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**Research Briefing**

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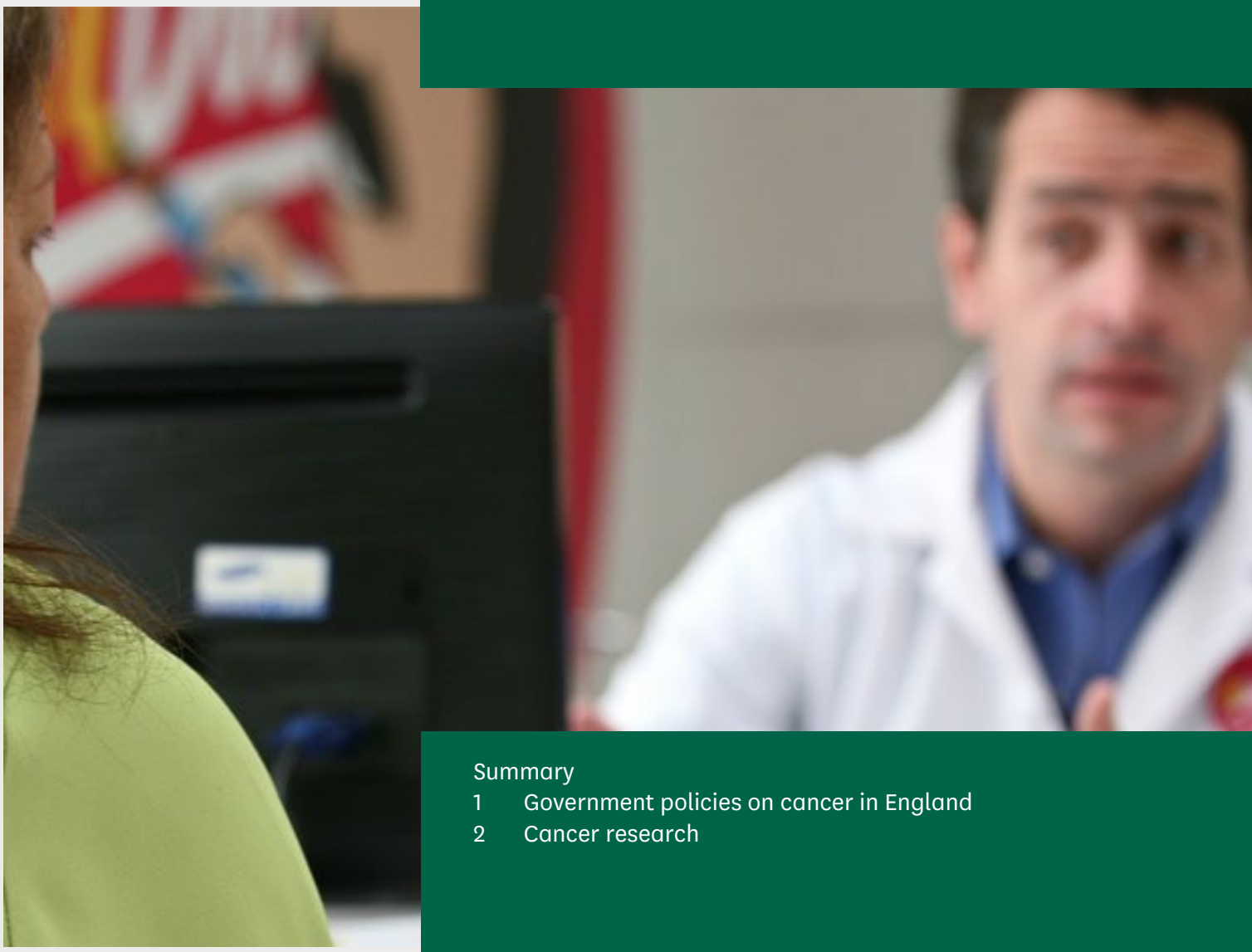
By,
Elizabeth Parkin,
Elizabeth Rough,
Carl Baker

# Support for cancer in England



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# Summary

Cancer is the cause of just over a quarter of all deaths in England in a typical year. The most common cancers are breast, lung, prostate and bowel cancer.

In 2021, 134,802 people died from cancer in England. The number of deaths has increased by 6% since 2001. But after accounting for the fact that England's population is both growing and ageing, the rate of cancer deaths has fallen by 23% among men and 16% among women.

The Library briefing Cancer statistics for England (updated February 2023) provides an overview of cancer statistics for England. It covers detailed information on cancer diagnoses up to 2020 and deaths up to 2021, as well as statistics on NHS screening and treatment.

## Health policy and cancer

The NHS Long Term Plan (January 2019) includes cancer care as one of its clinical priorities, and aims to boost cancer survival rates by focussing on early diagnosis. The Long Term Plan set a new target that by 2028, the proportion of cancers diagnosed at stages 1 and 2 will rise from around half now to three-quarters of cancer patients. It also set an ambition that where appropriate, every person diagnosed with cancer would have access to personalised care.

The Government is working jointly with NHS England on implementing the delivery plan for tackling the COVID-19 backlogs in elective care (published February 2022) and plans to spend more than £8 billion from 2022/23 to 2024/25 to help drive up and protect elective activity, including cancer diagnosis and treatment activity.

The NHS Cancer Programme has developed a Faster Diagnosis Framework, which brings together the objectives and key requirements for cancer alliances under a single programme of work. The Framework combines several elements including the Faster Diagnosis Standard, that patients will be diagnosed or have cancer ruled out within 28 days of having an urgent GP referral for suspected cancer. It also includes the non-specific symptoms pathway, which was introduced in 2019, and is a route for patients with "red flag" symptoms that may indicate cancer but whose symptoms do not align with one tumour type and thus cannot be referred to a single specific suspected cancer pathway. The Framework also includes best practice timed pathways, that aim to shorten cancer diagnosis pathways by identifying specific clinical events and tests for patients referred with certain symptoms,

with the ambition that these are available across all cancer pathways by the end of 2023/24.

On 24 January 2023 the Secretary of State for Health and Social Care announced there would be a new strategy covering major conditions, including cancer. The strategy signals a shift to integrated, whole person care for the increasing numbers of people in England with complex and multiple long-term conditions.

This strategy also draws on previous work on cancer, including over 5,000 submissions provided to the Department of Health and Social Care as part of a call for evidence to develop the 10 Year Cancer Plan, held in 2022.

In August 2023, the Government published the Major Conditions Strategy: case for change and our strategic framework. This outlines current priorities in cancer care, such as sustained investment in the cancer workforce, increasing diagnostic and treatment capacity and investment in research. It also notes that NHS England will implement the recommendations of the clinically led review of cancer service standards (March 2022).

In August 2023, NHS England and the Department of Health and Social Care announced changes to current set of cancer waiting times standards which had become they said had "increasingly becoming unwieldy for trusts to manage and confusing for patients". From 1 October 2023, the current set of ten standards will be streamlined to three key performance standards:

- A 28-day Faster Diagnosis Standard (patients are diagnosed or have cancer ruled out within 28 days of an urgent GP referral for suspected cancer)
- A 62-day referral to treatment standard
- A 31-day decision to treat to treatment standard.

The NHS currently offers bowel, cervical and breast screening. Coverage, which refers to the proportion of the eligible population who have been screened within the recommended time-period, has been falling for cervical and breast screening, but rising for bowel screening.

In February 2024, the Government announced a new Children and Young People Cancer Taskforce to improve treatment, detection and research for cancer in children. The Taskforce is chaired by Caroline Dinenage MP and brings together clinicians, cancer charities and the government.

