



# Technical annex to the 2026 National Cancer Plan

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## Introduction

The purpose of this technical annex is to:

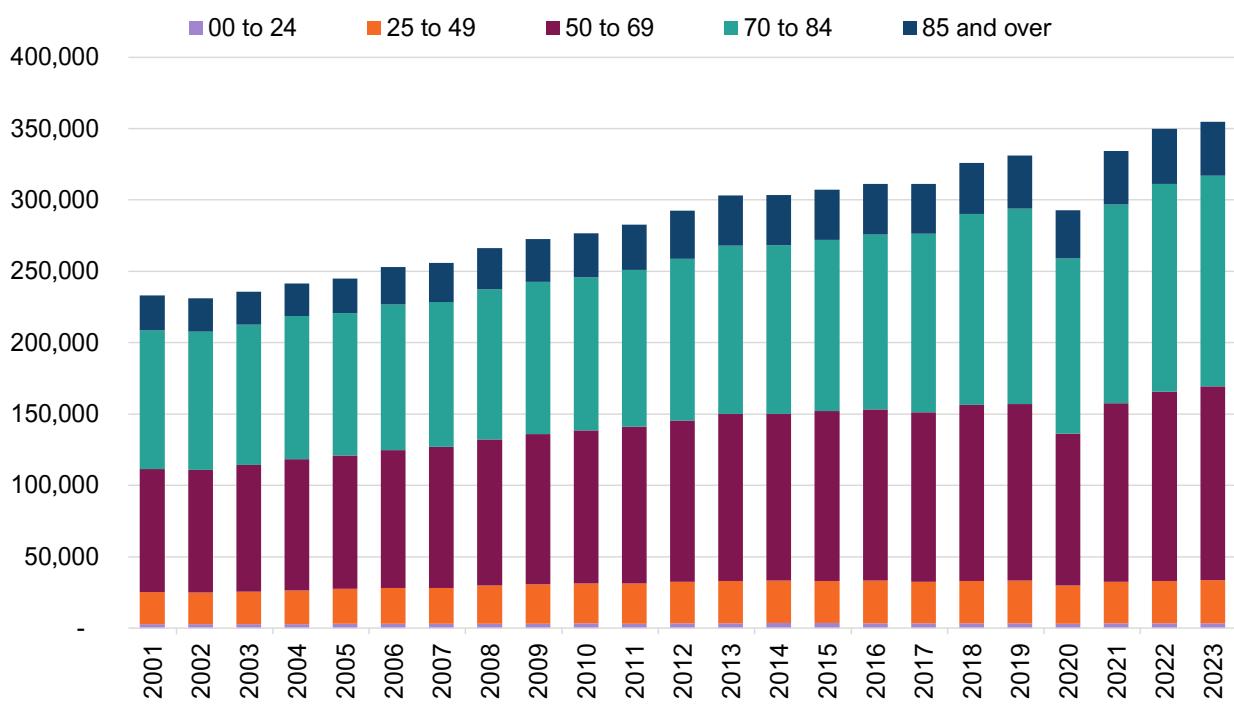
- present data on the current picture of cancer in England, and internationally, describing the case for change
- provide further details on the enablers for recovering Cancer Waiting Times
- lay out the underlying methodology for the projections included in the National Cancer Plan

# 1. Where we are now on cancer

## 1.1 How cancer incidence has changed over time

Cancer diagnoses have risen steadily over the past 2 decades, driven largely by an ageing population (figure 1).

**Figure 1: number of cancers diagnosed per year, by age, 2001 to 2023<sup>1</sup>**



The number of new cancers diagnosed (excluding non-melanoma skin cancers) per year, by age group, England, 2001 to 2023.

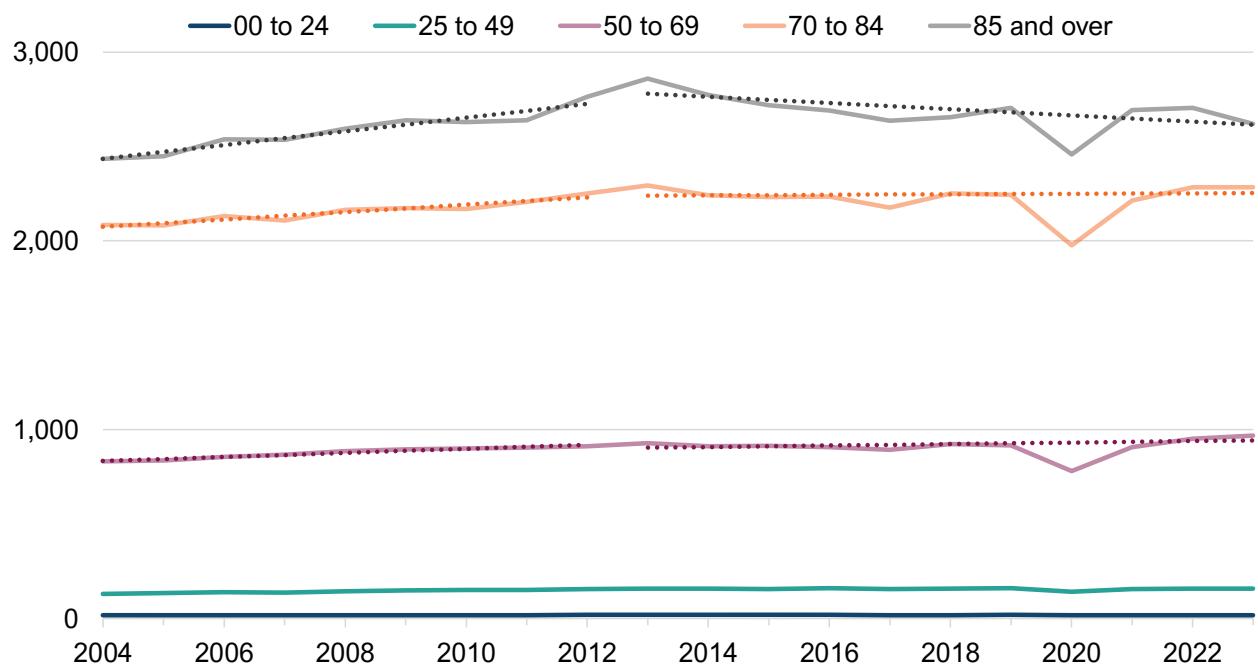
Description of figure 1: the stacked bar chart shows a general trend of increasing diagnoses over time, with most diagnoses occurring in people aged 50 and over. The largest increases are in those aged 50 to 84.

Source: Cancer Registration Statistics dashboard from the National Disease Registration Service, NHS England

<sup>1</sup> NHS England. 2025. '[Cancer registration statistics dashboard](#)' (viewed on 7 January 2026)

For the last 10 years, age-specific cancer incidence rates have remained relatively flat for persons aged 50 and above, and although cancer incidence rate in 25 to 49 year olds increased by 21% between 2004 and 2023 the rate in this age group remains small overall (figure 2).

**Figure 2: cancer incidence per 100,000 persons, by age group, 2004 to 2023<sup>2</sup>**



Age standardised cancer incidence rate per 100,000 persons per year, by age group, England, 2004 to 2023. Dotted lines are trend lines

Description of figure 2: the line chart shows a trend of slowly increasing cancer incidence rates across all age groups until the last decade. Rates then decline for those aged 85 and over and are largely flat for all other age groups.

Source: Cancer Registration Statistics dashboard from the National Disease Registration Service, NHS England

<sup>2</sup> NHS England. 2025. '[Cancer registration statistics dashboard](#)' (viewed on 7 January 2026)

## **1.2 How England compares to other countries on cancer survival and mortality**

England lags behind other countries on cancer survival and mortality, although survival is at an all-time high and mortality is improving.

There are 2 ways to measure the lives lost to cancer: mortality and survival:

1. Cancer survival estimates what percentage of people will be alive for one, 5, or 10 years after a cancer diagnosis. This provides a measure of how effective the NHS is at diagnosing and treating cancer. Survival figures can, with the support of clinicians, help patients understand their prognosis and treatment options. However, survival figures can take longer to produce and are more complex to calculate than mortality.
2. Cancer mortality measures the number of people who have died from cancer, usually measured as a rate per 100,000 people. Mortality statistics give us a good understanding of the impact of cancer and the success of the healthcare system overall in preventing cancer (that is, reducing incidence) and reducing deaths from cancer. However, these statistics are also lagged and will include some people who have survived for long periods after diagnosis. Therefore, they do not measure how effectively the NHS diagnoses and treats cancer once it develops and do not show improvements in care as clearly as survival.

Our ambition for this plan uses survival because it is more useful for understanding the performance of the NHS and is considered to provide useful information for the public and patients.

### **International comparisons**

International comparisons on cancer survival and mortality are difficult due to factors including:

- timeliness of data availability
- case mix of cancers in different countries
- the general health of the population
- differences in how cancer data is collected and collated

For example, English survival statistics have not always included prostate cancer in all-cancer survival, unlike other countries, which (because prostate cancer has relatively high survival) may have resulted in lower all-cancer survival estimates for England compared to

other nations. However, there is evidence that, over time, the UK has lagged persistently behind other countries.

### International survival

Data from the CONCORD 3 study for 2010 to 2014<sup>3</sup> shows there was variation by tumour type. England ranked 4th out of 26 for acute lymphoblastic leukaemia in children but 22nd out of 26 for stomach cancer. On average, across 18 cancers, England was placed 15th out of (up to) 28 European countries for survival. Data for the CONCORD 4 study for 2015 to 2019 is expected to be published later in 2026.

**Table 1: 5-year cancer net survival in England compared with 28 European countries, 2010 to 2014**

Cancer type	5-year survival (England)	Rank compared to European countries (out of 28 unless specified)
Acute lymphoblastic leukaemia (children)	92.3%	4 (out of 26)
Melanoma	90.9%	7
Oesophagus	16.0%	10
Rectum	62.7%	10
Breast	86.0%	12 (out of 27)
Lymphoid	65.1%	12 (out of 26)
Brain (children)	70.9%	12
Myeloid	48.7%	14
Prostate	89.3%	15

<sup>3</sup> Allemani C and others. [‘Global surveillance of trends in cancer survival 2000 to 2014 \(CONCORD-3\)’](#) The Lancet 2018: volume 391, pages 1023 to 1075 (viewed on 12 January 2026)

Cancer type	5-year survival (England)	Rank compared to European countries (out of 28 unless specified)
Lymphoma (children)	91.9%	15
Liver	12.5%	16
Colon	60.2%	17
Cervix	63.7%	18 (out of 27)
Pancreas	7.0%	19
Ovary	37.0%	20 (out of 25)
Lung	13.4%	21
Stomach	21.0%	22 (out of 26)
Brain (Adult)	25.8%	22 (out of 24)

Source: [Global surveillance of trends in cancer survival 2000 to 2014 \(CONCORD-3\)](#) from the CONCORD programme maintained by the Cancer Survival Group at the London School of Hygiene and Tropical Medicine.

### International mortality

Globally, cardiovascular disease (CVD) is still the top killer, responsible for roughly 17.9 million deaths annually (around 40% of global deaths).<sup>4</sup> Cancer was responsible for nearly 10 million deaths in 2020.<sup>5</sup>

In high-income countries (HICs), cancer has surpassed CVD as the main cause of death.<sup>6</sup> This shift is attributed to improved lifestyle factors (such as less smoking) and medical

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<sup>4</sup> World Health Organization. 2025. '[Cardiovascular diseases](#)' (viewed on 26 January 2026)

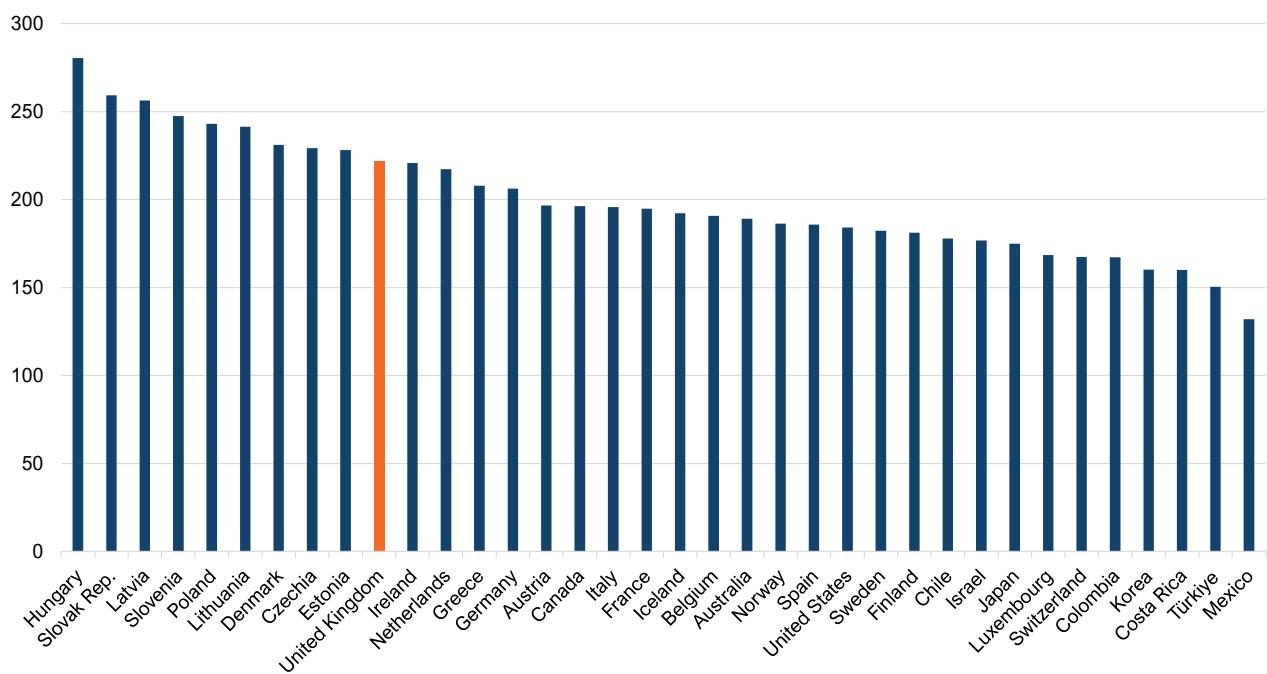
<sup>5</sup> World Health Organization. 2025. '[Cancer](#)' (viewed on 26 January 2026)

<sup>6</sup> Bray F and others. '[Comparing cancer and cardiovascular disease trends in 20 middle- or high-income countries 2000 to 2019: A pointer to national trajectories towards achieving Sustainable Development goal target 3.4](#)' Cancer Treatment Reviews 2021: volume 100 (viewed on 26 January 2026)

advances that reduce CVD deaths, allowing people to live longer and eventually succumb to other diseases like cancer.

Organisation for Economic Co-operation and Development (OECD)<sup>7</sup> data on deaths from cancer placed the UK 27th out of 36 countries in 2020, compared to 21st out of 28 countries in 1975 (in both cases at the bottom of the 3rd quartile). While the UK cancer mortality rate has improved significantly during the last half century (figure 4), the UK has not caught up with many countries which were ahead, because it was starting from a lower base.

**Figure 3: deaths from cancer (per 100,000 inhabitants), OECD countries, 2020**



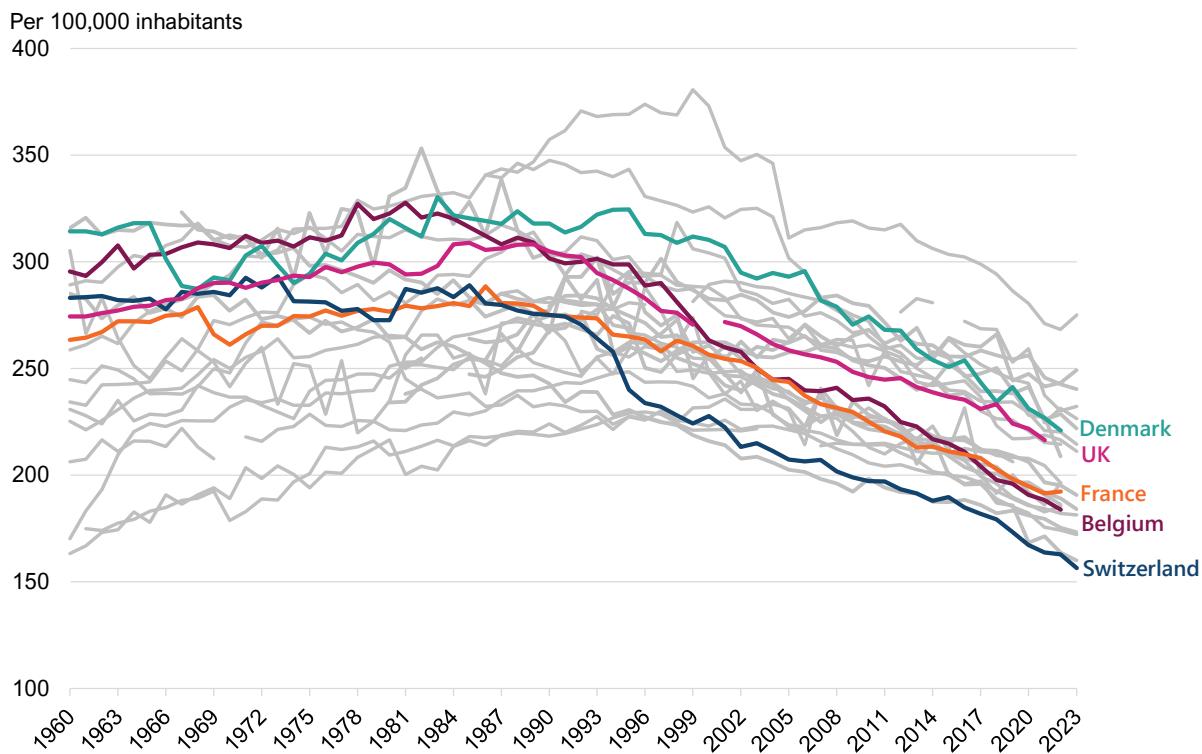
Age-standardised mortality rates from all malignant neoplasms per 100,000 population across OECD countries, 2020.

Description of figure 3: the bar chart shows the highest mortality rates are observed in Hungary and the Slovak Republic. The United Kingdom has a relatively high mortality rate ranking in the upper half of OECD countries.

Source: [Deaths from cancer](#) from the Organisation for Economic Co-operation and Development.

<sup>7</sup> Organisation for Economic Co-operation and Development. 2025. ['Deaths from cancer'](#) (viewed on 21 January 2026)

**Figure 4: deaths from cancer (per 100,000 inhabitants), 1960 to 2023, Europe**



Age-standardised mortality rates from all malignant neoplasms per 100,000 population, for selected European countries, 1960 and 2023.

Description of figure 4: the line chart shows differing trends in cancer mortality across European countries. A similar, but slower decline is observed in the United Kingdom compared to Denmark, Belgium, and Switzerland.

