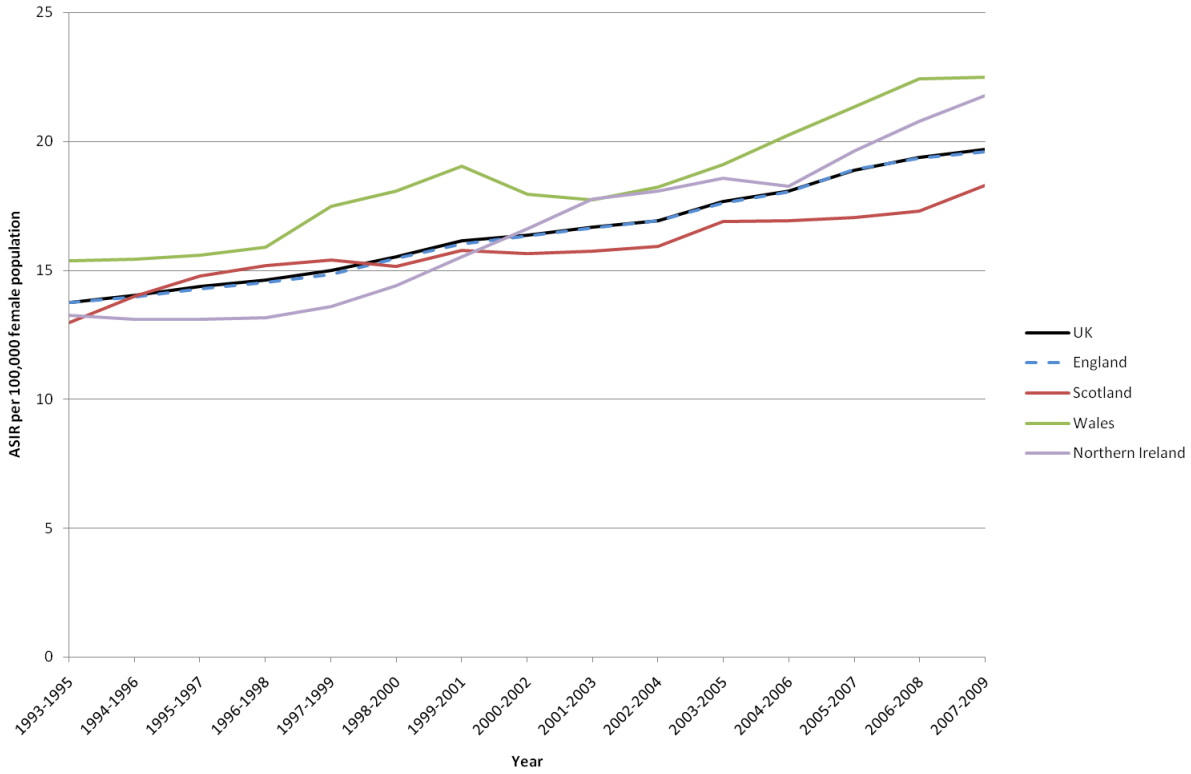

Figure 1 Trends in incidence by UK country, 1993-1995 to 2007-2009

Source: UK Cancer Information Service

In addition to the tables of figures showing 95% confidence intervals, funnel plots are also presented in the following sections. These funnel plots are a visual tool which allow an interpretation of data points falling outside of the two and three standard deviation (SD) control limits around the national average, represented by the horizontal line. Further details on funnel plots are given in Appendix 1.

For England, the geographies presented at Primary Care Trust (PCT) and Cancer Network (CN) level are defunct NHS structures. Since April 2013 these have been replaced with new organisations. However, in the absence of established boundaries for these new organisations we have only been able to present sub-national data for the old organisations.

Incidence by health authority, 2007-2009

There is strong evidence that Powys Teaching Health Board (HB) and Abertawe Bro Morgannwg University HB in Wales, and Southern Health and Social Care Trust (HSCT) (indicated by 4 in the funnel plot below) in Northern Ireland, and Primary Care Trusts (PCTs) in the Midlands have higher rates compared to the UK average. There is also evidence that Cwm Taf HB in Wales, and several PCTs in the south and north of England have higher incidence than the UK average (see Appendix 2, table A2.1 for detail).

There is strong evidence that rates are lower in the Greater Glasgow and Clyde Health Board (HB) (indicated by G in the funnel plot below) in Scotland and PCTs in the Midlands and the north of England. There is also evidence that rates are lower than the UK average in several other HBs in Scotland as well as several PCTs in England. (See Appendix 2, table A2.1 for detail)

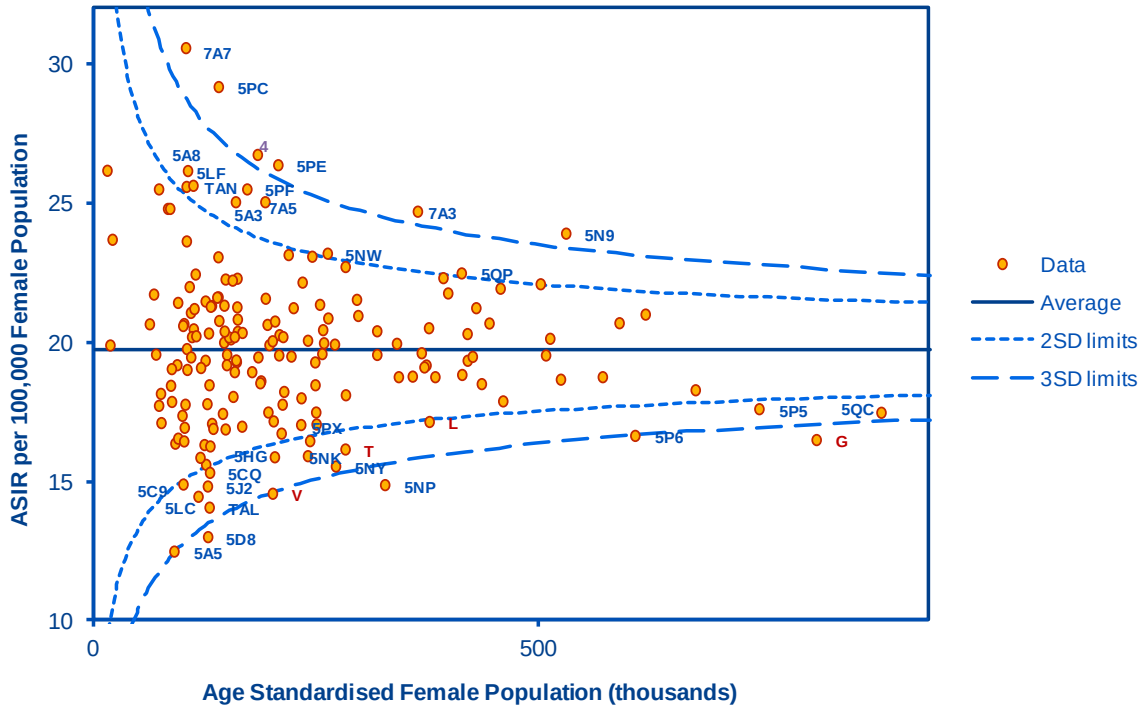

Figure 2 Funnel plot of incidence by health authority, 2007-2009

Source: UK Cancer Information Service

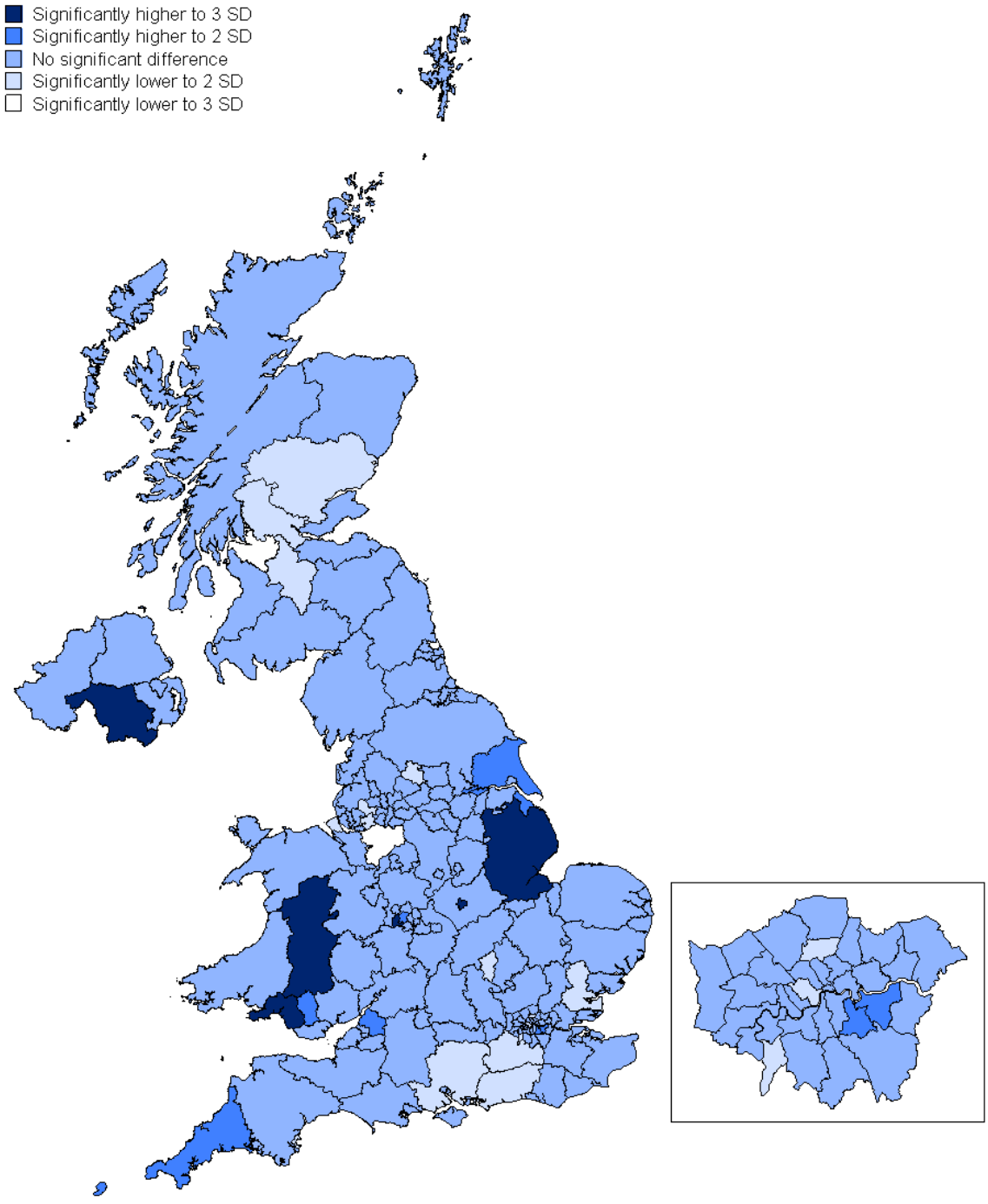

Figure 3 Map of incidence by health authority, 2007-2009

NB: The groupings in the map relate to the significant differences displayed in the funnel plots above

Incidence by Cancer Network, 2007-2009

Incidence rate patterns among Cancer Networks (CNs) broadly reflect those for PCTs. In 2007-2009, there is strong evidence that the South Wales CN and East Midlands CN have high incidence rates compared to the UK average at 23.2 and 22.0 per 100,000 female population, respectively. There is also some evidence that Humber & Yorkshire Coast, South East London and Greater Midlands CNs as well as Northern Ireland (comprising a single CN) have incidence rates higher than the UK average.

There is strong evidence that the West of Scotland CN has lower incidence rates than the UK average. There is also evidence that South West London, Surrey, West Sussex & Hampshire, Central South Coast, Merseyside & Cheshire, Yorkshire, Greater Manchester & Cheshire and North of England CNs have lower incidence rates than the UK average with rates between 17.0 and 18.0 per 100,000 female population.

Table 2 Incidence by Cancer Network, 2007-2009

Cancer Network	Total Cases	ASIR	95% CI
United Kingdom	**23,454**	**19.7**	**(19.4, 19.9)**
England	**19,399**	**19.6**	**(19.3, 19.9)**
3 Counties	441	19.1	(17.2, 21.1)
Anglia	1,139	20.6	(19.3, 21.9)
Arden	389	19.6	(17.6, 21.8)
Avon, Somerset & Wiltshire	811	20.5	(19.1, 22.1)
Central South Coast	744	18.0	(16.7, 19.5)
Dorset	343	19.3	(17.1, 21.7)
East Midlands	1,709	22.0	(20.9, 23.1)
Essex	561	18.9	(17.3, 20.6)
Greater Manchester & Cheshire	1,019	18.2	(17.0, 19.3)
Greater Midlands	836	21.2	(19.7, 22.7)
Humber & Yorkshire Coast	492	22.2	(20.2, 24.3)
Kent & Medway	640	18.8	(17.3, 20.4)
Lancashire & South Cumbria	658	21.1	(19.5, 22.9)
Merseyside & Cheshire	747	18.3	(16.9, 19.7)
Mount Vernon	466	18.3	(16.6, 20.1)
North East London	454	21.2	(19.2, 23.3)
North London	465	19.4	(17.6, 21.3)
North of England	1,125	18.2	(17.1, 19.4)
North Trent	669	18.8	(17.3, 20.3)
North West London	558	19.6	(18.0, 21.4)
Pan Birmingham	710	21.1	(19.5, 22.8)
Peninsula	826	20.9	(19.4, 22.5)
South East London	517	22.2	(20.2, 24.3)
South West London	452	17.1	(15.5, 18.8)
Surrey, West Sussex & Hampshire	413	17.4	(15.7, 19.2)
Sussex	521	19.1	(17.4, 21.0)
Thames Valley	795	18.7	(17.4, 20.1)
Yorkshire	899	18.1	(16.8, 19.3)
Scotland	**1,959**	**18.3**	**(17.5, 19.1)**
North of Scotland	533	19.0	(17.3, 20.8)
South East Scotland	549	18.9	(17.3, 20.7)
West of Scotland	877	17.5	(16.3, 18.8)
Wales	**1,435**	**22.5**	**(21.3, 23.8)**
South Wales	1,125	23.2	(21.8, 24.7)
North Wales	310	20.1	(17.8, 22.7)
Northern Ireland	**661**	**21.8**	**(20.1, 23.6)**

ASIR is (directly) age-standardised incidence rate per 100,000 female population

95% CI is 95% confidence interval for calculated rate

Source: UK Cancer Information Service

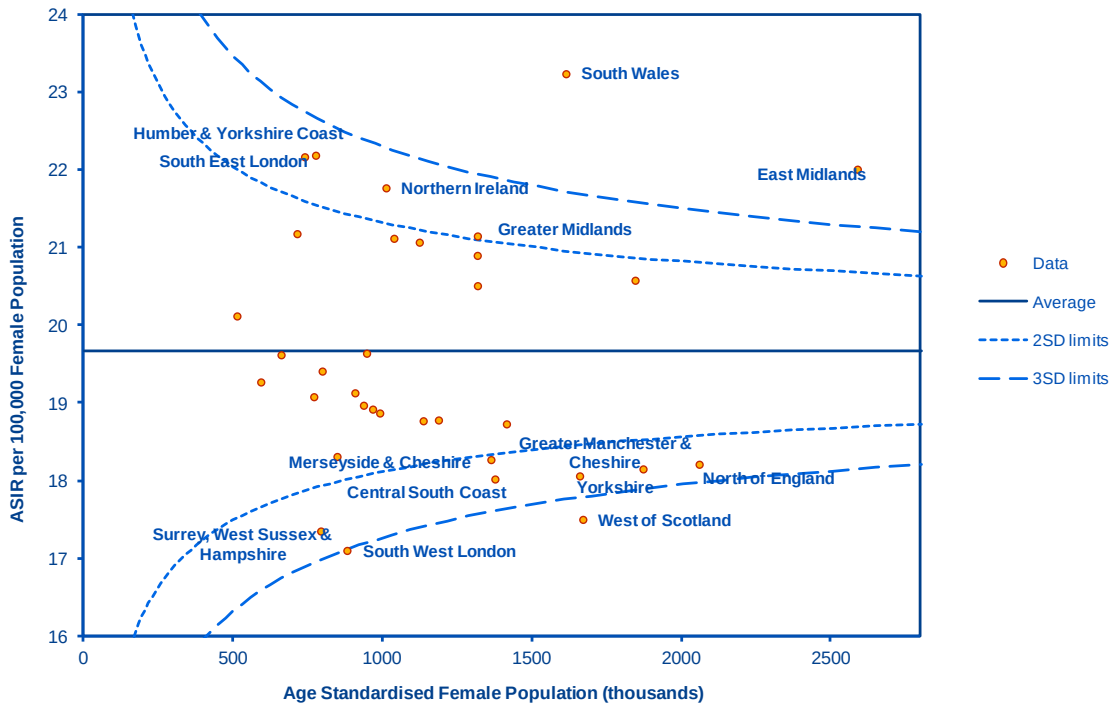

Figure 4 Funnel plot of incidence by Cancer Network, 2007-2009

Source: UK Cancer Information Service

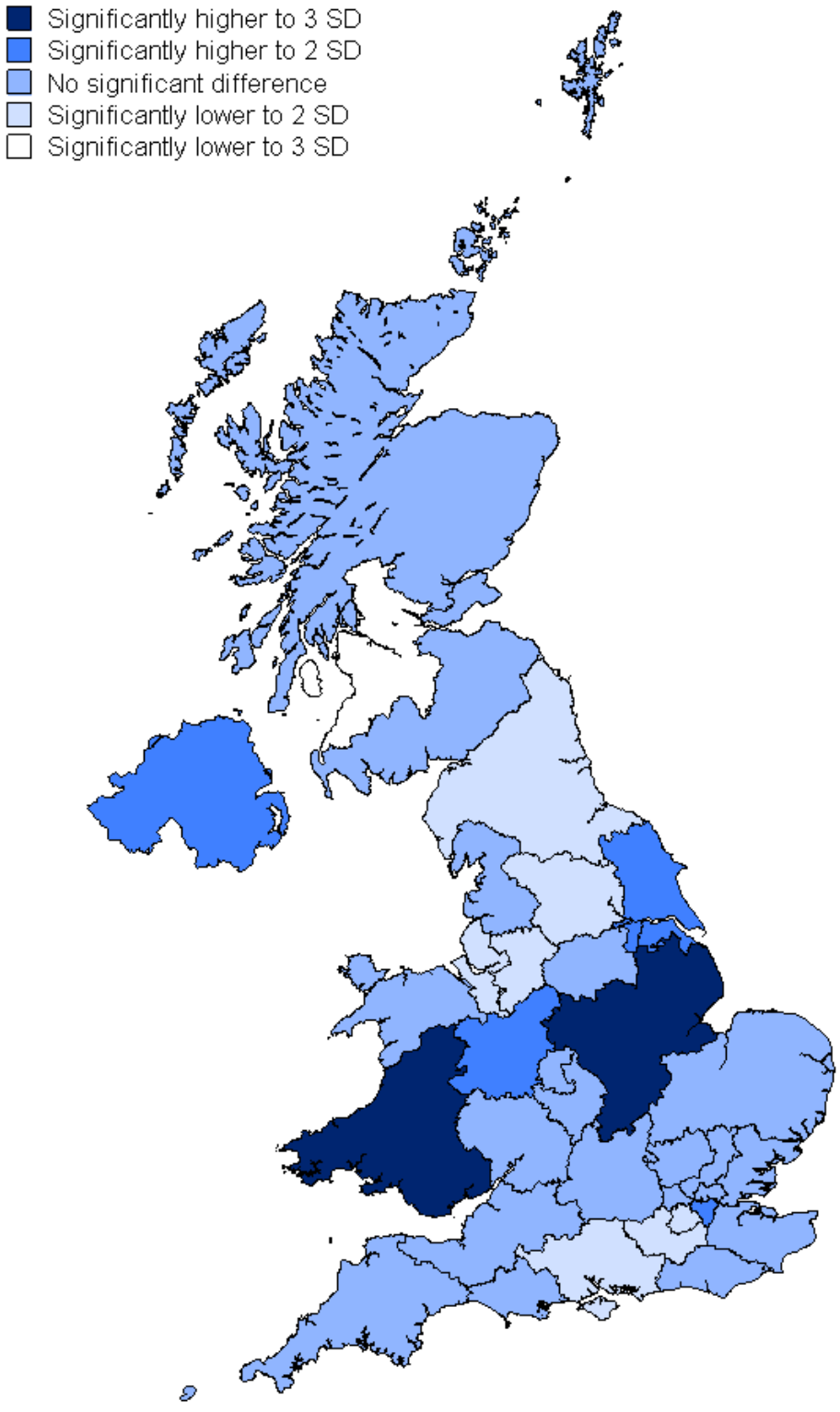

Figure 5 Map of incidence by CN, 2007-2009

NB: The groupings in the map relate to the significant differences displayed in the funnel plots above

Incidence by age, 2009

In 2009, in the UK generally, the age-specific incidence rates increased steeply from menopausal age (50+ age groups), peaking in women aged in their early 70s at 94.1 per 100,000 female population. There were over a thousand cases in each of the age groups between 55-59 and 70-75 (inclusive), accounting for almost two thirds of all uterine diagnoses. Rates steadily decreased after the age of 75. This pattern is similar across the UK countries (see Appendix 2, table A2.2 for detail).

Obesity is a significant risk factor for uterine cancer in women of all ages. However, this effect is more pronounced in postmenopausal women (ages 50+) than premenopausal women [8]. In postmenopausal obese women, there are higher concentrations of unopposed oestrogen. This is because a form of oestrogen is produced in body fat, and whilst the ovaries cease to produce oestrogen, natural progesterone production also ceases at the menopause and therefore there is an absence of natural progesterone to counteract the effects of this excess oestrogen. This is a major factor causing the steep rise in uterine cancer from around the age of 50-55.

In premenopausal women, the risk is more likely due to progesterone deficiency, caused by conditions such as polycystic ovary syndrome (PCOS) [8]. This condition is associated with the production of oestrogen in body fat, preventing the normal hormonal cycle of the ovaries and leading to an increased risk of infertility. Cases of endometrial adenocarcinoma in younger women are often associated with PCOS and obesity. Conversely, pregnancy is a high progesterone state, and protects against endometrial hyperplasia for a period of time. Endometrial hyperplasia is a pre-cancer change in the endometrium, which can progress to adenocarcinoma of the endometrium.

In the UK, the proportion of women who are overweight or obese is highest among women aged between 45 and 74 years of age, [16] which may partially explain why the incidence rates are highest in these age groups.