## Cancer research

Efforts to identify, treat and prevent cancer are underpinned by a broad range of research. Some of this may be focused specifically on developing new medications to treat cancers. Alongside this, biological, immunological

and genetic research seeks to understand more about 'cancer biology', the mechanisms by which cancers develop and grow.

Funding for medical research in the UK is provided by both the public and private sectors, as well as charities and non-governmental organisations. For example, the UK Clinical Research Collaboration – a partnership of the main stakeholders who fund and direct clinical research across the business, public and charitable sectors in the UK – noted that, in 2018, charities provided "the majority of funding for Cancer and neoplasms (73%, £353m)" research and that almost half of that funding (45%) was from Cancer Research UK.

Government funding for medical research is typically channelled through the National Institute for Health and Care Research (NIHR - which is funded by the Department of Health and Social Care) and through UK Research and Innovation (UKRI – whose funding comes mainly via the science budget of the Department for Science, Innovation and Technology). In January 2022, the Government stated that the NIHR's cancer research expenditure had "risen from £101 million in 2010/11 to £138 million in 2019/20" and that it was "supporting over 800 cancer studies through its Clinical Research Network". UKRI's total expenditure on cancer research similarly increased, from £98.1 million in 2015/16 to £125.5 million in 2020/21.

Translating laboratory research into new treatments and improved patient care is often referred to as 'translational research', or from bench (laboratory) to bedside (patients). The stages involved include preclinical development and clinical trials, through to regulatory approval, appraisal, and price negotiations. Not all drug candidates will make it through every stage; it is estimated that about 90% of drug candidates (for all diseases, not just cancer) that begin Phase I clinical trials will fail and never make it through to be approved / licenced as medicines. For those new drugs that are licenced, their research and development journey will have taken, on average, "12 years and cost around £1.15bn".

After being approved and obtaining a 'licence' (formally known as a 'marketing authorisation'), the next stage is for a medicine to go through an assessment – a type of cost/benefit analysis – to establish whether it should be made available via the NHS. In England, the National Institute for Health and Care Excellence (NICE) is responsible for making recommendations on the use of new and existing medicines and treatments within the NHS. NICE does this through undertaking 'technology appraisals'. In the case of cancer drugs, NICE can recommend a drug for use within the Cancer Drugs Fund (CDF). The CDF route allows the drug to be made available on the NHS for a time-limited period (typically two years) while further research into its clinical and cost effectiveness takes place.

# 1 Government policies on cancer in England

## 1.1 10 year Cancer Plan and Major Conditions Strategy

In February 2022, the Government published a Cancer Plan: call for evidence, to inform a new stand-alone 10-year Cancer Plan for England, intended to be a new vision for how the UK will lead the world in cancer care.[1]

The results of the Cancer Plan consultation were published in May 2023; the priorities that respondents had identified were grouped under the following themes:

- raising awareness of the causes of cancer
- spotting the signs and symptoms of cancer
- getting more people diagnosed quicker
- improving access to and experiences of cancer treatment
- improving after-care and end-of-life care
- maximising the impact of research and data.

In January 2023, it was announced that cancer would be incorporated into a new major conditions strategy, instead of a stand-alone plan. The Government notes that the previous responses to the cancer plan will directly inform the development of the strategy.

The strategy signals a shift to integrated, whole person care for the increasing numbers of people in England with complex and multiple long-term conditions. The strategy has an overall objective of gaining 5 extra years of healthy life expectancy by 2035 and narrowing the gap in healthy life expectancy by 2030.

The strategy will include cancer, covering the patient pathway from prevention, through treatment, to follow-up care. It will look at a wide range

[1] Department of Health and Social Care, Health and Social Care Secretary Savid Javid - World Cancer Day speech, 9 February 2022

of interventions and enablers to improve outcomes and experience for cancer patients.

Interventions set out in the Strategy will aim to alleviate pressure on the health system, as well as support the government's objective to increase healthy life expectancy and reduce ill-health related labour market inactivity.

The Strategy will cover the following six major conditions:

- Cancers
- Cardiovascular diseases, including stroke and diabetes
- Chronic respiratory diseases
- Dementia
- Mental ill health
- Musculoskeletal disorders

These areas account for approximately 60% of total Disability Adjusted Life Years in England. The Government is focusing on these areas in order to progress its manifesto commitment of gaining five extra years of Healthy Life Expectancy by 2035, and its levelling up mission to narrow the gap in Healthy Life Expectancy by 2030.

In May 2023, the Government published a Major conditions strategy: call for evidence to seek views on how best to prevent, diagnose, treat and manage the six major conditions. The consultation notes that cancer call for evidence published in 2022 provided useful insights to shape the Major Conditions Strategy but provides an opportunity to provide further insights into "How can we better support those with cancer?".

In August 2023, the Government published the Major Conditions Strategy: case for change and our strategic framework. Annex B sets out what the strategy means for cancer, including ambitions on early diagnosis, reducing risk factors for cancer and improving quality of care and treatment capacity.

## 1.2 NHS Long Term Plan

Cancer care is one of the clinical priorities set out in the NHS Long Term Plan (January 2019), which includes objectives to boost cancer survival rates by focussing on early diagnosis. The Long Term Plan sets out several commitments to improve cancer care and outcomes, including:

- By 2028, the Plan commits to dramatically improving cancer survival, by increasing to 75% the proportion of cancers diagnosed early (at stage 1 or 2). It is projected that this will mean from 2028, 55,000

more people each year will survive their cancer for at least five years after diagnosis.

- For children and young people with cancer, the NHS will develop and implement networked care to improve outcomes for children and young people with cancer, simplifying pathways and transitions between services and ensuring every patient has access to specialist expertise.

- The NHS will offer all children with cancer whole genome sequencing to improve diagnosis and provide access to CAR-T cancer therapies and specialist proton beam therapy.

- The NHS will commission a review of cancer screening and diagnostic capacity.

- A new faster diagnosis standard will be introduced from 2020, to ensure most patients receive a definitive diagnosis or ruling out of cancer within 28 days of referral from a GP or from screening.

- The NHS will roll out new Rapid Diagnostic Centres across the country.

- By 2021, where appropriate every person diagnosed with cancer will have access to personalised care, including needs assessment, a care plan and health and wellbeing information and support.

The NHS Long Term Plan also includes the following specific commitments on children and young people with cancer:

> 3.37. Survival rates for children with cancer have doubled over the past 40 years, but because mortality has fallen for other conditions, cancer is now the biggest cause of premature death among children and young people aged 5-14 years. We will therefore develop and implement networked care to improve outcomes for children and young people with cancer, simplifying pathways and transitions between services and ensuring every patient has access to specialist expertise.
>
> 3.38. From 2019, we will begin to offer all children with cancer whole genome sequencing to enable more comprehensive and precise diagnosis, and access to more personalised treatments. This will reduce the use of harmful medications and interventions, support increased access to clinical trials and reduce the number of young patients who experience lifelong health problems caused by high doses of chemotherapy and radiotherapy. Children and young people in England will also be amongst the very first in Europe to benefit from a new generation of CAR-T cancer therapies. And children who need proton beam therapy are now for the first time beginning to be able to access the most sophisticated modern precision treatment in the world here in the NHS without needing to travel abroad.
>
> 3.39. We will actively support children and young people to take part in clinical trials, so that participation among children remains high, and among teenagers and young adults rises to 50% by 2025. More effective consent processes for using data and tissue samples in research will contribute to improving survival outcomes. We will seek the views of patients aged under 16

> to ensure the NHS continues to offer the very best services for children and young people. This will be used, alongside other cancer data, to inform service design and transformation.
>
> 3.40. From September 2019, all boys aged 12 and 13 will be offered vaccination against HPV-related diseases, such as oral, throat and anal cancer. This will build on the success of the girls' programme, which has already reduced the prevalence of human papilloma virus (HPV) 16 and 18, the main cancer-causing types, by over 80%. This will reduce cervical and other cancers in both men and women in the future.
>
> 3.41. Children's palliative and end of life care is an important priority for the NHS. But local NHS funding has not kept pace with growth in clinical care costs or inflation, and NHS England's children's hospice grant programme currently provides an annual contribution of £11m. Over the next five years NHS England will increase its contribution by match-funding clinical commissioning groups (CCGs) who commit to increase their investment in local children's palliative and end of life care services including children's hospices. This should more than double the NHS support, from £11 million up to a combined total of £25 million a year by 2023/24.