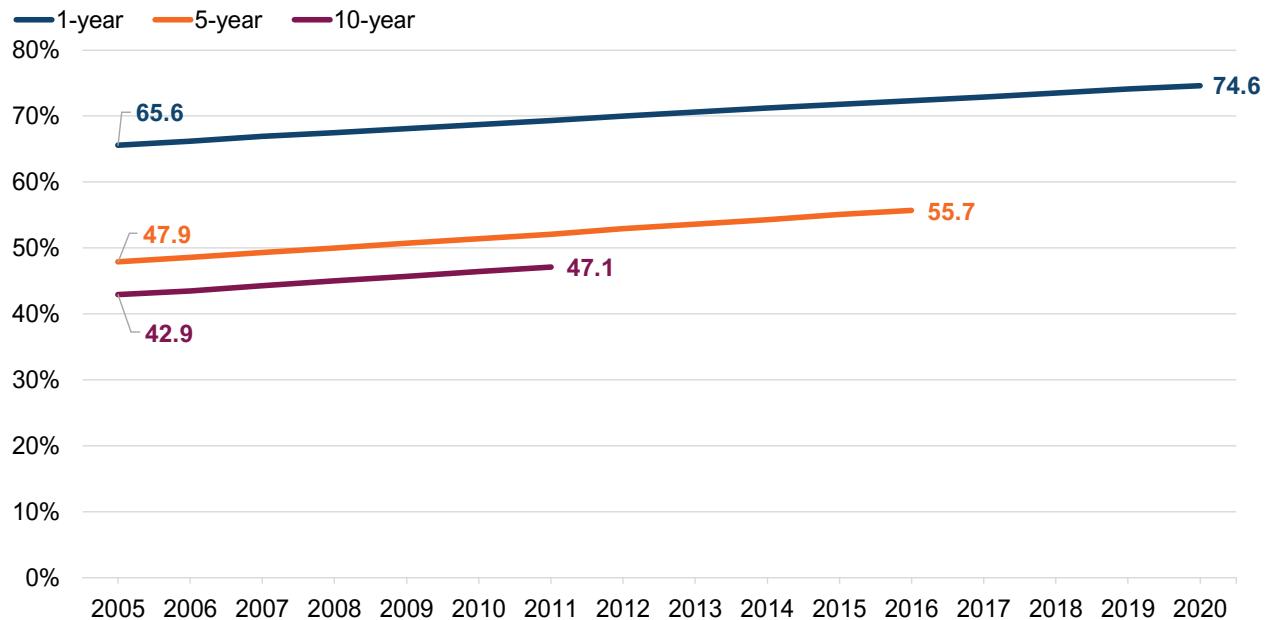
Source: [Deaths from cancer](#) from the Organisation for Economic Co-operation and Development.

### UK data on survival

Cancer Research UK reported that 10-year survival has doubled since the 1970s.<sup>8</sup> However, as Lord Darzi noted in his report, the rate of improvement seems to have slowed during the last decade.

<sup>8</sup> Cancer Research UK. 2025. ['Cancer in the UK 2025'](#) (viewed on 21 January 2026)

**Figure 5: cancer survival by year of diagnosis, 2005 to 2020, England**



Index for one-year, 5-year and 10-year cancer survival by calendar year of diagnosis for people aged 15 to 99, 2005 to 2020, England.

Description of figure 5: the line chart shows a general trend of increasing survival across all 3 survival rates. The rate of improvement slowed for one and 5-year survival in the decade up to 2020. 10-year survival also increases, up to the latest data in 2011.

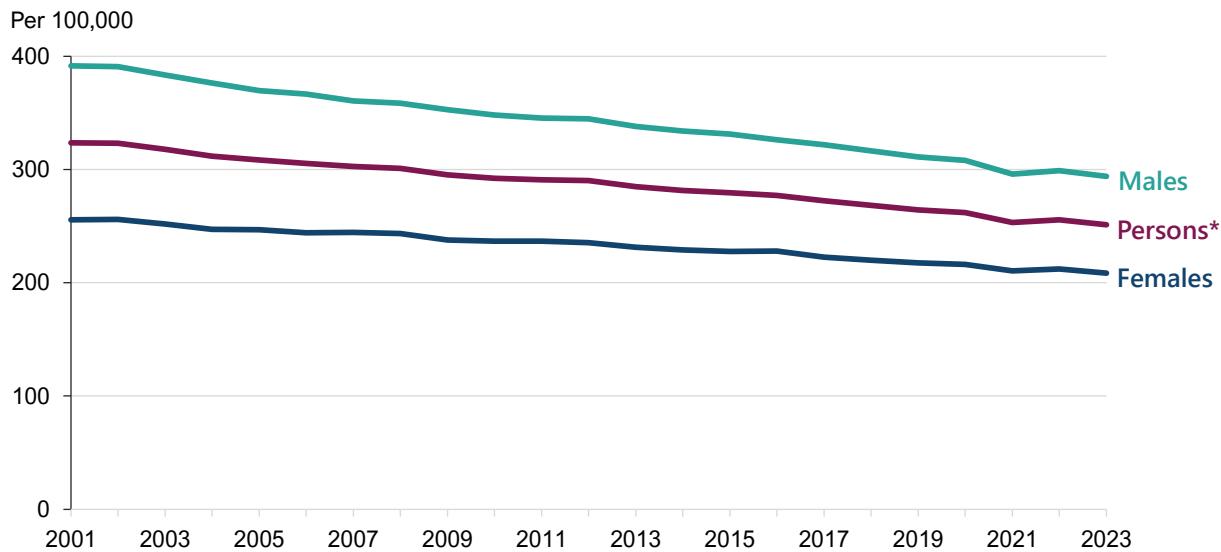
Source: [Cancer Survival: Index for sub-Integrated Care Boards, 2005 to 2020](#) from the National Disease Registration Service, NHS England.

## UK data on mortality

Mortality from cancer has been falling. For males, the mortality rate has fallen by 13% (from 338 deaths per 100,000 people in England in 2013, to 294 deaths per 100,000 people in 2023). For females, the rate fell by 10% (from 231 deaths per 100,000 people in 2013, to 208 deaths per 100,000 people in 2023).<sup>9</sup>

<sup>9</sup> NHS England. 2025. ['Cancer Registration Statistics, England 2023'](#) (viewed on 7 January 2026)

**Figure 6: deaths from cancer per 100,000 by gender, 2002 to 2023**



Age-standardised mortality rate for all malignant cancer (excluding non-melanoma skin cancer) per 100,000, by gender, 2002 to 2023, England. \*Persons is age-gender standardised.

Description of figure 6: the line chart shows male and female cancer mortality rates declining across the period. Overall male mortality is higher but declining at a faster rate, reducing the gap between genders.

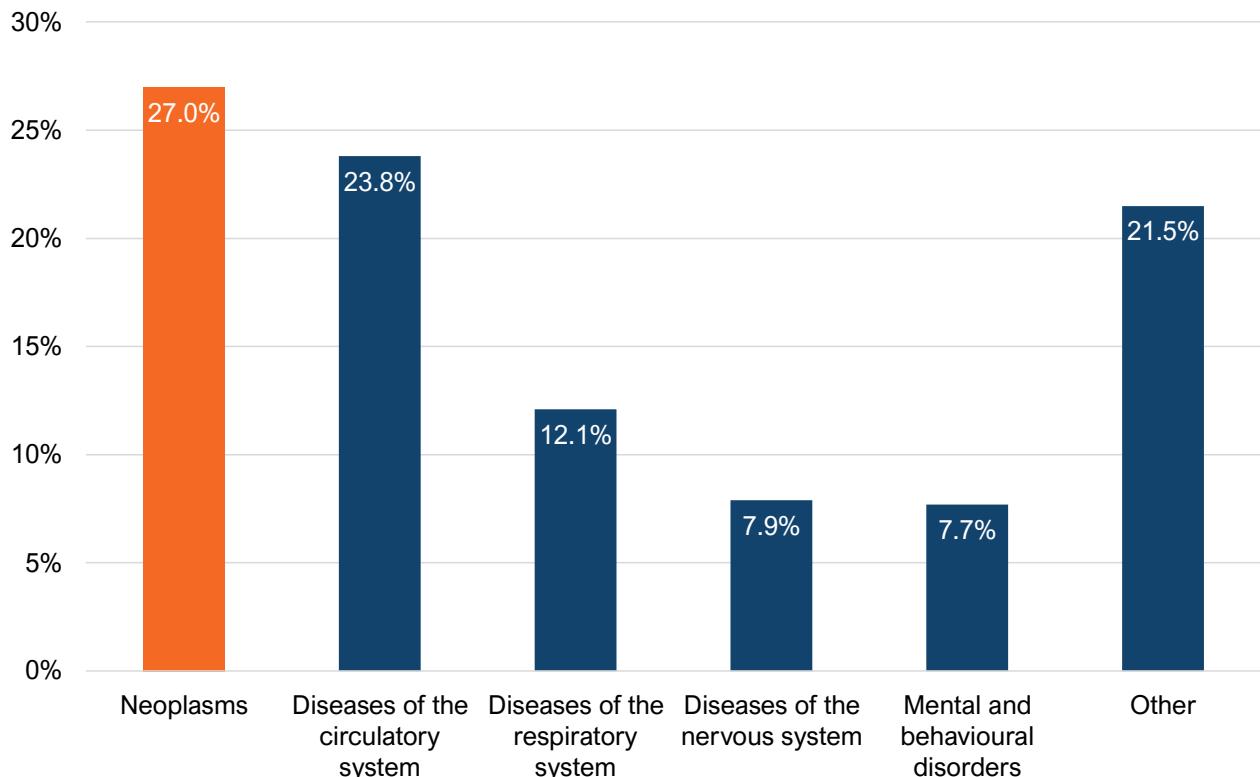
Source: [Cancer Registration Statistics dashboard](#) from the National Disease Registration Service, NHS England.

ONS data shows that 27% of deaths in England in 2024 were from cancer, making it the single biggest killer (figure 7).<sup>10</sup> Ministers have therefore adopted improving survival as the central ambition in the National Cancer Plan.

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<sup>10</sup> Office of National Statistics. 2025. ['Deaths registered in England and Wales: 2024'](#) (viewed on 21 January 2026)

**Figure 7: most common causes of death as a proportion of all deaths, 2024, England**



Description of figure 7: the bar chart shows neoplasms account for the largest proportions of deaths at 27.0%, followed by diseases of circulatory system at 23.8% and diseases of the respiratory system at 12.1% of deaths.

Source: [Deaths registered in England and Wales: 2024](#) from the Office of National Statistics.

### 1.3 Impact of early diagnosis on survival

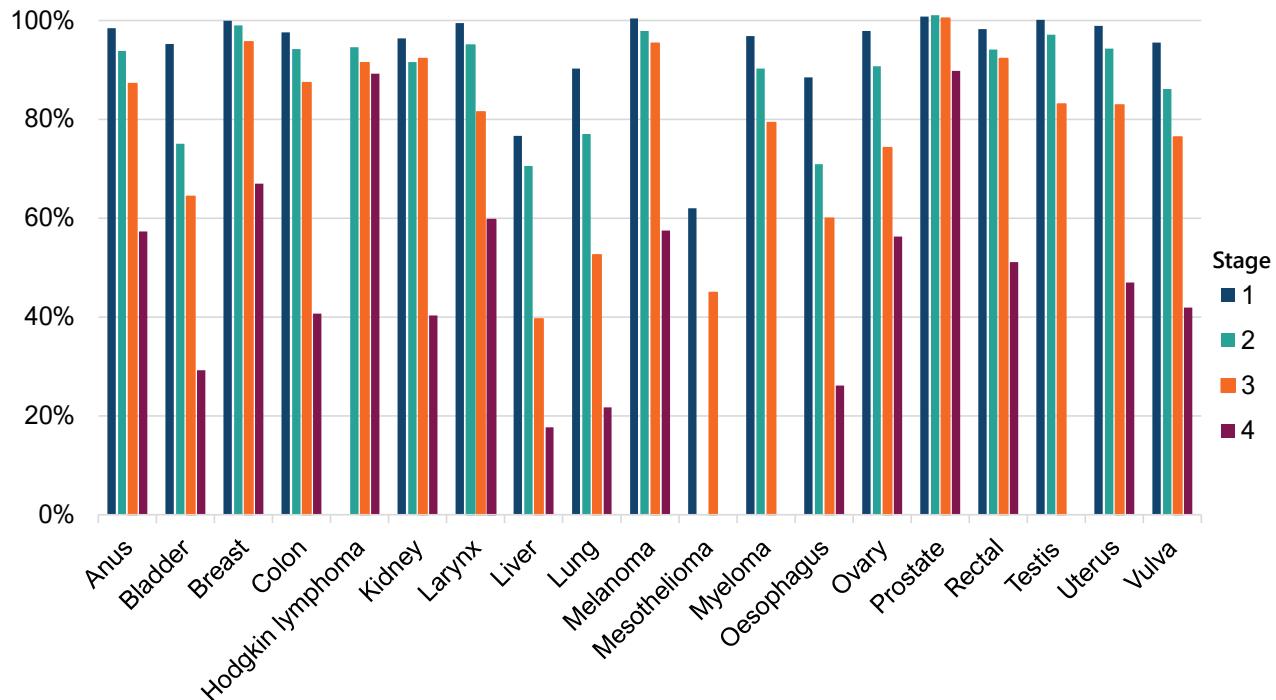
Earlier diagnosis is the key to unlocking further improvements in cancer survival.

The improvement we have seen in cancer survival over several decades has largely been driven by improvements in treatment. The bigger and more recent challenge has been early diagnosis. Diagnosing cancer at an earlier stage, before it has had a chance to spread to other parts of the body, will often mean that more curative treatment options are available. Figure 8 below shows how, across 21 cancer types, 1-year survival is higher the earlier the stage at which that cancer is diagnosed.<sup>11</sup>

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<sup>11</sup> NHS England. 2023. ['Cancer Survival in England'](#) (viewed on 13 January 2026)

**Figure 8: one-year net survival by stage and tumour type, 2016 to 2020, England**



Age-standardised 1-year net survival by stage and tumour type, for patients diagnosed 2016 to 2020, England.

Description of figure 8: the bar chart shows one-year survival is highest for all 21 cancer types when diagnosed at stage 1 and survival decreases progressively with each later stage.

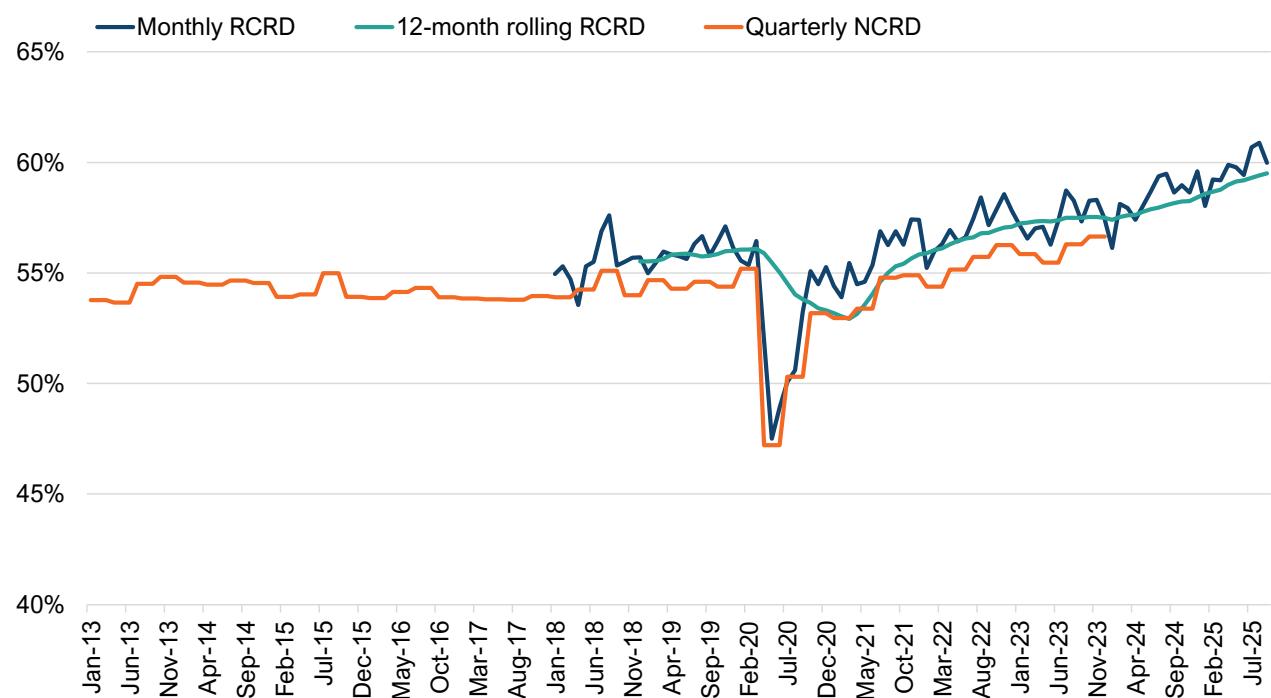
Source: [Cancer Survival in England, cancers diagnosed 2016 to 2020, followed up to 2021](#) from the National Disease Registration Service, NHS England.

## 1.4 How early diagnosis in England has changed

Despite the importance of early diagnosis, and ever-rising numbers of referrals for cancer checks, early diagnosis rates (proportion of staged cancers diagnosed at stage 1 or 2) were flat for nearly a decade between 2013 and the start of the pandemic in 2020. During this period there was a stubborn gap of around 8 percentage points in early diagnosis between the most affluent and the poorest areas of the country.

Since then, there have been signs of progress. The NHS Cancer Programme has delivered the first sustained increase in early diagnosis in over a decade. Early diagnosis rates in 2024 and 2025 have been at their highest ever level, and in the 12 months to September 2025 were 3.5 percentage points above the pre-pandemic level, equating to around 10,000 more people being diagnosed at stages 1 and 2.<sup>12</sup>

**Figure 9: proportion of rapid cancer registrations (RCRD) and full cancer registrations (NCRD) diagnosed at stage 1 and 2, January 2013 to September 2025, England**



Proportion of rapid cancer registrations (RCRD) and full cancer registrations (NCRD) diagnosed at an early stage (stage 1 and 2), January 2013 to September 2025, England.

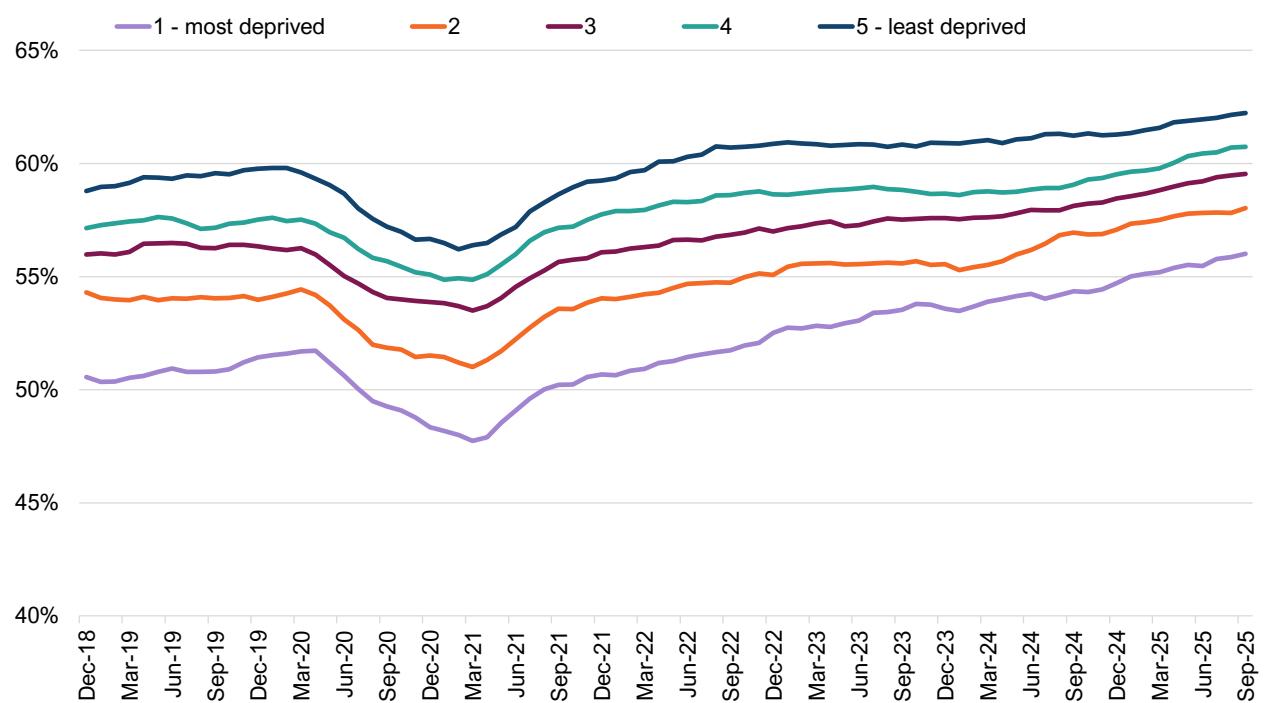
Description of figure 9: the line chart reach shows that the rate of early-stage diagnosis remains broadly flat at around the mid-50 percent range, falling sharply in 2020 and then recovering from mid-2020 onwards to around 60 percent by mid-2025.