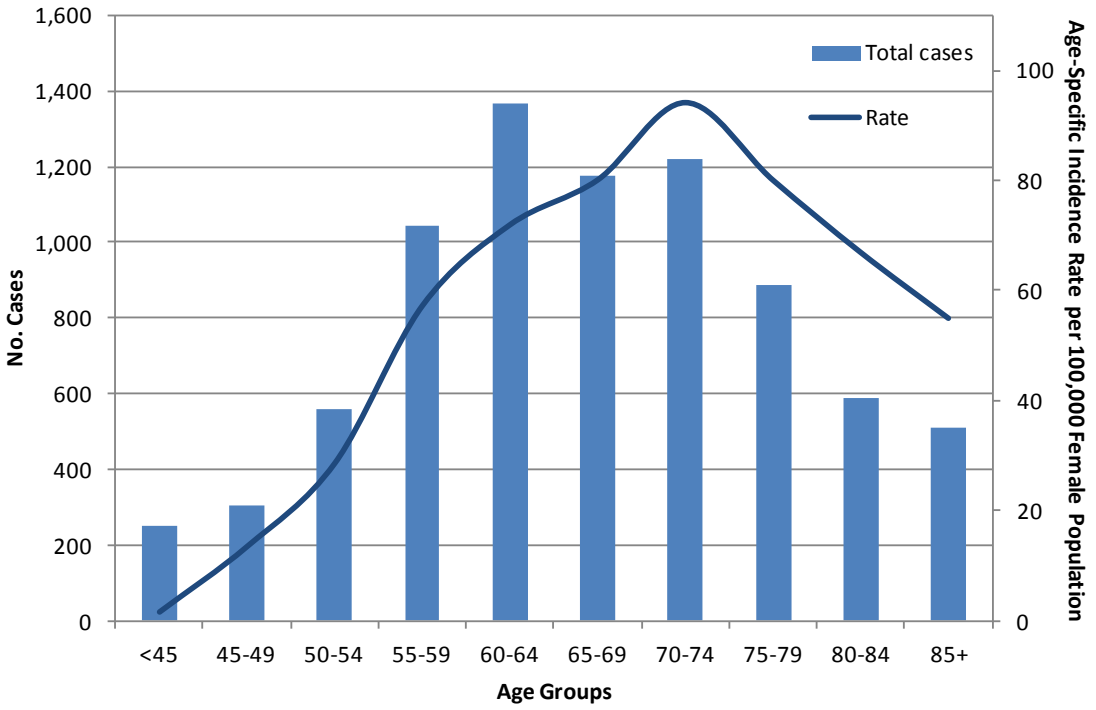

Figure 6 Age-specific incidence rates and number of cases by age, United Kingdom, 2009

Source: UK Cancer Information Service

Trends in incidence by age, United Kingdom, 1993-2009

Between 1993 and 2009, by broad age group (see figure 7 below), the incidence of uterine cancer has increased most in women aged 55-74, with an average increase in rates of 60% from 45.7 to 72.5 per 100,000 female population. For women aged 75+, rates increased by 43% from 49.1 to 70.4 per 100,000. Since 2004, incidence rates have been slightly higher in women aged 55-74 than older women. Rates have increased less markedly for women under the age of 55, from 4.2 to 4.8 per 100,000. In women under the age of 45, rates remain low, despite an increase of 36%. There were similar trends across the UK countries (see Appendix 2, table A2.2 for detail).

The rise in incidence rates among all age groups is most likely due to increasing obesity rates. However, the greater increase in incidence among women aged 55-74 may reflect a greater increase in obesity among this age group, but may also be partly explained by the increased use of Tamoxifen to treat breast cancers [7] as well as lower hysterectomy rates.

Table 3 Trends in age-specific incidence rates by age, United Kingdom, 1993 to 2009

Age Group	1993		1999		2004		2009	
	Total cases	Rate	Total cases	Rate	Total cases	Rate	Total cases	Rate
<45	187	1.0	170	1.0	205	1.2	251	1.4
45-49	235	11.8	212	11.2	249	12.5	302	13.3
50-54	407	25.8	558	27.9	522	28.0	560	28.5
55-59	625	41.9	769	48.2	998	50.9	1,045	57.1
60-64	664	45.2	843	57.4	1,022	66.0	1,366	71.9
65-69	695	48.3	837	61.0	1,024	73.2	1,178	80.0
70-74	709	50.6	730	56.7	852	67.5	1,218	94.1
75-79	495	47.1	690	56.8	734	66.3	886	79.9
80-84	426	50.3	423	56.0	554	59.4	586	66.8
85+	370	52.0	458	57.1	444	56.3	510	54.8

Rate is age-specific incidence rate per 100,000 female population

Source: UK Cancer Information Service

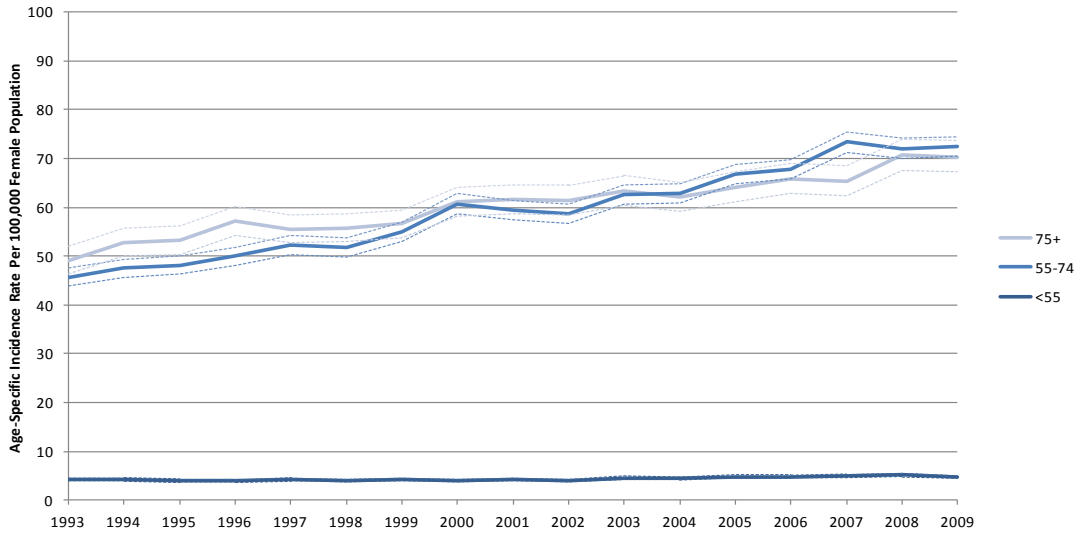

Figure 7 Trends in incidence by broad age group, United Kingdom, 1993 to 2009

Dotted line is 95% confidence interval for calculated rates

Source: UK Cancer Information Service

Comparing incidence and deprivation by Local Authority and UK country, 2007-2009

There is evidence of a relationship between deprivation (as measured by the income score of the Index of Multiple Deprivation) and incidence of uterine cancer among the LAs in England, with a correlation coefficient of 0.156 (p-value < 0.05). For example, the average incidence rate among the least deprived fifth of Local Authorities is 18.7 per 100,000 females, compared to 20.2 among the most deprived fifth Local Authorities in England. There is no evidence of a relationship between incidence and deprivation in the other UK countries. However, in Scotland there is a slightly higher incidence rate in the least deprived fifth of areas compared to the most deprived fifth of areas, 19.2 compared to 17.6 per 100,000 female population, respectively. This is particularly influenced by the high incidence rates in the least deprived LA of the Shetland Islands at 26.2 per 100,000.

In England, the slightly higher uterine cancer incidence rates in more deprived areas compared to the least deprived areas may be due to a higher prevalence of obesity (BMI >30) among more deprived populations; 19% of women were obese in the least deprived quintile compared to 30% in the most deprived quintile [9]. However, there was a greater proportion of overweight (BMI 25-30) women in the least deprived areas compared to the most deprived [9]. This may explain why the relationship between deprivation and uterine cancer incidence is not as strong as expected given the differences in obesity prevalence; the risk of uterine cancer is still higher in women who are overweight compared to women who are of normal weight [8].

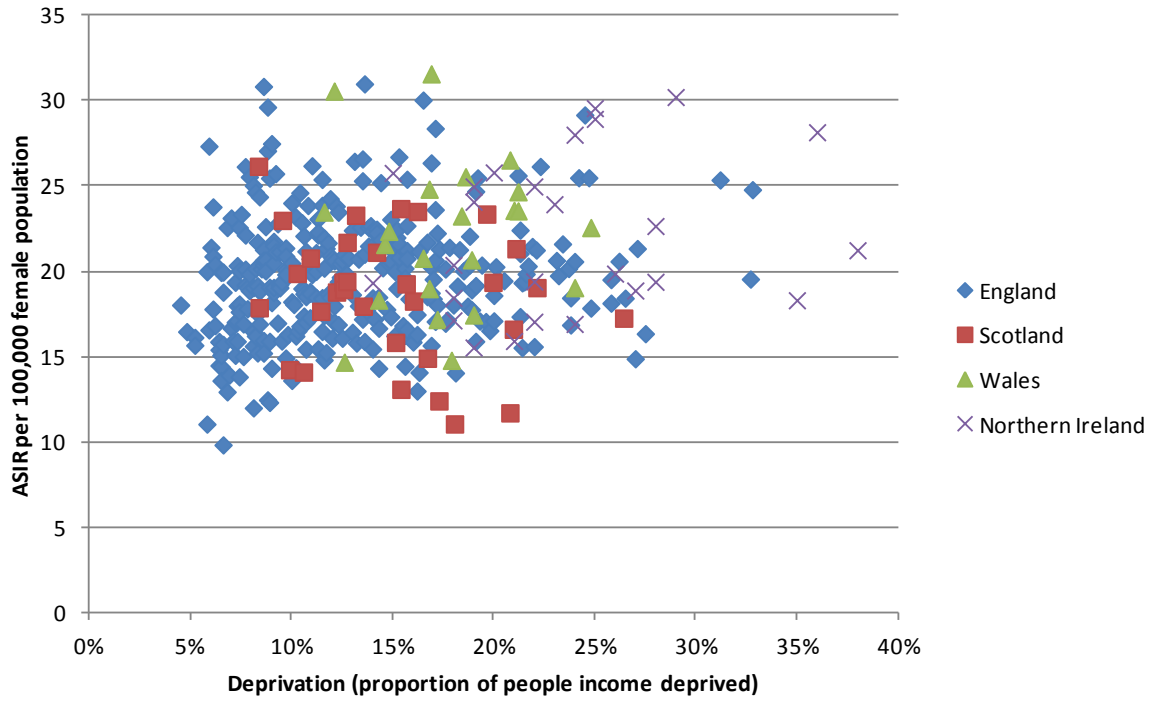

Figure 8 Scatter plot of incidence against deprivation by Local Authority and UK country, 2007-2009

Source: UK Cancer Information Service

Morphology

In this section uterine cancer cases have been grouped by the morphological type of the tumour. For uterine cancer, analysis by morphological grouping is both clinically and epidemiologically relevant. However, research has shown that there are differences in the aetiology and prognosis for some tumour morphologies which is why clear cell and papillary serous carcinomas have been grouped together and separated from other adenocarcinomas [4]. Other tumour types have been grouped where numbers are too small to produce sensible results. Figures in this section may not be the same as figures in the incidence section as the morphology analysis has been based on a different dataset, the National Cancer Data Repository 2010.

Tumours included in the group 'Other classified & unclassified carcinoma' are carcinomas with morphology that have not been classified by a pathologist according to one of the recognised subtypes of uterine carcinoma, as set out by the WHO. Tumours included in the 'Miscellaneous & unspecified' group include rare or uncommon tumour subtypes and cases where a diagnosis of malignancy has been made without specifying a tumour subtype. Please see the 'morphology' section in Appendix 1 for further details on which tumour types are included in each morphological group.

Incidence trends by morphology group, United Kingdom, 2000 to 2009

Endometrioid adenocarcinomas are the most common type of uterine cancer; in 2009 these tumours accounted for 76.9%, 6,087 cases, in total. In 2009, clear cell and papillary serous carcinomas are the second most common tumour group at 7.4%; however, in previous years this group was the fourth most common. In 2009, 'Mixed epithelial & mesenchymal' tumours were the third most common tumour group at 6.2%. The proportion of clear cell and papillary serous carcinomas increased over the 10 year period by around 4 percentage points whilst the rate of 'Other classified & unclassified carcinoma' tumours reduced by 4 percentage points. All other tumour types have remained fairly stable. These patterns are similar across the different UK countries (see Appendix 2, table A2.3).

The increase in the proportion of clear cell and papillary serous carcinomas and comparative decrease in 'Other classified & unclassified carcinoma' tumours is likely to be due to improvements in the coding of tumours.

Table 4 Trends in incidence by morphology group, United Kingdom, 2000 to 2009

Morphology Group	Year of Diagnosis							
	2000		2003		2006		2009	
	Cases	%	Cases	%	Cases	%	Cases	%
Endometrioid Adenocarcinoma	4,743	77.2%	5,141	78.1%	5,631	77.9%	6,087	76.9%
Clear cell and papillary serous carcinoma	199	3.2%	263	4.0%	444	6.1%	584	7.4%
Other classified & unclassified carcinoma	423	6.9%	390	5.9%	286	4.0%	246	3.1%
Leiomyosarcoma	149	2.4%	143	2.2%	129	1.8%	144	1.8%
Endometrial stromal sarcoma	62	1.0%	77	1.2%	75	1.0%	66	0.8%
Miscellaneous sarcoma	36	0.6%	45	0.7%	53	0.7%	65	0.8%
Mixed epithelial and mesenchymal	349	5.7%	390	5.9%	412	5.7%	494	6.2%
Miscellaneous and unspecified	183	3.0%	134	2.0%	198	2.7%	229	2.9%
	6,144		**6,583**		**7,228**		**7,915**	

Source: National Cancer Data Repository (NCDR)

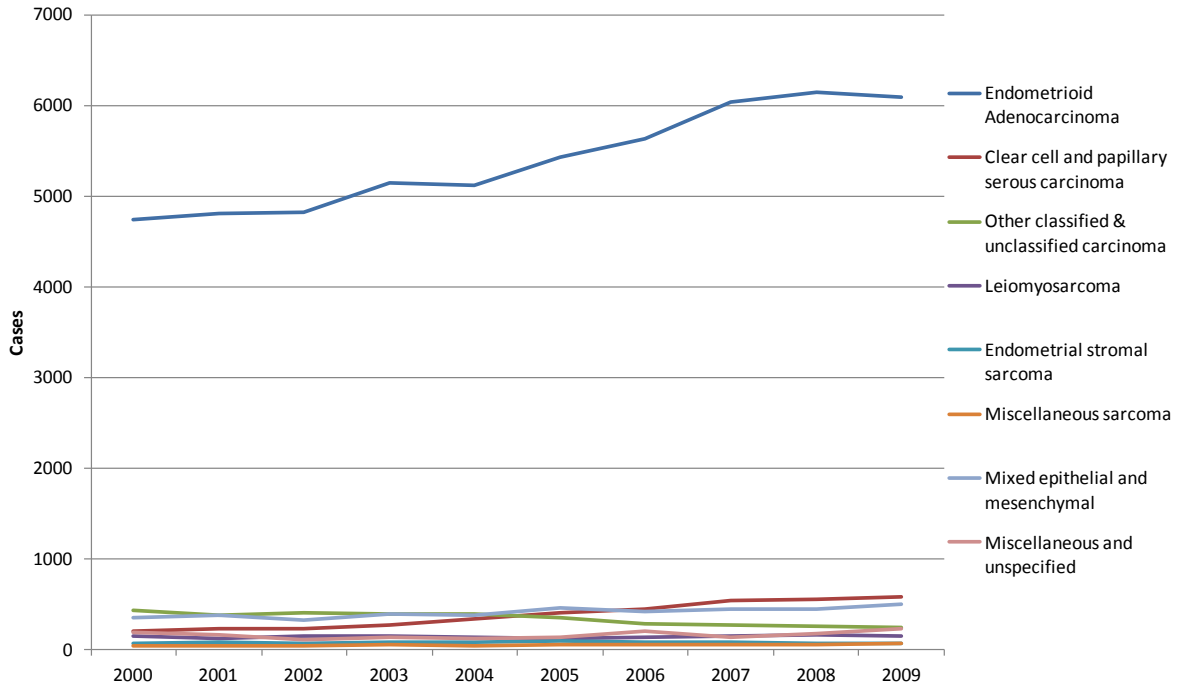

Figure 9 Trends in incidence by morphology group, United Kingdom, 2000 to 2009

Source: National Cancer Data Repository (NCDR)

Incidence by age and morphology group, United Kingdom, 2007-2009

The proportion of tumours that are endometrioid adenocarcinoma peaks in women aged between 50 and 64 at around 85%. The incidence of this tumour type then decreases to 56% in women aged 85+. Clear cell and serous papillary carcinoma is the second most common tumour group in women aged between 55 and 84. Leiomyosarcoma is the second most common tumour type in women under 55. For women aged under 50, endometrial stromal sarcoma is the third most common tumour type at around 4%. Mixed epithelial & mesenchymal tumours are the third most common tumour for women aged 55-84. For women aged 85+, 'Other classified & unclassified carcinoma' and 'Miscellaneous & unspecified' tumours account for a quarter of all uterine cancers in this age group. This pattern is similar across all UK countries (see Appendix 2, table A2.4 for detail).

The higher proportion of unclassified or unspecified morphology in older women may reflect the higher likelihood of co-morbidities or more advanced stage of disease. This may preclude attaining a histological diagnosis in older patients, as it may not be appropriate to carry out intrusive investigations. It may also be more difficult to discern the precise tumour type in cases where only a small tissue sample is available for examination, particularly in cases where the tumour is poorly differentiated.

The higher proportion of clear cell and papillary serous carcinoma (or type II endometrial cancer) in older women may contribute to the higher mortality rates and poorer survival in women aged between 55 and 84 as these tumour cell types are particularly aggressive and have poorer outcomes [4].

The data include DCO cases (where the cancer registration is made from a death certificate only), accounting for less than 1% of all cases overall. The number of DCO cases increases with age with the highest proportion in the 85 and over age group (7%). This may account for the higher proportion of 'Other classified & unclassified carcinoma' or 'Miscellaneous & unspecified' morphologies.

Table 5 Proportion of cases by morphology group and age, United Kingdom, 2007-2009

Morphology Group	Age Group									
	<45	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+
Endometrioid Adenocarcinoma	73.3%	80.6%	85.9%	85.2%	84.7%	79.3%	76.3%	72.5%	69.0%	56.2%
Clear cell and papillary serous carcinoma	2.4%	2.5%	2.6%	4.4%	5.4%	8.9%	10.1%	11.1%	10.0%	7.9%
Other classified & unclassified carcinoma	4.0%	1.8%	1.7%	1.5%	1.8%	2.3%	2.3%	3.6%	6.0%	14.6%
Leiomyosarcoma	7.8%	5.4%	3.6%	2.0%	1.7%	1.4%	1.2%	1.0%	0.6%	0.8%
Endometrial stromal sarcoma	4.3%	3.6%	1.4%	0.9%	0.5%	0.6%	0.6%	0.4%	0.3%	0.5%
Miscellaneous sarcoma	1.6%	2.0%	0.6%	0.5%	0.5%	0.4%	0.7%	0.6%	0.9%	1.0%
Mixed epithelial and mesenchymal	3.5%	2.2%	3.5%	4.4%	4.4%	6.2%	7.3%	8.3%	9.0%	7.6%
Miscellaneous and unspecified	2.9%	2.0%	0.7%	1.2%	1.0%	1.0%	1.5%	2.4%	4.2%	11.6%

Source: National Cancer Data Repository (NCDR)

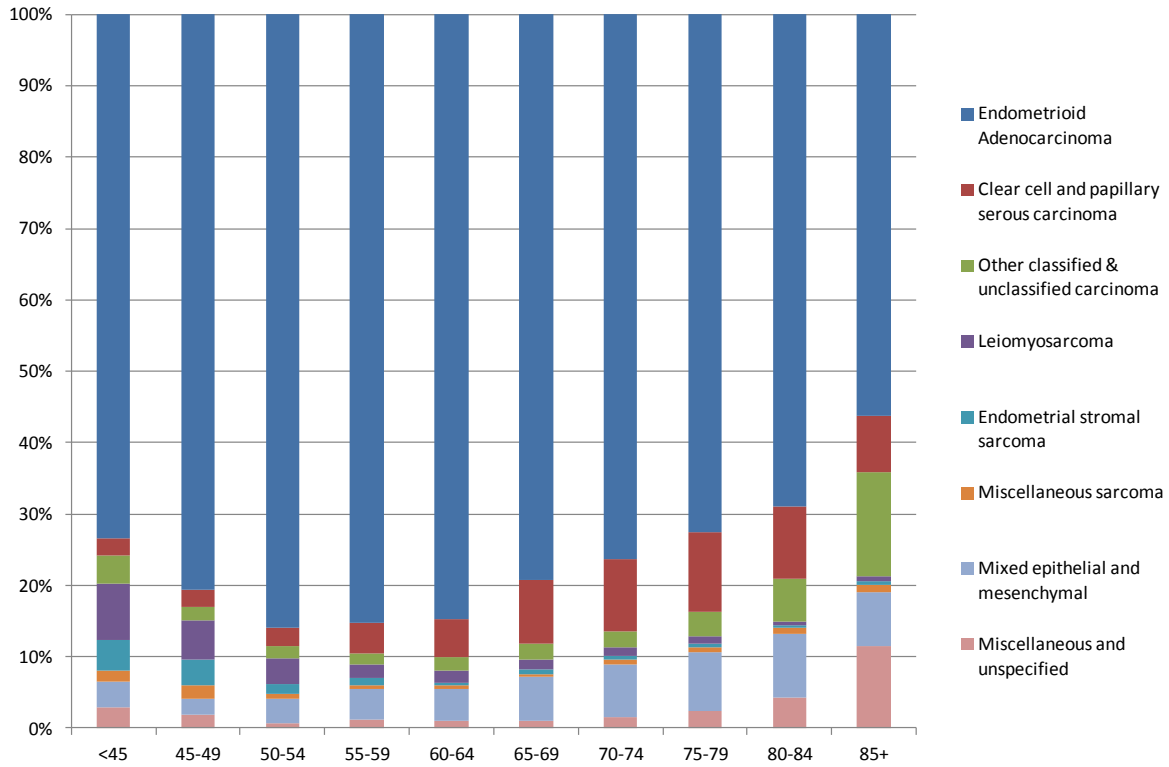

Figure 10 Proportion of cases by morphology group and age, United Kingdom, 2007-2009

Source: National Cancer Data Repository (NCDR)

Uterine Cancer Mortality

As for the majority of cancers, mortality from uterine cancer increases with age. Mortality rates are therefore age-standardised to take account of differing population age profiles between different areas and over time. Please see Appendix 1 section 'age standardisation' for details.