The Long Term Plan is funded until 2024-25. Further information on the Plan's ambitions is provided below.

## 1.3 Early diagnosis

Early diagnosis of cancer is a priority for the NHS, as described above in the NHS Long Term Plan.

The Long Term Plan includes the key ambitions that by 2028, the proportion of cancers diagnosed at stages 1 and 2 will rise from around 50% to 75% of cancer patients, with the result that from 2028, 55,000 more people each year will survive their cancer for at least five years after diagnosis.[2]

The NHS Cancer Programme has developed a Faster Diagnosis Framework, which brings together the objectives and key requirements for cancer alliances under a single programme of work. The Framework combines several elements including the Fasted Diagnosis Standard, non-specific symptoms pathway, best practice timed pathways, and a series of improvements across all cancer pathways, regardless of cancer type.

The National Institute for Health and Care Excellence (NICE) has published guidelines on Suspected cancer: recognition and referral NG12 (updated December 2021) which set out thresholds for suspected cancer referrals and timings for referrals to support faster diagnosis.

NHS England has also launched marketing campaigns to encourage people with potential cancer symptoms to see their GP, including the Help Us Help

[2] NHS England, NHS Long Term Plan (2019), para 3.52

You campaign. NHS England announced a further campaign to combat the fear of cancer in March 2022.

The Government announced a £2.3 billion investment for 100 new Community Diagnostic Centres across England to permanently increase diagnostic capacity, as part of the Comprehensive Spending Review in 2021. Community Diagnostic Centres were a key recommendation from Sir Mike Richards' independent review of NHS diagnostic capacity (November 2020). CDCs are intended to be 'one stop shops' for cancer checks, scans and tests to support earlier diagnostic tests closer to home. The Government has most recently set a target that 160 CDCs will be operational across England by 2025.[3]

NHS Operational Planning Guidance for 2023/24 set an expectation that new diagnostic capacity, including CDCs, would be prioritised for urgent suspected cancer.[4]

The Planning Guidance included reducing cancer backlogs as one of its key national objectives and set specific objectives for cancer diagnosis:

- Continue to reduce the number of patients waiting over 62 days
- Meet the cancer faster diagnosis standard by March 2024 so that 75% of patients who have been urgently referred by their GP for suspected cancer are diagnosed or have cancer ruled out within 28 days
- Increase the percentage of cancers diagnosed at stages 1 and 2 in line with the 75% early diagnosis ambition by 2028.

## Faster diagnosis standard

The Faster Diagnosis Standard (FDS) was introduced in April 2021. It aims for 75% of patients to have cancer either diagnosed or ruled out within a maximum of 28 days from referral.

The FDS applies to patients

- referred by their GP on a suspected cancer pathway
- referred by their GP with breast symptoms where cancer is not initially suspected
- referred by the National Screening Service with an abnormal screening result.

The FDS was initially recommended in the 2015 report of the Independent Cancer Taskforce, made up of stakeholders from cancer charities, Royal

[3] Department of Health and Social Care, NHS England, Six new CDCs to deliver more than 500,000 lifesaving checks a year, 15 May 2023

[4] NHS, 2023/24 priorities and operational planning guidance, 27 January 2023

Colleges and arms-length bodies, who released a five-year strategy for cancer services in England (spanning 2015 to 2020).

The FDS was formally introduced in the NHS Long Term Plan (2019) with a target of 75%, which was lower than the 95% target recommended by the Taskforce. It is intended to:

- reduce the time between referral and diagnosis of cancer
- reduce anxiety for the cohort of patients who will be diagnosed with cancer or receive an 'all clear'
- reduce unwarranted variation in England by understanding how long it is taking patients to receive a diagnosis or 'all clear' for cancer
- represent a significant improvement on the current two-week wait to first appointment target, and a more patient-centred performance standard.[5]

Since its introduction in September 2021, the Faster Diagnosis Standard has been met in only one month (February 2023). In March 2023, performance was 74.2%.[6]

## Faster Diagnosis Non-Specific Symptom Pathways

Faster Diagnosis Non-Specific Symptom Pathways are intended to cover patients with symptoms not specific to one cancer, such as weight loss or fatigue, and who do not fit clearly into a single 'urgent cancer' referral pathway, as defined by the NICE Guidance NG12 on suspected cancer.

These pathways are intended to provide GPs with a referral route into diagnostic services when it is unclear what type of cancer an individual may have. Patients should be referred to Rapid Diagnosis Centres which assess patients' symptoms holistically and provide a suite of clinically relevant diagnostic tests.

Since 2019, cancer alliances have been developing new dedicated urgent diagnostic pathways for these patients. By March 2024, the NHS aims to ensure that all patients with non-specific symptoms will be referred via a non-specific symptoms pathway.[7]

As of February 2023, there were 102 non-specific symptoms pathways across England[8], compared to 12 in March 2020.[9]

5 NHS, Faster diagnostic pathways: Guidance for local health and care systems, 20 March 2023
6 NHS England, Cancer Waiting Times, National Time Series
7 NHS England, Faster Diagnosis, last accessed 9 June 2023
8 PQ 148807 [on Cancer: Diagnosis], 20 February 2023
9 Department of Health and Social Care, Letter to Steve Brine MP, Chair of the Health and Social Care Committee RE: Major Conditions Strategy and Childhood Cancer, 17 March 2023

## Health and Social Care Select Committee evaluation of diagnosis commitments

In March 2022, the Health and Social Care Committee's Expert Panel published a report evaluating the Government's main commitments on cancer services in England. The Panel evaluated five commitments across four broad policy areas, including two commitments on diagnostics, using a 'Care Quality Commission-style' (CQC) rating. The two commitments evaluated on diagnostics were:

- Commitment 1: A faster diagnosis standard from 2020 to ensure most patients receive a definitive diagnosis or ruling out of cancer within 28 days of referral from GP or from screening

- Commitment 2: By 2028 the proportion of cancers diagnosed at stages 1 and 2 will rise from around 50% now to 75% of cancer patients

With regards to Commitment 1, the faster diagnosis standard, the Expert Panel rated the Government's progress towards meeting the commitment as "requires improvement":

> Monitoring of this new standard began in April 2020 and, so far, performance against the Department's target of ensuring 75% of patients are diagnosed within 28 days of referral from their GP or after screening has not been met. The Department stated that performance has varied between 71.3% and 74.3%. However, we received reports of significant regional disparities.
>
> We acknowledge the impact that the Covid-19 pandemic has had on this target. However, evidence we received pointed to pre-existing issues preventing this target being met, such as shortages in the diagnostic workforces.[10]

With regards to Commitment 2, similarly the Expert Panel also gave the Government an overall rating of "requires improvement". Although the deadline for this commitment has not yet passed, the Panel heard evidence that it was not currently on track to be met and there were particular concerns around regional variation and higher numbers of late diagnoses in areas of higher deprivation. The panel also noted concerns that funding commitments do not specifically address shortages in the diagnostic workforce. The Committee's report noted:

> The Department stated in its response that it is too early to tell whether the early diagnosis target of 75% of cancers being diagnosed at stages 1 or 2 has been met, because the deadline is set for 2028. However, stakeholders including the Blood Cancer Alliance and Cancer Research UK stated in their written evidence that this commitment was off track before the start of the Covid-19 pandemic. The Blood Cancer Alliance argued that the Covid-19 pandemic has "intensified a pre-existing problem with the cancer backlog and cancer outcomes, which were already poorer than comparably developed nations." The Institute for Public Policy Research estimated that the number of

[10] Health and Social Care Committee, Expert Panel: evaluation of the Government's commitments in the area of cancer services in England (parliament.uk), 29 March 2022

cancers diagnosed at stages 1 and 2 fell from 44% before the Covid-19 pandemic to 41% by the end of 2020.[11]

The Government's formal response to the Expert Panel (published in June 2022) noted that monthly performance against the FDS was narrowly below the standard – at 73.1% nationally. The Government also noted that funding for diagnostics transformation is projected to deliver 17 million more diagnostic tests over the next three years.