Source: [Rapid Cancer Registration Data dashboards](#) and [Using RCRD to measure ED technical document November 2025](#) from the National Disease Registration Service, NHS England.

<sup>12</sup> NHS England. 2025. ['Cancer Registration Statistics, England 2023'](#) (viewed on 7 January 2026)

Driven largely by the roll out of lung cancer screening, the most rapid progress has been made in the areas of highest deprivation. For all cancers, the deprivation difference in the early-stage proportion was narrower in the most recent year at 6.2 percentage points (56.0% in the most deprived and 62.2% in the least deprived, October 2024 to September 2025), compared to 8.2 percentage points in the pre-COVID-19 year (51.6% in the most deprived and 59.8% in the least deprived, March 2019 to February 2020). Building on this start is core to the strategy for increasing survival.

**Figure 10: early diagnosis rate by deprivation quintile, December 2018 to September 2025, England**



All cancer early diagnosis rate by deprivation quintile (Rapid Cancer Registration Dataset), December 2018 to September 2025, England.

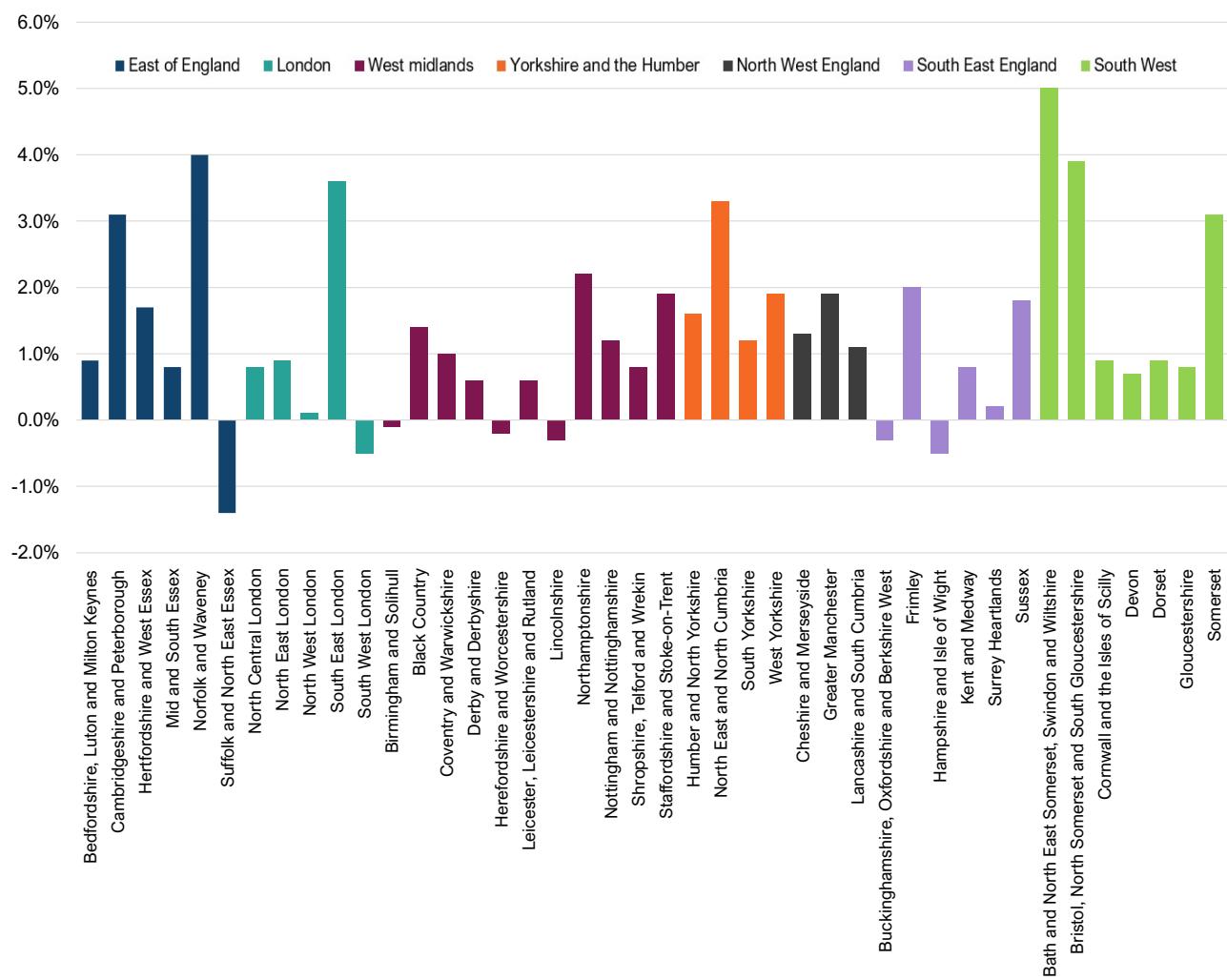
Description of figure 10: the line chart shows a general trend of increasing rates of early diagnosis for each deprivation quintile, with the gap between quintiles decreasing over time and the most rapid progress being made in the most deprived group.

Source: [Rapid Cancer Registration Data dashboards](#) from the National Disease Registration Service, NHS England.

The rate of improvement in early diagnosis has varied across the country, probably in part influenced by the different case mix in different local systems. Figure 11 demonstrates this

variation at integrated care board (ICB) level comparing the overall change in early diagnosis for the most recent year with the previous year. To note that the colours in the chart reflect different regions.

**Figure 11: change in the proportion of early-stage diagnoses by ICB, October 2024 to September 2025, compared to the previous year**



Percentage point change in the proportion of early-stage diagnoses (stage 1 and 2) by ICB, October 2024 to September 2025, compared to the previous year. Colour denotes region.

Description of figure 11: the bar chart shows substantial variation between ICBs. While several areas, including Swindon and Wiltshire, show large increases in early-stage diagnosis, a small number of ICBs show little change or a decline compared with the previous year.

Source: [Rapid Cancer Registration Data dashboards](#) from the National Disease Registration Service, NHS England.

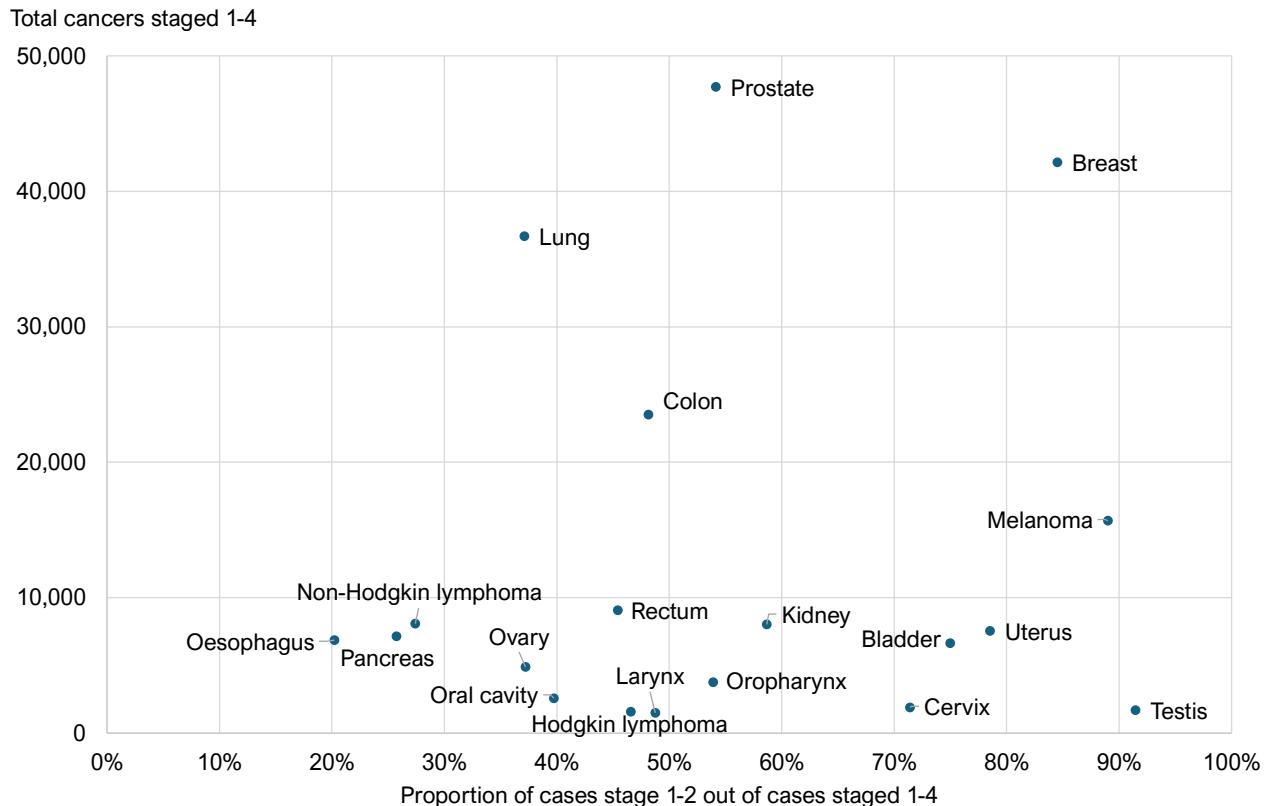
There also remains variation in early diagnosis between different cancer types. This is demonstrated in figure 12 comparing the proportion of early-stage diagnoses by total staged incidence for different cancer types. Certain cancers are often diagnosed at a late stage because of where they develop and how they behave. Tumours in deep anatomical locations - such as the ovaries or pancreas - are difficult to examine without advanced imaging or invasive procedures. In addition, these cancers typically cause few or non-specific symptoms early on.

For example:

- oesophageal cancer may mimic common gastrointestinal problems like heartburn or reflux
- non-Hodgkin lymphoma can present with symptoms similar to infection
- ovarian and pancreatic cancers often produce noticeable symptoms only when the disease is more advanced

Another major factor is the absence of effective screening programmes for these cancers. Unlike breast, bowel or cervical cancer, there are no widely accepted tests that reliably detect them early in the general population. Lung cancer used to share these challenges. However, the introduction of lung cancer screening has enabled the identification of more cases at an earlier stage, improving outcomes.

**Figure 12: early diagnosis rate and staged cancer cases by cancer type, 2023**



Proportion of cancer diagnosed at stage 1 and 2, and the total number of cases staged (1 to 4), by cancer type, 2023, England.

Description of figure 12: the scatter chart shows the large variation in stage of diagnosis and incidence for different cancer types.

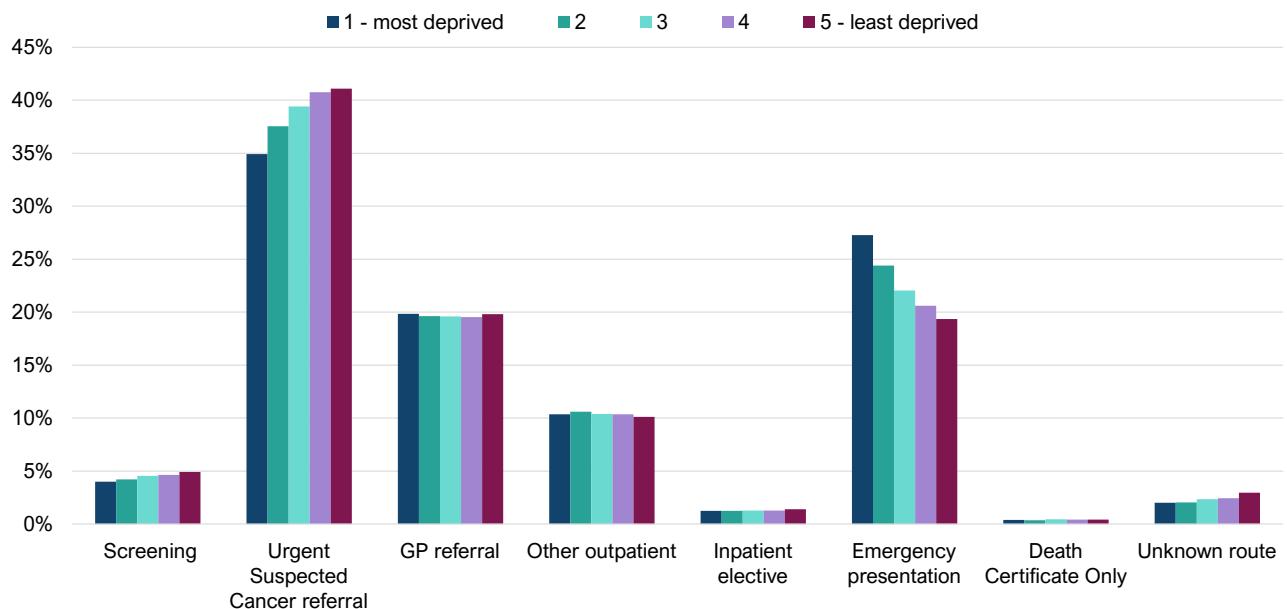
Source: [Cancer Registration Statistics, England, 2023](#) from the National Disease Registration Service, NHS England.

## 1.5 Emergency presentation and the link to deprivation

While the increase in people referred urgently by their GP has helped to reduce the number of cancers diagnosed in an emergency, this remains the route to diagnosis for a fifth of cancers. Figure 13 shows that the proportion of cancers diagnosed via an emergency route is higher for those living in the most disadvantaged areas (most deprived quintile) than least deprived areas. Figure 14 shows that following an increase in emergency presentations in 2020, owing to health service disruption during the COVID-19 pandemic, the proportion of cancers diagnosed via an emergency presentation continued to decline modestly, though the gap between most and least deprived persisted. Emergency presentation is associated with poorer outcomes, including survival. These poorer outcomes, combined with the anxiety for patients and their loved ones, is an

important reason to reduce emergency presentations and diagnose more patients through managed routes.

**Figure 13: routes to diagnosis for all cancers by deprivation quintile, 2024, England<sup>13</sup>**



Routes to diagnosis for all malignant neoplasms (excluding non-melanoma skin cancer) by deprivation quintile, 2024, England.

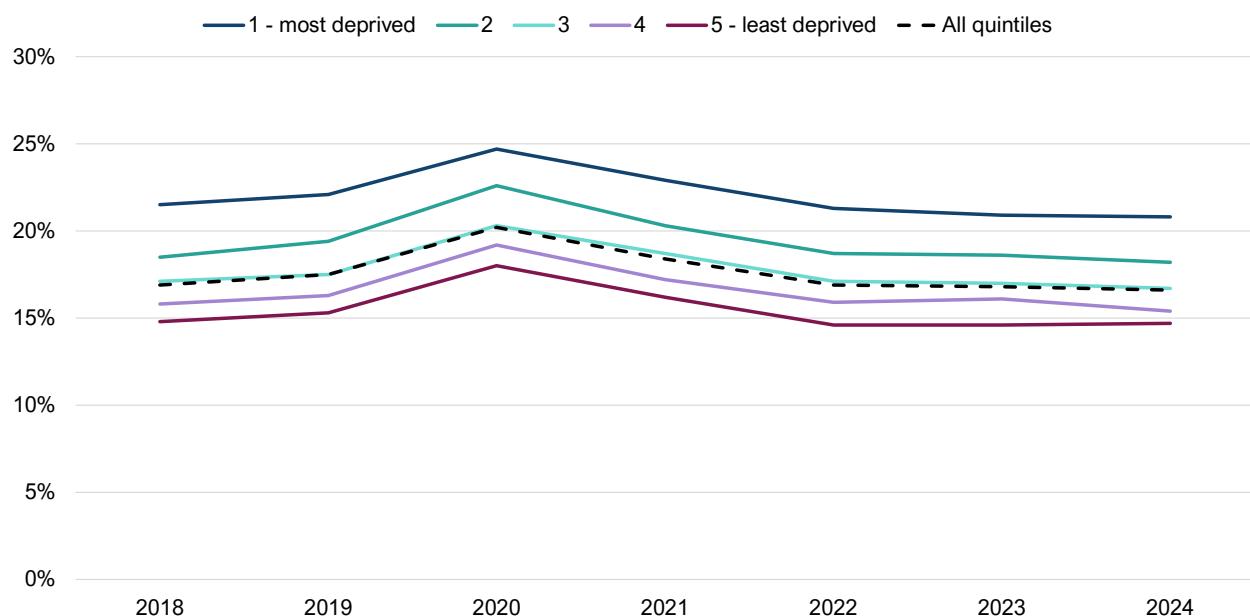
Description of figure 13: the bar chart shows the proportion of cancers diagnosed via an emergency route was higher for those living in the most deprived areas, compared to the least deprived areas.

Source: [Rapid Cancer Registration Data dashboards](#) from the National Disease Registration Service, NHS England.

<sup>13</sup> NHS England. 2026. ['Rapid Cancer Registration Data: Incidence and treatment dashboard'](#) (viewed on 21 January 2026)

NHS England. 2024. ['Routes to Diagnosis'](#) (viewed on 21 January 2026)

**Figure 14: proportion of emergency presentations, for all malignant neoplasms (excluding non-melanoma skin cancer) by deprivation quintile, 2018 to 2024, England<sup>14</sup>**



Proportion of emergency presentations, for all malignant neoplasms (excluding non-melanoma skin cancer) by deprivation quintile, 2018 to 2024, England.

Description of figure 14: the line chart shows emergency presentations are consistently highest among people living in the most deprived areas and lowest among those in the least deprived areas.

Source: [Rapid Cancer Registration Data dashboards](#) from the National Disease Registration Service, NHS England.

<sup>14</sup> NHS England. 2026. ['Rapid Cancer Registration Data: Incidence and treatment dashboard'](#) (viewed on 21 January 2026)

NHS England. 2024. ['Routes to Diagnosis'](#) (viewed on 21 January 2026)

## 1.6 Cancer risk factors

Around a third of cancers are attributable to known and preventable risk factors.<sup>15</sup> While smoking rates have continued to decline significantly over the past decade,<sup>16</sup> it remains the single biggest preventable risk factor. Conversely, the number of people in England being overweight or living with obesity has risen from 61.2% in 2015 to 2016 to 64% in 2022 to 2023.<sup>17</sup> Policies to reduce these risk factors can reduce cancer diagnoses, though often the impact of these interventions may only be felt many years in the future.