Variation in mortality rates between geographies and age groups may be due to variation in the incidence of different tumour types that have differing aetiologies, treatments and prognosis.

Trends in mortality, United Kingdom, 1993-1995 to 2008-2010

Between 2008 and 2010, there was an average of 1,800 deaths from uterine cancer annually in the UK. This makes uterine cancer the ninth most common cause of cancer death in women in the UK [1] and the second most common gynaecological cancer death after ovarian cancer [2], for which there was more than twice the number of deaths in the same period. The mortality rate in the UK has increased since 1993-1995 by 14% from 3.2 per 100,000 female population to 3.7 per 100,000 in 2008-2010.

This increase in uterine cancer mortality is likely to reflect the increasing numbers of women diagnosed with the disease.

Comparing across countries, mortality rates are similar in all UK countries, ranging from 3.3 per 100,000 in Northern Ireland to 4.0 in Scotland and Wales.

Table 6 Trends in mortality by UK country, 1993-1995 to 2008-2010

Year	United Kingdom			England			Scotland		
	Total Deaths	ASMR	95% CI	Total Deaths	ASMR	95% CI	Total Deaths	ASMR	95% CI
1993-1995	4,305	3.2	(3.1, 3.3)	3,594	3.2	(3.1, 3.3)	346	3.0	(2.7, 3.4)
1994-1996	4,290	3.2	(3.1, 3.3)	3,602	3.2	(3.1, 3.3)	336	2.9	(2.6, 3.3)
1995-1997	4,318	3.2	(3.1, 3.3)	3,651	3.2	(3.1, 3.4)	309	2.7	(2.4, 3.1)
1996-1998	4,294	3.2	(3.1, 3.3)	3,623	3.2	(3.1, 3.3)	321	2.8	(2.5, 3.1)
1997-1999	4,250	3.1	(3.0, 3.2)	3,555	3.1	(3.0, 3.2)	354	3.0	(2.7, 3.4)
1998-2000	4,300	3.1	(3.0, 3.2)	3,580	3.1	(3.0, 3.2)	376	3.1	(2.8, 3.5)
1999-2001	4,461	3.2	(3.1, 3.4)	3,677	3.2	(3.1, 3.3)	416	3.5	(3.1, 3.9)
2000-2002	4,621	3.3	(3.2, 3.4)	3,801	3.3	(3.2, 3.4)	430	3.6	(3.2, 4.0)
2001-2003	4,728	3.4	(3.3, 3.5)	3,869	3.3	(3.2, 3.4)	449	3.7	(3.4, 4.1)
2002-2004	4,778	3.4	(3.3, 3.5)	3,928	3.3	(3.2, 3.4)	442	3.6	(3.3, 4.0)
2003-2005	4,863	3.4	(3.3, 3.5)	4,022	3.4	(3.3, 3.5)	426	3.4	(3.0, 3.7)
2004-2006	4,926	3.5	(3.4, 3.6)	4,090	3.5	(3.3, 3.6)	420	3.3	(3.0, 3.7)
2005-2007	4,949	3.5	(3.4, 3.6)	4,149	3.5	(3.4, 3.6)	403	3.2	(2.9, 3.5)
2006-2008	5,053	3.5	(3.4, 3.6)	4,218	3.5	(3.4, 3.6)	430	3.4	(3.0, 3.7)
2007-2009	5,134	3.5	(3.4, 3.6)	4,303	3.6	(3.5, 3.7)	442	3.4	(3.1, 3.8)
2008-2010	5,409	3.7	(3.6, 3.8)	4,439	3.6	(3.5, 3.8)	519	4.0	(3.6, 4.4)

Year	Wales			Northern Ireland		
	Total Deaths	ASMR	95% CI	Total Deaths	ASMR	95% CI
1993-1995	270	3.8	(3.3, 4.3)	95	2.8	(2.3, 3.5)
1994-1996	261	3.5	(3.0, 4.0)	91	2.7	(2.1, 3.4)
1995-1997	268	3.6	(3.1, 4.1)	90	2.6	(2.1, 3.2)
1996-1998	253	3.4	(3.0, 3.9)	97	2.8	(2.3, 3.5)
1997-1999	246	3.4	(3.0, 3.9)	95	2.8	(2.3, 3.5)
1998-2000	251	3.5	(3.0, 4.0)	93	2.8	(2.2, 3.4)
1999-2001	267	3.7	(3.2, 4.2)	101	2.9	(2.4, 3.6)
2000-2002	275	3.7	(3.3, 4.2)	115	3.4	(2.8, 4.2)
2001-2003	285	3.8	(3.3, 4.3)	125	3.8	(3.1, 4.5)
2002-2004	285	3.8	(3.4, 4.4)	123	3.8	(3.1, 4.5)
2003-2005	292	4.0	(3.5, 4.5)	123	3.6	(3.0, 4.3)
2004-2006	293	4.0	(3.5, 4.5)	123	3.5	(2.8, 4.2)
2005-2007	279	3.7	(3.2, 4.2)	118	3.3	(2.7, 4.0)
2006-2008	291	3.8	(3.3, 4.3)	114	3.1	(2.5, 3.8)
2007-2009	277	3.5	(3.1, 4.0)	112	3.0	(2.5, 3.7)
2008-2010	322	4.0	(3.6, 4.5)	129	3.3	(2.7, 4.0)

ASMR is (directly) age-standardised mortality rate per 100,000 female population

95% CI is 95% confidence interval for calculated rate

Source: UK Cancer Information Service

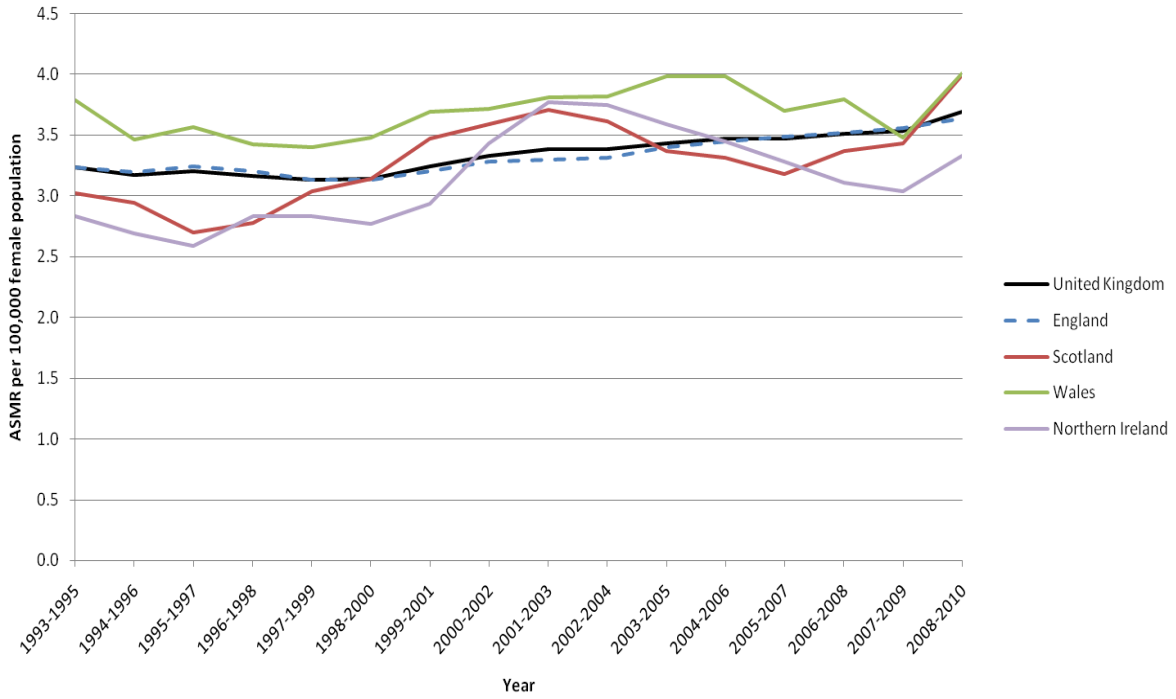

Figure 11 Trends in mortality by UK country, 1993-1995 to 2008-2010

Source: UK Cancer Information Service

Mortality by health authority, 2008-2010

There is evidence that PCTs mainly in the south of England have higher rates than the UK average; however, East Riding of Yorkshire PCT and Ayrshire & Arran HA in Scotland also have higher mortality rates. There is strong evidence that mortality rates in West Sussex, Ashton, Leigh & Wigan, and North Tyneside PCTs are lower than the UK average; ranging from 1.6 per 100,000 female population in the latter two PCTs to 2.6 in West Sussex. There is also evidence that mortality rates are lower in PCTs in the northwest as well as in the Midlands and south of England. Please see Appendix 2, table A2.5 for detail.

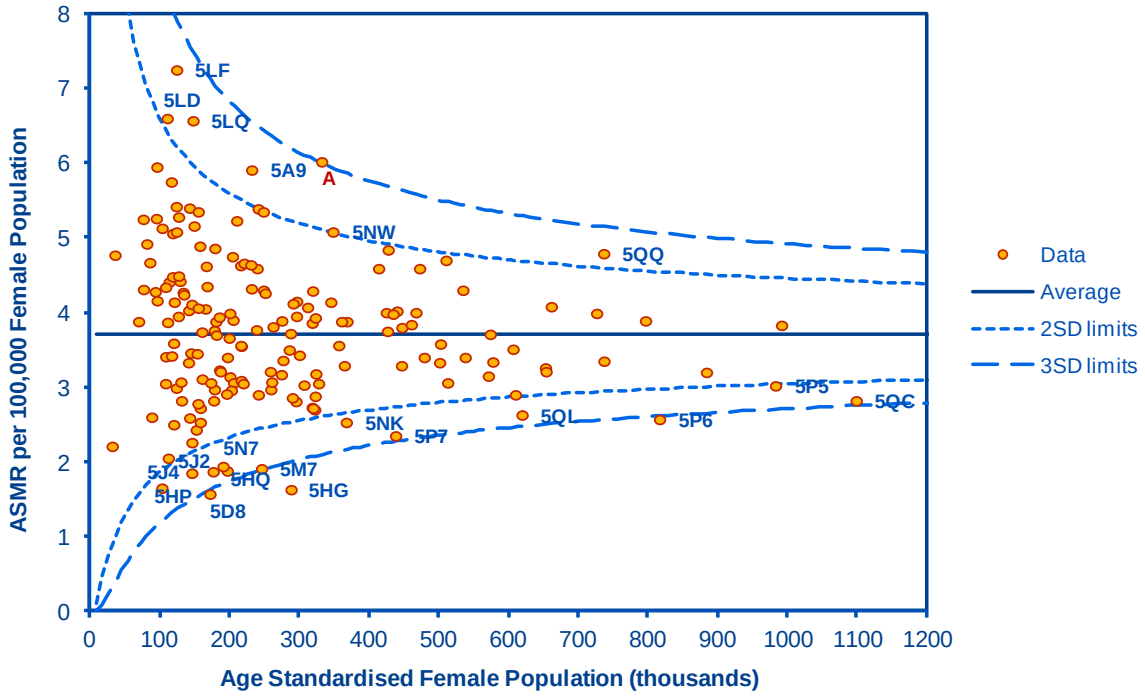

Figure 12 Funnel plot of mortality by health authority, 2008-2010

Source: UK Cancer Information Service

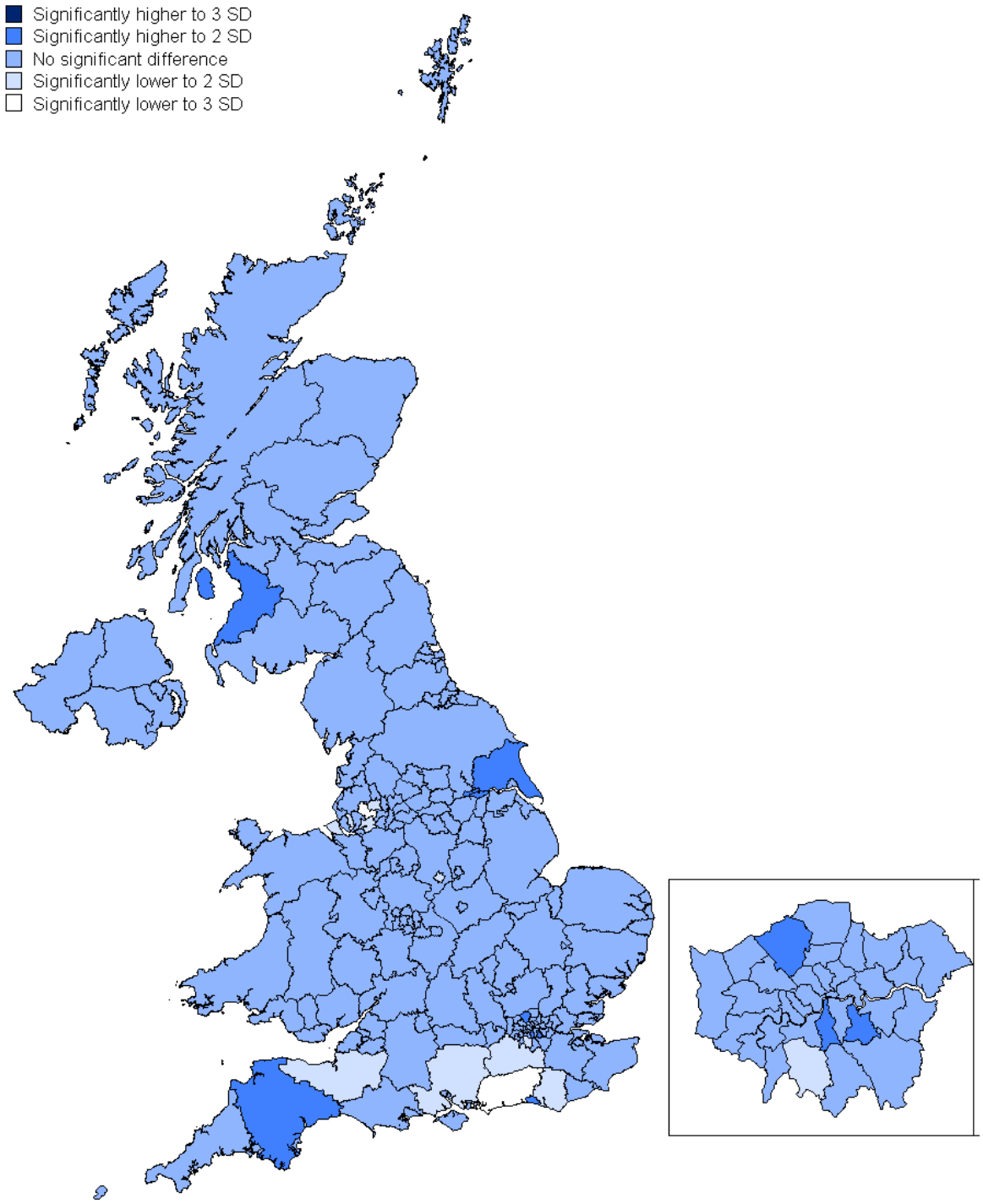

Figure 13 Map of mortality by health authority 2008-2010

NB: The groupings in the map relate to the significant differences displayed in the funnel plots above

Mortality by Cancer Network, 2008-2010

The patterns in mortality rates at CN level broadly reflect those seen for PCTs. There is strong evidence that the mortality rate in South East London CN is higher than the UK average at 5.0 per 100,000 female population compared to 3.7 per 100,000 female population, respectively. There is also evidence that mortality rates in North London CN (4.5 per 100,000 female population), West of Scotland and South Wales (both 4.3 per 100,000 female population) are higher than the UK average. There is evidence that mortality rates in Central South Coast CN and Surrey, West Sussex & Hampshire CN are lower than the UK average at; 3.0 and 2.7 per 100,000 female population, respectively.

Table 7 Mortality by Cancer Network, 2008-2010

Cancer Network	Total Deaths	ASMR	95% CI
United Kingdom	**5,409**	**3.7**	**(3.6, 3.8)**
England	**4,439**	**3.6**	**(3.5, 3.8)**
3 Counties	119	4.1	(3.3, 5.0)
Anglia	277	3.9	(3.4, 4.4)
Arden	81	3.5	(2.7, 4.4)
Avon, Somerset & Wiltshire	181	3.5	(3.0, 4.1)
Central South Coast	152	3.0	(2.5, 3.6)
Dorset	78	3.5	(2.7, 4.6)
East Midlands	340	3.6	(3.2, 4.0)
Essex	115	3.1	(2.5, 3.8)
Greater Manchester & Cheshire	234	3.4	(3.0, 3.9)
Greater Midlands	196	4.0	(3.4, 4.7)
Humber & Yorkshire Coast	124	4.4	(3.6, 5.4)
Kent & Medway	182	4.2	(3.6, 5.0)
Lancashire & South Cumbria	134	3.7	(3.1, 4.5)
Merseyside & Cheshire	165	3.3	(2.7, 3.9)
Mount Vernon	106	3.3	(2.7, 4.1)
North East London	104	4.0	(3.2, 4.9)
North London	127	4.5	(3.7, 5.4)
North of England	253	3.3	(2.9, 3.8)
North Trent	165	3.7	(3.2, 4.4)
North West London	117	3.7	(3.0, 4.5)
Pan Birmingham	161	3.9	(3.3, 4.6)
Peninsula	188	3.8	(3.3, 4.5)
South East London	134	5.0	(4.2, 6.0)
South West London	102	3.2	(2.6, 4.0)
Surrey, West Sussex & Hampshire	79	2.7	(2.1, 3.5)
Sussex	123	3.5	(2.8, 4.3)
Thames Valley	203	4.1	(3.6, 4.8)
Yorkshire	199	3.2	(2.8, 3.8)
Scotland	**519**	**4.0**	**(3.6, 4.4)**
North of Scotland	145	4.2	(3.5, 5.0)
South East Scotland	114	3.3	(2.7, 4.0)
West of Scotland	260	4.3	(3.8, 4.9)
Wales	**322**	**4.0**	**(3.6, 4.5)**
South Wales	259	4.3	(3.7, 4.9)
North Wales	63	3.2	(2.4, 4.3)
Northern Ireland	**129**	**3.3**	**(2.7, 4.0)**

ASMR is (directly) standardised mortality rate per 100,000 female population

95% CI is 95% confidence interval for calculated rate.

Source: UK Cancer Information Service

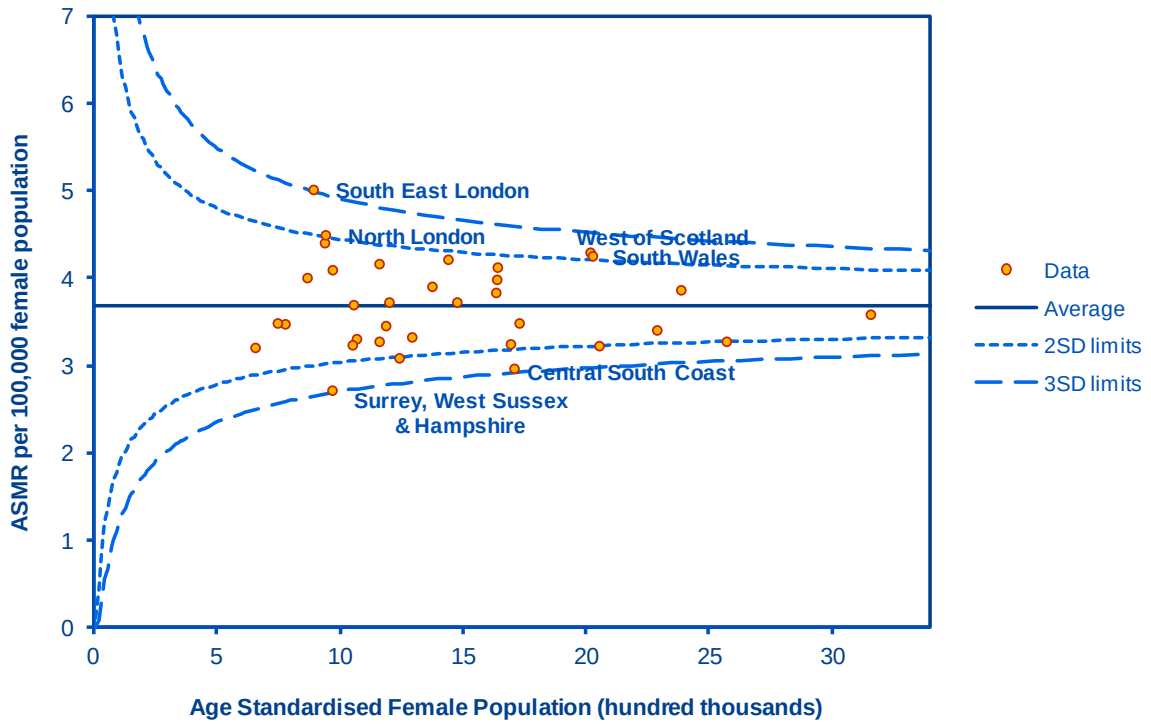

Figure 14 Funnel plot of mortality by Cancer Network, 2008-2010

Source: UK Cancer Information Service

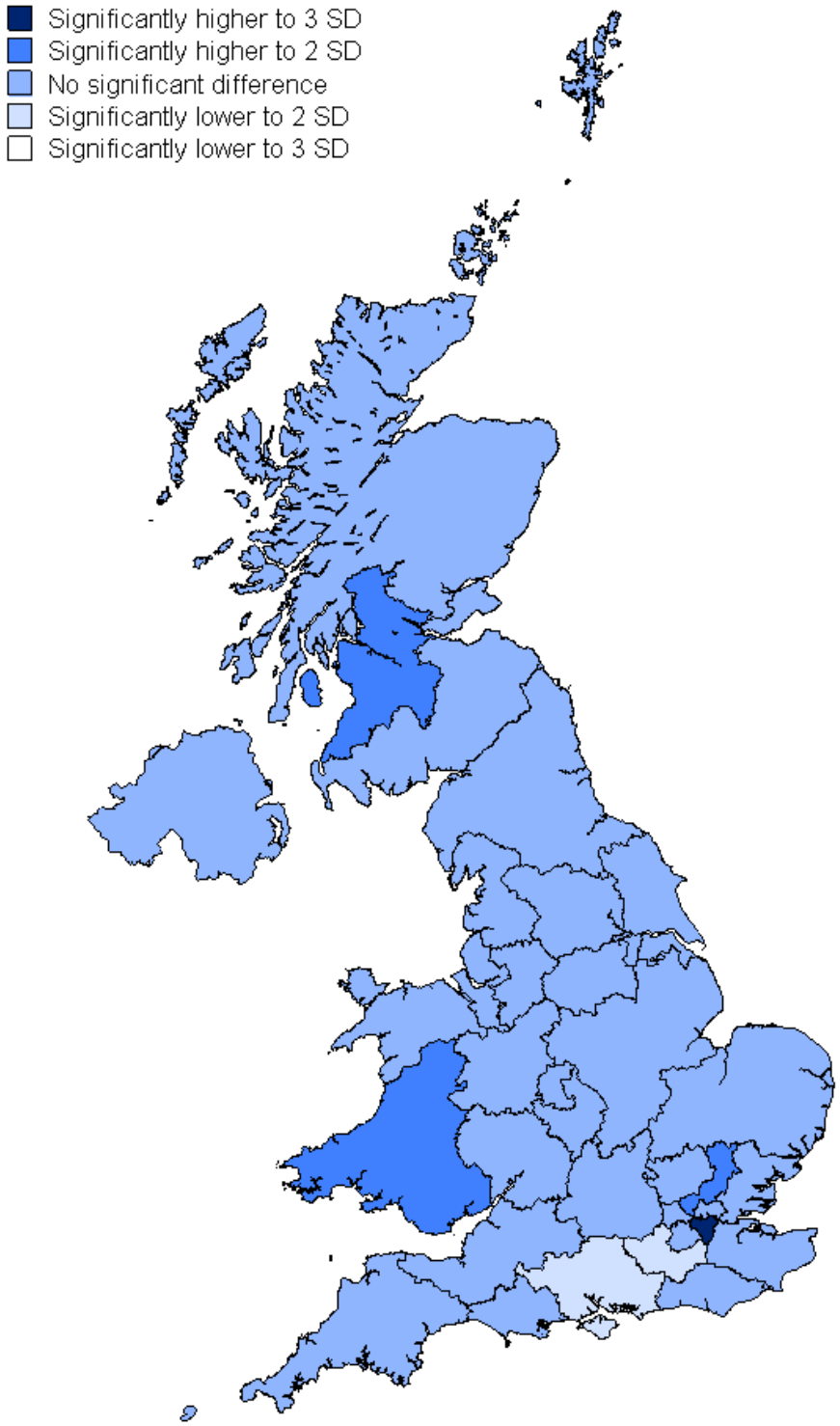

Figure 15 Map of mortality by CN 2008-2010

NB: The groupings in the map relate to the significant differences displayed in the funnel plots above

Mortality by age, United Kingdom, 2008-2010

Between 2008 and 2010, in the United Kingdom, the age-specific mortality rate steadily increases with age. Almost two thirds of deaths occur in women aged 70 and over. Both the number and rate of deaths from uterine cancer are highest in women aged 85+; 1,008 deaths at a rate of 36.1 per 100,000 female population. By country, the pattern in both the rates and numbers is similar. Please see Appendix 2, table A2.5 for a breakdown by country.