## 1.4 Waiting times standards

Cancer waiting times are a key performance measure and many elements of the cancer pathway are currently covered by national waiting time standards set out in the NHS Constitution for England (updated January 2021).

In August 2023, changes to cancer waiting times standards were agreed by NHS England and the Department of Health and Social Care; the changes will come into effect on 1 October 2023.

The changes streamline the current ten waiting times standards on cancer diagnosis and treatment into three key performance measures. NHS England has said that the current set of standards has "grown over time, increasingly becoming unwieldy for trusts to manage and confusing for patients."[12]

The three new performance standards are:

- Faster Diagnosis Standard: a diagnosis or ruling out of cancer within 28 days of urgent referral (set at 75%)
- 31-day treatment standard: commence treatment within 31 days of a decision to treat (set at 96%)
- 62-day treatment standard: commence treatment within 62 days of being referred (set at 85%)

Currently, there are ten cancer waiting times standards; nine provided for in the NHS Constitution for England and additionally the Faster Diagnosis Standard.

The NHS Constitution provides one legal right, as set out in legislation[13]:

11 Health and Social Care Committee, Expert Panel: evaluation of the Government's commitments in the area of cancer services in England (parliament.uk) 29 March 2022, page 36

12 NHS England, Changes to cancer waiting times standards from 1 October 2023, 17 August 2023

13 Part 9 of the National Health Service Commissioning Board and Clinical Commissioning Groups (Responsibilities and Standing Rules) Regulations 2012, as amended.

- Individuals have the right to be seen by a cancer specialist within a maximum of 2 weeks from GP referral for urgent referrals where cancer is suspected.

The NHS Constitution also provides the following pledges, which the NHS is committed to achieving but are not legal rights:

- a maximum one month (31-day) wait from diagnosis to first definitive treatment for all cancers
- a maximum 31-day wait for subsequent treatment where the treatment is surgery
- a maximum 31-day wait for subsequent treatment where the treatment is a course of radiotherapy
- a maximum 31-day wait for subsequent treatment where the treatment is an anti-cancer drug regimen
- a maximum 2-month (62-day) wait from urgent referral for suspected cancer to first treatment for all cancers
- a maximum 62-day wait from referral from an NHS cancer screening service to first definitive treatment for cancer
- a maximum 62-day wait for first definitive treatment following a consultant's decision to upgrade the priority of the patient (all cancers)
- a maximum 2-week wait to see a specialist for all patients referred for investigation of breast symptoms, even if cancer is not initially suspected.[14]

NHS England's Delivery plan for tackling the COVID-19 backlogs in elective care (February 2022) also sets several ambitions on reducing waiting times to pre-pandemic levels. This includes cutting the backlog of people waiting more than two months to be diagnosed and begin cancer treatment to pre-pandemic levels.

In March 2022, NHS England announced a consultation into the operation of Cancer Waiting Times standards, in order to simplify and update the current system, based on the recommendations of the Independent Cancer Taskforce.

NHS England proposed a significant simplification of the standards, with the current nine standards reduced to three, as described above. The NHS noted that the new standards will better reflect current care requirements:

> The new standards are more in line with the requirements of modern cancer care, with a greater focus on outcomes over process. They will ensure equitable access to care because the new treatment standards will measure

[14] Department of Health & Social Care, Public Health England, Handbook to the NHS Constitution for England, updated January 2022

waiting time for all patients regardless of their route of referral into the system and the type of treatment they receive.[15]

As noted above, the new waiting times standards will be introduced on 1 October 2023; the current standards remain in the NHS Standard Contract 2023/24 (Annex A of the Service Conditions).

## Are waiting time targets being met?

93% of patients urgently referred by their GP with suspected cancer should have a first consultant appointment within two weeks. This target was met consistently until 2018 but not since.

In September 2022, performance fell to a record low of 72.3%. As of March 2023, performance had recovered to 83.9% - well below pre-pandemic levels. The chart below shows trends.

**Two-week wait cancer performance (target: 93%)**

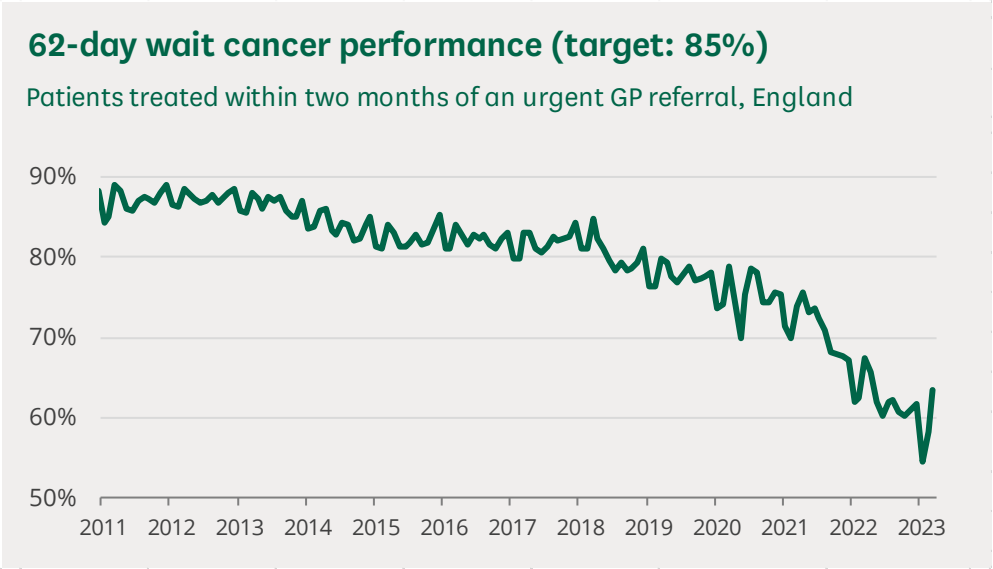
Percentage of patients with a first consultant appointment within two weeks of an urgent GP referral, England


Source: NHS England, Cancer Waiting Times, National Time Series, Monthly Data

85% of patients who are treated for cancer after being urgently referred by their GP should have their first treatment within two months of the initial referral. This target has not been met consistently since 2013. Performance has fallen steadily since 2018.