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<sup>15</sup> Cancer Research UK. 2026 ['Cancer Risk Statistics'](#) (viewed on 3 February 2026)

Estimates of UV-attributable cancer cases are obtained by comparing melanoma skin cancer incidence rates today, with those in a theoretically less-UV-exposed cohort (diagnoses in 1975). This is an established approach to estimating UV-attributable cancer burden (for example, Langselius and others, 2025), and is really the only viable method since no data on UV exposure prevalence is available.

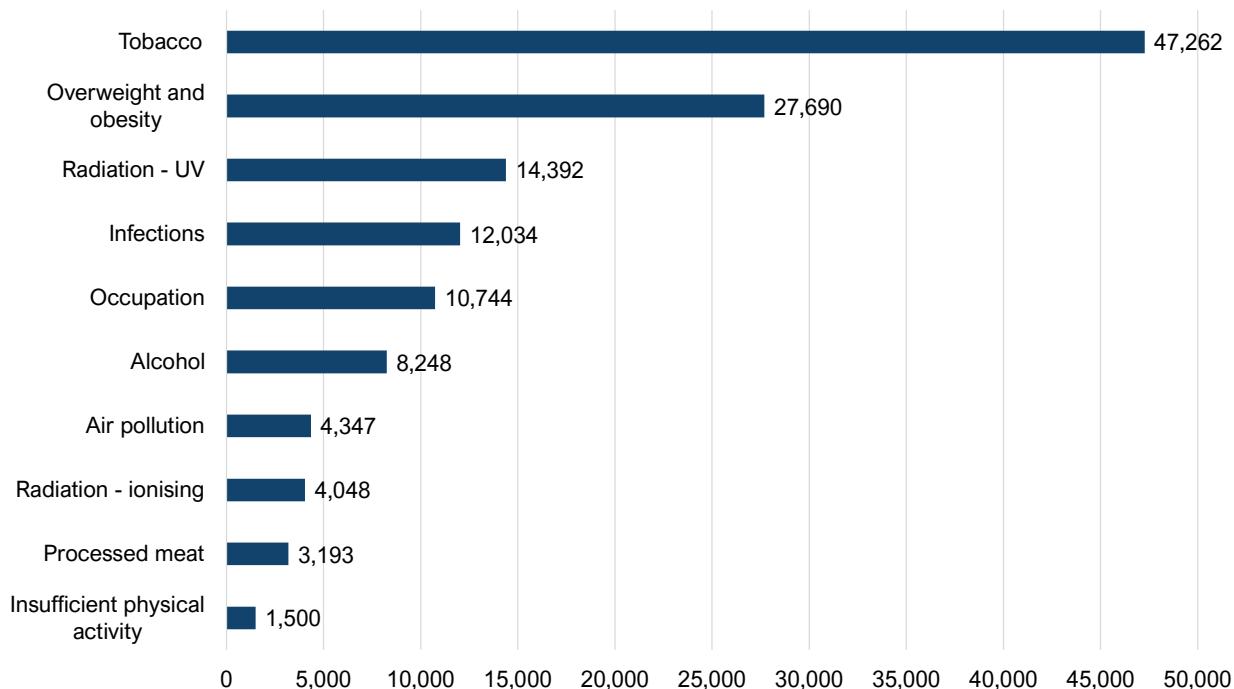
However, some of the increase in melanoma skin cancer incidence over time - therefore some of the cases attributed to UV using the established method - likely reflects overdiagnosis of the disease: increased awareness of melanoma and changing criteria for diagnosing the disease resulting in increased diagnosis of cases which would cause no harm in a person's lifetime and which would in past decades have likely not been diagnosed at all (see Karponis and others, 2025).

There are no UK estimates of the proportion of melanoma skin cancer cases which are overdiagnosed, but evidence from elsewhere in the world suggests it may be sizeable (Bjørch and others, 2024). Adjusting for overdiagnosis could reduce the difference between today's melanoma skin cancer incidence rates and those in the theoretically less-exposed cohort, which would reduce the number of cases attributable to UV. Rough calculations suggest that if around half of current UK melanoma skin cancer cases are overdiagnosed, UV would drop to the fourth-biggest UK cancer risk factor; however this magnitude of overdiagnosis seems unlikely based on the literature.

<sup>16</sup> Office of National Statistics. 2025. ['Adult smoking habits in the UK'](#) (viewed 21 January 2026)

<sup>17</sup> Office for Health Improvement and Disparities. 2024. 'Obesity Profile: short statistical commentary May 2024' available from ['Update to the Obesity Profile on Fingertips'](#) (viewed on 21 January 2026)

**Figure 15: estimated number of cancer cases attributed to risk factors, persons, 2023, England<sup>18</sup>**



Description of figure 15: the bar chart shows tobacco use remains by far the most significant preventable cause of cancer, followed by obesity. Other risk factors present smaller - but still important - risks to cancer.

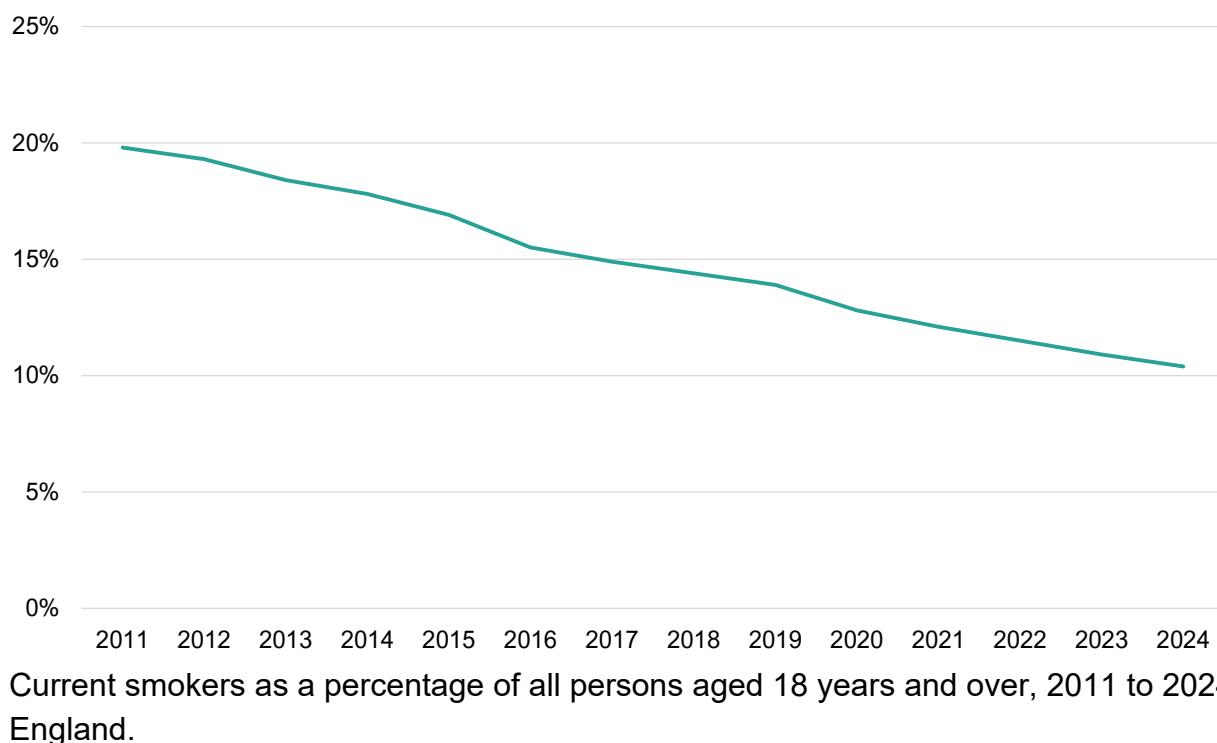
Source: [Cancer Risk Statistics](#) from Cancer Research UK, 2026.

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<sup>18</sup> Cancer Research UK. 2026. ['Cancer Risk Statistics' \(viewed on 3 February 2026\)](#)

Figure 16 shows how smoking prevalence has continued to fall in recent years. The Smokefree Generation policy will drive further reductions in smoking.

**Figure 16: the proportion of adults aged 18 and over in England who currently smoke cigarettes, from 2011 to 2024**

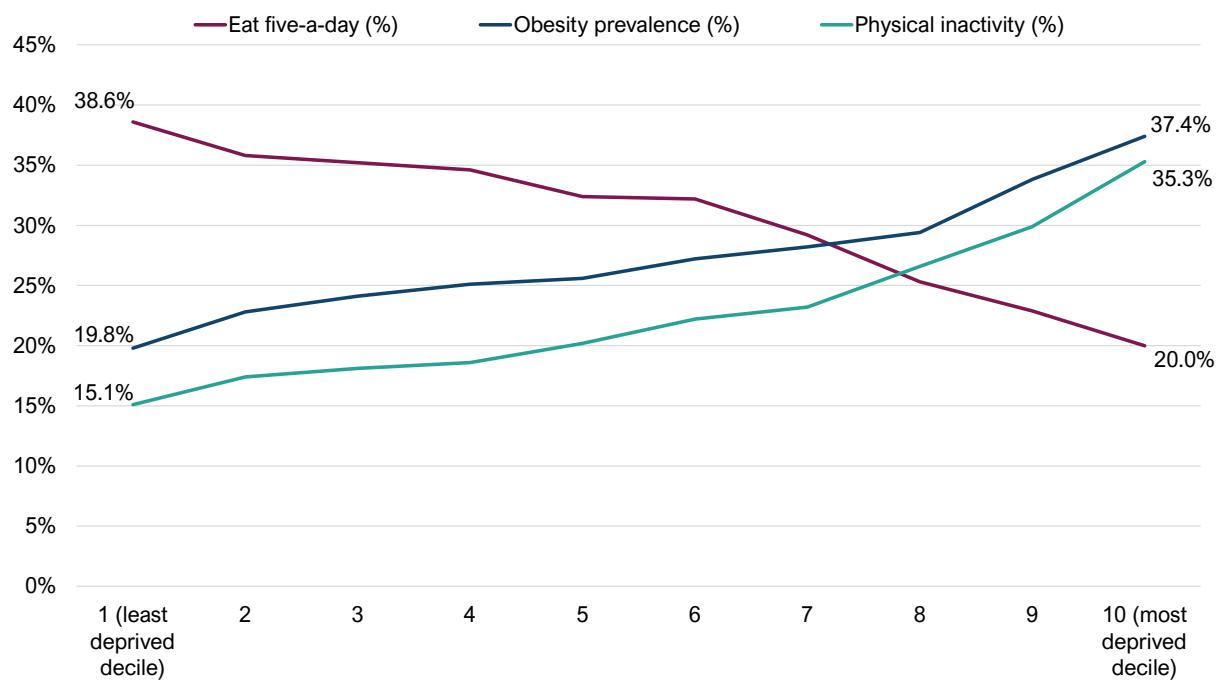


Description of figure 16: the line chart shows the percentage of adults smoking in England has consistently fallen, from around 20% in 2011, to just over 10% in 2024.

Source: [Adult smoking habits in the UK: 2024](#) from the Office of National Statistics.

Some risk factors are higher for those in higher levels of deprivation, as shown in figure 17.

**Figure 17: proportion of adults obese, physically inactive, or consuming 5 portions of fruit and vegetables per day, by deprivation decile**



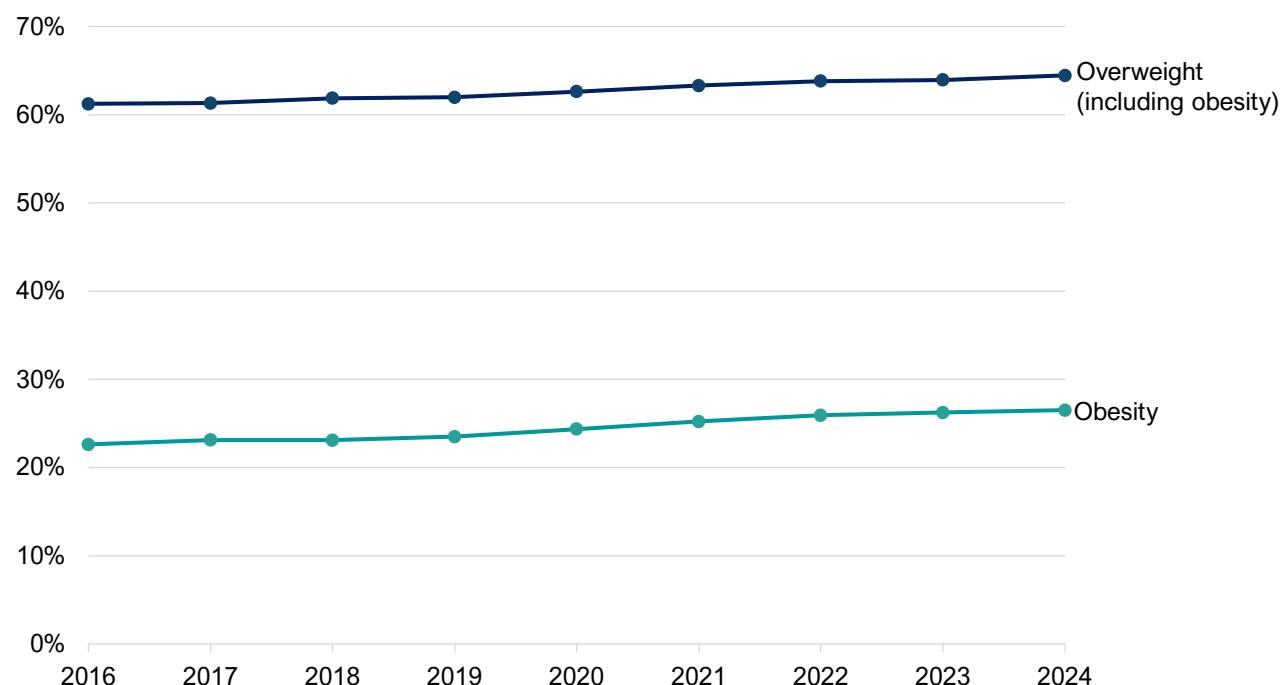
Proportion of adults obese, physically inactive, or consuming 5 portions of fruit and vegetables per day, by deprivation decile, England.

Description of figure 17: the line chart shows that adults in more deprived areas are more likely to be obese and physically inactive, and less likely to eat 5 portions of fruit and vegetables per day, compared with those in less deprived areas.

Source: [Obesity profile: short statistical commentary, May 2025](#) from the Office for Health Improvement and Disparities.

Overweight and obesity prevalence has increased in recent years, as shown in figure 18.

**Figure 18: overweight and obesity prevalence in adults, 2016 to 2024, England**



Overweight (including obesity) and obesity prevalence in adults (aged 18 and over) by survey year ending, 2024, England.

Description of figure 18: the line chart shows a general upwards trend in overweight and obesity prevalence over the time period.

Source: [Obesity profile: short statistical commentary, May 2025](#).

## 1.7 How cancer referrals and conversion rates have changed over time

More people than ever before have been referred by their GPs for urgent checks. This reached 3.2m in 2024 to 2025, nearly double the number in 2014 to 2015.<sup>19</sup>

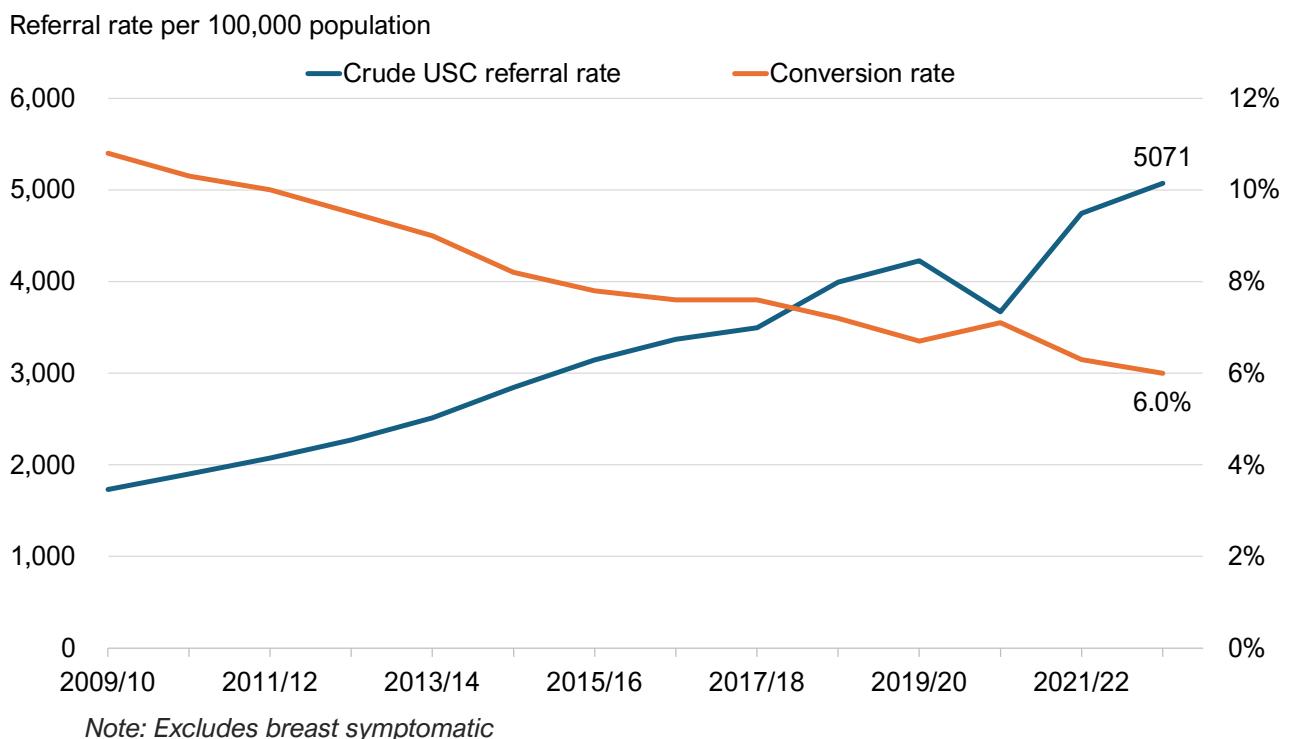
At the same time, as referrals have increased, the conversion rate - meaning the proportion of those urgent suspected cancer (USC) referrals resulting in a positive cancer diagnosis - has reduced. As noted above, for much of this period, rates of early diagnosis remained flat. While it remains important that people who are exhibiting symptoms that

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<sup>19</sup> NHS England. 2026. ['Cancer waiting times'](#) (viewed on 23 January 2026)

could suggest cancer contact their GP and are checked promptly, this suggests that more might be done to target diagnostic capacity more effectively at those at higher risk.

**Figure 19: referral and conversion rate for all cancers, financial year 2009 to 2010 to 2022 to 2023, England<sup>20</sup>**



Number of urgent suspected cancer referrals per 100,000 population and the proportion of referrals that result in a cancer diagnosis (conversion rate) for all cancers, by financial year (April to March), England. The data excludes breast symptomatic referrals.

Description of figure 19: the line chart shows an upwards trend in cancer referrals and a corresponding downwards trend in the cancer conversion rate across the same period.

Source: [CWT Urgent suspected cancer referrals dashboard](#) from the National Disease Registration Service, NHS England.