The increase in the mortality rate as age increases reflects increasing incidence. Furthermore, similarly to incidence, the risk of mortality increases with BMI, particularly in older women [6]. As with many cancers, later stage disease at presentation is more common with increasing age and is associated with poorer survival. Poorer general health with comorbidities in older patients may prohibit the use of effective uterine cancer treatments.

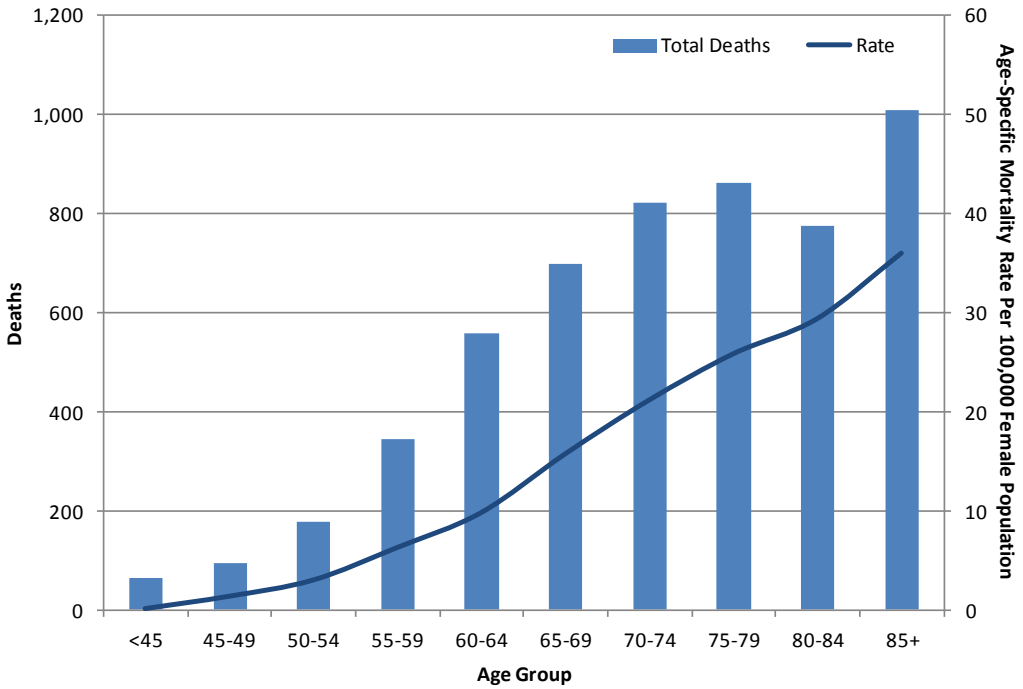

Figure 16 Age-specific mortality rates and number of cases by age, United Kingdom, 2008-2010

Rate is age-specific mortality rate per 100,000 female population
Source: UK Cancer Information Service

Trends in mortality by age, United Kingdom, 1993-1995 to 2008-2010

Mortality rates in women under 55 have remained similar over the time period analysed. However, there is evidence that mortality rates have increased in the UK for older women. Mortality rates increased in women age 55-74 by 17%, from 10.1 to 11.9 per 100,000 female population and for women over 75 by 13%, from 26.1 to 29.3 per 100,000 female population. Please see Appendix 2, table A2.5 for a breakdown by country.

The increase in mortality reflects patterns in incidence among these age groups. However, unlike incidence trends, mortality has always been much higher in women aged over 75 than women aged 55-74.

Table 8 Trends in age-specific mortality rates by age, United Kingdom, 1993-1995 to 2008-2010

Age Group	1993-1995		1998-2000		2003-2005		2008-2010	
	Total Deaths	Rate	Total Deaths	Rate	Total Deaths	Rate	Total Deaths	Rate
<45	56	0.1	47	0.1	52	0.1	65	0.1
45-49	81	1.3	77	1.4	64	1.1	93	1.4
50-54	142	2.9	144	2.4	147	2.6	178	3.0
55-59	282	6.2	256	5.4	328	5.6	346	6.3
60-64	382	8.8	409	9.3	446	9.6	559	9.8
65-69	518	12.1	546	13.3	644	15.4	698	15.8
70-74	740	17.5	601	15.5	728	19.2	823	21.2
75-79	666	21.5	779	21.8	745	22.4	862	25.9
80-84	658	25.7	614	26.3	788	28.5	777	29.5
85+	780	35.6	827	34.4	921	38.3	1,008	36.1

Rate is age-specific rate per 100,000 female population
Source: UK Cancer Information Service

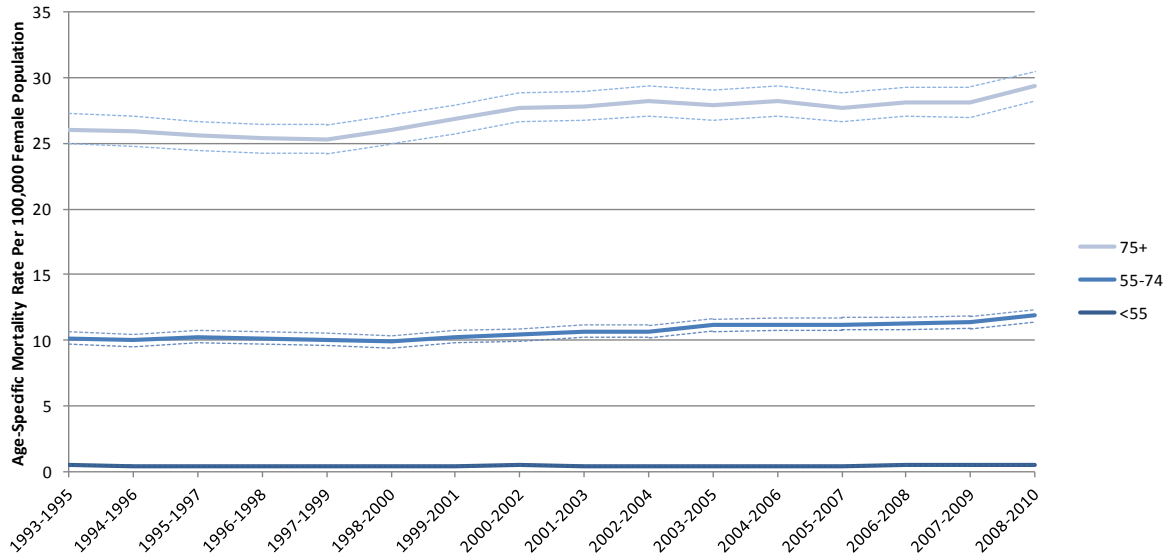

Figure 17 Trends in mortality by broad age group, United Kingdom, 1993-1995 to 2008-2010

Dotted line is 95% confidence interval for calculated rates.
Source: UK Cancer Information Service

Comparing mortality and deprivation by Local Authority and UK country, 2008-2010

There is evidence of a relationship between deprivation (as measured by the income score of the Index of Multiple Deprivation) and mortality from uterine cancer among the Local Authorities in England, with a correlation coefficient of 0.166 (p-value<0.05). For example, the average mortality rate in the least deprived fifth of Local Authorities is 3.3 per 100,000 females, compared to 4.0 per 100,000 females in the most deprived fifth of Local Authorities. For the other UK countries there is no evidence of a relationship between mortality and deprivation. However, in Scotland the average mortality rate is higher in the least deprived fifth of areas compared to the most deprived fifth of areas, 4.7 per 100,000 female population compared to 4.0 per 100,000, respectively. This difference is largely because of the particularly high rates in the least deprived LA of the Shetland Islands at 10.0 per 100,000.

The slightly higher mortality rate in the most deprived fifth of areas reflects the trend seen for incidence.

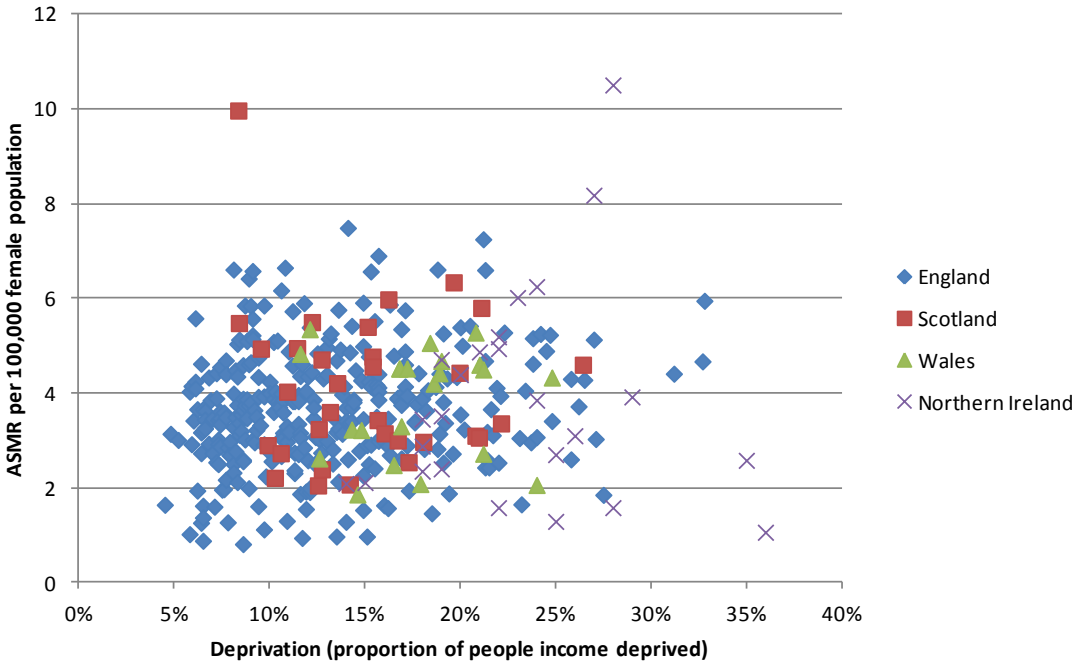

Figure 18 Scatter plot of mortality against deprivation by Local Authority and UK country, 2008-2010

Source: UK Cancer Information Service

Uterine Cancer Survival

Details of the definition of relative survival used here can be found in Appendix 1. There may be differences between the relative survival rates calculated here and those found in other sources. This may be due to differences in the methodology used, but may also reflect differences in the definition of uterine cancer. For further details, please see the section 'Definition of uterine cancer' in Appendix 1.

Variation in survival rates between geographies and age groups may be due to variation in the incidence of different tumour types that have differing aetiologies, treatments and prognosis.

Trends in one- and five-year relative survival by UK country, 1993-1995 to 2003-2005/2007-2009

One-year survival has increased for all countries in the UK between 1993-1995 and 2007-2009. In the UK one-year survival rates have increased by 5.9 percentage points from 85.3% to 91.2%. However, the greatest increase in one-year survival has been in Northern Ireland, increasing by 10.8 percentage points from 83.2% to 94.0%. One-year survival in Northern Ireland is higher than the UK average for 2007-2009.

Five-year survival has also increased in the UK overall by 5.6 percentage points from 72.9% to 78.5% between 1993-1995 and 2003-2005. Five-year survival rates have most markedly increased in Northern Ireland, by 11.8 percentage points from 69.0% to 80.8%.

Survival from uterine cancer is generally better than ovarian cancer [2]. Although stage analysis has not been presented here, it is estimated that around 75%[17] of uterine cancers are diagnosed at stage I disease compared to around 30% for women diagnosed with ovarian cancer [18] Women usually present with irregular bleeding which, particularly in postmenopausal women, prompts most to visit their doctor [7]. Postmenopausal women presenting with irregular bleeding are urgently referred for further investigation. Over two thirds of women diagnosed with uterine cancer were diagnosed through via an urgent referral as a "suspected cancer" through a rapid access pathway to a specialist diagnostic clinic. [19]. This awareness of symptoms and subsequent early diagnosis contributes to improved survival. Disease which is a result of obesity and tamoxifen is also mostly diagnosed early due to closer surveillance of the patient's health [7]. However, although uterine cancer is generally picked up early due to these factors, 8% of cases in 2006-2008 were still diagnosed through emergency presentation, with these cases having a much lower one-year survival rate at less than 60% [19].

For five-year survival, improvements are also likely to be a result of a combination of these factors along with improvements in treatment and diagnostics. The use of lymphadenectomy in the staging of uterine cancer results in more accurately staged disease. Therefore, there is less chance that stage I disease will have spread to adjacent lymph nodes without being found. This results in the most appropriate treatment being given for disease where nodes are indeed positive for disease [7]. Notwithstanding, the ASTEC randomised trial showed no survival advantage for lymphadenectomy for endometrial cancer, and despite the role of lymphadenectomy in accurate surgical disease staging the use of this procedure remains contentious and practice varies across the country [20].

Following the release of the *Improving Outcomes* report in 1999 for the NHS[21] the Campbell report for Northern Ireland in 1996[22] and the *Cancer in Scotland: Action for Change* report in 2001[23], cancer services have undergone considerable change. In particular, the establishment of specialist gynaecological oncology multidisciplinary teams and centralisation of treatment for

uterine cancer by subspecialist gynaecological oncologists has contributed to improved long term survival.

Surgery is the mode of treatment with the greatest impact on long term survival and for uterine cancer patients major resection rates are particularly high. In England, 84% of patients received a major resection in 2004-2006 compared to 59% for ovarian cancer [24]. This reflects the earlier presentation of uterine cancer, making the disease more amenable to surgery and therefore better long term survival outcomes for the patient.

Table 9 Trends in one-year relative survival by UK country, 1993-1995 to 2007-2009

Year	One-Year Relative Survival											
	United Kingdom				England				Scotland			
	Total Cases	Cumulative Deaths	%	95% CI	Total Cases	Cumulative Deaths	%	95% CI	Total Cases	Cumulative Deaths	%	95% CI
1993-1995	13,183	2,262	85.3	(84.6, 86.0)	11,020	1,879	85.4	(84.6, 86.1)	1,114	184	86.2	(83.9, 88.5)
1994-1996	13,358	2,252	85.6	(84.9, 86.2)	11,122	1,876	85.5	(84.8, 86.3)	1,179	173	87.9	(85.8, 90.0)
1995-1997	13,627	2,210	86.2	(85.5, 86.8)	11,293	1,846	86.0	(85.3, 86.7)	1,253	185	87.9	(85.8, 90.0)
1996-1998	13,925	2,192	86.6	(86.0, 87.3)	11,509	1,816	86.6	(85.9, 87.3)	1,298	199	87.3	(85.2, 89.3)
1997-1999	14,314	2,102	87.7	(87.1, 88.3)	11,773	1,732	87.6	(87.0, 88.3)	1,329	198	87.7	(85.7, 89.7)
1998-2000	14,962	2,117	88.2	(87.6, 88.8)	12,386	1,753	88.2	(87.6, 88.8)	1,289	180	88.5	(86.5, 90.4)
1999-2001	15,610	2,166	88.5	(87.9, 89.0)	12,925	1,810	88.4	(87.7, 89.0)	1,336	169	89.7	(87.8, 91.6)
2000-2002	16,003	2,236	88.3	(87.8, 88.9)	13,310	1,873	88.2	(87.6, 88.9)	1,338	160	90.4	(88.6, 92.2)
2001-2003	16,363	2,273	88.4	(87.8, 88.9)	13,612	1,897	88.3	(87.7, 88.9)	1,371	164	90.4	(88.6, 92.2)
2002-2004	16,723	2,270	88.6	(88.1, 89.1)	13,890	1,885	88.6	(88.0, 89.2)	1,400	171	90.1	(88.3, 91.9)
2003-2005	17,483	2,258	89.2	(88.7, 89.7)	14,541	1,864	89.3	(88.7, 89.8)	1,485	194	89.1	(87.3, 90.9)
2004-2006	18,138	2,229	89.8	(89.3, 90.3)	15,131	1,857	89.8	(89.3, 90.3)	1,499	196	89.1	(87.3, 90.9)
2005-2007	19,141	2,235	90.4	(89.9, 90.8)	15,996	1,872	90.3	(89.8, 90.8)	1,532	185	90.2	(88.5, 91.9)
2006-2008	19,887	2,234	90.8	(90.3, 91.3)	16,542	1,873	90.7	(90.2, 91.2)	1,579	182	90.8	(89.1, 92.4)
2007-2009	20,474	2,218	91.2	(90.8, 91.6)	16,921	1,845	91.1	(90.6, 91.6)	1,714	189	91.3	(89.7, 92.8)

Year	Wales				Northern Ireland			
	Total Cases	Cumulative Deaths	%	95% CI	Total Cases	Cumulative Deaths	%	95% CI
1993-1995	729	137	83.6	(80.6, 86.6)	320	62	83.2	(78.6, 87.7)
1994-1996	738	145	82.6	(79.6, 85.6)	319	58	84.3	(79.8, 88.7)
1995-1997	759	127	85.7	(82.9, 88.5)	322	52	86.3	(82.1, 90.5)
1996-1998	788	125	86.4	(83.7, 89.0)	330	52	86.6	(82.5, 90.7)
1997-1999	872	119	88.5	(86.2, 90.9)	340	53	86.6	(82.5, 90.6)
1998-2000	925	131	88.1	(85.7, 90.5)	362	53	87.5	(83.7, 91.3)
1999-2001	966	132	88.6	(86.3, 90.8)	383	55	87.8	(84.1, 91.4)
2000-2002	935	148	86.5	(84.1, 89.0)	420	55	89.0	(85.7, 92.4)
2001-2003	929	151	86.1	(83.6, 88.5)	451	61	88.6	(85.3, 91.9)
2002-2004	965	153	86.5	(84.0, 88.9)	468	61	88.9	(85.7, 92.1)
2003-2005	987	137	88.3	(86.0, 90.5)	470	63	88.4	(85.2, 91.6)
2004-2006	1,039	124	90.0	(88.0, 92.1)	469	52	90.8	(87.8, 93.7)
2005-2007	1,109	125	90.7	(88.8, 92.7)	504	53	91.4	(88.6, 94.2)
2006-2008	1,222	128	91.6	(89.8, 93.4)	544	51	92.5	(89.9, 95.0)
2007-2009	1,257	138	91.2	(89.4, 93.0)	582	46	94.0	(91.7, 96.3)

95% CI is 95% confidence interval for calculated rate.