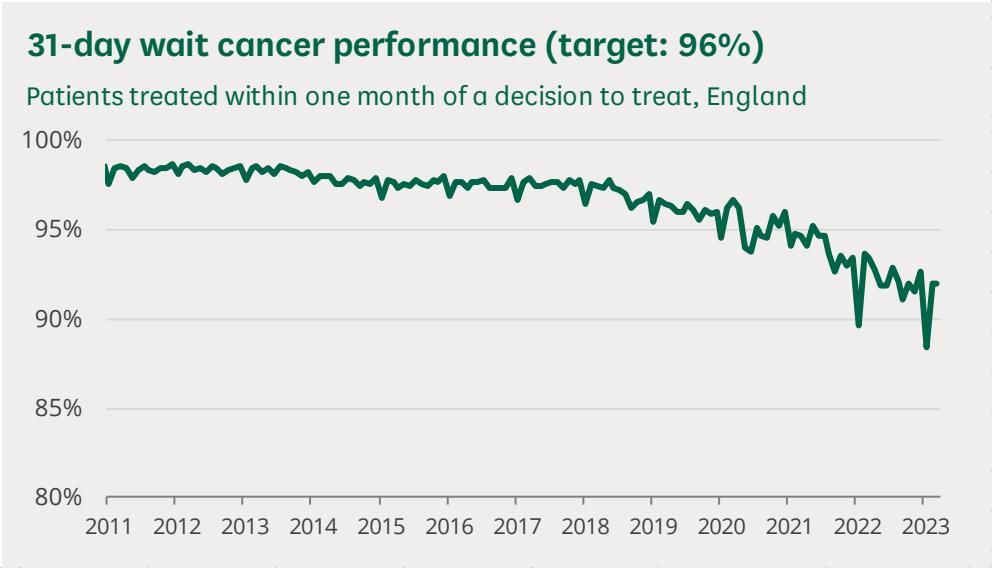
In January 2023 a record low of 54.4% of patients were treated within 62 days of an urgent GP referral. In March 2023 performance had recovered to 63.5%. The chart below shows trends.

[15] NHS England, Clinically led review of NHS access standards: Cancer [last accessed 29 August 2023]




Source: NHS England, Cancer Waiting Times, National Time Series, Monthly Data

96% of patients treated for cancer should start their treatment within 31 days of the decision to treat being made. This target was consistently met until 2020 but since then it has not been met. In the last two years, monthly performance has twice fallen below 90%. The chart below shows trends.




Source: NHS England, Cancer Waiting Times, National Time Series, Monthly Data

### Financial penalties

Previously under the NHS Standard Contract, Clinical Commissioning Groups (now Integrated Care Systems) could withhold money from hospitals if they did not meet nationally required standards. The NHS Contract set out national quality standards and associated financial penalties for each breach.

Previous versions of the NHS Standard Contract provided financial penalties for breaching maximum waiting times for cancer pathways. This included a threshold of 93% of patients referred urgently with suspected cancer by a GP waiting no more than two weeks for first outpatient appointment; there was a £200 fine for each patient above this threshold.[16] Financial penalties also existed for 31 day diagnosis to first treatment for cancer waits.

Concerns were raised about imposing financial penalties on NHS providers which may have in turn reduced spend on patient care and worsened outcomes.[17]

NHS Standard Contract penalties for not meeting required standards have gradually been withdrawn. The NHS Standard Contract 2020/21 provided that many financial sanctions in respect of breaches of certain national standards were suspended, with just those covering cancelled operations, mixed sex accommodation, the duty of candour and 52- week waits to remain.

The NHS Standard Contract for 2021/22 removed entirely all automatic sanctions for breaches of National Quality Requirements. These national standards such as for maximum waiting times for cancer pathways remain in the Contract (see Annex A), but the associated financial penalties have been removed.

## 1.5 Cancer screening

The NHS currently runs three national screening programmes in England which can help to diagnose cancer or risk of cancer earlier: breast cancer, bowel cancer and cervical cancer.

In 2019 Professor Sir Mike Richards published an independent review of adult screening programmes in England, which was commissioned by NHS England as part of the NHS Long Term Plan. The review concluded that current screening programmes are "far from realising their full potential", and made recommendations to improve governance, IT systems, capacity and uptake of screening programmes.

The Government has noted that many of the recommendations made by the review have already been delivered. This includes campaigns to improve public uptake of screening, and reform of the UK National Screening Committee (UKNSC) which advises Ministers and the NHS in all four UK countries on national screening:

> The UK NSC will have the ability to start making recommendations on national targeted and stratified screening alongside population level programmes. This

16 NHS England, NHS Standard Contract 2019/20 Particulars (Full Length) Schedule 4, Quality Requirements

17 See for example analysis from NHS Providers: Fines add to unnecessary financial burden facing NHS providers (March 2016).

> will allow the NHS to provide more personalised programmes, based on predictive analysis of individual risk factors, leading to better outcomes for groups at higher risk of having or developing specific health conditions.[18]

Coverage statistics for screening programmes are as follows:

- **Breast screening**: As of 2022, 65.3% of eligible women in England (age 53-71) had been screened in the last three years. This is a fall from 74.6% in 2019, and 77.0% in 2012.[19]
- **Cervical screening**: As of 2022, 69.6% of eligible women in England (age 25-64) had been screened within the appropriate period. This is a fall from 71.4% in 2019 and from 75.7% in 2011.[20]
- **Bowel screening**: As of 2022, 70.3% of people aged 60-74 had been screened within the last 30 months. This is an increase from 60.5% in 2019 and from 57.3% in 2015.[21]

18 Health and Social Care Committee, Cancer Services: Government Response to the Committee's Report of 2021-22 (parliament.uk), 7 June 2022
19 NHS Digital, NHS Breast Screening Programme, England 2021-22, 16 Feb 2023
20 NHS Digital, Cervical Screening Programme, England 2021-2022, 24 Nov 2022
21 Office for Health Improvement and Disparities, Public Health Profiles, accessed 24 May 2023

# 2 Cancer research

## 2.1 Different types of research

Efforts to identify, treat and prevent cancer are underpinned by a broad range of research. Some of this may be focused specifically on developing new medications to treat cancers. Alongside this, biological, immunological and genetic research seeks to understand more about 'cancer biology', the mechanisms by which cancers develop and grow. This type of investigation (sometimes referred to as 'discovery' or 'fundamental' research) can provide valuable insights which, with further research, can be translated into results that can advance the prevention, detection or treatment of cancer in the future.

Box 1 below provides an overview of different types of research (as categorised by Cancer Research UK in its research strategy) in relation to cancer.

### 1 Different types of cancer research

#### Discovery (or basic / fundamental) research

Discovery research aims to develop and enhance our understanding of the fundamentals of cancer biology. The Institute of Cancer Research (ICR) explains that discovery science covers a very broad range of topics within cancer biology, such as:

- the process involved in the regulation of cell division;
- how cancer can evolve and adapt;
- the immune system's interactions with cancer cells;
- the role of chemical signal networks in cancerous cell growth.

Discovery science can be done in cells, 'model organisms' (typically non-human species that are easy to breed and maintain in a laboratory setting, including yeast and fruit flies) as well as using mathematical and computational models.

#### Clinical research

Clinical research is broad category. It typically involves the study of health and illness in people to find better ways of identifying, diagnosing, treating

and preventing disease. Some clinical research will involve people (both patients and otherwise healthy people); others will rely on samples of blood or tissue, or other types of data, collected from people. Specific types of clinical research include clinical trials of cancer drugs/treatments, and disease pathology in which information is collected to understand how a disease develops and progresses, as a way to assist diagnosis.

#### Prevention / population research

Prevention research focuses on identifying the causes of cancer to reduce its occurrence across a population. This includes improving our understanding 'modifiable risk factors' and how to translate this understanding into effective prevention strategies (such as developing vaccines against particular cancers, like the HPV vaccine). While approximately 5-10% of cancer cases are caused by genetic factors, the National Cancer Institute in the United States notes that most cancers are caused by environmental and lifestyle factors (such as tobacco, certain chemicals and obesity). Reducing exposure to risk factors can, in turn, reduce the risk of cancer.

