Cancer in the UK 2019
Focus on early diagnosis
Finding and treating cancer early saves lives

Patients diagnosed at an early stage are more likely to survive cancer.\(^1\)

Five-year survival by stage at diagnosis

- **Diagnosed at earliest stage**
  - Lung: Almost 6 in 10
  - Bowel: More than 9 in 10

- **Diagnosed at latest stage**
  - Lung: Less than 1 in 10
  - Bowel: Around 1 in 10

Earliest stage = stage 1; latest stage = stage 4.
Data is age-standardised net survival for adults (aged 15 to 99 years) in England in 2012-2016 followed up to 2017.

This improved survival is partly because patients diagnosed at the earliest stage have different treatment options than those diagnosed later. In England, the Government has set an ambition for 75% of cancers to be diagnosed at stage 1 or 2 by 2028, which is closely aligned to CRUK’s ambition set in 2014.

The challenge is reducing the number of cases diagnosed at a late stage.

Source: Stage Breakdown by CCG, England 2017, National Cancer Registration Analysis Service (NCRAS)
Too many patients are diagnosed via an emergency route

A fifth of all cancers in England are diagnosed via an emergency route. Patients diagnosed via this route are more likely to have late stage disease, which not only impacts their treatment options, but patients diagnosed via this route also report a worse experience of cancer care.

How and when cancer patients are diagnosed

<table>
<thead>
<tr>
<th>% of patients diagnosed in England, 2015-2016</th>
<th>Stage when diagnosed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Via national screening programmes</td>
<td>6%</td>
</tr>
<tr>
<td>By urgent GP Two Week Wait referral for suspected cancer symptoms</td>
<td>37%</td>
</tr>
<tr>
<td>By routine or urgent GP referral (non Two Week Wait)</td>
<td>24%</td>
</tr>
<tr>
<td>In an emergency, via emergency GP transfer to hospital, as a hospital patient, or via A&amp;E</td>
<td>19%</td>
</tr>
<tr>
<td>Other*</td>
<td>13%</td>
</tr>
<tr>
<td>Earliest = stage 1; Latest = stage 4</td>
<td></td>
</tr>
</tbody>
</table>

*Inpatient elective, other outpatient, death certificate only, or unknown route to diagnosis

Public Health England and Cancer Research UK, Stage by Routes to Diagnosis 2015-2016 Workbook

Most cancers are diagnosed following a visit to the GP. However, some patients see their GP multiple times before being referred for cancer tests. According to the Cancer Patient Experience survey in 2017, 5% said that they saw their GP three or four times, and 8% said that they saw their GP five or more times.

Encouraging the public to seek help for unusual health changes, supporting primary care to be alert to the possibility of cancer in their patients, and timely referral for tests and specialist advice could help to ensure that fewer patients are diagnosed as an emergency.
Screening uptake could be improved

Around two in three cancers diagnosed through screening are at an early stage. Across the UK, only around 60% of people invited to take part in bowel screening do so⁶. A new screening test called the faecal immunochemical test (FIT) is already in place in Scotland and is rolling out in Wales and England in 2019, and Northern Ireland have pledged to introduce FIT screening in 2020.

FIT detects human blood in stool samples, which is an early sign of bowel cancer. The test produces a numerical result of micrograms of human haemoglobin per gram of faeces (ug/g).

The initial threshold for Scotland is 80ug/g, with England having a higher threshold of 120ug/g. Although a lower threshold is more sensitive and will detect more cases of cancer and advanced adenomas (pre-cancerous growths), it requires more colonoscopies and an increased demand for pathology.

<table>
<thead>
<tr>
<th>Cancers detected</th>
<th>Advanced adenomas</th>
<th>Colonoscopies required*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FIT – 120ug/g</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suggested threshold in England</td>
<td>4,700</td>
<td>17,700</td>
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</tbody>
</table>

**But if England used the Scottish threshold:**

<table>
<thead>
<tr>
<th>Cancers detected</th>
<th>Advanced adenomas</th>
<th>Colonoscopies required*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FIT – 80ug/g</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agreed threshold in Scotland</td>
<td>5,800</td>
<td>24,400</td>
</tr>
</tbody>
</table>

*Additional surveillance colonoscopies will also be required.
Figures shown are estimates per year for years immediately following the introduction of FIT. Figures are based on data from the England FIT pilot (Moss et al, 2016) and assume 4.5 million screening invites per year.