Source: UK Cancer Information Service

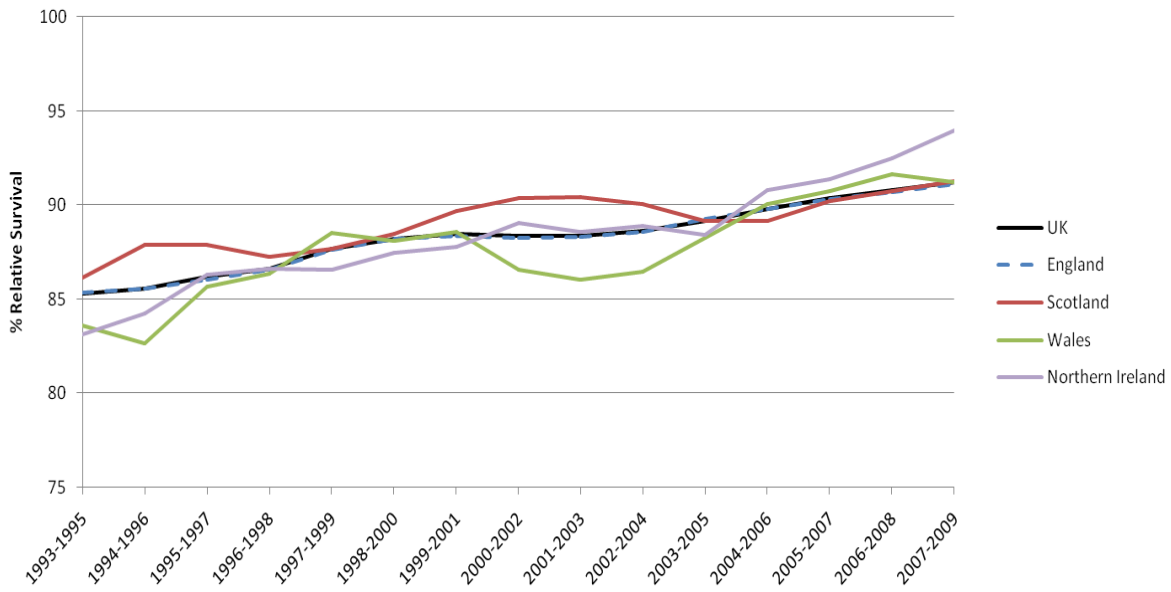

Figure 19 Trends in one-year relative survival by UK country, 1993-1995 to 2007-2009

Dotted line is 95% confidence interval for calculated rates
Source: UK Cancer Information Service

Table 10 Trends in five-year relative survival by UK country, 1993-1995 to 2003-2005

Year	Five-Year Relative Survival											
	United Kingdom				England				Scotland			
	Total Cumulative				Total Cumulative				Total Cumulative			
	Cases	Deaths	%	95% CI	Cases	Deaths	%	95% CI	Cases	Deaths	%	95% CI
1993-1995	13,183	4,961	72.9	(71.9, 73.8)	11,020	4,145	72.8	(71.7, 73.9)	1,114	402	75.6	(72.2, 79.0)
1994-1996	13,358	4,916	73.7	(72.8, 74.7)	11,122	4,110	73.5	(72.5, 74.6)	1,179	401	77.4	(74.2, 80.6)
1995-1997	13,627	4,943	74.1	(73.2, 75.1)	11,293	4,098	74.0	(73.0, 75.1)	1,253	435	76.8	(73.6, 80.0)
1996-1998	13,925	4,946	74.9	(73.9, 75.8)	11,509	4,097	74.7	(73.7, 75.8)	1,298	446	77.0	(73.9, 80.1)
1997-1999	14,314	4,996	75.3	(74.4, 76.2)	11,773	4,114	75.2	(74.2, 76.2)	1,329	458	76.9	(73.8, 79.9)
1998-2000	14,962	5,089	76.2	(75.3, 77.1)	12,386	4,216	76.2	(75.2, 77.2)	1,289	434	76.9	(73.9, 80.0)
1999-2001	15,610	5,232	76.7	(75.8, 77.6)	12,925	4,342	76.7	(75.7, 77.6)	1,336	430	78.2	(75.2, 81.1)
2000-2002	16,003	5,238	77.5	(76.6, 78.3)	13,310	4,339	77.6	(76.7, 78.6)	1,338	430	78.2	(75.3, 81.1)
2001-2003	16,363	5,284	77.8	(77.0, 78.6)	13,612	4,374	77.9	(77.0, 78.8)	1,371	436	78.8	(75.9, 81.7)
2002-2004	16,723	5,292	78.2	(77.4, 79.0)	13,890	4,375	78.3	(77.4, 79.2)	1,400	445	78.5	(75.7, 81.4)
2003-2005	17,483	5,438	78.5	(77.7, 79.3)	14,541	4,512	78.6	(77.7, 79.4)	1,485	465	78.8	(76.0, 81.6)

Year	Wales				Northern Ireland			
	Total Cumulative				Total Cumulative			
	Cases	Deaths	%	95% CI	Cases	Deaths	%	95% CI
1993-1995	729	282	71.4	(67.2, 75.6)	320	132	69.0	(62.6, 75.5)
1994-1996	738	282	71.8	(67.6, 75.9)	319	123	71.7	(65.4, 78.1)
1995-1997	759	293	71.6	(67.5, 75.7)	322	117	74.0	(67.8, 80.3)
1996-1998	788	286	73.4	(69.5, 77.4)	330	117	74.8	(68.7, 80.9)
1997-1999	872	305	74.5	(70.8, 78.2)	340	119	74.5	(68.5, 80.4)
1998-2000	925	311	76.4	(72.9, 80.0)	362	128	73.6	(67.9, 79.4)
1999-2001	966	323	76.5	(73.0, 80.0)	383	137	73.1	(67.5, 78.7)
2000-2002	935	327	75.5	(71.9, 79.1)	420	142	75.2	(69.9, 80.4)
2001-2003	929	329	74.9	(71.3, 78.6)	451	145	77.0	(72.0, 82.0)
2002-2004	965	332	76.0	(72.4, 79.5)	468	140	79.0	(74.2, 83.7)
2003-2005	987	330	76.2	(72.8, 79.7)	470	131	80.8	(76.2, 85.4)

95% CI is 95% confidence interval for calculated rate.

Source: UK Cancer Information Service

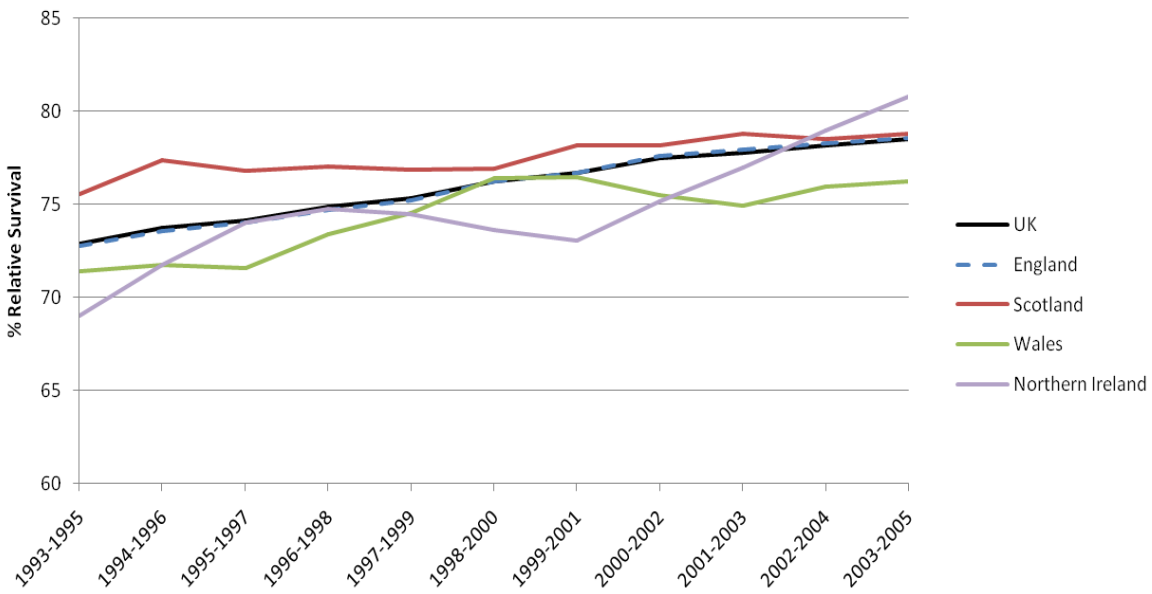

Figure 20 Trends in five-year relative survival by UK country, 1993-1995 to 2003-2005

Dotted line is 95% confidence interval for calculated rates
Source: UK Cancer Information Service

Trends in one-year relative survival by Cancer Network, 1993-1995 to 2007-2009

Between 1993-1995 and 2007-2009, there is evidence that one-year survival for women diagnosed with uterine cancer improved in several Cancer Networks. The greatest improvements, with increases in the one-year survival rate of more than 10 percentage points, were in Arden CN, Surrey West Sussex & Hampshire CN in England, in North Wales CN, and in Northern Ireland CN.

Table 11 Trends in one-year relative survival by Cancer Network, 1993-1995 to 2007-2009

Cancer Network	1993-1995	2000-2002	2007-2009	Change	
United Kingdom	**85.3**	**88.3**	**91.2**	**5.9**	*
England	**85.4**	**88.2**	**91.1**	**5.7**	*
3 Counties	83.4	90.1	90.5	7.1	
Anglia	85.3	89.6	89.9	4.6	
Arden	82.9	90.9	93.8	10.9	*
Avon, Somerset & Wiltshire	86.1	86.8	88.9	2.8	
Central South Coast	84.6	89.1	92.3	7.7	*
Dorset	83.7	95.5	87.4	3.6	
East Midlands	85.7	88.3	91.2	5.5	*
Essex	88.3	91.3	90.7	2.4	
Greater Manchester & Cheshire	83.8	85.8	91.4	7.6	*
Greater Midlands	84.2	89.3	90.9	6.7	*
Humber & Yorkshire Coast	83.1	86.1	87.8	4.7	
Kent & Medway	85.7	86.4	92.0	6.3	
Lancashire & South Cumbria	82.9	88.0	89.3	6.4	
Merseyside & Cheshire	82.3	87.9	91.4	9.1	*
Mount Vernon	87.2	89.0	87.9	0.8	
North East London	86.6	86.3	89.7	3.1	
North London	90.6	88.6	93.6	3.0	
North of England	83.6	86.7	90.9	7.3	*
North Trent	86.2	84.0	90.4	4.2	
North West London	90.3	85.9	93.5	3.2	
Pan Birmingham	84.8	88.8	93.1	8.3	*
Peninsula	86.5	88.3	91.3	4.8	
South East London	84.6	87.7	88.8	4.2	
South West London	87.4	90.1	94.2	6.8	
Surrey, West Sussex & Hampshire	83.7	90.3	93.7	10.1	*
Sussex	83.7	86.8	89.0	5.3	
Thames Valley	87.1	88.5	92.5	5.4	
Yorkshire	87.7	90.0	93.2	5.5	*
Scotland	**86.2**	**90.4**	**91.3**	**5.1**	*
North of Scotland	85.8	89.3	90.9	5.1	
South East Scotland	86.7	90.5	94.3	7.5	*
West of Scotland	86.0	91.1	89.6	3.6	
Wales	**83.6**	**86.5**	**91.2**	**7.6**	*
South Wales	84.1	86.1	90.8	6.7	*
North Wales	82.0	87.8	92.7	10.7	*
Northern Ireland	**83.2**	**89.0**	**94.0**	**10.8**	*

'Change' is the percentage point change between 1987-1989 and 2007-2009. There may be some discrepancy in the difference between the two rates due to rounding error

* represents statistically significant difference over this time period

Source: UK Cancer Information Service

One-year relative survival by Cancer Network, 2007-2009

For patients diagnosed between 2007 and 2009, there is evidence that relative survival up to one year from diagnosis is higher than the UK average in South West London CN, South East Scotland CN and Northern Ireland CN.

The relative survival results presented here are not age-standardised; therefore, any differences across the CNs in the age profile of women diagnosed with uterine cancer have not been adjusted for.

Variation in the survival rates across Cancer Networks may also reflect differences in other factors that impact on survival, such as: delays in presentation and diagnosis, differences in stage of disease, differences in treatment, differences in comorbidities among patients, or a combination of all these factors. Differences in treatment may relate to practices and protocols (differences in surgery, radiotherapy and chemotherapy) and patient preferences. Generally, poor one-year relative survival is considered to be related to delays in presentation and diagnosis.

The quality of the data is also dependent on the quality of data capture systems within multidisciplinary teams, cancer networks and cancer registries. At present, stage data for uterine cancer are variably recorded by registries across the UK meaning that analysis by stage of disease cannot be carried out nationally. Registries have increased efforts to record stage for uterine cancers over recent years and it is hoped that analysis based on stage of disease will be possible in the near future.

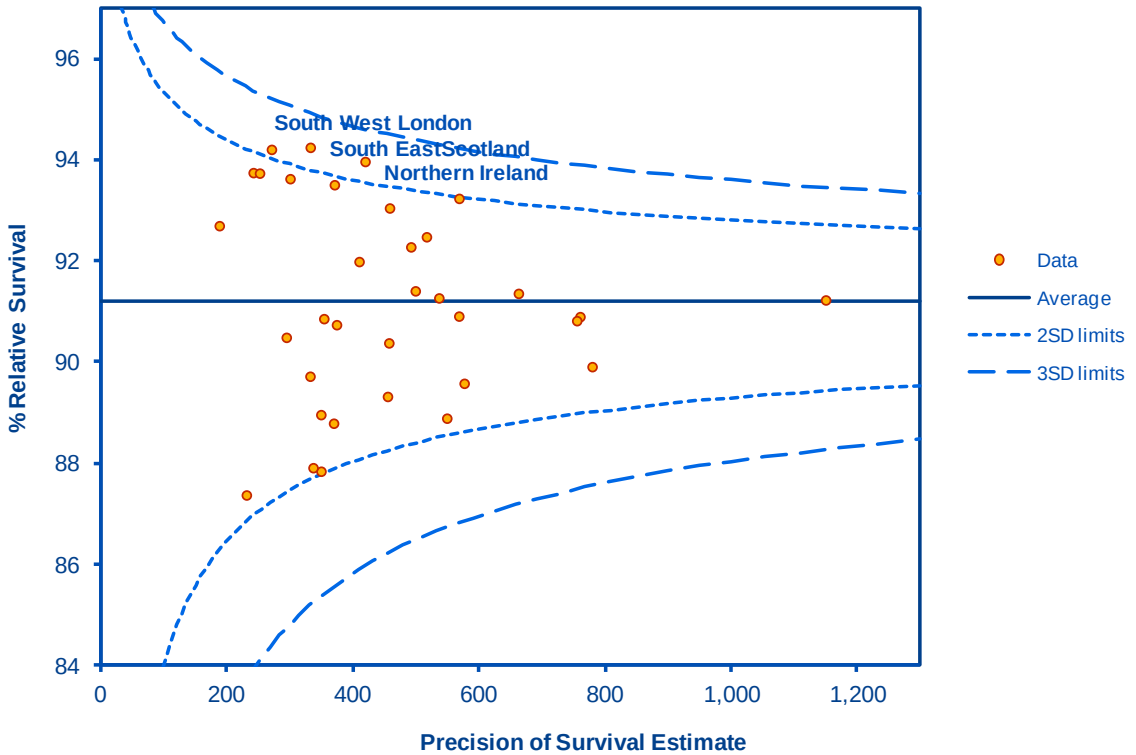

Figure 21 Funnel plot of one-year relative survival by Cancer Network, 2007-2009

Source: UK Cancer Information Service

Trend in five-year relative survival by Cancer Network, 1993-1995 to 2003-2005

For women diagnosed over the 10-year period between 1993-1995 and 2003-2005, there is evidence that five-year relative survival improved in four CNs: 3 Counties CN (13.0 percentage point increase), Anglia CN (9.2 percentage point increase) and North of England CN (11.0 percentage point increase)in England; and Northern Ireland CN (11.8 percentage point increase). In the areas where relative survival decreased, the change was not statistically significant.

Table 12 Trends in five-year relative survival by Cancer Network, 1993-1995 to 2003-2005

Cancer Network	1993-1995	2003-2005	Change	
United Kingdom	**72.9**	**78.5**	**5.6**	*
England	**72.8**	**78.6**	**5.8**	*
3 Counties	69.7	82.7	13.0	*
Anglia	73.9	83.1	9.2	*
Arden	74.2	76.4	2.3	
Avon, Somerset & Wiltshire	76.0	82.1	6.1	
Central South Coast	72.3	77.1	4.9	
Dorset	74.0	84.4	10.5	
East Midlands	71.4	76.9	5.5	
Essex	78.7	80.0	1.2	
Greater Manchester & Cheshire	72.3	78.1	5.8	
Greater Midlands	70.2	79.5	9.4	
Humber & Yorkshire Coast	68.7	79.6	10.8	
Kent & Medway	71.1	75.3	4.2	
Lancashire & South Cumbria	73.0	74.7	1.7	
Merseyside & Cheshire	70.1	78.2	8.1	
Mount Vernon	78.7	76.3	-2.3	
North East London	74.6	77.8	3.2	
North London	75.3	78.9	3.6	
North of England	69.0	80.0	11.0	*
North Trent	73.6	73.5	-0.2	
North West London	73.6	73.2	-0.4	
Pan Birmingham	73.7	78.0	4.3	
Peninsula	73.4	79.5	6.1	
South East London	68.2	72.9	4.7	
South West London	72.1	75.2	3.2	
Surrey, West Sussex & Hampshire	71.7	79.7	8.0	
Sussex	69.4	79.8	10.4	
Thames Valley	77.8	80.7	2.9	
Yorkshire	73.8	82.1	8.2	
Scotland	**75.6**	**78.8**	**3.2**	
North of Scotland	79.2	79.3	0.1	
South East Scotland	75.6	83.0	7.4	
West of Scotland	73.2	75.9	2.7	
Wales	**71.4**	**76.2**	**4.8**	
South Wales	73.9	77.1	3.1	
North Wales	63.6	73.8	10.2	
Northern Ireland	**69.0**	**80.8**	**11.8**	*

'Change' is the percentage point change between 1987-1989 and 2007-2009. There may be some discrepancy due to rounding error

* represents statistically significant difference over this time period

Source: UK Cancer Information Service

Five-year relative survival by Cancer Network, 2003-2005

For those patients diagnosed in 2003-2005, there is evidence that relative survival up to five years from diagnosis is higher than the UK average of 78.5% in Anglia CN (83.1%). Likewise, there is evidence that five-year survival is lower than the UK average in South East London CN (72.9%) and North Trent CN (73.5%).

The relative survival results presented here are not age-standardised; therefore, any differences across the CNs in the age profile of women diagnosed with uterine cancer have not been adjusted for. As with one-year relative survival, variation in five-year survival rates can be due to several factors. Generally, poor five-year relative survival is considered to be related to the effectiveness of treatment as well as delays in presentation and diagnosis.

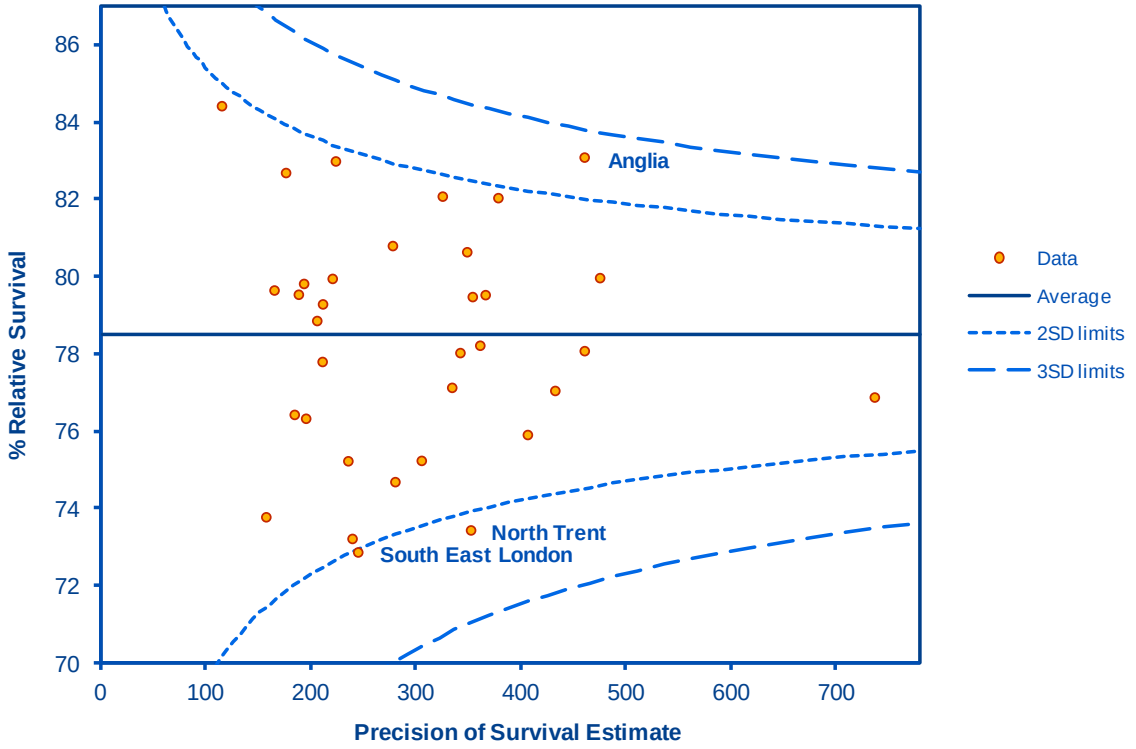

Figure 22 Funnel plot of five-year relative survival by Cancer Network, 2003-2005

Source: UK Cancer Information Service

Relative survival by age, United Kingdom, 2007-2009 and 2003-2005

There is strong evidence that uterine cancer survival is worse in older women in the UK, with women aged over 75 having much lower one-year survival than younger women; survival is less than 90% in women of this age compared to over 90% in younger women. For five-year relative survival, women aged over 65 have much worse survival than younger women; survival is less than 80% in women of this age compared to over 80% in younger women. This pattern is similar across the UK countries.

Some of the difference in survival rates may be explained by the variation in tumour type by age. As discussed in the morphology section, the second most common type of tumour for women aged above 55 is 'Mixed epithelial & mesenchymal' tumours. This group is largely made up of carcinosarcomas which, compared to other uterine tumour types, have particularly poor prognosis due to a higher likelihood of metastases and recurrence [7]. There are other tumour types more common in older women, such as clear cell and papillary serous carcinomas that also have poorer outcomes and therefore explain some of the difference in survival rates between age groups. There are also differences in the way sarcomas are treated, which may explain different outcomes for patients diagnosed with these tumours types compared to other uterine tumours. The poorer survival in older women may also be related to the increasing proportion of unspecified morphology, possibly indicating later presentation and poorer health.

It has been found that women over the age of 70 are more likely than younger women to be diagnosed through emergency presentation, ranging from 9% of uterine cancers diagnosed in women in their 70s to 27% in women aged over 85. This mode of presentation has the poorest survival, particularly among older patients [19]. However, premenopausal women do not necessarily present earlier as irregular bleeding is more common in women approaching the menopause, resulting in this early symptom possibly being ignored [7]. This is perhaps reflected in the slightly higher rate of emergency presentations in women aged under 50 compared to women aged 50-69; 8% compared to 5%, respectively [19].

Variation in major resection rates by age has also been found, with rates as high as 89% in women in their 50s and 60s, but falling to 65% in women aged 80 and over [24]. This may reflect the poorer health and later stage of disease in older women, which in turn impacts on survival.