#### Early detection and diagnosis (EDD)

This type of research aims to establish approaches that detect cancer earlier, before it grows and spreads, and is therefore more treatable. EDD includes research into cancer 'biomarkers' (molecules found in blood, tissue, or other body fluids that indicate whether normal or abnormal processes are taking place in the body – and potentially signalling the development of the disease) as well as translating research findings into more reliable screening methods and diagnostic technologies.

#### Data science / research

Data science, in the context of cancer research, involves analysing both non-human data (eg environmental data, like air quality) and human data (eg from blood and tissue samples, x-rays and other imaging, health records, fitness devices) through the application of statistical, computational, machine learning and artificial intelligence techniques.

## 2.2 Research funding

### Overall funding

Funding for medical research in the UK is provided by both the public and private sectors, as well as charities and non-governmental organisations. The latest data from the UK Clinical Research Collaboration (UKCRC – a partnership of the main stakeholders who fund and direct clinical research across the business, public and charitable sectors in the UK) indicated that, in 2018, there were over 3,000 direct awards for "cancer and neoplasms"

research, amounting to a total spend of £483 million (18.9% of the total health research spend).[22]

More recent UKCRC figures are not available. Spending on cancer research, however, is also captured by the National Cancer Research Institute (NCRI) on its database. In 2020-21, it reported that its partners, a mixture of public and charitable funders (listed here), had spent £630 million on cancer research, down from £694 million in 2019-20. NCRI's website also breaks down research spend by disease site (for example breast cancer, leukaemia, brain tumour and so forth).

## Public funding

Government funding for medical research is typically channelled through the National Institute for Health and Care Research (NIHR - which is funded by the Department of Health and Social Care) and through UK Research and Innovation (UKRI – whose funding comes mainly via the science budget of the Department for Science, Innovation and Technology). UKRI is the UK's national funding agency "investing in science and research in the UK, bringing together the seven research councils, Innovate UK and Research England".

In response to a Parliamentary Question (PQ) in January 2022, the Government stated that the NIHR's cancer research expenditure had "risen from £101 million in 2010/11 to £138 million in 2019/20" and that it was "supporting over 800 cancer studies through its Clinical Research Network".[23] The Government has previously emphasised that NIHR funding is "not ring-fenced for cancer research" but instead is awarded based on the "quality of scientific activity".[24] Research funding has, however, previously been allocated by the Government to specific cancers: notably in 2018, following the death of Dame Tessa Jowell, the Government announced £40 million for brain cancer research in Dame Tessa's honour.[25]

A response to another PQ, in December 2022, set out UKRI's spending on cancer research, by its research councils, since 2015.

22 UK CRC, UK Health Research Analysis 2018, published 2020, p33. A neoplasm is an abnormal, uncontrolled growth of cells (sometimes referred to as a tumour) which may be non-cancerous (benign) or cancerous.

23 PQ 93921 [on breast cancer: research], 6 January 2022

24 Government Response to Fund more research into brain tumours, the biggest cancer killer of under-40s - Petitions (parliament.uk), 7 September 2015

25 Government announces £40 million for brain cancer research in honour of Tessa Jowell - GOV.UK (www.gov.uk), 14 May 2018

**Table 1 Cancer research spend, 2015/16 to 2020/21**

| Year | 2015/16 | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 |
|---|---|---|---|---|---|---|
| UKRI spend (£m) | 98.1 | 116.9 | 109 | 114.4 | 119.1 | 125.5 |
| MRC spend (£m) | 96.2 | 102.7 | 93.4 | 96.3 | 101.6 | 106.6 |
| BBSRC spend (£m) | Data not available | 2.9 | 14.3 | 15.2 | 14.2 | 15.2 |
| ESRC spend (£m) | 1.9 | 1.3 | 1.3 | 2.9 | 3.3 | 3.7 |

Source: PQ 95941 [on Cancer: Research], 2 December 2022

Notes:

Spend figures include data provided by Biotechnology and Biological Sciences Research Council (BBSRC), Economic and Social Research Council (ESRC) and Medical Research Council (MRC).

Spend data for Arts and Humanities Research Council (AHRC), Engineering and Physical Sciences Research Council (EPSRC), Innovate UK (IUK), Natural Environment Research Council (NERC), Research England (RE) and Science and Technology Facilities Council (STFC) are not provided.

BBSRC spend data for 2015/16 is unavailable.

MRC and BBSRC spend is provided by the National Cancer Research Institute (NCRI). Spend is based on the percentage of each research project that is relevant to cancer research.

ESRC total spend for each relevant grant is included in the data above.

BBSRC spend figures represent underpinning bioscience research relevant to cancer. BBSRC does not fund research directly to understanding specific human diseases.

### Life Sciences Vision

The Government may also set research priorities (with, or without, dedicated funding). For example, the Government's Life Sciences Vision (July 2021) identified seven 'healthcare missions' to help the "NHS to solve some of the biggest healthcare problems of our generation". Mission two focuses on cancer and is aimed at "enabling early diagnosis and treatments, including immune therapies such as cancer vaccines". More specifically, the Government stated in the Vision that it wanted to "drive the development and commercialisation of new cancer medicines, diagnostics, and genomic and predictive technologies in the UK, acting as a testbed for oncology innovation".[26]

Four months later, in November 2022, the Government announced £113 million to fund research into three of the seven healthcare missions – cancer, obesity

[26] Department for Business, Energy & Industrial Strategy; Department for Science, Innovation & Technology; Office for Life Sciences, Life Sciences Vision (HTML), 6 July 2021

and mental health – as well as addiction. Cancer research was allocated £22.5 million to develop:

> […] new immune-based cancer therapies, including cancer vaccines, which are targeted to a patient's specific cancer. Funding will also support the development of technologies that enable earlier, more effective cancer diagnosis. This will support progress towards the NHS Long Term Plan ambition to diagnose three-quarters of cancers at stages 1 or 2 by 2028.[27]

## Charitable funding

The UK Clinical Research Collaboration noted that, in 2018, charities provided "the majority of funding for Cancer and neoplasms (73%, £353m)" research, and that almost half of that funding (45%) was from Cancer Research UK. UKCRC added, however, that "18 of the medium to smaller charities also have a predominantly cancer-based portfolio".[28]

In 2021/22, Cancer Research UK spent:

- £193 million on research projects focused on specific cancer types;
- £62 million on basic research understanding the fundamental biology of cancer and;
- £79 million on research relevant to all types of cancer (eg research infrastructure).[29]

The Association of Medical Research Charities (AMRC) has a 'research expenditure dashboard' which sets out the annual research expenditure of its member charities, see AMRC research expenditure dashboard (google.com) Five cancer charities are in the AMRC's 'top 20' for 2021 based on research spend:

| | | |
|---|---|---|
| 6. | Cancer Research UK | £3,390,300,000 |
| 7. | Anthony Nolan | £289,233,000 |
| 16. | Prostate Cancer UK | £129,114,062 |
| 17. | Breast Cancer Now | £118,011,000 |
| 18. | Blood Cancer UK | £88,119,000 |

27 Department of Health and Social Care, Government to use Vaccine Taskforce model to tackle health challenges, 28 November 2022