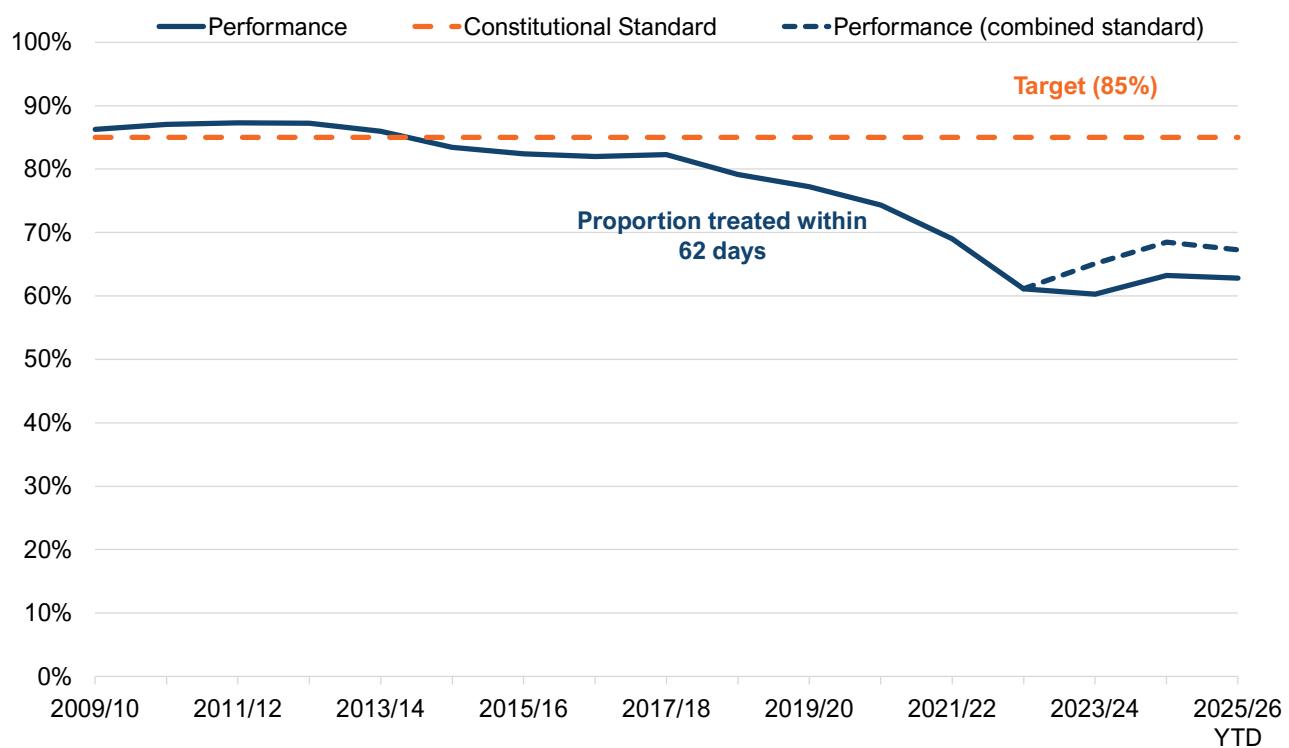
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<sup>20</sup> NHS England. 2024. [Cancer Waiting Times \(CWT\) urgent suspected cancer referrals dashboard](#) (viewed on 21 January 2026)

## 1.8 The relationship between demand and waiting times

During the last decade, the NHS struggled to keep pace with this increasing demand for testing and treatment, which led to longer waiting times.

**Figure 20: proportion of patients treated within 62 days of an urgent suspected cancer referral, England**



Proportion of patients treated within 62-days if an urgent suspected cancer referral, financial year (April to March) 2009 to 2010 to 2025 to 2026 (year-to-date), England.

Description of figure 20: the line chart shows a general downwards trend in performance against the 62-day performance standard. There is some recovery since financial year 2022 to 2023, but performance remains below the target.

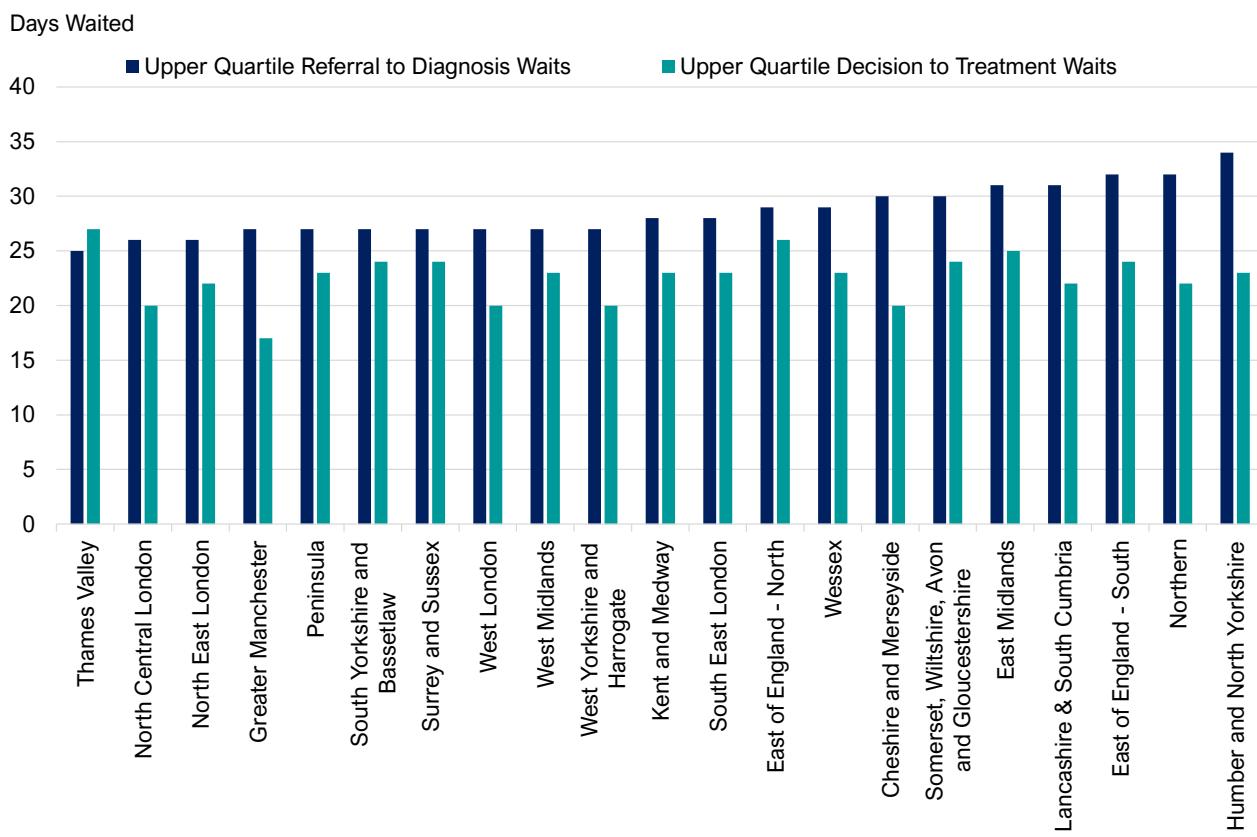
Source: [Cancer Waiting Times Data Collection](#) from NHS England.

In March 2025, the NHS met its 77% target for the 28-day Faster Diagnosis Standard and the interim 70% target in planning guidance for the 62-day standard. However, there remains much further to go to deliver on all 3 cancer waiting times standards, including the 31-day treatment standard.

## **1.9 Geographical variations in cancer care**

There are geographical variations in terms of how long patients wait between a cancer referral and diagnosis, and between diagnosis and treatment (not all of which can be explained by the case mix in different areas). While these geographical differences in waiting times are unlikely to be directly related to survival, they do provide some context on the variation in service delivery across England.

**Figure 21: days waited by 75% of patients between referral to diagnosis, and diagnosis to first treatment, by cancer alliance, August to November 2025<sup>21</sup>**



Number of days waited by 75% of patients (upper-quartile waits) between referral and diagnosis, and between diagnosis and first treatment (decision to treatment), August to November 2025, for each cancer alliance.

Description of figure 21: the bar chart shows variation in referral-to-diagnosis and diagnosis-to-treatment waits across alliances, with diagnosis-to-treatment waits typically shorter.

Source: [Days Waited by Patients between referral to diagnosis and diagnosis to first treatment](#) from NHS England.

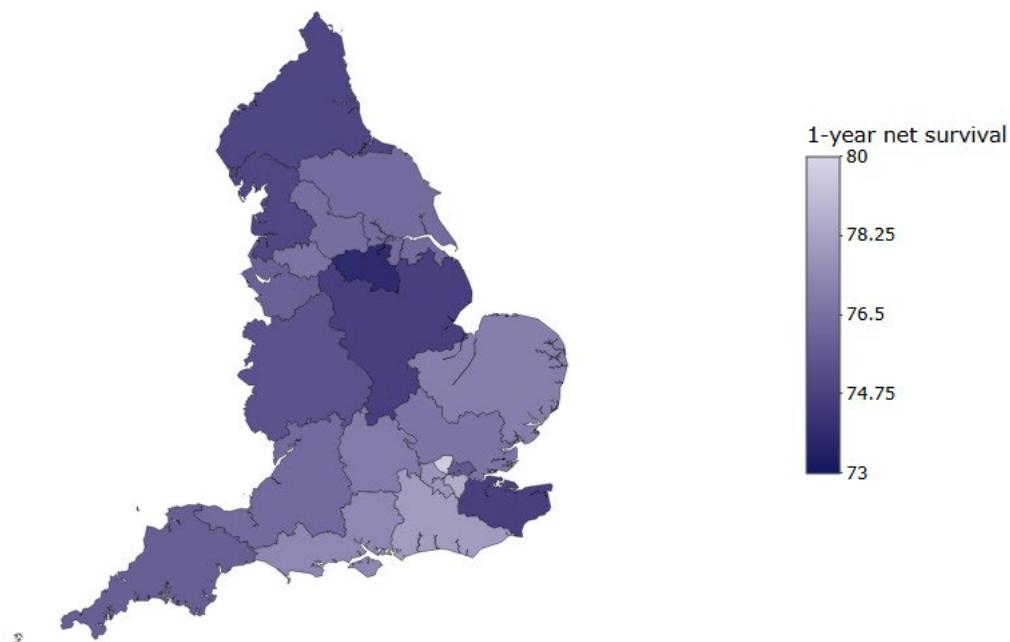
Ensuring that all NHS patients, wherever they live, get access to the very latest, evidence-based treatments is critical to continuing to improve survival outcomes. NDRS make available cancer survival data by tumour type and cancer alliance.<sup>22</sup> For example, figure

<sup>21</sup> NHS England. 2026. ['Days Waited by Patients between referral to diagnosis and diagnosis to first treatment'](#) (viewed on 30 January 2026)

<sup>22</sup> NHS England. 2022. ['Cancer survival in England'](#) (viewed on 22 January 2026)

22 illustrates the variation by cancer alliance area in one year survival for people diagnosed with colon cancer between 2015 and 2019, and followed up to 2020.

**Figure 22: one-year net survival for patients diagnosed with colon cancer between 2015 and 2019, followed up to 2020, by cancer alliance**



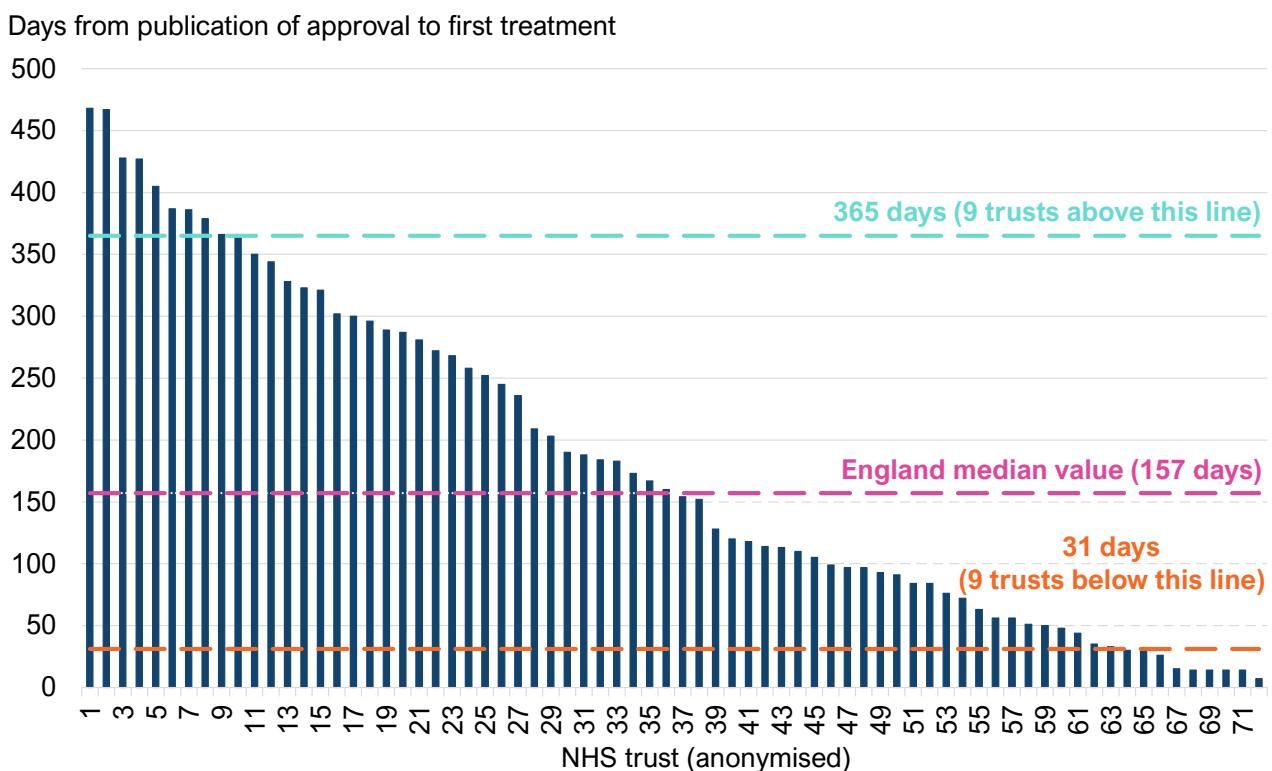
One-year net survival for patients diagnosed with colon cancer between 2015 and 2019, followed up to 2020, by cancer alliance

Description of figure 22: the map shows variation in one-year survival for patients diagnosed with colon cancer across cancer alliances in England, ranging from 73% to 80%.

Source: [Cancer survival dashboard](#) from the National Disease Registration Service, NHS England.

When it comes to systemic anti-cancer therapies, there continue to be significant disparities in how quickly patients are able to access new treatments. The time from approval by NICE to adoption of new cancer drugs such as alpelisib and fulvestrant varied from less than a month in 9 provider trusts to more than a year in 9 other organisations as shown in figure 23.

**Figure 23: time from NICE approval for alpelisib and fulvestrant to first use by NHS Trusts, August 2022<sup>23</sup>**



Number of days from alpelisib and fulvestrant being approved by NICE (publication of approval) to first use by NHS Trusts (first treatment) registered as using that combination, August 2022.

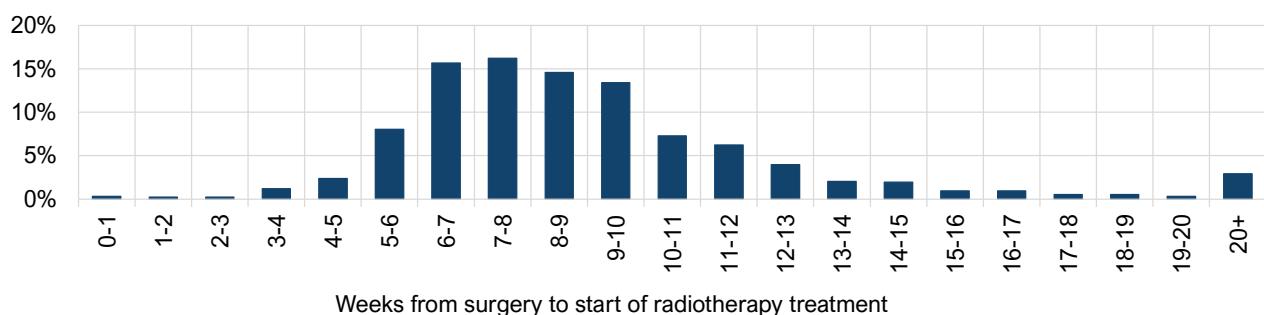
Description of figure 23: the bar chart displays the wide variation across NHS Trusts in the number of days between approval and first treatment for alpelisib and fulvestrant.

Source: [SACT time to first treatment dashboard](#), National Disease Registration Service, NHS England.

Accessing radiotherapy after surgery improves survival for patients with high-risk localised head and neck mucosal cancers. However, substantial variation can be seen in the length of time after surgery that radiotherapy is initiated (figure 24).

<sup>23</sup> National Disease Registration Service. 2025. ['Time to first treatment dashboard'](#) (viewed on 23 January 2026)

**Figure 24: percentage of head and neck episodes starting radiotherapy treatment by weeks after surgery<sup>24</sup>**



Proportion of head and neck episodes starting radiotherapy treatment by weeks after surgery, January 2020 to June 2024, England.

Description of figure 24: the bar chart shows the distribution of patient waits between surgery and the start of radiotherapy treatment. The majority are clustered between 5 to 11 weeks with a long tail out to 20+ weeks.

Source: [Radiotherapy site specific improvement metrics](#), National Disease Registration Service, NHS England.

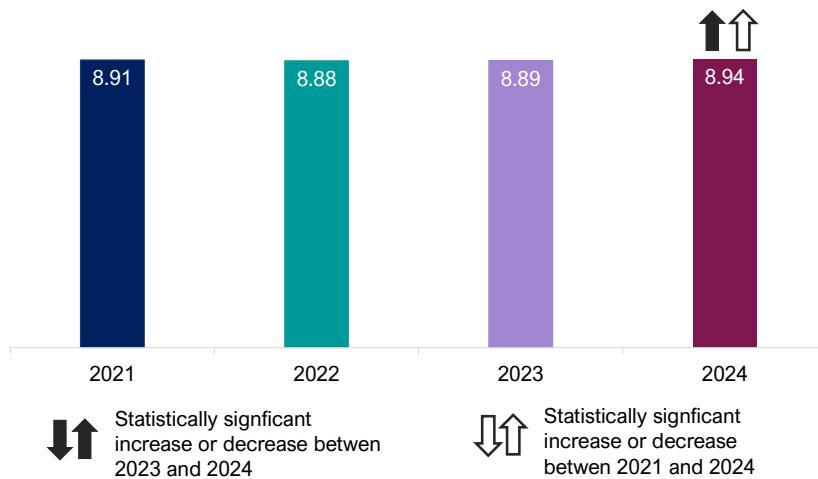
## 1.10 Patient experience of cancer services

Cancer patients generally report a high level of satisfaction with cancer services - in 2024, the 64,000 people who completed the Cancer Patient Experience Survey (CPES)<sup>25</sup> on average rated their overall experience of care at 8.94 out of 10. Beneath that headline, the survey shows variation and that the experience of some groups of people, while still high, is lower than the average.