Table 13 One- and five-year relative survival by age, United Kingdom, 2007-2009 and 2003-2005

Age Group	One-year Relative Survival					Five-year Relative Survival				
	Cases	Deaths	%	95% CI		Cases	Deaths	%	95% CI	
All Females	20,474	2,218	91.2	(90.8,	91.6)	17,483	5,438	78.5	(77.7,	79.3)
<45	723	32	95.7	(94.1,	97.2)	588	75	87.8	(85.0,	90.5)
45-49	828	48	94.4	(92.8,	96.0)	661	101	85.8	(83.0,	88.6)
50-54	1,572	88	94.7	(93.5,	95.9)	1,514	225	86.8	(84.9,	88.7)
55-59	3,022	147	95.6	(94.8,	96.4)	2,821	457	86.2	(84.8,	87.7)
60-64	3,726	200	95.3	(94.6,	96.1)	2,735	545	83.8	(82.2,	85.4)
65-69	3,067	229	93.7	(92.7,	94.6)	2,732	788	76.8	(75.0,	78.7)
70-74	2,890	292	91.8	(90.6,	92.9)	2,283	787	74.9	(72.6,	77.1)
75-79	2,110	350	86.5	(84.8,	88.2)	1,805	838	67.7	(64.7,	70.6)
80-84	1,406	351	80.1	(77.6,	82.5)	1,375	851	57.8	(53.8,	61.7)
85+	1,130	481	66.0	(62.6,	69.3)	969	771	49.3	(43.0,	55.5)

95% CI is 95% confidence interval for calculated rate

Source: UK Cancer Information Service

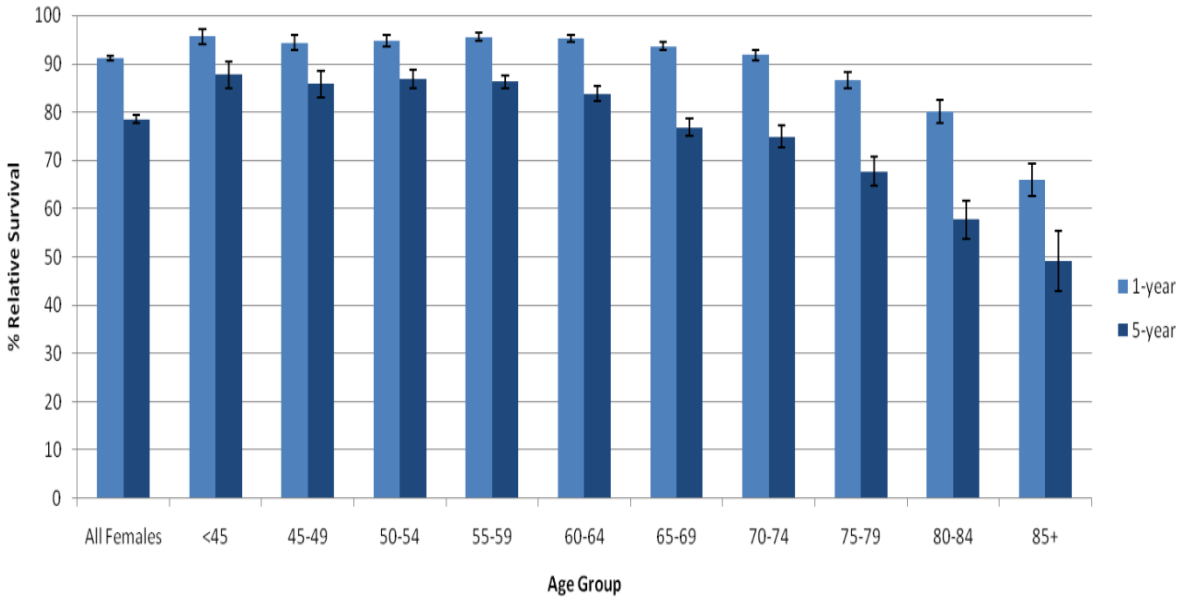

Figure 23 One- and five- year relative survival by age, United Kingdom, 2007-2009 and 2003-2005

Error bars are 95% confidence intervals for survival estimates
Source: UK Cancer Information Service

Trends in one-year relative survival by age, United Kingdom, 1993-1995 to 2007-2009

Over the period analysed, there is evidence that one-year relative survival has improved for all age groups over 55. The greatest improvement was for women over 80 with an increase of 11.0 percentage points.

As discussed above, advancements in both diagnostics and treatment may have contributed to the improvement in survival seen in women over 55. The survival estimates for women aged under 55 are based on small numbers and therefore less likely to show significant results. However, the problem of delayed presentation by women approaching the menopause may also be impeding improvements in one-year survival.

Table 14 Trends in one-year survival by age, United Kingdom, 1993-1995 to 2007-2009

Age Group	1993-1995	2000-2002	2007-2009	Change
All Females	85.3	88.3	91.2	5.9 *
<45	92.1	94.9	95.7	3.5
45-49	93.8	95.3	94.4	0.6
50-54	94.2	94.7	94.7	0.5
55-59	93.0	94.7	95.6	2.6 *
60-64	92.0	93.3	95.3	3.4 *
65-69	87.7	91.4	93.7	5.9 *
70-74	82.3	88.4	91.8	9.5 *
75-79	80.2	83.2	86.5	6.3 *
80-84	68.8	72.5	80.1	11.3 *
85 +	54.9	61.6	66.0	11.0 *

'Change' is the percentage point change between 1987-1989 and 2007-2009

* represents statistically significant difference over this time period

Source: UK Cancer Information Service

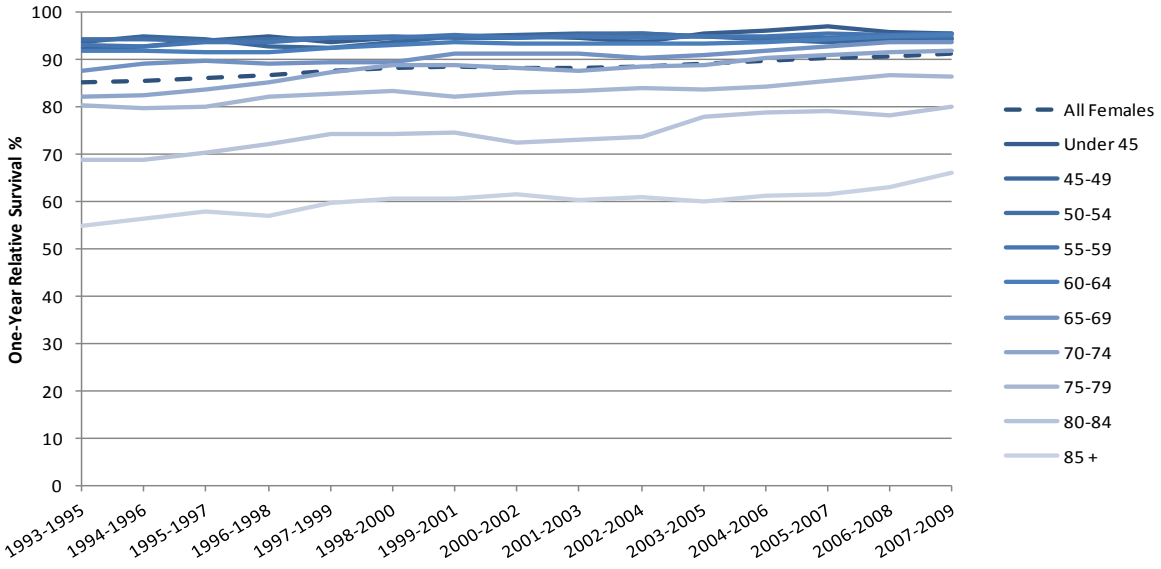

Figure 24 Trends in one-year relative survival by age, United Kingdom, 1993-1995 to 2007-2009

Source: UK Cancer Information Service

Trends in five-year relative survival by age, United Kingdom, 1993-1995 to 2003-2005

Over the 15 year period, there is evidence that five-year relative survival has improved in women age 60-74 and women aged 80+, with the greatest increase of 14.7 percentage points in women aged 85+. There may also be increases in the survival of other age groups, however, the estimates are based on small numbers and therefore do not show statistically significant improvements.

Again, improvements in five-year survival may be due to more centralised treatment and surgery by specialist gynaecological oncologists as well as improved symptom awareness, referral and diagnostics.

Table 15 Trends in five-year relative survival by age, United Kingdom, 1993-1995 to 2003-2005

Age Groups	1993-1995	2003-2005	Change
All Females	72.9	78.5	5.6 *
< 45	81.3	87.8	6.5
45-49	85.3	85.8	0.5
50-54	84.5	86.8	2.3
55-59	83.0	86.2	3.2
60-64	79.1	83.8	4.7 *
65-69	72.6	76.8	4.3 *
70-74	64.5	74.9	10.3 *
75-79	62.9	67.7	4.8
80-84	48.4	57.8	9.4 *
85 +	34.6	49.3	14.7 *

'Change' is the percentage point change between 1988-1990 and 2003-2005.

* represents statistically significant difference over this time period

Source: UK Cancer Information Service

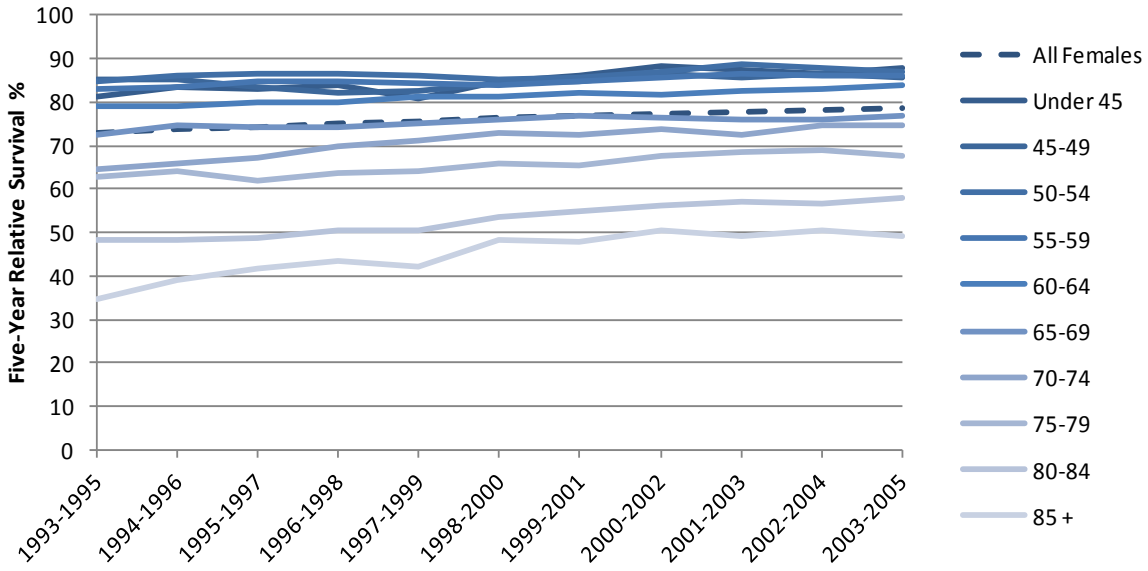

Figure 25 Trends in five-year relative survival by age, United Kingdom, 1993-1995 to 2003-2005

Source: UK Cancer Information Service

Appendix 1: Methodology

Source of results

All incidence, mortality and survival results were extracted from the UK Cancer Information Service (UKCIS) in November 2012. The morphology incidence data was extracted from the 2010 National Cancer Data Repository (NCDR) database provided by the National Cancer Intelligence Network (NCIN). This data set holds merged data from the eight PHE National Cancer Registration Service (NCRS) teams in England and the cancer registries in Scotland, Wales and Northern Ireland.

Definition of uterine cancer

The results presented in this report are based on all types of malignant uterine tumour, defined using the International Classification of Diseases version 10 (ICD10) codes. Incidence, mortality and survival data taken from the UK Cancer Information Service (UKCIS) is based on ICD10 codes C54-55. C54 is "malignant neoplasm of corpus uteri"; C55 is "uterus part unspecified". The definition of uterine cancer in the morphology section is also based on these ICD 10 codes.

In the incidence, mortality and survival sections it has not been possible to exclude on the basis of tumour type due to the source of the data. Tumours with different risk factors and prognoses are considered together. Where possible, details of the tumour types associated with risk factors or particular prognoses are discussed in relation to variation in outcomes, particularly by age. Caution should be taken when interpreting variation by geography and age as differences in the prevalence of tumour types may impact on survival estimates.

In some sections of the report there is mention of type 1 and type 2 endometrial cancer; endometrioid cancer is a type 1 cancer, and clear cell and papillary serous are type 2; both are endometrial cancers.

Morphology groups

The cancer morphology data are available as a five digit code, where the first four digits refer to the morphology and the fifth digit to the tumour behaviour code. The coding is based on (ICD-O-2) [25]. The groupings for morphology codes presented in this report were derived by Lynn Hirschowitz (Consultant Pathologist, Birmingham Women's NHS Trust) and Carolynn Gildea (PHE Knowledge and Intelligence Team (East Midlands)). The morphology groups include the morphology codes as detailed in section

Table A1.1 Morphology groupings used in the report

Group Used in Report	Morphology Codes
Endometrioid Adenocarcinoma	*8022, 8050, 8140-8141, 8190-8211, 8230-8231, 8255-8263, 8323, 8380, 8382-8384, 8430-8440 8443, 8450, 8452-8459, 8461, 8470-8471, 8480-8490, 8510, 8550, 8560, 8570-8574, 8576*
Clear cell and papillary serous	*8310, 8441, 8460*
Other classified carcinoma & Unclassified carcinoma	*8010-8015, 8020, 8021, 8030-8046, 8051-8131, 8142-8180, 8212-8221, 8240-8254, 8264-8300, 8311-8322, 8324-8375, 8390-8420, 8500-8508, 8512-8543, 8551, 8561-8562*
Leiomyosarcoma	*8890-8898*
Endometrial stromal sarcoma	*8930-8932, 8935*
Miscellaneous sarcoma	*8800-8858, 8900-8921, 8936, 8960-8974, 8990-8991, 9120-9363, 9480-9989*
Mixed epithelial and mesenchymal	*8381, 8933-8934, 8940-8959, 8980-8983, 9014-9015*
Miscellaneous and unspecified	*8000-8005, 8442, 8444, 8451, 8462-8463, 8472-8473, 8575, 8580-8790, 8860-8881, 9000-9013, 9016-9110, 9364-9474*

Age standardisation

Uterine cancer incidence and mortality vary greatly with age. Incidence and mortality rates are directly age-standardised to take account of differing age profiles of cancer patients in different geographical areas over time. Comparisons between areas and years are consequently not biased by differing age profiles.

Rates are presented per 100,000 female population using the European standard population weights, as outlined in Table 1A2.

Table A1.2 European standard population weights

Age group	Population	Age group	Population	Age group	Population
0	1,600	30-34	7,000	65-69	4,000
1-4	6,400	35-39	7,000	70-74	3,000
5-9	7,000	40-44	7,000	75-79	2,000
10-14	7,000	45-49	7,000	80-84	1,000
15-19	7,000	50-54	7,000	85+	1,000
20-24	7,000	55-59	6,000		
25-29	7,000	60-64	5,000	**Total**	**100,000**

Confidence intervals

Confidence intervals (CIs) are a way of expressing how certain we are about a figure, such as an estimated cancer incidence rate. All CIs in this report have been calculated at the 95% level of statistical significance and thus define a 95% chance that the interval contains the true value. When comparing the rates of different groups, the CIs can be compared to determine if the range of values overlap. This is a useful rule-of-thumb for calculating statistical significance; if the confidence intervals do not overlap then the difference is statistically significant.

Correlation

Correlation is a way to measure the association between two continuous variables. Pearson's correlation coefficient is a number between -1 and 1 that quantifies the degree of 'straight line' relationship between two variables. A value of -1 indicates a perfect negative association (i.e. as one variable increases the other decreases) and +1 a perfect positive association. A value closer to 0 indicates that there is no linear association between the two variables. In this way, the spread of the data points around an underlying linear trend is quantified; the greater the spread of data points, the lower the correlation.

Funnel Plots

Funnel plots [26] have become a preferred method of presenting comparisons between geographical areas or institutions in public health. This is opposed to the more conventional use of 'caterpillar' plots which visually imply a ranking of areas based on good or bad performance. In any process or system, variation is to be expected; the funnel plot approach makes it easier to identify which data points indicate areas that may be worthy of further investigation.

Simple statistical methods are used to define limits of expected variation known as control limits. The group average is used as the estimate of expected 'performance' and the best estimate of expected variation around this average is both/either ± 2 standard deviations (SDs), equivalent to 95% confidence intervals, and/or ± 3 SDs, equivalent to 99.8% confidence intervals. Those areas that fall outside of these control limits are deemed to be statistically significantly different from the

group average. More information on funnel plot methodology can be found in the APHO technical briefing no.2 [27].

Deprivation

For each of the UK countries, the Income Domain of the country specific Indices of Multiple Deprivation (IMD) were used to assess the relationship between incidence and mortality and deprivation. This measure of deprivation may be calculated differently in each country due to differences in policy or methodology, therefore the measure specific to each country was used.

Comparisons across countries cannot be made due to differences in how income deprivation may be defined; it cannot be said that those in the most deprived fifth of areas in England have higher rates than the most deprived fifth of areas in Scotland. However, generalised comments can be made. For example, those in the most deprived areas in all the UK countries generally have higher rates than those in the least deprived.

For England the Income domain of the IMD 2010 (based on 2009 population estimates) at Local Authority level was used as published by the Association of Public Health Observatories [28]. For Scotland, the income domain of the Scottish IMD 2009+2 years was used, based on 2009 population estimates [29]. For Wales, the income domain of the Welsh IMD 2011 was used, based on mid-2009 population estimates [30]. For Northern Ireland, the Northern Ireland IMD 2010 was used, based on data between 2007-2009 [31].These were calculated by aggregating the LSOA level data by Local Authority.

Relative survival

Survival analysis is valuable in the assessment of the effectiveness of prevention and treatment regimes. The aim of analysing survival data is often to estimate the probability of not dying of the diagnosed cancer. This uses a *relative survival* statistic which compares the observed (crude) survival rate in a patient group to the expected survival rate in a group of people from the general population similar to the patient group with respect to age, sex and calendar period of observation.

So, relative survival can be interpreted as the survival of cancer patients relative to, or compared with, that of the population. For example, if five-year survival is 40% among a group of cancer patients of whom 80% would have been expected to survive that long, then their relative survival is 40/80 = 50%.

In order to obtain accurate estimates of survival, it is important to use the most appropriate life table to obtain the probability of death by age, sex, calendar period (and possibly other factors such as deprivation quintile) for the general population in which the cancer patients arise. National life tables at UK country level have been used in the calculation of relative survival to provide the calendar-year age and sex specific mortality profile of the background population. However, these have also been used for the sub-national level analysis and therefore sub-national survival estimates may under- or over-estimate *relative* survival because of variation in the background mortality rates by sub-geography.

Appendix 2: UK Country Tables

Table A2.1 Incidence by health authority, 2007-2009

Code	health authority	Total Cases	ASIR	95% CI
	United Kingdom	**23,454**	**19.7**	**(19.4, 19.9)**
	England	**19,399**	**19.6**	**(19.3, 19.9)**
	North East SHA	**928**	**18.0**	**(16.8, 19.2)**
	PCT			
5D7	Newcastle	88	19.5	(15.4, 24.4)
5D8	North Tyneside	50	13.0	(9.5, 17.5)
5D9	Hartlepool	39	20.6	(14.3, 29.1)
5E1	Stockton-on-Tees Teaching	61	16.3	(12.3, 21.3)
5J9	Darlington	44	21.7	(15.4, 29.7)
5KF	Gateshead	68	17.1	(13.0, 22.1)
5KG	South Tyneside	52	17.4	(12.7, 23.5)
5KL	Sunderland Teaching	105	18.6	(15.0, 22.8)
5KM	Middlesbrough	47	17.9	(12.8, 24.3)
5ND	County Durham	193	18.7	(16.1, 21.8)
5QR	Redcar & Cleveland	55	17.8	(13.1, 23.8)
TAC	Northumberland Care Trust	126	18.0	(14.9, 21.8)
	North West SHA	**2,572**	**19.0**	**(18.2, 19.8)**
	PCT			
5F5	Salford	79	20.3	(15.8, 25.7)
5F7	Stockport	121	20.6	(17.0, 25.0)
5HG	Ashton, Leigh & Wigan	97	15.9	(12.8, 19.6)
5HP	Blackpool	62	19.8	(14.7, 26.0)
5HQ	Bolton	99	20.4	(16.4, 25.1)
5J2	Warrington	57	14.8	(11.1, 19.6)
5J4	Knowsley	45	16.4	(11.7, 22.2)
5J5	Oldham	73	19.3	(15.0, 24.5)
5JX	Bury	69	20.5	(15.7, 26.1)
5LH	Tameside & Glossop	86	19.2	(15.2, 23.9)
5NE	Cumbria Teaching	216	18.7	(16.2, 21.7)
5NF	North Lancashire Teaching	170	23.1	(19.5, 27.3)
5NG	Central Lancashire	191	21.5	(18.5, 25.0)
5NH	East Lancashire Teaching	155	20.0	(16.8, 23.6)
5NJ	Sefton	127	20.3	(16.7, 24.5)
5NK	Wirral	115	15.9	(12.9, 19.4)
5NL	Liverpool	163	21.3	(18.1, 25.1)
5NM	Halton & St Helens	103	17.5	(14.2, 21.5)
5NN	Western Cheshire	93	19.3	(15.4, 24.1)
5NP	Central & Eastern Cheshire	146	14.9	(12.4, 17.7)
5NQ	Heywood, Middleton & Rochdale	59	15.6	(11.7, 20.3)
5NR	Trafford	68	16.9	(12.9, 21.7)
5NT	Manchester	122	19.5	(16.0, 23.5)
TAP	Blackburn with Darwen Teaching Care Trust	56	25.5	(19.0, 33.3)

