Macmillan-NCIN UK Cancer Prevalence Project
Cancer prevalence describes people living with cancer (the number or proportion of people alive on a specified date who have been diagnosed with cancer at some time in the past). By linking cancer registrations to mortality records we quantify how many people were diagnosed with cancer between 1991 and 2010, and who were still alive on 31st December 2010 – that is 20-year prevalence.

What’s new? For the first time we have detailed prevalence data available by: cancer type, deprivation group and local area, as well as age, sex, and time since diagnosis.

Most prevalent cancers
Around 93,000 people were living with one of the four most prevalent cancers in Scotland (Figure 1) - breast, prostate, colorectal or skin cancer (malignant melanoma) - at their first cancer diagnosis.

There were around 41,000 women and around 20,000 men who were living with breast and prostate cancer respectively.

The number of people living with cancer (cancer prevalence) is influenced by new cases diagnosed and the number of people dying from cancer. This means that poor prognosis cancers such as lung cancer – despite being one of the most commonly diagnosed cancers in Scotland – are less prevalent (6,380 people).

A new way of counting prevalence
Our figures for different cancers are based on counting a person's first diagnosis of a specific cancer type (in the period 1991-2010) even if they have had cancer in another part of their body in the past.

Lung cancer had the highest proportion of diagnoses in people who had a previous cancer diagnosis of a different site in the period 1991-2010 - for around 1 in 9 people living with lung cancer (around 800 people) this was not their first cancer (Figure 2).

For around 1 in 10 people living with pancreatic cancer, and around 1 in 11 people living with liver cancer, this was not their first cancer in the period.

Prevalence by age at diagnosis

Although cancer diagnoses most often occur in later life, this does vary according to cancer type and even for common cancers there are significant numbers of people who were diagnosed at a younger age (Figure 3).

There were 5,750 women living with breast cancer who were diagnosed under the age of 45, and around 23,500 women (over half) who were diagnosed between the age of 45 and 64.

Around 12,750 (less than a third) of women living with breast cancer were diagnosed when they 65 or over.

Prevalence by age at end of 2010

Although cancer is mostly associated with older people, there were significant numbers of people from all age groups who were living with cancer; this varies by cancer type (Figure 4).

Just under half (47%) of women living with breast cancer were of working age².

There were around 1,800 women under 45 living with breast cancer in 2010.

Over 22,000 women living with breast cancer were 65 or over, of these 10,600 were 75 or over.

There around 900 people living with colorectal cancer who were diagnosed under the age of 45. 8,440 were diagnosed between the age of 45 and 64, just over a third of the total.

Around 13,600 people living with colorectal cancer were diagnosed with diagnosed when they were 65 or over, well over half of the total.

A quarter of people living with lung cancer were of working age² –1,800 people.

Although a low proportion, there were still around 100 people living with lung cancer under the age of 45.

There were over 5,300 people with lung cancer who were 65 or over, of which 2,775 were 75 or over.

Over half (57%) of people living with skin cancer were of working age² - 6,330 people of which around 2,000 were under 45.

Despite the high numbers in younger age groups, there were still 4,700 older people (65 or over) who were living with skin cancer, of which 2,600 were 75 or over.

² Working age is based on those aged 15 - 64
**Prevalence by time since diagnosis**

Around 2,500 people living with lung cancer in 2010 had been diagnosed within the previous year, representing 36% of all people living with lung cancer. Just 13% (around 885 people) had been living with lung cancer for more than 10 years, and just 5% (340 people) had been living with lung cancer for more than 15 years, reflecting the poor survival associated with lung cancer.

Skin cancer (malignant melanoma) has better survival rates than lung cancer, and around 3,400 people living with skin cancer in 2010 had been for more than 10 years – almost a third of the 20-year prevalence total. There were around 7,600 people who have been living with skin cancer for up to ten years, and just 10% of all people living with skin cancer in 2010 (around 1,000 people) had been diagnosed within the past year.