<sup>24</sup> NHS England. 2025. ['Radiotherapy site specific improvement metrics'](#) (viewed on 23 January 2026)

<sup>25</sup> National Cancer Patient Experience Survey. 2024. ['Latest National Results'](#) (viewed on 8 January 2026)

**Figure 25: patient's average rating of care (out of 10), 2021 to 2024, England**

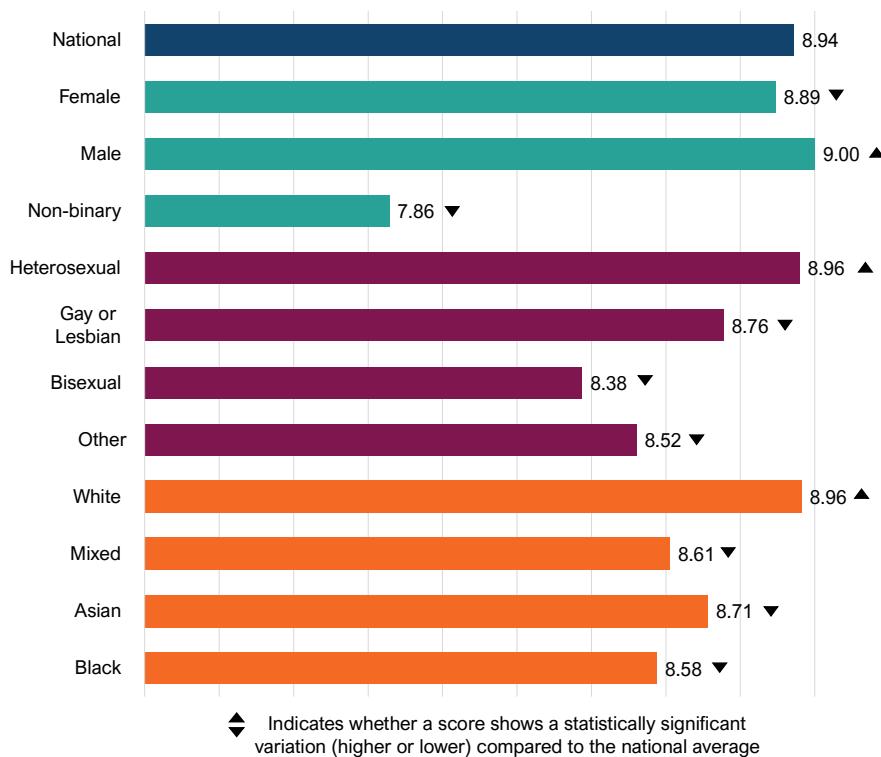


Year on year comparisons for 'Patient's average rating of care scored from very poor to very good'. Patients were asked to rate their care overall on a scale of 0 (very poor) to 10 (very good).

Description of figure 25: the bar chart shows patient's average rating of care dipped slightly in 2022 and subsequently recovered and improved in 2023 and 2024.

Source: [Cancer Patient Experience Survey 2024: National quantitative report](#) from NHS England.

**Figure 26: cancer patients' average rating of care (0 to 10), by gender identity, sexual orientation and ethnicity, 2024, England**



Cancer patients' average rating of care (0 to 10), by gender identity, sexual orientation and ethnicity, 2024, England.

Description of figure 26: the bar chart shows variation in experience across subgroups against the national average, with lower average ratings for female and minority patients.

Source: [Cancer Patient Experience Survey 2024: National quantitative report](#) from NHS England.

All subgroups reported high levels of overall satisfaction; however, the results for female, non-binary, gay or lesbian, bisexual and ethnic minority patients were statistically significantly below the national average. Under 65s, most notably those aged 25 to 34 (8.44) reported scores below the average (8.94).

Many of these groups reported differences in the level of support they received from their GP practice, hospital staff, main contact person and in their ability to access support at home and after their treatment.

The survey also showed us experience differs by the type of cancer patients are diagnosed with. Skin (9.07), blood (9.06) and lung cancers (9.02), all scored above the

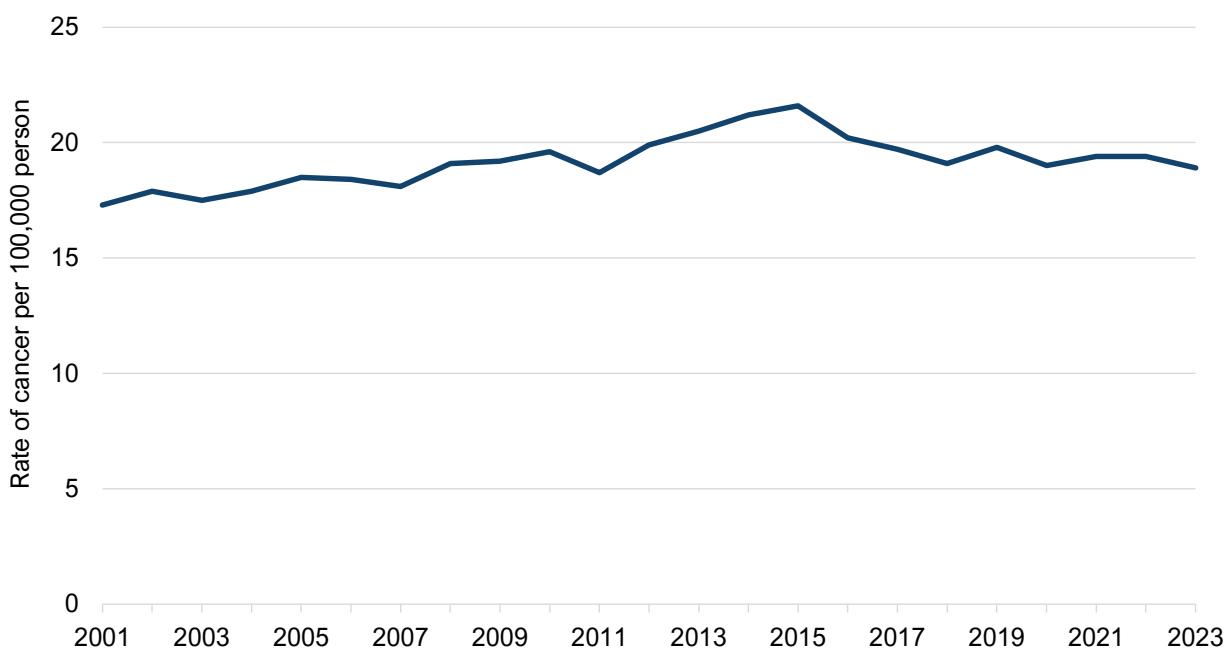
national average, but scores for rarer cancers such as thyroid (8.50), pancreatic (8.58), and brain or CNS (8.67) while still high, were below the national average.

The survey is a valuable resource for the NHS and for clinicians by providing an overview of how patients experience care and where the system can improve. However, it is not a tool that patients can use to raise concerns in real time or to provide them with information about their treatment or choice of providers.

## 1.11 Children and young people's cancer

Cancer is thankfully rare in young people. There were 38,810 new cancer cases diagnosed in children and young people under the age of 25 in England during the 11-year period 2013 to 2023, an annual average of 3,528 or about 1% of all cancers.<sup>26</sup>

**Figure 27: cancer incidence per 100,000 persons for young people under 25, 2001 to 2023, England**



Annual rate of cancer incidence rate per 100,000 population, for people under 25 years old, 2001 to 2023, England.

<sup>26</sup> NHS England. 2025. [Cancer registrations statistics 2023](#) (viewed on 23 January 2026)

Description of figure 27: the line chart shows an overall upwards trend in the under-25s cancer incidence rate between 2001 and 2023, with the rate peaking in 2015 and declining in the years since.

Source: [Cancer Registration Statistics](#) from the National Disease Registration Service, NHS England.

The annual average number of cancers occurring among children aged 0 to 14 increased by 2.6% between the periods 2013 to 2018 (average 1,558 per year) and 2019 to 2023 (average 1,599 per year), while the average population of children increased by 1.3%. The increase in the incidence rate was within the bounds of random variation and consistent with no change in underlying risk.

The annual average number of cases among Teenagers and Young Adults (TYA) decreased by 7.1% between the periods 2013 to 2018 (2,017 per year) and 2019 to 2023 (1,873 per year), while the average population of TYA decreased by only 1.4%, indicating that underlying risk of cancer for TYA decreased by around 5%.

The overall decrease among TYA was largely accounted for by reductions in annual case numbers of 28% for melanoma, 24% for skin carcinoma, 83% for cervical carcinoma, and 26% for germ cell testicular tumours. Health improvement interventions to reduce exposure to ultraviolet light and particularly to avoid sunburn and use of sunbeds may have been a factor in the decrease in melanoma and skin carcinoma. The very large reduction in the incidence of cervical cancer among TYA occurred since the introduction of vaccination against human papillomavirus. The reasons for the decrease in testicular cancer, however, are less clear.

**Table 2a: number of newly diagnosed cancers among children (aged 0 to 14) resident in England, 2013 to 2023**

<b>ICCC-3 cancer classification</b>	<b>Total cases 2013 to 2023</b>	<b>Average number of cases per year</b>	<b>% of total cases</b>
I. Leukaemias, myeloproliferative diseases, and myelodysplastic diseases	5,168	470	30%
(a) Lymphoid leukaemias	4,029	366	23%
(b) Acute myeloid leukaemias	781	71	5%
II. Lymphomas and reticuloendothelial neoplasms	1,859	169	11%
(a) Hodgkin lymphomas	771	70	4%
(b) Non-Hodgkin lymphomas	637	58	4%
(c) Burkitt Lymphoma	411	37	2%
III. CNS and miscellaneous intracranial and intraspinal neoplasms	4,475	407	26%
(a) Ependymomas and choroid plexus tumour	417	38	2%
(b) Astrocytomas	1,727	157	10%
(c) Intracranial and intraspinal embryonal tumours	719	65	4%
IV. Neuroblastoma and other peripheral nervous cell tumours	979	89	6%
V. Retinoblastoma	625	57	4%
VI. Renal tumours (Kidney)	974	89	6%
VII. Hepatic tumours (Liver)	260	24	1%
VIII. Malignant bone tumours	691	63	4%
(a) Osteosarcomas	344	31	2%
(c) Ewing tumour and related sarcomas of bone	260	24	1%
IX. Soft tissue and other extraosseous sarcomas	1,043	95	6%
(a) Rhabdomyosarcomas	539	49	3%

ICCC-3 cancer classification	Total cases 2013 to 2023	Average number of cases per year	% of total cases
X. Germ cell tumours, trophoblastic tumours, and neoplasms of gonads	600	55	3%
(c) Malignant gonadal germ cell tumours	229	21	1%
XI. Other malignant epithelial neoplasms and malignant melanomas	576	52	3%
XII. Other and unspecified malignant neoplasms	92	8	1%
Total cases	17,342	1,577	Not applicable

Source: National Disease Registration Service, NHS England.

**Table 2b: number of newly diagnosed cancers among teenagers and young adults (aged 15 to 24) resident in England, 2013 to 2023**

ICCC-3 cancer classification	Total cases 2013 to 2023	Average number of cases per year	% of total cases
I. Leukaemias, myeloproliferative diseases, and myelodysplastic diseases	2,137	194	10%
(a) Lymphoid leukaemias	841	76	4%
(b) Acute myeloid leukaemias	635	58	3%
II. Lymphomas and reticuloendothelial neoplasms	4,819	438	22%
(a) Hodgkin lymphomas	3,415	310	16%
(b) Non-Hodgkin lymphomas	1,174	107	5%
(c) Burkitt Lymphoma	154	14	1%
III. CNS and miscellaneous intracranial and intraspinal neoplasms	2,768	252	13%
(a) Ependymomas and choroid plexus tumour	183	17	1%

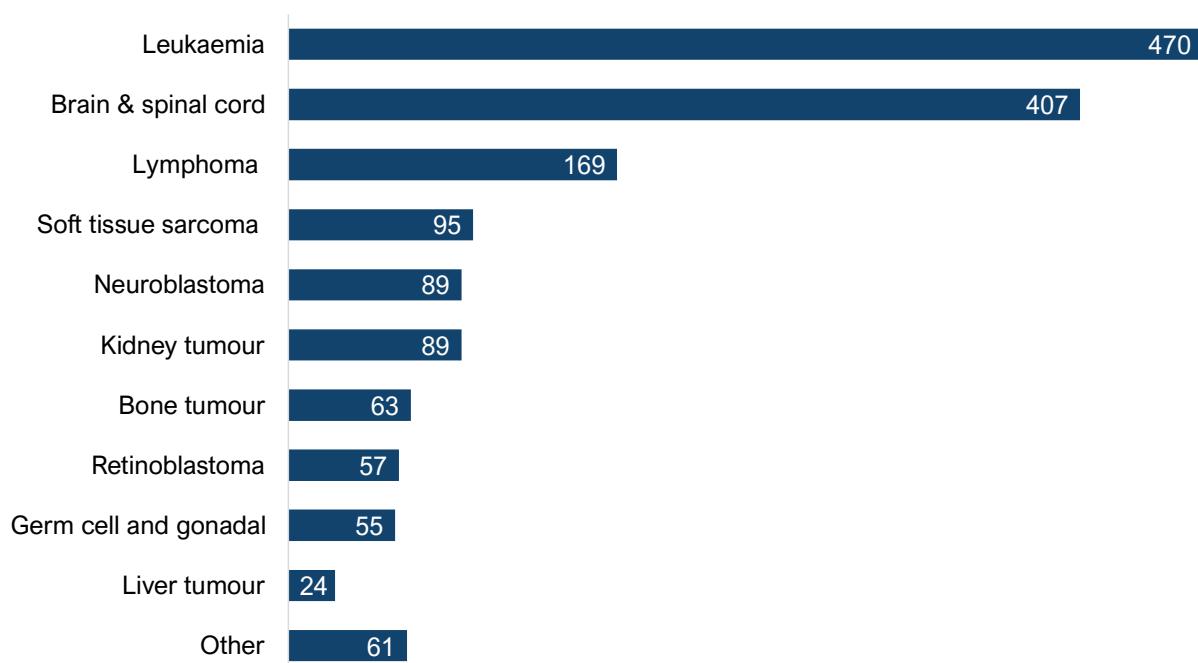
<b>ICCC-3 cancer classification</b>	<b>Total cases 2013 to 2023</b>	<b>Average number of cases per year</b>	<b>% of total cases</b>
(b) Astrocytomas	915	83	4%
(c) Intracranial and intraspinal embryonal tumours	138	13	1%
IV. Neuroblastoma and other peripheral nervous cell tumours	123	11	1%
V. Retinoblastoma	0	0	0%
VI. Renal tumours (Kidney)	171	16	1%
VII. Hepatic tumours (Liver)	101	9	0%
VIII. Malignant bone tumours	817	74	4%
(a) Osteosarcomas	381	35	2%
(c) Ewing tumour and related sarcomas of bone	246	22	1%
IX. Soft tissue and other extraosseous sarcomas	1,116	101	5%
(a) Rhabdomyosarcomas	216	20	1%
X. Germ cell tumours, trophoblastic tumours, and neoplasms of gonads	3,006	273	14%
(c) Malignant gonadal germ cell tumours	2,446	222	11%
XI. Other malignant epithelial neoplasms and malignant melanomas	6,220	565	29%
XII. Other and unspecified malignant neoplasms	190	17	1%
<b>Total cases</b>	<b>21,468</b>	<b>1,952</b>	<b>Not applicable</b>

Source: National Disease Registration Service, NHS England.

The types of cancer and how they manifest in children and young people is different to adults. Among children, blood and brain tumours make up a much greater proportion of all cancers diagnosed (figure 28), with 30% of cancers diagnosed under the age of 14 being types of leukaemia, 26% tumours of the central nervous system or intracranial and intraspinal cancers, 11% lymphomas, and 6% neuroblastomas and other peripheral nervous cell tumours.

For young people aged 15 to 24, there is a much wider range of cancers compared with younger children (figure 29), with 29% of cancers being other malignant epithelial neoplasms and melanomas. Lymphomas make up 22% of cancers in this age group and germ cell and gonadal tumours (which often develop in the ovaries or testes) 14%.

**Figure 28: average annual cancer diagnoses among children, 2013 to 2023**

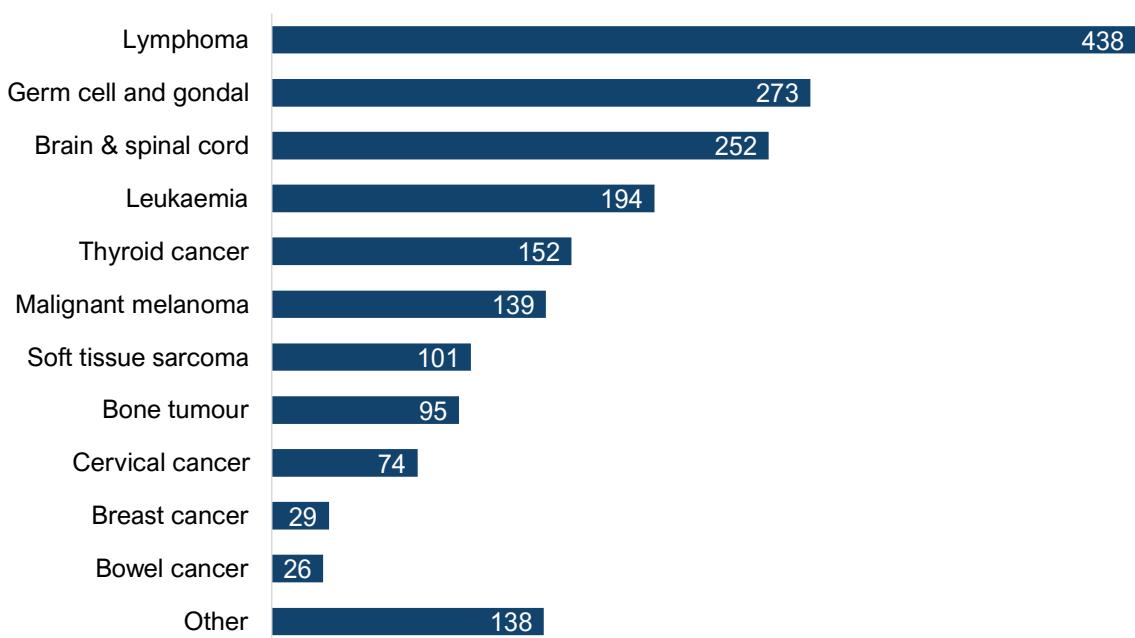


Average number of newly diagnosed cancer cases per year among children aged 0 to 14, diagnosed 2013 to 2023 in England.

Description of figure 28: the bar chart shows the distribution of cancer cases among children aged 0 to 14 across cancer types, with leukaemia, brain and spinal cord, and lymphoma making up the majority of cases.

Source: Cancer Registration Statistics.

**Figure 29: average annual cancer diagnoses among teenagers and young adults, 2013 to 2023**



Average number of newly diagnosed cancer cases per year among teenagers and young adults aged 15 to 24, diagnosed 2013 to 2023 in England.

Description of figure 29: the bar chart shows the distribution of cancer cases among those aged 15 to 24 across cancer types, with lymphoma, germ cell and gonadal, and brain and spinal cord the most common.

Source: Cancer Registration Statistics.

Among children, cancer was less frequent in females (7,779, 45%) than in males (9,563, 55%), whereas among TYA 50% of cases (10,756) occurred among females and 50% (10,712) among males. Among young people aged 15 to 24, however, there were marked differences between females and males in the frequency of some cancer types. In that age group, malignant melanoma was twice as frequent in females (10% of female cancers) as it was in males (5%). By contrast, germ cell, trophoblastic and gonadal tumours were more than 3 times as frequent in males (22% of male cancers) as in females (6%).

## 1.12 Economic benefits from reducing cancer incidence, severity and mortality

In addition to its impacts on people's health and wellbeing, cancer causes wider costs to the UK economy through healthcare costs and reducing productivity and employment, in turn reducing tax revenue, wages, profits and national output.

The whole economic cost of cancer is hard to estimate, but the UK's cancer healthcare costs alone have been estimated at £10 billion<sup>27</sup> to £15 billion<sup>28</sup> per year, and one study estimated a discounted total UK cost of £24 billion<sup>29</sup> when also accounting for social care costs and future losses in economic output from premature mortality and morbidity. Note these costs in this section are the costs of cancer, not the cost of the National Cancer Plan.