Code	health authority	Total Cases	ASIR	95% CI
	Yorkshire & The Humber SHA	**1,901**	**19.0**	**(18.1, 19.9)**
	PCT			
5EF	North Lincolnshire	71	22.0	(17.0, 28.3)
5H8	Rotherham	85	17.0	(13.4, 21.3)
5J6	Calderdale	64	16.3	(12.3, 21.1)
5JE	Barnsley	85	18.0	(14.2, 22.7)
5N1	Leeds	242	18.5	(16.1, 21.1)
5N2	Kirklees	131	17.5	(14.5, 20.9)
5N3	Wakefield District	129	20.2	(16.7, 24.2)
5N4	Sheffield	187	19.5	(16.7, 22.8)
5N5	Doncaster	104	17.2	(13.8, 21.1)
5NV	North Yorkshire & York	322	18.7	(16.6, 21.1)
5NW	East Riding Of Yorkshire	183	23.2	(19.8, 27.2)
5NX	Hull Teaching	91	21.6	(17.2, 26.8)
5NY	Bradford & Airedale Teaching	127	15.5	(12.8, 18.6)
TAN	North East Lincolnshire Care Trust Plus	80	25.6	(20.0, 32.3)
	East Midlands SHA	**1,872**	**21.9**	**(20.9, 22.9)**
	PCT			
5EM	Nottingham City	81	21.5	(16.8, 26.9)
5ET	Bassetlaw	39	17.7	(12.5, 24.9)
5N6	Derbyshire County	333	22.1	(19.7, 24.8)
5N7	Derby City	94	21.3	(17.0, 26.4)
5N8	Nottinghamshire County Teaching	276	20.7	(18.2, 23.4)
5N9	Lincolnshire Teaching	381	23.9	(21.4, 26.6)
5PA	Leicestershire County & Rutland	301	21.9	(19.4, 24.7)
5PC	Leicester City	123	29.2	(24.1, 35.0)
5PD	Northamptonshire Teaching	244	19.3	(16.9, 22.0)
	West Midlands SHA	**2,187**	**20.6**	**(19.7, 21.5)**
	PCT			
5CN	Herefordshire	88	20.0	(15.7, 25.4)
5M1	South Birmingham	113	17.8	(14.4, 21.7)
5M2	Shropshire County	119	17.0	(13.9, 20.9)
5M3	Walsall Teaching	103	21.3	(17.2, 26.0)
5MD	Coventry Teaching	101	18.9	(15.2, 23.2)
5MK	Telford & Wrekin	63	20.7	(15.7, 26.7)
5MV	Wolverhampton City	75	16.9	(13.1, 21.5)
5MX	Heart Of Birmingham Teaching	67	20.2	(15.4, 25.9)
5PE	Dudley	164	26.4	(22.3, 31.0)
5PF	Sandwell	132	25.5	(21.0, 30.5)
5PG	Birmingham East & North	152	23.1	(19.4, 27.3)
5PH	North Staffordshire	93	20.1	(16.0, 25.1)
5PJ	Stoke on Trent	108	22.3	(18.1, 27.3)
5PK	South Staffordshire	256	20.3	(17.8, 23.1)
5PL	Worcestershire	260	21.8	(19.1, 24.8)
5PM	Warwickshire	217	19.6	(17.0, 22.6)
5QW	Solihull	76	17.4	(13.6, 22.3)

Table A2.1 continued

Code	health authority	Total Cases	ASIR	95% CI
	East of England SHA	**2,274**	**19.6**	**(18.8, 20.5)**
	PCT			
5GC	Luton	47	16.5	(11.9, 22.1)
5P1	South East Essex	158	20.4	(17.1, 24.3)
5P2	Bedfordshire	151	19.6	(16.5, 23.1)
5PN	Peterborough	61	21.4	(16.1, 27.7)
5PP	Cambridgeshire	232	20.5	17.9, 23.5)
5PQ	Norfolk	367	20.7	(18.5, 23.2)
5PR	Great Yarmouth & Waveney	102	20.3	(16.3, 25.3)
5PT	Suffolk	274	21.2	(18.6, 24.1)
5PV	West Essex	108	19.5	(15.8, 23.8)
5PW	North East Essex	145	20.1	(16.7, 24.0)
5PX	Mid Essex	120	16.4	(13.5, 19.8)
5PY	South West Essex	138	18.5	(15.3, 22.0)
5QV	Hertfordshire	371	18.3	(16.4, 20.3)
	London SHA	**2,252**	**20.0**	**(19.1, 20.8)**
	PCT			
5A4	Havering	93	19.3	(15.4, 24.1)
5A5	Kingston	34	12.5	(8.5, 17.8)
5A7	Bromley	127	20.7	(17.1, 25.0)
5A8	Greenwich Teaching	83	26.2	(20.5, 32.6)
5A9	Barnet	125	21.6	(17.8, 26.0)
5AT	Hillingdon	97	23.1	(18.6, 28.2)
5C1	Enfield	92	20.2	(16.1, 24.8)
5C2	Barking and Dagenham	48	18.4	(13.2, 24.9)
5C3	City and Hackney Teaching	62	24.8	(18.8, 31.9)
5C4	Tower Hamlets	41	19.6	(13.8, 26.9)
5C5	Newham	64	24.8	(19.0, 31.8)
5C9	Haringey Teaching	45	14.9	(10.7, 20.1)
5H1	Hammersmith & Fulham	39	17.1	(11.9, 23.8)
5HX	Ealing	90	20.4	(16.2, 25.2)
5HY	Hounslow	74	23.6	(18.5, 29.7)
5K5	Brent Teaching	72	18.5	(14.3, 23.4)
5K6	Harrow	85	21.3	(16.9, 26.6)
5K7	Camden	54	19.2	(14.2, 25.3)
5K8	Islington	41	18.1	(12.8, 24.9)
5K9	Croydon	104	18.5	(15.0, 22.6)
5LA	Kensington & Chelsea	50	16.4	(11.9, 22.3)
5LC	Westminster	51	14.4	(10.6, 19.5)
5LD	Lambeth	69	21.1	(16.2 26.9)
5LE	Southwark	64	19.5	(14.7, 25.0)
5LF	Lewisham	86	25.6	(20.2, 31.8)
5LG	Wandsworth	70	20.2	(15.5, 25.9)
5M6	Richmond & Twickenham	52	16.9	(12.5, 22.4)
5M7	Sutton & Merton	106	16.7	(13.5, 20.4)
5NA	Redbridge	84	21.3	(16.8, 26.4)
5NC	Waltham Forest	62	20.6	(15.6, 26.5)
TAK	Bexley Care Trust	88	20.8	(16.4, 25.9)

Code	health authority	Total Cases	ASIR	95% CI
	South East Coast SHA	**1,679**	**18.2**	**(17.3, 19.1)**
	PCT			
5L3	Medway	99	22.3	(18.0, 27.2)
5LQ	Brighton & Hove City	90	21.6	(17.1, 26.9)
5P5	Surrey	395	17.6	(15.8, 19.5)
5P6	West Sussex	304	16.6	(14.7, 18.8)
5P7	East Sussex Downs & Weald	154	18.1	(15.1, 21.7)
5P8	Hastings & Rother	96	20.2	(16.0, 25.5)
5P9	West Kent	247	17.9	(15.6, 20.4)
5QA	Eastern & Coastal Kent	294	18.7	(16.4, 21.1)
	South Central SHA	**1,393**	**18.3**	**(17.3, 19.3)**
	PCT			
5CQ	Milton Keynes	60	15.3	(11.6, 19.8)
5FE	Portsmouth City Teaching	60	19.0	(14.3, 24.8)
5L1	Southampton City	77	22.4	(17.5, 28.3)
5QC	Hampshire	464	17.5	(15.8, 19.2)
5QD	Buckinghamshire	204	19.9	(17.2, 23.1)
5QE	Oxfordshire	215	19.2	(16.6, 22.1)
5QF	Berkshire West	128	17.0	(14.1, 20.4)
5QG	Berkshire East	117	18.2	(15.0, 22.0)
5QT	Isle of Wight NHS	68	17.8	(13.4, 23.8)
	South West SHA	**2,341**	**20.4**	**(19.5 21.3)**
	PCT			
5A3	South Gloucestershire	120	25.0	(20.6, 30.2)
5F1	Plymouth Teaching	101	20.8	(16.8, 25.7)
5FL	Bath & North East Somerset	69	19.1	(14.6, 24.9)
5K3	Swindon	72	21.2	(16.3, 26.9)
5M8	North Somerset	90	18.9	(15.0, 23.8)
5QH	Gloucestershire	234	18.8	(16.3, 21.6)
5QJ	Bristol	143	21.2	(17.7, 25.3)
5QK	Wiltshire	195	20.4	(17.5, 23.8)
5QL	Somerset	249	19.5	(17.0, 22.3)
5QM	Dorset	213	19.1	(16.4, 22.4)
5QN	Bournemouth & Poole Teaching	130	19.5	(16.0, 23.7)
5QP	Cornwall and Isles of Scilly	279	22.5	(19.8, 25.6)
5QQ	Devon	391	21.0	(18.8, 23.4)
TAL	Torbay Care Trust	55	14.1	(10.2, 19.5)

Table A2.1 continued

Code	health authority	Total Cases	ASIR	95% CI
	Scotland	**1,959**	**18.3**	**(17.5, 19.1)**
	Health Board			
8000001	Ayrshire & Arran	193	22.7	(19.5, 26.5)
8000002	Borders	50	19.0	(13.9, 26.2)
8000004	Fife	144	19.3	(16.1, 22.9)
8000007	Greater Glasgow & Clyde	402	16.5	(14.8, 18.3)
8000008	Highland & Argyll	156	22.1	(18.7, 26.3)
8000009	Lanarkshire	194	17.1	(14.7, 19.9)
8000006	Grampian	202	18.8	(16.2, 21.7)
8000011	Orkney	11	19.9	(8.9, 43.8)
8000010	Lothian	298	19.5	(17.3, 22.0)
8000013	Tayside	137	16.1	(13.4, 19.3)
8000005	Forth Valley	88	14.6	(11.6, 18.2)
8000014	Western Isles	15	23.7	(12.5, 46.1)
8000003	Dumfries & Galloway	57	15.8	(11.8, 21.3)
8000012	Shetland	12	26.2	(12.9, 51.7)
	Wales	**1,435**	**22.5**	**(21.3, 23.8)**
	Health Board			
7A1	Betsi Cadwaladr University	310	20.1	(17.8, 22.7)
7A2	Hywel Dda	187	20.9	(17.9, 24.5)
7A3	Abertawe Bro Morgannwg University	270	24.7	(21.7, 28.1)
7A4	Cardiff & Vale University	165	20.9	(17.6, 24.5)
7A5	Cwm Taf	145	25.0	(20.9, 29.8)
7A6	Aneurin Bevan	263	22.3	(19.6, 25.4)
7A7	Powys Teaching	95	30.6	(24.3, 38.6)
	Northern Ireland	**661**	**21.8**	**(20.1, 23.6)**
	Health & Social Care Trust			
ZC1	Belfast	118	19.9	(16.3, 24.1)
ZC2	Northern	162	19.9	(16.9, 23.3)
ZC4	South Eastern	121	20.0	(16.6, 24.0)
ZC3	Southern	148	26.7	(22.5, 31.5)
ZC5	Western	104	22.2	(18.0, 27.0)

ASIR is (directly) age-standardised incidence rate per 100,000 female population

95% CI is 95% confidence interval for calculated rate

Source: UK Cancer Information Service

Table A2.2 Trends in incidence by age and UK country, 1993 to 2009

		1993		1999		2004		2009	
Age group	Country	Total Cases	Rate	Total Cases	Rate	Total Cases	Rate	Total Cases	Rate
Under 45	England	153	1.0	143	1.0	176	1.2	219	1.5
	Scotland	17	1.1	11	0.7	13	0.9	13	0.9
	Wales	13	1.5	9	1.1	10	1.2	7	0.9
	Northern Ireland	4	0.8	7	1.3	6	1.1	12	2.2
45-49	England	197	11.8	171	10.8	189	11.5	239	12.7
	Scotland	18	10.7	11	6.6	34	18.4	33	16.0
	Wales	15	15.0	23	24.1	16	16.5	19	17.5
	Northern Ireland	5	10.3	7	14.1	10	17.9	11	17.1
50-54	England	331	25.3	446	26.6	421	27.1	466	28.6
	Scotland	37	25.4	63	37.0	52	31.1	46	25.0
	Wales	29	35.7	32	31.3	35	36.1	29	29.8
	Northern Ireland	10	23.9	17	34.7	14	28.4	19	34.0
55-59	England	529	42.8	608	46.0	839	51.2	882	58.1
	Scotland	44	31.0	88	60.9	83	49.2	87	52.7
	Wales	33	42.6	56	66.7	55	53.1	53	54.8
	Northern Ireland	19	50.1	17	39.9	21	43.2	23	47.2
60-64	England	556	45.8	689	56.7	828	64.7	1,113	70.1
	Scotland	53	38.0	86	62.5	96	68.1	112	68.2
	Wales	38	48.7	54	69.9	70	82.9	100	98.1
	Northern Ireland	17	45.3	14	37.0	28	66.9	41	86.5
65-69	England	593	49.8	696	61.4	841	72.6	975	80.0
	Scotland	55	41.7	65	50.1	95	72.7	99	74.2
	Wales	33	41.4	57	77.9	64	85.8	62	76.7
	Northern Ireland	14	39.1	19	53.8	24	66.1	42	104.8
70-74	England	584	50.0	602	56.4	704	67.3	1,005	93.7
	Scotland	60	49.2	49	42.0	73	61.9	114	95.7
	Wales	53	67.8	63	88.6	55	81.9	72	104.2
	Northern Ireland	12	36.6	16	49.2	20	61.2	27	79.8
75-79	England	417	47.4	581	57.1	612	66.5	739	80.3
	Scotland	36	39.9	49	47.4	55	56.2	73	72.4
	Wales	28	49.2	40	59.4	48	79.6	42	71.6
	Northern Ireland	14	57.1	20	71.4	19	67.0	32	111.4
80-84	England	364	51.1	344	54.3	463	59.2	479	65.4
	Scotland	26	36.7	43	68.5	41	53.0	57	76.4
	Wales	23	51.5	31	75.1	36	70.1	35	73.9
	Northern Ireland	13	68.6	5	27.6	14	64.9	15	66.1
85+	England	308	51.1	407	59.9	378	56.6	422	53.6
	Scotland	29	50.6	26	40.5	32	51.4	45	62.3
	Wales	24	64.7	21	49.9	24	56.5	32	63.4
	Northern Ireland	9	58.2	4	23.5	10	58.4	11	55.1

Rate is age-specific incidence rate per 100,000 female population
Source: UK Cancer Information Service

Table A2.3 Trends in incidence by morphology group and UK country, 2000 to 2009

		2000		2003		2006		2009	
Morphology Group	**Country**	**Total Cases**	**Rate**	**Total Cases**	**Rate**	**Total Cases**	**Rate**	**Total Cases**	**Rate**
Endometrioid Adenocarcinoma	England	3,997	77.7%	4,322	78.4%	4,744	78.0%	5,037	77.0%
	Scotland	372	75.8%	394	75.5%	408	75.6%	509	74.7%
	Wales	266	73.5%	284	78.5%	328	78.5%	347	76.4%
	Northern Ireland	108	72.0%	141	75.0%	151	79.5%	194	81.9%
Clear cell and papillary serous	England	166	3.2%	194	3.5%	360	5.9%	454	6.9%
	Scotland	17	3.5%	38	7.3%	37	6.9%	73	10.7%
	Wales	9	2.5%	19	5.2%	31	7.4%	41	9.0%
	Northern Ireland	7	4.7%	12	6.4%	16	8.4%	16	6.8%
Other classified & unclassified carcinoma	England	367	7.1%	333	6.0%	253	4.2%	199	3.0%
	Scotland	22	4.5%	24	4.6%	12	2.2%	17	2.5%
	Wales	29	8.0%	27	7.5%	19	4.5%	26	5.7%
	Northern Ireland	5	3.3%	6	3.2%	2	1.1%	4	1.7%
Leiomyosarcoma	England	116	2.3%	121	2.2%	116	1.9%	119	1.8%
	Scotland	13	2.6%	13	2.5%	8	1.5%	18	2.6%
	Wales	17	4.7%	6	1.7%	2	0.5%	5	1.1%
	Northern Ireland	3	2.0%	3	1.6%	3	1.6%	2	0.8%
Endometrial stromal sarcoma	England	45	0.9%	60	1.1%	59	1.0%	63	1.0%
	Scotland	7	1.4%	10	1.9%	9	1.7%	1	0.1%
	Wales	6	1.7%	5	1.4%	3	0.7%	1	0.2%
	Northern Ireland	4	2.7%	2	1.1%	4	2.1%	1	0.4%
Miscellaneous sarcoma	England	27	0.5%	39	0.7%	38	0.6%	62	0.9%
	Scotland	6	1.2%	5	1.0%	10	1.9%	2	0.3%
	Wales	2	0.6%	1	0.3%	4	1.0%	1	0.2%
	Northern Ireland	1	0.7%	0	0.0%	1	0.5%	0	0.0%
Mixed epithelial & mesenchymal	England	271	5.3%	328	6.0%	351	5.8%	414	6.3%
	Scotland	41	8.4%	31	5.9%	38	7.0%	45	6.6%
	Wales	24	6.6%	15	4.1%	18	4.3%	22	4.8%
	Northern Ireland	13	8.7%	16	8.5%	5	2.6%	13	5.5%
Miscellaneous & unspecified	England	152	3.0%	114	2.1%	159	2.6%	195	3.0%
	Scotland	13	2.6%	7	1.3%	18	3.3%	16	2.3%
	Wales	9	2.5%	5	1.4%	13	3.1%	11	2.4%
	Northern Ireland	9	6.0%	8	4.3%	8	4.2%	7	3.0%

Source: National Cancer Data Repository

Table A2.4 Morphology group by age and UK country, 2007-2009

The proportions for Scotland, Wales and Northern Ireland are based on small numbers

		Age Group									
Morphology Group	**Country**	<44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+
Endometrioid Adenocarcinoma	England	74.5%	81.6%	88.3%	90.0%	90.3%	88.2%	86.5%	83.8%	80.0%	65.4%
	Scotland	84.1%	91.9%	89.5%	90.7%	88.0%	88.1%	86.5%	87.9%	70.8%	65.3%
	Wales	69.2%	90.9%	90.7%	89.8%	93.7%	85.7%	89.4%	84.1%	83.6%	58.9%
	Northern Ireland	88.2%	90.0%	93.8%	92.1%	92.6%	94.8%	88.8%	83.1%	77.8%	64.3%
Other classified & unclassified carcinoma	England	4.0%	2.0%	1.6%	1.5%	1.9%	2.1%	2.0%	3.6%	5.3%	14.4%
	Scotland	2.3%	0.0%	0.7%	0.7%	1.8%	1.7%	2.9%	2.6%	6.6%	9.3%
	Wales	7.7%	0.0%	1.0%	2.7%	0.7%	5.9%	4.8%	5.1%	9.0%	24.3%
	Northern Ireland	0.0%	0.0%	4.7%	1.3%	0.0%	0.0%	1.0%	1.5%	8.3%	0.0%
Leiomyosarcoma	England	8.3%	5.7%	3.4%	1.9%	1.7%	1.5%	1.1%	1.1%	0.7%	0.9%
	Scotland	6.8%	5.8%	6.3%	1.9%	2.1%	1.0%	1.6%	0.4%	0.7%	0.8%
	Wales	10.3%	3.6%	3.1%	3.2%	1.1%	0.0%	0.5%	0.6%	0.0%	0.0%
	Northern Ireland	2.9%	0.0%	1.6%	2.6%	0.8%	0.0%	2.0%	1.5%	0.0%	0.0%
Endometrial stromal sarcoma	England	5.6%	5.0%	1.8%	1.1%	0.4%	0.8%	0.7%	0.5%	0.3%	0.6%
	Scotland	0.0%	0.0%	0.0%	0.7%	1.2%	0.7%	0.6%	0.4%	0.0%	0.0%
	Wales	2.6%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%
	Northern Ireland	0.0%	5.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Miscellaneous sarcoma	England	1.9%	1.8%	0.8%	0.4%	0.5%	0.2%	0.6%	0.5%	0.9%	0.9%
	Scotland	0.0%	1.2%	0.0%	0.4%	0.0%	1.0%	1.0%	0.4%	2.2%	0.0%
	Wales	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	1.3%	0.8%	2.8%
	Northern Ireland	2.9%	0.0%	0.0%	1.3%	1.6%	1.0%	1.0%	1.5%	0.0%	3.6%
Mixed epithelial & mesenchymal	England	3.5%	2.0%	3.4%	4.2%	4.6%	6.3%	7.7%	8.6%	9.2%	7.9%
	Scotland	0.0%	1.2%	3.5%	5.2%	6.4%	6.4%	7.1%	5.6%	10.9%	4.2%
	Wales	7.7%	3.6%	5.2%	4.3%	1.8%	6.9%	4.3%	7.6%	5.7%	8.4%
	Northern Ireland	0.0%	0.0%	0.0%	2.6%	3.3%	4.1%	7.1%	7.7%	11.1%	17.9%
Miscellaneous & unspecified	England	2.2%	1.8%	0.8%	0.9%	0.6%	0.9%	1.4%	2.0%	3.5%	10.1%
	Scotland	6.8%	0.0%	0.0%	0.4%	0.3%	1.0%	0.3%	2.6%	8.8%	20.3%
	Wales	2.6%	1.8%	0.0%	0.0%	2.1%	1.0%	1.1%	1.3%	0.8%	5.6%
	Northern Ireland	5.9%	5.0%	0.0%	0.0%	1.6%	0.0%	0.0%	4.6%	2.8%	14.3%