The introduction of FIT has been shown to improve uptake in Scotland, particularly in groups with low participation. It will be important to monitor inequalities and continue to remove barriers to participation.

There must be a clear and resourced plan to increase colonoscopy and pathology capacity so that FIT can be made more sensitive and bowel screening improved.
Coverage of cervical screening is falling

A worrying trend in recent years has been the continued decline in coverage of cervical screening. This decline is greater among under 50s, particularly in young women aged 25-29. Although the human papilloma virus (HPV) vaccine introduced in 2008 offers some protection, screening is still vital to both prevent cervical cancer and diagnose it early, particularly in women who have not been vaccinated.

There was a change to the age range of cervical screening in Scotland in 2016, so data post-2016 are not comparable to the previous trend and have not been included.

National bodies should support evidence-led activity to address barriers to screening participation and reduce inequalities in all cancer screening programmes. Improvements to screening programmes must be brought in on time and with enough diagnostic capacity.
The healthcare system is struggling to keep up with current demand...

Across the UK, official cancer waiting times measure two or three time intervals: two weeks, 31 days and 62 days. In England, the 62 day wait currently states that 85% of people with an urgent GP referral for suspected cancer should begin their first definitive treatment within two months. This target has been consistently missed since early 2014, and is currently around 79%. However, the number of patients being treated within waiting times targets has increased over this period, as there has been a rise in the number of people being diagnosed with cancer via this route⁸.

These targets act as a barometer for cancer services – addressing underpinning capacity shortages in diagnostic services are essential. Meeting these targets is also important for securing a better experience for patients during an anxious time.
...because cancer services are short-staffed

According to recent analysis of the National Cancer Diagnosis Audit, GPs report that most patients (78%) in England don’t suffer avoidable delays in getting their cancer diagnosis. But where delays occur, one in three were due to waiting for tests and results⁹.

When might avoidable delays happen in cancer diagnosis?

GPs considered delays to happen to patients when...

- **Waiting for tests & results**: 33.7%
- **Waiting for a referral (a specialist appointment)**: 19.7%
- **Being assessed (by GP or specialist doctor)**: 16.7%
- **Patient doesn’t seek help (eg. missing appointments)**: 15.5%
- **Waiting for an appointment**: 7.3%
- **Waiting for follow-up (eg. after test results)**: 7.1%
- **Unknown**: 3.6%


As cancer incidence increases and we drive for earlier diagnosis, more people are referred for tests every year and we need enough trained and employed staff to meet this demand. Across the UK there are significant vacancies across key diagnostic professions such as radiologists, endoscopists and pathologists. With 500,000 people expected to be diagnosed with cancer by 2035, it is essential that every UK nation has a long-term plan to increase staff numbers to meet this demand and diagnose more cancers at an early stage.

**More staff will be needed to meet future diagnostic demand.**
References


6. England bowel screening data for FY 2014/15, persons aged 60-74, “Percentage of people adequately screened out of those invited for FOBt screening” were provided by Public Health England (PHE) Screening on request, April 2016.

7. Calculated by the Cancer Intelligence Team at Cancer Research UK using data from Public Health Wales (25-64 years), ISD Scotland (20-60 years), NHS Digital (England, 25-64 years) and Health and Social Care Northern Ireland (25-64 years).

8. Calculated by the Cancer Intelligence Team at Cancer Research UK: the proportion of patients treated within 62 days of an urgent GP referral for suspected cancer in England, October 2009 - September 2018 alongside number of cases.

Cancer Research UK (CRUK) is the world’s largest independent cancer charity dedicated to saving lives through research. It supports research into all aspects of cancer and this is achieved through the work of over 4,000 scientists, doctors and nurses. In 2016/17, we spent £432 million on research in institutes, hospitals and universities across the UK. We receive no funding from the Government for our research and are dependent on fundraising with the public. Cancer Research UK wants to accelerate progress so that 3 in 4 people survive their cancer for 10 years or more by 2034.

Compiled by the Cancer Intelligence team, Cancer Research UK
Comments, questions or feedback to: stats.team@cancer.org.uk

Registered Charity in England and Wales (1089464), Scotland (SC041666) and the Isle of Man (1103)