While there is uncertainty over the precise level of these costs, the order of magnitude is clearly large, in the billions of pounds per year.

Reducing cancer incidence, severity, and mortality, through better prevention, better treatment and innovation, therefore has the potential to generate significant benefits for both individuals and the UK economy.

A range of costs from the literature are presented below for different types costs of cancer - healthcare costs, secondary health impacts, social care costs, and lost economic outputs from morbidity and premature mortality.<sup>30</sup>

### Healthcare

Bottom-up and top-down estimates of healthcare expenditure on cancer range from £10 to 15 billion (as above).

These costs are expected to grow as the population ages, patients survive longer necessitating additional treatment, and new treatments and technology present new costs.

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<sup>27</sup> Landeiro F and others. ['The economic burden of cancer, coronary heart disease, dementia, and stroke in England in 2018, with projection to 2050: an evaluation of two cohort studies'](#) The Lancet Healthy Longevity 2024: volume 5, issue 8, pages e514 to e523 (viewed on 22 January 2026)

<sup>28</sup> Hofmarcher T and others. ['The cost of cancer in Europe 2018'](#) European Journal of Cancer 2020: volume 129, pages 41 to 49 (viewed on 22 January 2026)

<sup>29</sup> Landeiro F and others. ['The economic burden of cancer, coronary heart disease, dementia, and stroke in England in 2018, with projection to 2050: an evaluation of two cohort studies'](#) The Lancet Healthy Longevity 2024: volume 5, pages e514 to e523 (viewed on 26 January 2026)

<sup>30</sup> Note these estimates of these different types of costs are taken from different sources and their definitions may overlap. They have therefore not been summed, except as above quoting the total presented in a single study.

## Secondary health impacts

Additional healthcare costs can result from treating conditions caused by cancer and its treatment. It has been estimated that around half of patients experience anxiety and depression severe enough to affect their quality of life when diagnosed with cancer, and 1 in 10 will have symptoms serious enough to require support from psychiatric services.<sup>31</sup> These impacts can extend to carers, 67% of whom are estimated to experience anxiety and 42% depression.<sup>32</sup> The cost to secondary care of treating mental health conditions is approximately £6,200 per person.<sup>33</sup>

Around 75% of people living with cancer experience fatigue and 23% said they found performing physical activities (for example, personal care or housework) very difficult, compared to 3% of healthy survey participants.<sup>34</sup> Fertility loss also affects many cancer patients, with the probability of conceiving a first child around 50% lower after a cancer treatment for those aged 15 to 40.<sup>35</sup>

## Social care

Delivering social care for cancer patients has been estimated at £1.9 billion across residential and nursing homes, and formal care.<sup>36</sup>

## Other direct costs to patients

Cancer patients face other direct costs, varying over age and cancer type and individual circumstances. These may include transport and parking costs, childcare, prescriptions, counselling and so on. In their literature review, Cancer Research UK<sup>37</sup> found estimates of these costs varying widely from £34 to £570 per patient per month, probably reflecting differing scope of costs and treatment versus wider periods.

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<sup>31</sup> National Institute for Health and Care Excellence. 2025. ['Scenario: Management approach'](#) (viewed on 22 January 2026)

<sup>32</sup> Transforming Cancer Services Team and Macmillan Cancer Support. 2020. ['Commissioning guidance for Cancer Psychosocial support'](#) (viewed on 22 January 2026)

<sup>33</sup> Centre for Health Economics. 2024. ['Costs and activity for mental health services provided by NHS mental health trusts in England'](#) (viewed on 22 January 2026)

<sup>34</sup> Macmillan Cancer Support. 2013. ['Throwing light on the consequences of cancer and its treatment'](#) (viewed on 22 January 2026)

<sup>35</sup> Mandanat L and others. ['Probability of parenthood after early onset cancer: a population-based study'](#) International Journal of Cancer 2008: volume 123, pages 2891 to 2898 (viewed on 22 January 2026)

<sup>36</sup> Landeiro F and others. ['The economic burden of cancer, coronary heart disease, dementia, and stroke in England in 2018, with projection to 2050: an evaluation of two cohort studies'](#) The Lancet Healthy Longevity 2024: volume 5, pages e514 to e523 (viewed on 26 January 2026)

<sup>37</sup> Cancer Research UK. 2025. ['Cost of cancer in the UK'](#) (viewed on 22 January 2026)

**Informal care** The opportunity cost of delivering informal, unpaid care for cancer patients has been estimated at £1.1 billion<sup>38</sup> (using the mean hourly wage for a home care assistant as a proxy)<sup>39</sup> to £4.0 billion.

### **Economic losses from premature mortality**

Cancer is the leading cause of death in the UK, accounting for an estimated 1 in 4 premature deaths between 2023 and 2050, and costing more in losses to economic output and productivity than any other major disease.<sup>40</sup> Despite cancer disproportionately affecting older age groups, annual cancer mortalities are expected to cost the UK £7.5 billion to £12 billion in discounted future lost output.<sup>41</sup>

### **Economic losses from morbidity**

Economic losses due to cancer morbidity are estimated from £0.62 billion<sup>42</sup> to £2.0 billion<sup>43</sup>, as a consequence of changes to cancer patients' employment (for example, moving to unemployment or part-time employment).<sup>44</sup>

Employment and productivity can be disrupted before, during and after treatments shown in figure 30 below.

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<sup>38</sup> Landeiro F and others. ['The economic burden of cancer, coronary heart disease, dementia, and stroke in England in 2018, with projection to 2050: an evaluation of two cohort studies'](#) The Lancet Healthy Longevity 2024: volume 5, pages e514 to e523 (viewed on 26 January 2026)

<sup>39</sup> Hofmarcher T and others. ['The cost of cancer in Europe 2018'](#) European Journal of Cancer 2020: volume 129, pages 41 to 49 (viewed on 22 January 2026)

<sup>40</sup> Organisation for Economic Co-operation and Development. 2024. ['Tackling the Impact of Cancer on Health, the Economy and Society: United Kingdom'](#) (viewed on 22 January 2026)

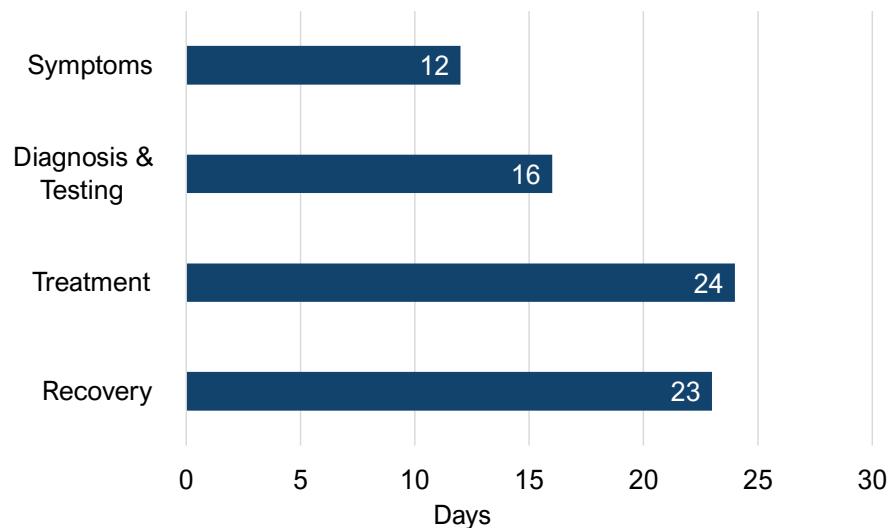
<sup>41</sup> Cancer Research UK. 2025. ['Cost of cancer in the UK'](#) (viewed on 22 January 2026)

<sup>42</sup> Landeiro F and others. ['The economic burden of cancer, coronary heart disease, dementia, and stroke in England in 2018, with projection to 2050: an evaluation of two cohort studies'](#) The Lancet Healthy Longevity 2024: volume 5, pages e514 to e523 (viewed on 26 January 2026)

<sup>43</sup> Leal J and others. ['Economic burden of bladder cancer across the European Union'](#) European Urology 2016: volume 69, pages 438 to 447 (viewed on 26 January 2026)

<sup>44</sup> Cancer Research UK. 2025. ['Cost of cancer in the UK'](#) (viewed on 22 January)

**Figure 30: number of days absent from work by stage of cancer journey**



The average number of absence days from work recorded by UK adults who are employed during each stage of their cancer journey.

Description of figure 30: the bar chart shows patients take time off before, during and after treatment, with the most absences occurring during treatment and recovery.

Source: [The Employee Experience report](#) from Reframe Cancer.

Unemployment can continue long after treatment concludes, with people hospitalised because of cancer less likely to be employed 5 years post-diagnosis.<sup>45</sup>

### **Benefits of achieving the survival ambition**

The National Cancer Plan sets out an ambition to increase the survival rate for all cancers in England to 75% for people diagnosed with cancer in 2035. Achieving this would mean an additional 320,000 people with cancer surviving at 5 years after their diagnosis, over the course of the plan.

The benefits of improving quality of life and savings lives are sometimes monetised using the quality-adjusted life year (QALY) approach.<sup>46</sup> Analysis by Department of Health and Social Care (DHSC) suggests this additional survival would have a QALY value of around

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<sup>45</sup> Office for National Statistics. 2025. ['Impact of health conditions requiring hospitalisation on earnings, employment and benefits receipt, England: April 2014 to December 2022'](#) (viewed on 22 January 2026)

<sup>46</sup> Department of Health and Social Care. 2024. ['Policy Appraisal and Health'](#) (viewed on 22 January 2026)

£88 billion (discounted).<sup>47</sup> Achieving the ambition for survival at 5 years would also likely to be associated with increased survival beyond 5 years, that is, further lives saved and QALY value. Note this does not take account of the costs incurred to achieve the ambition.

As described above, avoided cancer diagnoses and mortality, such as those from achieving the cancer survival ambition, can also bring benefits in the former of higher future economic output and avoided cancer-related health and social care costs.

### **Cancer-related benefits of the Smokefree Generation policy**

As an example of the potential benefits from policies that reduce cancer incidence, DHSC analysts have modelled the impact of the Smokefree Generation policy on the future prevalence of smoking, and how the expected reductions in smoking will reduce future lung cancer diagnoses (as well as reducing other cancers and diseases such as cardiovascular disease) and save lives. The benefits of improving quality of life and savings lives are sometimes monetised using the QALY approach.<sup>48</sup>

This prevention policy is estimated to reduce future lung cancer diagnoses by around 9,000, and as a result to reduce lives lost to lung cancer by around 8,000.

The avoided lung cancer-related mortality from the Smokefree Generation policy is estimated to imply a gain of around 300,000 life-years for people who, with the policy, are no longer expected to get a lung cancer diagnosis (up to 2075) and pass away, over the remainder of their lifetimes. These life years have an estimated discounted QALY value of around £9 billion over the course of their lives.<sup>49</sup>

As described above, avoided cancer diagnoses and mortality such as those from the Smokefree Generation policy can also bring benefits in the former of higher future economic output and avoided cancer-related health and social care costs. It will also bring

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<sup>47</sup> This analysis uses projections of cancer incidence and 5-year net survival by NHS England analysts described on page 52 out to diagnoses in 2035, with additional assumptions on increases in net survival at 1, 2, 3 and 4 years consistent with the 5-year modelled projections and historic data taken from a regression approach. The additional life-years associated with achieving the ambition at 1, 2, 3, 4 and 5 years after diagnosis, for each diagnosis year up to 2035, have been monetised and discounted as QALYs.

<sup>48</sup> Department of Health and Social Care. 2004. ['Policy Appraisal and Health'](#) (viewed on 22 January 2026)

<sup>49</sup> This analysis built on the modelling for DHSC [Tobacco and Vapes Bill impact assessment](#), 2024, to explore the impact of the policy on lung cancer diagnoses, using latest cancer-specific diagnosis and survival data from the National Disease Registration Service, adjusted for relative risks, or hazard ratios of diagnosis and mortality, for smokers and ex-smokers relative to never smokers from the Royal College of Physicians, [Hiding in Plain Sight](#), 2018 report. It estimates avoided lung cancer diagnoses (those occurring under the baseline scenario without the Smokefree Generation policy that are assumed not to occur under the policy) up to 2075, and considers the associated avoided mortalities, avoided years of life lost, and avoided QALYs lost.

wider benefits as set out in the impact assessment for the Tobacco and Vapes Bill<sup>50</sup> related to avoided incidence of other diseases.

## 2. Delivering change

### Key interventions to enable recovery of Cancer Waiting Times

The continued high rate of growth in urgent suspected cancer (USC) referrals over the last decade coupled with the steady drop in the rate of conversion from referral into a diagnosis of cancer from over 10% to around 6% today,<sup>51</sup> indicates that there will likely be opportunities to prioritise demand and use diagnostic and treatment capacity more effectively to target those at highest risk. More activity than ever before is being delivered, but it is not currently sufficient to meet demand quickly enough to meet the cancer waiting time standards.

The National Cancer Plan sets out how recovery will be enabled over the coming period within existing resources and through use of expanded capacity where funded. The interventions in the plan can be grouped under 5 themes:

#### 2.1 Improving guidelines for referral

The National Cancer Plan includes interventions which focus on both mitigating USC demand growth as well as increasing outpatient and diagnostic capacity through improved productivity and capacity expansion. Use of AI and other digital tools will be stepped up to rapidly assess the need for onward referral or treatment, reducing numbers of new appointments.

FIT testing triages out low clinical value lower-GI referrals before entering USC pathways, reducing diagnostic demand on the system. Comparing to a working-day adjusted (WDA) pre-pandemic baseline (expected referrals if FIT had not been introduced), 2024 to 2025 data show a 22.1% reduction in referrals (approximately 141,000),<sup>52</sup> with further benefits expected in subsequent years. Furthermore, algorithm-driven tools such as COLOFIT are also expected to lead to reductions in USC referrals of low clinical value, but as yet, there is no available quantifiable evidence base for potential impact.

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<sup>50</sup> Department of Health and Social Care. 2024. ['The Tobacco and Vapes Bill: impact assessment'](#) (viewed on 22 January 2026)

<sup>51</sup> NHS England. 2024. ['CWT USC referrals dashboard'](#) (viewed on 21 January 2026)

<sup>52</sup> NHS England. 2025. ['Cancer Waiting Times'](#) (viewed on 12 January 2026)

straight to test (STT) means pathways where patients go directly to the most appropriate diagnostic test before seeing a specialist - cutting out an outpatient clinic. Across all electives, shifting an additional 4% of pathways to a straight to test approach would remove 800,000 unnecessary follow-up appointments each year, thereby freeing up capacity.

Further changes to ensure adoption of best practice pathways, which limit the flow of USC referrals that are unnecessary or of low clinical value, will be driven through the National Cancer Plan, for example to direct patients with breast pain into more appropriate clinics and to direct women with post-menopausal bleeding on Hormone Replacement Therapy, to alternative pathways. Anecdotal evidence is promising, but currently there is not enough data to quantify the likely impact on cancer performance. Collectively, these interventions are expected to have a material impact on future USC referral demand, thereby increasing the capacity to meet demand for patients at higher risk of cancer.

## **2.2 Increasing throughput in outpatients**

The National Cancer Plan builds on the commitment in the 10 Year Health Plan to the use of digital pathways and technology to end outpatients as we know it. Fundamental changes to the outpatient pathway will lead to more seamless and less resource-intensive pathways, freeing up capacity.

Increased use of standardised clinic templates across elective services has been estimated to create between one and 2 million outpatient appointments per year, which could be the equivalent of an additional week of outpatient activity in every trust in England.<sup>53</sup>

New technology to automate clinical interactions - such as ambient voice technology (AVT) - has the potential to drive tangible improvements in care quality, clinician experience, and system efficiency. While the evidence base on the benefits is still emerging, an initial small-scale study across a range of specialties has shown benefits. For example, a reduction in median consultation times from 18.4 to 16.9 minutes and consultant time being freed up by around 8% increasing the proportion of time spent providing direct patient care.<sup>54</sup>

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<sup>53</sup> Getting It Right First Time. 2025. '[Outpatient operational guide](#)' (viewed on 22 January 2026)

<sup>54</sup> Great Ormond Street Hospital. 2025. '[DRIVE resources and publications](#)' (viewed on 22 January 2026)

## 2.3 Expanding diagnostic capacity

Having sufficient diagnostic capacity is critical to driving improvements in cancer waiting times. Community Diagnostic Centres (CDCs) have led to a rapid expansion of available capacity, and modelling (see section 3 of this technical annex for more detail) indicates that an additional 9.5 million tests will be delivered by 2029 through a concerted effort to make maximum use of both the existing and new diagnostic estate.

## 2.4 Increasing throughput in imaging and demand optimisation

Digital technology and improved booking systems with automated processes will free up considerable capacity.

The Federated Data Platform (FDP) aims to enable operational teams to automate and optimise scheduling of appointments. Cancer 360<sup>55</sup> is an FDP tool available to trusts to support cancer pathway management by providing real-time visibility of patients from referral to treatment. There is some emerging evidence on the benefits of Cancer 360. For example, based on pre and post implementation surveys completed with trusts using Cancer 360, users reported experiencing a significant reduction in e-mail volumes. Also, from comparing Cancer Waiting Times data in the 12 months before implementation, to available data post implementation, there were improvements across the cancer performance standards.

Drawing on a case study from Chelsea and Westminster NHS Foundation Trust,<sup>56</sup> a consultant reported:

“Cancer 360 has enabled my team to monitor and safely carry our patients through their cancer pathway... reducing admin time and enabling them to focus on the patient journey. I have witnessed an improvement in performance, team spirit and most importantly patient experience.”

As Cancer 360 is rolled out to additional trusts and benefits data is established at scale, NHS England will publish benefits information on the NHS England website.<sup>57</sup>

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<sup>55</sup> UK Government. 2025. '[Government's tech reform to transform cancer diagnosis](#)' (viewed on 23 January 2026)

<sup>56</sup> NHS England. 2025. '[NHS England » Cancer 360 streamlines patient pathways across NHS trusts](#)' (viewed on 29 January 2026)

<sup>57</sup> NHS England. 2025. '[NHS England » NHS Federated Data Platform uptake and benefits](#)' (viewed on 29 January 2026)

There will be greater adoption of AI in imaging. For example, the NIHR-funded EDITH trial which was launched in 2025 aims to replace the second read of mammograms on breast pathways with an AI reader. This has been estimated to free up hundreds of radiologists and other specialists to see more patients.<sup>58</sup>

Diagnostic reform is expected to deliver productivity benefits. Between April 2026 and March 2029, these initiatives are estimated to make available an additional 4.91% (3.6m) diagnostic tests compared with 2025 to 2026 capacity, contributing to a total of 9.5 million additional tests across the period, and deliver 1.61% (1,100) Whole Time Equivalent (WTE) staff savings.<sup>59</sup> These productivity-generating initiatives include service optimisation (for example, longer opening hours), digitisation (for example, MRI digital pathology), demand optimisation (for example, CDS-iRefer<sup>60</sup>), and services' automation (for example, histopathology automation).

Modalities in scope are imaging, endoscopy, histopathology and physiological sciences including echocardiography, and cover capacity available to NHS hospitals and CDCs. Diagnostics delivered under national screening programmes are excluded.

It is estimated that 5% of these benefits may be applicable for cancer pathway diagnostic services. This has been estimated using the total cancer test capacity as a proportion of the total diagnostic test capacity between April 2025 to March 2029.