Source: National Cancer Data Repository

Table A2.5 Mortality by health authority, 2008-2010

Code	health authority	Total Deaths	ASMR	95% CI
	United Kingdom	**5,409**	**3.7**	**(3.6, 3.8)**
	England	**4,439**	**3.6**	**(3.5, 3.8)**
	North East SHA	**205**	**3.2**	**(2.7, 3.7)**
	PCT			
5D7	Newcastle	18	3.2	(1.8, 5.4)
5D8	North Tyneside	8	1.6	(.6, 3.7)
5D9	Hartlepool	10	3.1	(1.4, 7.0)
5E1	Stockton-on-Tees Teaching	15	3.5	(1.9, 6.2)
5J9	Darlington	8	3.9	(1.5, 8.4)
5KF	Gateshead	13	2.7	(1.3, 5.2)
5KG	South Tyneside	11	2.4	(1.1, 5.2)
5KL	Sunderland Teaching	23	3.6	(2.1, 5.7)
5KM	Middlesbrough	11	3.4	(1.5, 6.6)
5ND	County Durham	48	3.8	(2.7, 5.2)
5QR	Redcar and Cleveland	15	4.4	(2.3, 8.1)
TAC	Northumberland Care Trust	25	2.8	(1.7, 4.6)
	North West SHA	**567**	**3.5**	**(3.2, 3.8)**
	PCT			
5F5	Salford	15	3.1	(1.6, 5.6)
5F7	Stockport	39	5.4	(3.7, 7.8)
5HG	Ashton, Leigh and Wigan	14	1.6	(.9, 3.0)
5HP	Blackpool	5	1.7	(.5, 4.5)
5HQ	Bolton	11	1.9	(.9, 3.6)
5J2	Warrington	10	1.9	(.8, 4.0)
5J4	Knowsley	8	1.9	(.7, 4.5)
5J5	Oldham	11	2.6	(1.2, 4.8)
5JX	Bury	17	4.3	(2.3, 7.3)
5LH	Tameside and Glossop	20	3.8	(2.2, 6.1)
5NE	Cumbria Teaching	50	3.3	(2.4, 4.7)
5NF	North Lancashire Teaching	41	4.3	(3.0, 6.4)
5NG	Central Lancashire	37	3.9	(2.7, 5.5)
5NH	East Lancashire Teaching	32	3.9	(2.6, 5.7)
5NJ	Sefton	30	3.8	(2.5, 6.0)
5NK	Wirral	28	2.5	(1.6, 4.1)
5NL	Liverpool	28	3.0	(1.9, 4.6)
5NM	Halton and St Helens	30	4.6	(3.0, 6.9)
5NN	Western Cheshire	22	3.7	(2.2, 6.1)
5NP	Central and Eastern Cheshire	43	3.9	(2.7, 5.5)
5NQ	Heywood, Middleton and Rochdale	12	2.5	(1.2, 4.8)
5NR	Trafford	20	3.7	(2.1, 6.2)
5NT	Manchester	32	4.3	(2.8, 6.3)
TAP	Blackburn with Darwen Teaching Care Trust	12	5.3	(2.6, 9.3)

Code	health authority	Total Deaths	ASMR	95% CI
	Yorkshire and The Humber SHA	**456**	**3.7**	**(3.3, 4.0)**
	PCT			
5EF	North Lincolnshire	15	4.0	(2.1, 7.1)
5H8	Rotherham	20	3.4	(2.0, 5.7)
5J6	Calderdale	17	4.0	(2.2, 6.8)
5JE	Barnsley	21	3.9	(2.3, 6.3)
5N1	Leeds	55	3.4	(2.5, 4.6)
5N2	Kirklees	28	2.9	(1.8, 4.4)
5N3	Wakefield District	30	3.5	(2.2, 5.3)
5N4	Sheffield	51	4.0	(2.9, 5.5)
5N5	Doncaster	27	3.8	(2.4, 5.8)
5NV	North Yorkshire and York	74	3.4	(2.6, 4.4)
5NW	East Riding Of Yorkshire	53	5.1	(3.7, 7.1)
5NX	Hull Teaching	20	4.1	(2.4, 6.6)
5NY	Bradford and Airedale Teaching	31	3.2	(2.1, 4.6)
TAN	North East Lincolnshire Care Trust Plus	14	3.3	(1.7, 6.4)
	East Midlands SHA	**380**	**3.6**	**(3.2, 4.0)**
	PCT			
5EM	Nottingham City	18	4.1	(2.3, 6.8)
5ET	Bassetlaw	12	4.9	(2.4, 9.6)
5N6	Derbyshire County	64	3.3	(2.5, 4.3)
5N7	Derby City	11	1.9	(.8, 4.0)
5N8	Nottinghamshire County Teaching	64	3.7	(2.8, 4.9)
5N9	Lincolnshire Teaching	81	4.1	(3.2, 5.3)
5PA	Leicestershire County and Rutland	58	3.3	(2.5, 4.5)
5PC	Leicester City	23	4.9	(3.0, 7.5)
5PD	Northamptonshire Teaching	49	3.4	(2.5, 4.6)
	West Midlands SHA	**491**	**3.8**	**(3.4, 4.2)**
	PCT			
5CN	Herefordshire	18	3.2	(1.8, 6.0)
5M1	South Birmingham	21	2.9	(1.7, 4.7)
5M2	Shropshire County	30	3.1	(1.9, 4.9)
5M3	Walsall Teaching	22	3.9	(2.3, 6.4)
5MD	Coventry Teaching	19	3.1	(1.8, 5.1)
5MK	Telford and Wrekin	15	4.1	(2.3, 7.3)
5MV	Wolverhampton City	23	4.6	(2.8, 7.3)
5MX	Heart Of Birmingham Teaching	18	5.1	(2.9, 8.2)
5PE	Dudley	40	5.4	(3.7, 7.6)
5PF	Sandwell	33	5.2	(3.5, 7.6)
5PG	Birmingham East and North	32	3.7	(2.4, 5.5)
5PH	North Staffordshire	16	3.0	(1.6, 5.6)
5PJ	Stoke on Trent	31	4.7	(3.0, 7.0)
5PK	South Staffordshire	47	3.1	(2.2, 4.3)
5PL	Worcestershire	54	3.6	(2.6, 4.9)
5PM	Warwickshire	53	4.0	(2.9, 5.5)
5QW	Solihull	19	3.1	(1.8, 5.5)

Table A2.5 continued

Code	health authority	Total Deaths	ASMR	95% CI
	East of England SHA	**528**	**3.6**	**(3.2, 3.9)**
	PCT			
5GC	Luton	14	4.3	(2.3, 7.4)
5P1	South East Essex	38	4.1	(2.8, 5.9)
5P2	Bedfordshire	37	4.2	(2.8, 5.9)
5PN	Peterborough	17	4.4	(2.5, 7.5)
5PP	Cambridgeshire	44	3.3	(2.3, 4.5)
5PQ	Norfolk	93	3.9	(3.1, 5.0)
5PR	Great Yarmouth and Waveney	29	4.8	(3.0, 7.5)
5PT	Suffolk	64	3.5	(2.6, 4.7)
5PV	West Essex	30	4.3	(2.8, 6.5)
5PW	North East Essex	26	2.7	(1.6, 4.4)
5PX	Mid Essex	26	2.7	(1.7, 4.3)
5PY	South West Essex	25	2.9	(1.8, 4.4)
5QV	Hertfordshire	85	3.2	(2.5, 4.1)
	London SHA	**532**	**4.1**	**(3.7, 4.5)**
	PCT			
5A4	Havering	20	3.1	(1.7, 5.3)
5A5	Kingston	13	3.9	(1.9, 7.2)
5A7	Bromley	23	3.0	(1.8, 4.8)
5A8	Greenwich Teaching	20	5.3	(3.0, 8.4)
5A9	Barnet	41	5.9	(4.1, 8.3)
5AT	Hillingdon	10	2.3	(1.0, 4.4)
5C1	Enfield	18	3.0	(1.6, 5.0)
5C2	Barking and Dagenham	12	4.3	(2.1, 7.7)
5C3	City and Hackney Teaching	12	4.2	(2.0, 7.4)
5C4	Tower Hamlets	12	4.7	(2.3, 8.5)
5C5	Newham	17	6.0	(3.4, 9.7)
5C9	Haringey Teaching	16	5.1	(2.8, 8.4)
5H1	Hammersmith and Fulham	10	4.3	(1.9, 8.4)
5HX	Ealing	15	2.8	(1.5, 4.8)
5HY	Hounslow	20	5.8	(3.4, 9.0)
5K5	Brent Teaching	23	5.2	(3.2, 7.9)
5K6	Harrow	16	3.5	(1.8, 6.0)
5K7	Camden	15	5.3	(2.8, 8.8)
5K8	Islington	7	2.6	(.9, 5.8)
5K9	Croydon	24	3.9	(2.4, 5.9)
5LA	Kensington and Chelsea	11	3.0	(1.4, 6.0)
5LC	Westminster	12	3.4	(1.7, 6.6)
5LD	Lambeth	22	6.6	(4.0, 10.1)
5LE	Southwark	20	5.4	(3.2, 8.6)
5LF	Lewisham	27	7.3	(4.7, 10.8)
5LG	Wandsworth	16	4.5	(2.4, 7.6)
5M6	Richmond and Twickenham	13	3.6	(1.8, 6.5)
5M7	Sutton and Merton	14	1.9	(1.0, 3.4)
5NA	Redbridge	19	4.1	(2.4, 6.4)
5NC	Waltham Forest	12	3.1	(1.5, 5.7)
TAK	Bexley Care Trust	22	4.4	(2.6, 6.9)

Code	health authority	Total Deaths	ASMR	95% CI
	South East Coast SHA	**417**	**3.5**	**(3.1, 3.9)**
	PCT			
5L3	Medway	26	4.9	(3.0, 7.4)
5LQ	Brighton and Hove City	29	6.6	(4.2, 9.8)
5P5	Surrey	89	3.0	(2.4, 3.9)
5P6	West Sussex	63	2.6	(1.9, 3.5)
5P7	East Sussex Downs and Weald	31	2.4	(1.5, 3.9)
5P8	Hastings and Rother	23	3.6	(2.1, 6.3)
5P9	West Kent	69	4.3	(3.3, 5.6)
5QA	Eastern and Coastal Kent	87	4.0	(3.1, 5.1)
	South Central SHA	**319**	**3.5**	**(3.1, 4.0)**
	PCT			
5CQ	Milton Keynes	19	5.1	(3.0, 8.1)
5FE	Portsmouth City Teaching	9	2.5	(.9, 5.2)
5L1	Southampton City	17	4.2	(2.3, 7.1)
5QC	Hampshire	93	2.8	(2.2, 3.5)
5QD	Buckinghamshire	57	4.6	(3.4, 6.2)
5QE	Oxfordshire	51	3.8	(2.7, 5.2)
5QF	Berkshire West	28	3.4	(2.2, 5.0)
5QG	Berkshire East	32	4.3	(2.8, 6.2)
5QT	Isle of Wight NHS	13	2.8	(1.3, 6.3)
	South West SHA	**544**	**3.8**	**(3.4, 4.1)**
	PCT			
5A3	South Gloucestershire	24	4.0	(2.5, 6.3)
5F1	Plymouth Teaching	17	2.9	(1.6, 5.1)
5FL	Bath and North East Somerset	18	3.7	(2.0, 6.8)
5K3	Swindon	17	4.5	(2.4, 7.4)
5M8	North Somerset	20	3.1	(1.8, 5.4)
5QH	Gloucestershire	72	4.7	(3.6, 6.2)
5QJ	Bristol	36	4.1	(2.8, 6.0)
5QK	Wiltshire	42	3.9	(2.7, 5.5)
5QL	Somerset	49	2.6	(1.9, 3.7)
5QM	Dorset	52	4.0	(2.8, 5.8)
5QN	Bournemouth and Poole Teaching	26	2.7	(1.6, 4.5)
5QP	Cornwall and Isles of Scilly	54	3.2	(2.3, 4.4)
5QQ	Devon	106	4.8	(3.8, 6.0)
TAL	Torbay Care Trust	11	2.8	(1.2, 6.2)

Table A2.5 continued

Code	health authority	Total Deaths	ASMR	95% CI
	Scotland	**519**	**4.0**	**(3.6, 4.4)**
	Health Board			
8000001	Ayrshire and Arran	60	6.0	(4.5, 8.1)
8000002	Borders	7	2.1	(.7, 6.0)
8000004	Fife	31	3.4	(2.3, 5.2)
8000007	Greater Glasgow and Clyde	114	3.8	(3.1, 4.7)
8000008	Highland and Argyll	35	4.0	(2.7, 5.9)
8000009	Lanarkshire	53	3.8	(2.8, 5.2)
8000006	Grampian	62	4.8	(3.6, 6.4)
8000011	Orkney	2	2.2	(.1, 19.1)
8000010	Lothian	53	2.9	(2.1, 3.9)
8000013	Tayside	36	3.3	(2.2, 4.9)
8000005	Forth Valley	33	4.6	(3.1, 6.8)
8000014	Western Isles	5	4.8	(1.3, 21.9)
8000003	Dumfries and Galloway	23	5.4	(3.3, 9.0)
8000012	Shetland	5	10.0	(2.9, 28.4)
	Wales	**322**	**4.0**	**(3.6, 4.5)**
	Health Board			
7A1	Betsi Cadwaladr University	63	3.2	(2.4, 4.3)
7A2	Hywel Dda	43	4.1	(2.9, 5.9)
7A3	Abertawe Bro Morgannwg University	56	4.0	(2.9, 5.5)
7A4	Cardiff and Vale University	38	3.6	(2.4, 5.1)
7A5	Cwm Taf	32	4.6	(3.1, 6.9)
7A6	Aneurin Bevan	65	4.6	(3.5, 6.0)
7A7	Powys Teaching	25	5.4	(3.2, 9.5)
	Northern Ireland	**129**	**3.3**	**(2.7, 4.0)**
	Health & Social Care Trust			
ZC1	Belfast	24	3.1	(1.9, 4.8)
ZC2	Northern	38	3.9	(2.7, 5.6)
ZC4	South Eastern	26	3.2	(2.0, 4.9)
ZC3	Southern	25	3.2	(2.0, 5.0)
ZC5	Western	16	3.1	(1.7, 5.1)

ASMR is (directly) age-standardised mortality rate per 100,000 female population

95% CI is 95% confidence interval for calculated rate

Source: UK Cancer Information Service

Table A2.6 Trends in mortality by age and UK country, 1993-1995 to 2008-2010

		1993-1995		1998-2000		2003-2005		2008-2010	
Age group	Country	Total Deaths	Rate	Total Deaths	Rate	Total Deaths	Rate	Total Deaths	Rate
Under 45	England	45	0.1	46	0.1	43	0.1	58	0.1
	Scotland	6	0.1	0	0.0	3	0.1	1	<0.1
	Wales	5	0.2	1	0.0	4	0.2	4	0.2
	Northern Ireland	0	0.0	0	0.0	2	0.1	2	0.1
45-49	England	74	1.5	62	1.3	54	1.1	79	1.4
	Scotland	4	0.8	9	1.8	1	0.2	9	1.5
	Wales	1	0.3	5	1.7	6	2.1	2	0.6
	Northern Ireland	2	1.4	1	0.7	3	1.8	3	1.6
50-54	England	116	2.9	112	2.2	122	2.6	143	2.9
	Scotland	14	3.2	16	3.1	11	2.2	21	3.8
	Wales	10	4.0	11	3.6	10	3.4	8	2.7
	Northern Ireland	2	1.54	5	3.4	4	2.7	6	3.58
55-59	England	231	6.2	208	5.2	268	5.5	291	6.4
	Scotland	24	5.6	22	5.1	32	6.3	27	5.4
	Wales	22	9.4	19	7.5	22	7.1	21	7.2
	Northern Ireland	5	4.32	7	5.47	6	4.11	7	4.79
60-64	England	312	8.7	338	9.3	372	9.7	462	9.7
	Scotland	39	9.4	42	10.2	29	6.9	50	10.2
	Wales	26	11.3	25	10.8	30	11.8	38	12.5
	Northern Ireland	5	4.5	4	3.5	15	12.0	9	6.3
65-69	England	450	12.7	459	13.5	515	14.9	561	15.3
	Scotland	41	10.4	45	11.6	72	18.4	80	20.0
	Wales	17	7.2	25	11.4	36	16.1	41	16.9
	Northern Ireland	10	9.3	17	16.1	21	19.3	16	13.3
70-74	England	608	17.2	500	15.6	605	19.3	693	21.6
	Scotland	55	14.9	53	15.1	62	17.5	69	19.3
	Wales	53	22.5	37	17.3	46	22.8	43	20.8
	Northern Ireland	24	24.2	11	11.3	15	15.3	18	17.8
75-79	England	540	20.8	646	21.6	609	22.0	696	25.2
	Scotland	66	24.8	66	21.7	74	25.2	98	32.4
	Wales	44	25.8	49	24.6	44	24.3	47	26.7
	Northern Ireland	16	21.8	18	21.6	18	21.1	21	24.4
80-84	England	558	25.9	504	25.8	660	28.5	640	29.0
	Scotland	52	24.4	60	30.9	75	33.0	71	31.6
	Wales	35	25.9	40	31.4	40	26.3	45	31.6
	Northern Ireland	13	22.7	10	18.2	13	20.2	21	30.8
85+	England	660	35.7	705	34.6	774	38.1	816	34.5
	Scotland	45	25.5	63	32.7	67	35.2	93	42.9
	Wales	57	49.9	39	30.9	54	41.8	73	48.1
	Northern Ireland	18	37.9	20	39.1	26	50.1	26	43.3

Rate is age-specific incidence rate per 100,000 female population
Source: UK Cancer Information Service

Appendix 3: Maps

Figure A3.1 UK map of Cancer Networks

Code	Cancer Network
	England
N01	Lancashire and South Cumbria CN
N02	Greater Manchester and Cheshire CN
N03	Merseyside and Cheshire CN
N06	Yorkshire CN
N07	Humber and Yorkshire Coast CN
N08	North Trent CN
N11	Pan Birmingham CN
N12	Arden CN
N20	Mount Vernon CN
N21	North West London CN
N22	North London CN
N23	North East London CN
N24	South East London CN
N25	South West London CN
N26	Peninsula CN
N27	Dorset CN
N28	Avon, Somerset and Wiltshire CN
N29	3 Counties CN
N30	Thames Valley CN
N31	Central South Coast CN
N32	Surrey, West Sussex and Hampshire CN
N33	Sussex CN
N34	Kent and Medway CN
N35	Greater Midlands CN
N36	North of England CN
N37	Anglia CN
N38	Essex CN
N39	East Midlands CN
	Scotland
SCAN	South East Scotland
WOSCAN	West of Scotland
NOSCAN	North of Scotland
	Wales
N95	South Wales CN
N96	North Wales CN
NIICAN	Northern Ireland Cancer Network

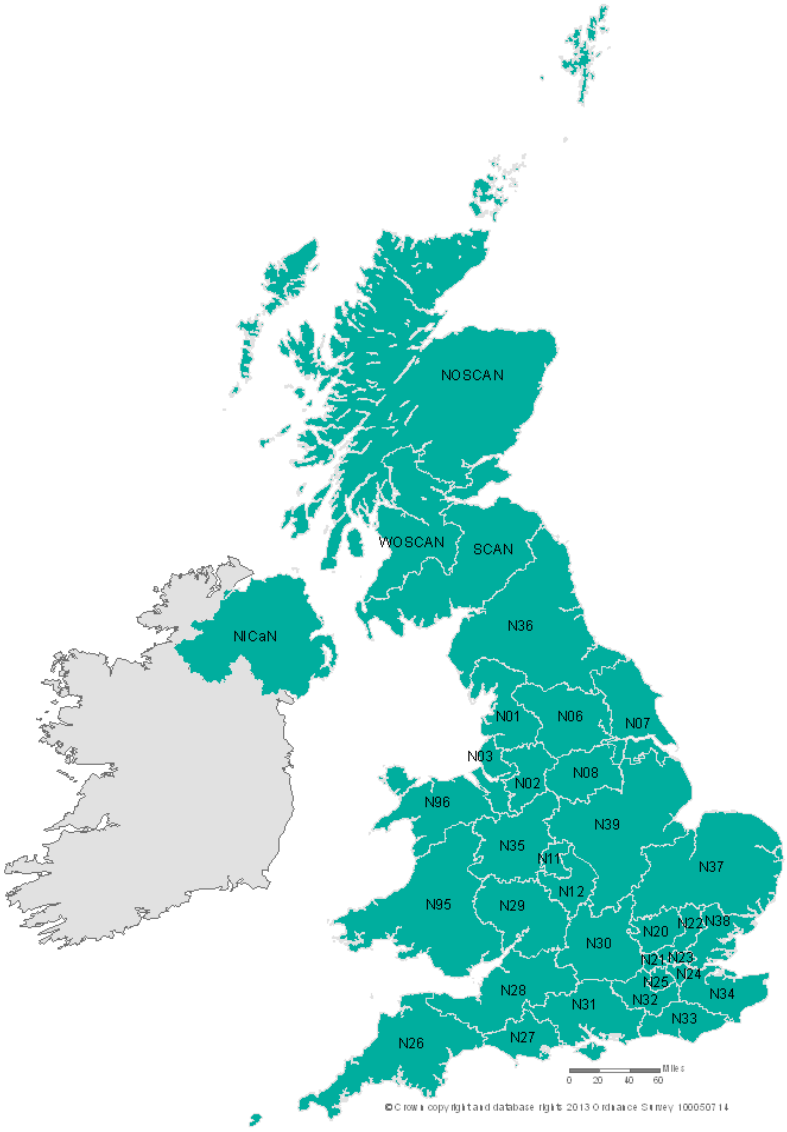

Figure A3.2 UK map of health authorities

Code	health authority
	England
Q30	North East SHA
Q31	North West SHA
Q32	Yorkshire and The Humber SHA
Q33	East Midlands SHA
Q34	West Midlands SHA
Q35	East of England SHA
Q36	London SHA
Q37	South East Coast SHA
Q38	South Central SHA
Q39	South West SHA
	Scotland
8000001	Ayrshire and Arran HB
8000002	Borders HB
8000004	Fife HB
8000007	Greater Glasgow and Clyde HB
8000008	Highland and Argyll HB
8000009	Lanarkshire HB
8000006	Grampian HB
8000011	Orkney HB
8000010	Lothian HB
8000013	Tayside HB
8000005	Forth Valley HB
8000014	Western Isles HB
8000003	Dumfries and Galloway HB
8000012	Shetland HB
	Wales
7A1	Betsi Cadwaladr University HB
7A2	Hywel Dda HB
7A3	Abertawe Bro Morgannwg University HB
7A4	Cardiff and Vale University HB
7A5	Cwm Taf HB
7A6	Aneurin Bevan HB
7A7	Powys Teaching HB
	Northern Ireland
ZC1	Belfast HSCT
ZC2	Northern HSCT
ZC4	South Eastern HSCT
ZC3	Southern HSCT
ZC5	Western HSCT

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The NCIN is a UK-wide initiative, working to drive improvements in standards of cancer care and clinical outcomes by improving and using the information collected about cancer patients for analysis, publication and research.

Sitting within the National Cancer Research Institute (NCRI), the NCIN works closely with cancer services in England, Scotland, Wales and Northern Ireland. In England, the NCIN is part of the National Cancer Programme.

The National Cancer Intelligence Network will be hosted by Public Health England from 1st April 2013

Our aims and objectives cover five core areas to improve the quality and availability of cancer data from its collection to use:

- **Promoting efficient and effective data collection throughout the cancer journey**
- **Providing a common national repository for cancer datasets**
- **Producing expert analyses, to monitor patterns of cancer care**
- **Exploiting information to drive improvements in cancer care and clinical outcomes**
- **Enabling use of cancer information to support audit and research programmes**