**Prevalence by deprivation**

In Scotland, it is the least deprived group who constitute the highest proportion of cancer survivors for the 10-year period across most cancer types. This is likely due to the least deprived groups having a higher incidence in the better prognosis cancers, such as breast and skin cancer, and the most deprived groups having higher incidence in the poor prognosis cancers.

People living with skin cancer were more than twice as likely to be from the least deprived group than the most deprived group (Figure 6). This was the largest difference in the proportion of people in the least versus the most deprived group for people living with different cancers.

People living with lung and cervical cancer were more likely to be from the most deprived group. Over a quarter of people from these cancer types were from the most deprived group, more than twice the proportion of those from the least deprived groups.
Prevalence by local area

The 20-year cancer prevalence data is broken down to a sub-national level, allowing us to identify the number of people living with a specific cancer type in a region or local area (based on their location of residence at time of diagnosis). Cancer prevalence can also be based on crude rates (per 100,000 population) which allows for some comparison between areas, although it does not account for different age profiles of local areas.

People living with colorectal cancer

The overall rates of colorectal prevalence are highest in the North of Scotland regional cancer network, although West of Scotland has the highest number of people living with colorectal cancer (almost 10,000 people).

Colorectal prevalence rates are particularly high in the Western Isles NHS Board Area.

There are around 2,200 people living with colorectal cancer in Glasgow City (local council area) – more than any other local council area, although this had one of the lowest rates in Scotland. This is likely due to the younger population in Glasgow.

Comhairle nan Eilean Siar had the highest rates of colorectal cancer prevalence out of all local council areas in Scotland, where just under 200 people were living with colorectal cancer in 2010.

Women living with breast cancer

The overall rates of breast cancer prevalence in Scotland are marginally highest in North of Scotland, although West of Scotland has the highest number of women living with breast cancer (around 19,000).

Dumfries and Galloway NHS Board Area has some of the highest rates in Scotland.

Although there were around 4,000 women living with breast cancer in Glasgow City – more than any other local council area – it had the lowest breast cancer prevalence rate.

Argyll and Bute, and East Dunbartonshire, had some of the highest breast cancer prevalence rates in Scotland, where both of these local council areas also had around 1,000 women living with breast cancer in 2010.
Find out more

All the data and analysis presented in this high level summary are available alongside much more detail in a series of data tables. This includes between 16 and 47 cancer sites for different analyses, 7 age groups, and three different geographical breakdowns (regional cancer network, NHS board area and local council area) for Scotland.

The following additional resources are now available:

- National-level and UK combined data tables for common and detailed cancer types, age, sex, time since diagnosis, nation and UK summary: http://www.ncin.org.uk/about_ncin/segmentation
- Sub-geographical data tables for England, Northern Ireland, Scotland and Wales which contain variables for: sex, common cancer types, time since diagnosis and sub-geographical area:
  http://www.ncin.org.uk/about_ncin/segmentation
- A full guidance document and FAQ on using the prevalence data referred to here and included in the data files: http://www.ncin.org.uk/about_ncin/segmentation
- Location maps (in PDF format) describing the areas referred to here and in the data files: http://www.ncin.org.uk/about_ncin/segmentation

Other useful resources within the Macmillan-NCIN partnership:

Public Health England’s National Cancer Intelligence Network (NCIN) is a UK-wide initiative, working to drive improvements in cancer awareness, prevention, diagnosis and clinical outcomes by improving and using the information collected about cancer patients for analysis, publication and research.
http://www.ncin.org.uk/about_ncin/understanding_the_cancer_population

Macmillan does more research into the needs and experiences of people living with cancer and their carers than any other charity in the UK. We fund a range of research projects and work in partnership with leading national research organisations and academics. Our research covers health and social care services, patient experience, cancer survivorship, the economics of cancer, the demographics of the cancer population and many more areas.
http://www.macmillan.org.uk/research

Working together

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