## 2.5 Improving inpatient utilisation

Efforts across the system will continue to improve access to surgery for cancer. There is some evidence that the shift of treatments to day cases could drive productivity benefits. It has been estimated that across all electives, there is the potential opportunity to release about 20,000 bed days per month by increasing day case and outpatient procedure rates to the British Association of Day Surgery (BADS)<sup>61</sup> benchmarks.

GIRFT publications have provided guidance to providers on identifying High Volume Low Complexity (HVLC) pathways that will be suitable for relocating to surgical hubs.<sup>62</sup> Almost all ICBs now have at least one surgical hub, and these continue to be rolled out.<sup>63</sup> The extra activity that these hubs take on will free up capacity for cancer surgeries to be

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<sup>58</sup> National Institute of Health Research. 2025. ['World-leading AI trial to tackle breast cancer launched'](#) (viewed on 22 January 2026)

<sup>59</sup> See section 3 of this technical annex for more detail on how the number of additional tests was calculated.

<sup>60</sup> iRefer. ['Clinical Decision Support System'](#), irefer.org.uk (viewed on 26 January 2026).

<sup>61</sup> British Association of Day Surgery. 2026. ['British Association Of Day Surgery'](#) (viewed on 23 January)

<sup>62</sup> Getting It Right First Time. 2023. ['High Volume Low Complexity \(HVLC\) Guide \(Edition 2\)'](#) (viewed on 7 January 2026)

<sup>63</sup> UK Government 2025.. ['Plan for Change: delivering reduced waiting times'](#) (viewed on 23 January 2026)

carried out in the acute setting. In some cases, cancer surgeries are also being carried out in surgical hubs when deemed appropriate.

Maximising estate usage remains an area for further productivity opportunity where sessions have not been run due to avoidable reasons but where staffing was available through the development of parallel lists and local anaesthetic only lists, the data to quantify the national opportunity for this is not yet robust enough to make firm assumptions on gains which would not require funding versus if additional funding is made available for all providers.

### **3. Methodology underlying projections in the National Cancer Plan**

The objective of this section is to summarise the assumptions and methodology behind modelled projections mentioned in the plan. Details on previously unpublished data will also be included.

#### **Statement on achieving higher cancer survival**

See chapter 3, 'A global leader in cancer outcomes by 2035' for the following statement:

"Significantly reducing the number of lives lost to the biggest killers is at the heart of this government's health mission. On cancer, we will deliver on this by ensuring - through successful delivery of this plan - that three-quarters of people diagnosed in 2035 are cancer-free or living well with cancer after 5 years, up from a projected 60% in 2022 and 50% in 2008".

#### **Underlying methodology and assumptions**

The "projected 60% (5-year survival) in 2022" figure is based on the latest series of national cancer survival trend data. This is published by NDRS as a Cancer Survival Index that includes estimates of 5-year net survival for all cancers (excluding non-melanoma skin cancer and prostate cancer) in England.<sup>64</sup> Net survival here represents the survival of cancer patients compared with the expected survival of the general population (background mortality). The Index adjusts for any changes in the profile of cancer patients by age, gender or cancer type over time to ensure these survival estimates are comparable.

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<sup>64</sup> NHS England. 2025. [Cancer survival](#) (viewed on 26 January 2026)

This trend data shows that while survival is increasing year-on-year, this increase is gradually slowing. A series of several Index publications were used to give a more extensive and longer history of observed annual changes in 5-year survival.

Projections beyond the latest available observation (55.7% 5-year survival for patients diagnosed in 2016 and followed up to 2021) were derived by modelling the annual change in 5-year survival as a function of the current survival level. A quadratic (polynomial) trend was fitted to these observed annual changes to capture the expected decline in incremental gains over time.

To avoid implausible long run extrapolation, the model incorporates a long-term future ceiling effect by constraining the fitted quadratic trend so that the expected annual increase in survival eventually declines to zero as 5-year survival approaches a specified upper level.

This approach assumes that future improvements in 5-year survival will continue to follow the broad pattern observed in past published trends, with incremental gains diminishing as survival outcomes improve.

## **Statement on the future number of lives saved by the new survival ambition**

See 'Chapter 3. A global leader in cancer outcomes by 2035' in the plan for the following statement:

"This will be the fastest rate of improvement in cancer outcomes this century - and will translate to 320,000 more lives saved over the course of this plan"

### **Underlying methodology and assumptions**

The baseline survival curve as mentioned above represents the expected trajectory of 5-year survival in the absence of further improvements in early diagnosis. This provides a counterfactual estimate of how survival would have evolved had more recent gains in early diagnosis not occurred. Under this counterfactual, 5-year survival is estimated to reach 61.0% in 2024.

Observed improvements in early diagnosis in 2024, derived from Rapid Cancer Registration Data,<sup>65</sup> were then assessed against this baseline. Using the latest NDRS estimates of 5-year survival by stage at diagnosis,<sup>66</sup> these observed improvements were

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<sup>65</sup> NHS England. 2025. ['Rapid Cancer Registration Data'](#) (viewed on 23 January 2026)

<sup>66</sup> NHS England. 2025. ['Cancer survival'](#) (viewed on 23 January 2026)

converted into an estimated number of additional people surviving for at least 5 years following a cancer diagnosis. For 2024, this equates to approximately 1,700 additional 5-year survivors attributable to increased early diagnosis.

Using Cancer Research UK incidence projections,<sup>67</sup> the 1,700 additional survivors are converted into a percentage point increase, consistent with the Cancer Survival Index. On this basis, the observed early diagnosis improvements in 2024 correspond to an uplift of approximately 0.5 percentage points, increasing estimated 5-year survival from 61.0% to 61.5% in that year.

Beyond 2024, 5-year survival is projected forward to 2035 by assuming a linear increase from the last modelled survival value that incorporates observed early diagnosis improvements (2025 onwards) to the ambition of 75% 5-year survival in 2035. This reflects the delivery of the full set of commitments in the National Cancer Plan over the period.

The estimated number of additional 5-year survivors over the period 2025 to 2035 is calculated by taking the difference between the baseline survival figure for 2024 (61.5%) and the survival trajectory. Then for each year, multiplying this difference by the projected total number of cancer cases by the projected incidence. Finally, annual estimates of additional 5-year survivors are summed across the period, resulting in a cumulative estimate of approximately 320,000 additional people surviving at least 5 years following a cancer diagnosis.

## **Statement on the current performance for cancer histopathology tests**

See 'Action 2. We will enable our expansion of diagnostic capacity with new histopathology capacity' in chapter 2 of the plan for the following statement:

"The national standard is that 98% of histopathology tests should be reported within 10 days, but due to unprecedented growth in demand for histopathology services in recent years the current average performance for cancer pathway histopathology tests is 68% within 10 days."

### **Underlying methodology**

The source for histopathology 10-day turnaround performance is the Pathology Quality Assurance Dashboard (PQAD) - a monthly provider-level aggregate management information data collection. The 10-day measure includes all histopathology cases from

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<sup>67</sup> Smittenaar C and others. ['Cancer incidence and mortality projections in the UK until 2035'](#), British Journal of Cancer 2016: volume 115, pages 1147 to 1155 (viewed on 23 January 2026)

the point the specimen is received into the laboratory to the point the final report is made available to treating clinicians. The 68% figure refers to November 2025.

## **Statement on actions to meet the histopathology standard**

See 'Action 2. We will enable our expansion of diagnostic capacity with new histopathology capacity' in chapter 2 of the plan for the following statement:

"To transform histopathology services and achieve the 98% standard by March 2029, we will:

Deliver £604 million capital investment in digital diagnostics across modalities, including support for digital histopathology, plus £96 million to automate histopathology to speed up the processing and reporting of tissue samples.

Increase productivity by transitioning to digital and robotic automation-enabled histopathology pathways, with AI further enhancing capability. We estimate our investment in digital combined with robotic automation will deliver up to a 21% productivity gain.

Optimise demand to ensure the tests that add the most value to patient care are prioritised and delivered most quickly and deliver workforce measures including an expansion of advanced clinical practice for scientists."

### **Underlying methodology and assumptions**

Histopathology productivity at 21% is based on optimising services with investment in digital histopathology and robotic automation over a 3-year period - baselined at 2025 to 2026. This assumes that 3.9m cases will be received in 2028 to 2029.

## **Statement on teledermatology implementation**

See 'Action 4. We will harness digital, home and community innovations to make better use of diagnostic capacity' in chapter 2 of the plan for the following statement:

"Teledermatology is now used for half of all urgent skin cancer referrals."

### **Underlying methodology**

Teledermatology data is collected quarterly, via an aggregate data collection, from the cancer alliances and submitted to NHS England. Each cancer alliance is responsible for collecting this data from their local trusts. This data is then used to calculate the

percentage of total urgent suspected skin cancer referrals which are managed via teledermatology.

## **Statement on lung cancer screening implementation and impact**

See 'Action 1. We will complete the roll out of lung cancer screening by 2030' in chapter 3 of the plan for the following statement:

"Over 1.5 million people have attended a lung health check, and over 9,000 people have been diagnosed with lung cancer."

### **Underlying methodology**

Lung health check data is currently submitted from providers to NHS England in aggregate form on a monthly basis. The collection includes details on invites, attendances, scans, incidental diagnoses and cancer diagnoses. The data quoted in the plan were from Q3 2025 to 2026. In 2026 a patient level data collection for the Lung Cancer Screening Programme will be launched.

## **Statement on lung cancer screening national roll-out**

See 'Action 1. We will complete the roll out of lung cancer screening by 2030' in chapter 3 of the plan for the following statement:

"The [Lung Cancer Screening] programme is expected to diagnose up to 50,000 cancers by 2035 and at least 23,000 at an earlier stage, potentially saving thousands of lives."

### **Underlying methodology and assumptions**

The modelling assumes that the number of invites reduce from approximately 1,159,000 across years 2026 to 2027 to 2028 to 2029 and then reduce to 320,000 across years 2031 to 2032 to 2034 to 2035.

The projection assumes a constant uptake rate of 63%. The projection does not account for participants taking up invitations who did not previously accept, or for the re-invitation of previously low-risk participants who did not previously breach the risk threshold for CT scan, but may do so in future.

The projection assumes a conversion rate from completed Lung Health Check risk assessment to CT scan of 43.3%. There are 3 types of CT scan, prevalent or baseline scans are the first scan for a participant in the programme. Screening round scans are routine scans, which should take place 2 years after a participant's last scan with no

suspicious findings. Nodule surveillance scans are where a participant has received a screening round or prevalent scan with a suspicious finding that was not sufficient for immediate referral for cancer investigation.

The projection assumes that 13.2% of participants will require nodule surveillance scans at 3 and 9 months after a prevalent or screening round scan; and 82.7% of participants will cease to remain engaged with the programme at each screening round. Reasons for ceasing engagement include ageing out, death, cancer diagnosis, or failing to take up invitations to screening round scans.

The projection assumes the cancer incidence rate at initial scans is 0.9% and the cancer incidence rate at screening round scans is 0.6%. This produces an estimate of the total number of cancer diagnoses in each year.

The lung cancer early diagnosis rate through the Lung Cancer Screening Programme is 76%. The lung cancer early diagnosis rate in the general population prior to the programme's introduction was around 29% (Gold Standard data from 2017 suggests 29.3% of all staged cancers were diagnosed at Stage 1 or 2). Additional early diagnoses are calculated by with the following calculation (cancers diagnosed \* 0.76) - (cancers diagnosed \* 0.29).

## **Statement on the extension of bowel cancer screening**

See 'Action 2. We will expand and improve bowel, cervical and breast screening' in chapter 3 of the plan for the following statement:

"We have extended NHS bowel cancer screening to cover people from the age of 50 and, between now and 2028, will increase the sensitivity of the Faecal Immunochemical Test (FIT) to 80µg Hb/g, rolling this out nationally by 2028. This will deliver, combined with increased uptake, 17,000 earlier diagnoses by 2035 and save almost 6,000 lives."

## **Underlying methodology and assumptions**

The figures for "17,000 earlier diagnoses" and "almost 6,000 lives" have been derived from a series of calculation steps. Firstly, by modelling changes in patient volumes, uptake and sensitivity it is expected that these 2 interventions (bowel screening age extension and increased FIT sensitivity) will have a combined effect of increasing the early diagnosis proportion across all cancers by 0.85 percentage points by 2035.

This estimated increase in early diagnosis was then translated into expected improvements in survival outcomes using the latest NDRS estimates of 5-year survival by

stage at diagnosis,<sup>68</sup> alongside Cancer Research UK incidence projections.<sup>69</sup> Applying stage-specific survival differences to the projected stage shift yields an estimate of the additional 5-year survivors in each year between 2025 and 2035. Aggregated across this period, this results in an estimated almost 6,000 additional 5-year survivors attributable to the bowel screening interventions.

To estimate the total number of people diagnosed earlier over the full period, the relationship between early diagnosis and 5-year survival observed across 2025 to 2035 was used to derive a consistent conversion factor. Based on this relationship, the additional number of early diagnoses in 2035 (estimated at approximately 2,750) was scaled across the full period using a multiplicative factor of 6.25, resulting in an estimated total of around 17,000 additional people diagnosed earlier between 2025 and 2035.

## **Statement on additional diagnostic tests**

See 'We will drive up the access, convenience and productivity of CDCs and testing' in chapter 2 of the plan for the following statement:

"The NHS will provide an additional 9.5 million diagnostic tests (an increase of 12.8%) between April 2026 and March 2029."

### **Underlying methodology and assumptions**

9.5 million diagnostic tests is the difference between the projected level of capacity for diagnostic tests available in the 2025 to 2026 financial year, and the projected level of demand for diagnostic tests in the 2028 to 2029 financial year in England.

These projections are inclusive of tests relating to endoscopy, echocardiography, imaging, histopathology, and physiological sciences, and include capacity available to NHS hospitals and Community Diagnostic Centres. It does not include diagnostic tests carried out under national screening programmes.

Demand has been calculated using national data sets such as the Diagnostic Imaging Data Set (DIDS), Hospital Episode Statistics (HES), Diagnostic Waiting Times and Activity (DM01), historic growth trends, and Referral to Treatment Time waiting list projections. Capacity has been calculated using input factors including NHS workforce, diagnostic equipment resulting from capital investment, and productivity improvements. Capacity has

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<sup>68</sup> NHS England. 2025. ['Cancer survival'](#) (viewed on 23 January 2026)

<sup>69</sup> Smittenaar C and others. ['Cancer incidence and mortality projections in the UK until 2035'](#), British Journal of Cancer 2016: volume 115, pages 1147 - 1155 (viewed on 23 January 2026)

been calibrated to meet Faster Diagnosis Standard, Referral to Treatment Times and 6-week wait performance targets.

## **Statement on the impact of straight-to-test pathways**

See 'Action 10. We will cut down unnecessary appointments through straight-to-test pathways and patient-initiated follow-up' in chapter 2 of the plan for the following statement:

"Across all electives, shifting an additional 4% of pathways to a straight to test approach would remove 800,000 unnecessary follow-up appointments each year".

### **Underlying methodology and assumptions**

These figures were arrived at through analysis involving the linkage of data from the Waiting List Minimum Data Set (WLMDS), the Diagnostic Imaging Dataset (DIDS) and the Secondary Uses Service Outpatient Commissioning Data Set (SUS OP CDS).

The figures only cover the straight to test opportunity relating to diagnostic imaging; and do not cover other diagnostic modalities.

The analysis was based upon the sample of referral-to-treatment (RTT) pathways from WLMDS where the clock started in June 2023. This period was chosen to allow a sufficient time period to capture subsequent diagnostic and outpatient events occurring along the RTT pathway.

The linkage between WLMDS and DIDS was based on the pseudo NHS number. Diagnostic tests occurring in the 12-month period after the RTT clock start were identified. A check was undertaken to ensure that the diagnostic test date was after the referral received date to reduce the possibility of false positives (matching to an incorrect RTT pathway). Where a patient had multiple diagnostic tests, the first test after referral was used. Only diagnostic tests from an outpatient source were included. Diagnostic tests arising from direct access were excluded.

The linkage to the SUS OP CDS was based on both the pseudo NHS number and referral received date. The latter, extra condition was used to limit the possibility of matching outpatient attendances from unrelated RTT pathways. For each pathway, outpatient attendances between the date of the RTT clock start and the date of the diagnostic test were identified. Where multiple outpatient attendances (OPA) were identified, the closest attendance preceding the date of the diagnostic test was used. It was also identified whether the preceding OPA involved procedure or not (based on whether the attendance had a procedure tariff associated with it). It was assumed that if the preceding attendance

involved a procedure then the attendance was required and this would not be in scope to move to an STT pathway. Attendances falling within treatment function 812 (diagnostic imaging) were excluded.

Attendances following the diagnostic test were identified using a timeframe of up to 15 months after the test. Where multiple outpatient attendances were matched the closest attendance following the diagnostic test was used. Again, attendances falling within treatment function 812 (diagnostic imaging) were excluded.

Through the above approach, it was found that 4% of pathways in the sample had a pre-test attendance not involving a procedure and a post-test attendance. This is likely to be a conservative estimate of the total potential opportunity as it does not include pathways that had a pre-test attendance not involving a procedure and no post-test attendance.

In the last 12 months, there have been 20.7 million clock starts. Applying the 4% figure to the 20.7 million yields a figure for the number of in-scope pathways of over 800 thousand. It is assumed that only one attendance can be avoided per pathway. Again, this is likely to be a conservative estimate.

## **Statement on the impact of shifting treatments to day cases**

See 'Improving inpatient utilisation' in chapter 2 of this technical annex for the following statement:

"There is some evidence that the shift of treatments to day cases, could result in some productivity benefits. It has been estimated that across all electives, there is the potential opportunity to release about 20,000 bed days per month by increasing day case and outpatient procedure rates to the British Association of Day Surgery (BADS) benchmarks."

## **Underlying methodology and assumptions**

This metric shows how many inpatient bed days could be released by increasing day case and outpatient procedure rates to BADS benchmarks. The metric uses each trust's average inpatient length of stay at procedure level to calculate bed day opportunity.

A low rate can indicate an opportunity to release inpatient bed days and cost savings. This rate includes day cases (planned as a day case, with no overnight stay) and outpatient procedures.

Note: this metric only includes activity reported in NHS secondary care,<sup>70</sup> where data is submitted to the Admitted Patient Care and Outpatient Commissioning Data Sets (CDS), so GP practice procedure activity is not included. There will be variation in the extent to which less complex cases are delivered via GP minor operations rather than in secondary care, which will result in variation in the case mix in secondary care, which in turn will affect the day case rate that is clinically appropriate.

### **How the bed day opportunity is calculated**

Bed Days Opportunity = Number of missed outpatient and day case opportunities x Average Length of Stay

Missed opportunity (that is, how many more procedures could have been done as outpatient and day cases)

Formula:

If the expected number of outpatient + day cases is greater than the observed, the difference is the opportunity.

Otherwise, it's 0.

### **Expected activity (outpatient + day cases)**

This is how many procedures could have been done as outpatient or day cases, based on a target percentage.

Formula:

(Total number of procedures, both admitted and outpatient) x (Target % for outpatient + day cases)

### **Observed activity (outpatient + day cases)**

This is how many were actually done as outpatient day cases.

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<sup>70</sup> NHS England. ['Hospital Episode Statistics \(HES\)'](#) (viewed on 23 January 2026)

## **Average length of stay**

This is how long patients typically stayed when the stay was short and uncomplicated (1 to 3 days), calculated only for inpatients (CLASSPAT = 1).