28 UK CRC, UK Health Research Analysis 2018, published 2020, p47

29 Facts and figures about our research funding | Cancer Research UK, not dated, accessed 16 May 2023

### Business / private funding

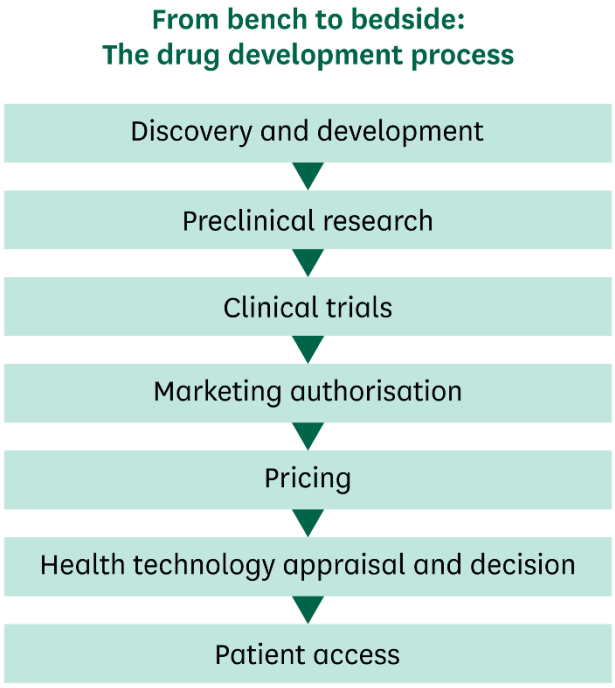
The Office for National Statistics (ONS) reported that expenditure on research and development (R&D) performed by UK businesses (in current prices) was £46.9 billion in 2021, of which £8.2 billion (17.4%) was categorised as "Chemicals and pharmaceuticals".[30] While pharmaceuticals is an important, health-relevant area, focusing purely on this category gives a limited picture of how much business spent on health-related research in 2021. As there are no further public records of business expenditure on R&D, it is not possible to estimate how much businesses are spending on health research generally, and cancer research specifically.

## 2.3 Translational research: from 'bench to bedside'

Translating laboratory research into new treatments and improved patient care is often referred to as 'translational research', or from bench (laboratory) to bedside (patients).

Outlined below is an overview of the research and development journey for a medicinal product. The stages include preclinical development and clinical trials, through to regulatory approval, appraisal, and price negotiations, as set out in the diagram below.

[30] Business enterprise research and development, UK: 2021 - Office for National Statistics (ons.gov.uk), published November 2022; Business enterprise research and development, UK (designated as official statistics) - Office for National Statistics (ons.gov.uk), 2021 edition, published November 2022 (table 3 in Excel spreadsheet)




Not all drug candidates will make it through every stage; it is estimated that about 90% of drug candidates (for all diseases, not just cancer) that begin Phase I clinical trials will fail and never make it through to be approved / licenced as medicines.[31] For those new drugs that are licenced, their research and development journey "will have taken around 12 years and cost around £1.15bn".[32]

The charity Breast Cancer Now has published a blog post on What does it take to develop a new treatment for breast cancer? (not dated) which considers the drug development process in further detail.

## From cancer research to a cancer treatment available on the NHS

### Discovery and development

At this very early stage, researchers (based in a university laboratory, a research institute and /or pharmaceutical company) undertake basic research to understand the emergence and development of a disease better. This type of research typically takes place at a cellular or molecular level.[33] The Pharmaceutical Journal explains that "it is through better understanding of disease processes and pathways that targets for new treatments are identified. This might be a gene or protein instrumental to the disease process

[31] Asher Mullard, Parsing clinical success rates | Nature Reviews Drug Discovery, **15**, page 447 (2016)

[32] Drug development: the journey of a medicine from lab to shelf - The Pharmaceutical Journal (pharmaceutical-journal.com), 12 May 2015

[33] Cells are the smallest unit that can live on its own and are the building blocks of all living organisms and tissues of the body.

that a new treatment could interfere with", for example, by blocking its operation.[34]

Researchers will then look for, and test, molecules that have a beneficial effect against the target. These could be naturally occurring compounds (eg from plants) or they could be molecules that are identified/designed and developed through computer modelling.[35] The Food and Drug Administration (FDA) in the United States notes that, at this stage, thousands of compounds could be tested, with only a handful subsequently identified as promising and requiring further study.[36]

### Preclinical research

Once a potential compound has been identified, its therapeutic effects, as well as its effectiveness and safety, are tested. At this stage, those tests do not take place in humans. Instead, they are undertaken in cells, in animals and/or using computer modelling. Through these tests, researchers aim to gather more information on, for example, how the compound works, how to give it to patients (for example by mouth, injection) and how much to give (the dosage), as well as whether it interacts with other drugs.

### Clinical trials

In the UK, before clinical trials of medicinal products can take place in humans, the researcher(s) responsible must obtain a clinical trial authorisation (CTA) from the Medicines and Healthcare products Regulatory Agency (MHRA – the UK's medicines regulator). The MHRA reviews the application, including:

- the results from the preclinical research;
- the trial protocol (the design of the study – how many people will participate, who qualifies for participation, what dosage they will be given, how data will be collected and so forth).

It then decides whether the trial can go ahead. A Research Ethics Committee is also required to review the proposed research, to make sure it is ethical and to safeguard the well-being of research participants.

If a CTA is granted, there are typically three stages to clinical trials, with more people involved as the trial progresses:

- **Phase I**– an initial trial involving a small group of adult participants (up to 100 people) who are closely supervised. This is carried out to make sure that the drug does not have major safety concerns in humans and

34 Drug development: the journey of a medicine from lab to shelf - The Pharmaceutical Journal (pharmaceutical-journal.com), 12 May 2015
35 Feature: Using computers to design drugs - News - University of Liverpool, August 2014
36 Step 1: Discovery and Development | FDA, 1 April 2018

also to help establish the most effective dose. Phase I trials typically take several months to gather data.

- **Phase II**– a trial in a larger group of participants (several hundred people) who have the condition that the drug is intended to treat. Phase II trials check that the drug works consistently and is effective and safe. They also consider how the drug is to be administered (eg as a tablet, an injection) as well as establishing the length of any interval (gap) between doses.

  Participants are continuously monitored and assessed, with researchers looking for potential side effects. Phase II trials can take anywhere between two months and two years.

- **Phase III** – a trial in a much larger group of people (usually several thousand). Phase III trials gather statistically significant data on the drug's safety and efficacy (how well it works and how it compares to existing treatments).

  Trials typically take place across multiple, international sites, with researchers monitoring for adverse side effects. The FDA explains that, because these studies are "larger and longer in duration, the results are more likely to show long-term or rare side effects".[37] The developers of the drug need to gather sufficient safety and efficacy data, to demonstrate that the benefits of the drug outweigh the risks, which would then enable a submission to be made for a licence (termed a 'marketing authorisation') to the regulatory authority, the MHRA.[38]

Following a review of the commercial clinical trial landscape in the UK, conducted by Lord O'Shaughnessy and published in May 2023, the Government has committed to:

> make approving and setting up trials quicker, make it easier for people to find trials and to contact patients who could benefit from ground-breaking treatments, and create exemplars for delivering trials in key areas, such as cancer and infectious disease, to improve our delivery of all trials.[39]

The commitments are supported by "up to £121 million over 3 years".[40]

### Marketing authorisation

Before a medicine can be sold in a country, and administered in people, it must receive what is termed a 'marketing authorisation' (sometimes referred to as a 'licence'). In the UK, an application for a marketing authorisation must

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37 Step 3: Clinical Research | FDA, 1 April 2018

38 Clinical trial stages adapted from: How vaccines are tested, licensed and monitored | Oxford Vaccine Knowledge Project (ox.ac.uk), May 2022; Drug development: the journey of a medicine from lab to shelf - The Pharmaceutical Journal (pharmaceutical-journal.com), 12 May 2015; Step 3: Clinical Research | FDA, 1 April 2018

39 Government response to the Lord O'Shaughnessy review into commercial clinical trials in the UK - GOV.UK, 26 May 2023

40 As above.

be submitted to the medicines regulator, the Medicines and Healthcare products Regulatory Agency (MHRA). It is the MHRA's role to ensure a medicine is safe, that it works as it is intended and that it can be manufactured to a consistently high-quality standard.

Before making its decision, the MHRA reviews the preclinical and clinical trial data, as well as data about the chemical makeup and manufacturing process (for example, can the drug be safely supplied and distributed), pharmacology and toxicity of the compound (including how the body interacts with the medicine) and the proposed labelling of the drug.[41]

### Pricing

Following receipt of a marketing authorisation, the pharmaceutical company will decide on how much they will charge for the drug in a particular country. NHS England may, at this stage, enter price negotiations with the drug company.

### Health technology appraisal

After obtaining a marketing authorisation, the next stage is for a medicine to go through an assessment – a type of cost/benefit analysis – to establish whether it should be made available via the NHS. In England, the National Institute for Health and Care Excellence (NICE) is responsible for making recommendations on the use of new and existing medicines and treatments within the NHS. NICE does this through undertaking 'technology appraisals'.

NICE explains that it bases its recommendations on a review of clinical and economic evidence:

- Clinical evidence shows how well the medicine or treatment works.
- Economic evidence shows how well the medicine or treatment works in relation to how much it costs the NHS - does it represent value for money?[42]

Typically, NICE examines the number of 'quality-adjusted life years' (QALYs) that a patient may, on average, gain from taking the drug compared with existing therapies. This is then considered in the context of the price of the new drug and how much each QALY costs, again in comparison to existing treatments.

The King's Fund explains that, since 2019, NICE now "reviews all new drugs launched in the UK, or the use of existing drugs for new diseases unless there is a clear rationale not to do so". It adds, however, that the Secretary of State

41 Drug development: the journey of a medicine from lab to shelf - The Pharmaceutical Journal (pharmaceutical-journal.com), 12 May 2015

42 NICE, Technology appraisal guidance, accessed 10 May 2023

for Health and Social Care must "formally agree to or amend NICE's planned work programme before it can start the appraisal process for new drugs".[43]

Demand for appraisals appears to be increasing; before 2014/15, NICE reported that it published an average of 30 appraisals a year but that its 2017/18 target was 55. NICE expected this figure to rise further to 75 topics annually.[44]

The different stages in the technology appraisal process are set out by NICE on its website: Single technology appraisal (STA) timeline Broadly speaking, the stages involve:

- setting the remit and scope (what the technology appraisal will cover and the questions that need to be addressed);
- evidence gathering (from the company developing / producing the drug, as well as from patients and clinical experts);
- producing an evidence report and a technical report and;
- consideration of the evidence by an appraisal committee, ahead of making a final recommendation.

A study published in 2013 examined how long NICE took to publish its single technology appraisal guidance (the outcome of the appraisal process). For those drugs submitted to NICE for appraisal between 2001 and 2010, it reported that the process typically took 48 weeks from initial submission to the publication of NICE guidance. The study authors noted that there was no evidence technology appraisals linked to cancer drugs took longer to complete than those relating to non-cancer drugs.[45]

In contrast, the results of a study published in 2019, and based on NICE single technology appraisals published between January 2010 and January 2018, found that drugs indicated for cancers – particularly advanced cancers – had been less successful in gaining approval from NICE than those for other indications:

> […] 123 (84.2%) of STAs [single technology appraisals] ended with a positive final recommendation; however, a significantly lower proportion (28/43, 65.1%) of drugs for advanced or 'end-of-life' cancers received a positive final recommendation […] Despite making up only 29.5% of included STAs, drugs for advanced cancers comprised 65% of all negative recommendations […] Cancer drug appraisals took 224 days (95% 182–266) from the first committee

43 Access to new medicines in the English NHS | The King's Fund (kingsfund.org.uk), 28 October 2020

44 National Institute for Health and Care Excellence (NICE), Proposals for increasing capacity within NICE's technology appraisal programme, October 2017 (PDF)

45 Steven G Cass.on et al. How long has NICE taken to produce Technology Appraisal guidance? A retrospective study to estimate predictors of time to guidance, BMJ Open 2013;3:e001870

meeting to publication of final guidance, while this was 148 days (95% CI 120–176) across all other disease areas.[46]

Slightly different figures were produced by a study undertaken by the Institute of Cancer Research (ICR). It found that while NICE had become quicker at starting appraisals (with some now beginning before a drug had received a marketing authorisation) the length of the overall evaluation process remained about the same. Based on data gathered between 2009 and 2016, the ICR reported that "it took an average of 16.0 months to get a drug through NICE approval from 2009 to 2016", compared to 16.7 months between 2000 and 2008.[47] It added that, of the cancer drugs NICE assessed between 2009 and 2016, 66% received a positive recommendation.

More recent figures indicate that improvements have been made. NICE's own estimate is that the technology appraisal process can take between 40 to 49 weeks if no appeal is received.[48] A response to a PQ also states that, in 2022/23, "89% of NICE's final recommendations on cancer drugs were positive".[49]

Under the NHS Constitution for England, the NHS is obliged to fund and resource medicines and treatments recommended by NICE's technology appraisals, normally within three months of the publication of final NICE guidance.[50] Patients have the right to these drugs/treatments if their doctor believes they are clinically appropriate.

## 2.4 Cancer Drugs Fund

In 2011, the Cancer Drugs Fund (CDF) was established to provide access to some additional cancer drugs that had not been approved by NICE. The CDF was reformed in July 2016, when a new approach to the appraisal and funding of cancer drugs in England began operating.

Under the new approach, an additional option was made available to NICE, enabling it to recommend a drug "for use within the CDF". This option is for instances when NICE considers "there to be plausible potential for a drug to satisfy the criteria for routine commissioning, but where there is significant remaining clinical uncertainty".[51] The CDF route allows the drug to be made

46 M. J. Walton et al, A Review of Issues Affecting the Efficiency of Decision Making in the NICE Single Technology Appraisal Process, PharmacoEconomics - Open volume 3, pages403–410 (2019)

47 The Institute of Cancer Research, From Patent to Patient. Analysing access to innovative cancer drugs, December 2018 (PDF), p18

48 Single technology appraisal (STA) timeline | Technology appraisal processes | Technology appraisal guidance | NICE guidance | Our programmes | What we do | About | NICE, accessed 31 May 2023

49 PQ HL7741 [on Cancer Drugs Fund], 19 May 2023

50 PQ 182399 [on Health Services: Technology], 15 May 2023

51 NHS England, Appraisal and Funding of Cancer Drugs from July 2016 (including the new Cancer Drugs Fund), July 2016, p6 (PDF)

available on the NHS for a time-limited period (typically two years) while further research into its clinical and cost effectiveness takes place.

The new approach to the CDF also required NICE to start the appraisal process earlier, "with the aim of publishing draft guidance prior to a drug receiving its marketing authorisation and then final guidance within 90 days of marketing authorisation wherever possible".[52]

NHS England explained that "all cancer drugs that are recommended for either routine or CDF managed access funding are funded from the very first positive recommendations from NICE", through a 'managed access agreement'.[53] The CDF has an annual budget of £340 million. According to the Government, the CDF has, since 2016, "helped over 90,000 patients, with 102 medicines treating 243 different cancers having received funding".[54]

The Cancer Drugs Fund list is available on the NHS England website.

If a cancer specialist thinks that a specific patient would benefit from a drug on the CDF list, they can apply online, on behalf of their patient, and should receive a decision within two working days.[55]

Information for patients on the CDF can be found on Cancer Research UK's website.

52 As above
53 NHS England » Cancer Drugs Fund, accessed 31 May 2023
54 PQ 181513 [on Cancer: Health Services] 26 April 2023
55 What you can do if a treatment is not available | Macmillan Cancer Support, July 2018

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