RTT statistics user guidance, definitions, quality and methodological information

Contents

Key terms

Referral to Treatment (RTT) pathway

Patients referred for non-emergency consultant-led treatment are on RTT pathways. An RTT pathway is the period of time that a patient waited from referral to start of treatment, or, if they have not yet started treatment, the length of time that a patient has waited so far.

All decisions about when an RTT pathway (or RTT clock) starts and stops should be made with the patient's best clinical interests in mind and in accordance with the national legally-binding RTT rules. The RTT recording and reporting guidance provides further guidance for all staff responsible for managing the treatment of patients referred for non-emergency consultant-led treatment.

RTT clock start

A waiting time clock starts when any care professional or service permitted by an English NHS commissioner to make such referrals, refers to:

a) a consultant-led service, regardless of setting, with the intention that the patient will be assessed and, if appropriate, treated before responsibility is transferred back to the referring health professional or general practitioner;

b) an interface or referral management or assessment service, which may result in an onward referral to a consultant-led service before responsibility is transferred back to the referring health professional or general practitioner.

An RTT clock also starts upon a self-referral by a patient to the above services where these pathways have been agreed locally by commissioners and providers and once the referral is ratified by a care professional permitted to do so.

Upon completion of a consultant-led RTT period, a new waiting time clock only starts:

a) when a patient becomes fit and ready for the second of a consultant-led bilateral procedure;

b) upon the decision to start a substantively new or different treatment that does not already form part of that patient's agreed care plan;

c) upon a patient being re-referred into a consultant-led; interface; or referral management or assessment service as a new referral;

d) when a decision to treat is made following a period of active monitoring;

e) when a patient rebooks their appointment following a first appointment DNA that stopped and nullified their earlier clock.

RTT clock stop

Once a referral to treatment (RTT) waiting time clock has started it continues to tick until one of the following activities ends the RTT pathway:

- First treatment – the start of the first treatment that is intended to manage a patient's disease, condition, or injury in a RTT pathway.
- Start of active monitoring initiated by the patient.
- Start of active monitoring initiated by the care professional.
- Decision not to treat – decision not to treat made or no further contact required.
- Patient declined offered treatment.
- Patient died before treatment.

Patients vs pathways

Each RTT pathway relates to an individual referral for a patient. A patient can be on more than one RTT pathway at the same time if they are waiting for consultant-led elective treatment for different conditions or unrelated clinical reasons. Some patients will therefore be included in the RTT pathway figures more than once.

Consultant-led treatment

A consultant-led service is a service where a consultant retains overall clinical responsibility for the service, team or treatment. The consultant will not necessarily be physically present for each patient's appointment, but they take overall clinical responsibility for patient care.

A consultant is defined as a person contracted by a healthcare provider who has been appointed by a consultant appointment committee. They must be a member of a Royal College or Faculty.

Incomplete pathway

Incomplete pathways are the waiting times for cases where patients are waiting to start treatment at the end of the reporting period. In these cases, patients will be at

various stages of their pathway, for example, waiting for diagnostics, an appointment with a consultant, or for admission for a procedure. These are sometimes referred to as waiting list waiting times and the volume of incomplete RTT pathways as the size of the RTT waiting list. Incomplete pathways are the basis of the 92% NHS Constitution operational standard.

Completed admitted pathway

Completed admitted pathways are the waiting times for cases where patients started treatment during the reporting period and the treatment involved admission to hospital. These are sometimes referred to as inpatient waiting times. They include the complete time waited from referral until start of inpatient treatment. Performance targets relating to completed pathways existed until 2015.

Completed non-admitted pathway

Completed non-admitted pathways are the waiting times for cases where patients completed their pathway during the reporting period for reasons other than an inpatient or day case admission to hospital for treatment. These are sometimes referred to as outpatient waiting times. They include the time waited for cases where a patient's RTT waiting time clock either stopped for treatment that did not require admission or other reasons, such as a patient declining treatment. Performance targets relating to completed pathways existed until 2015.

New RTT period

New RTT periods (or RTT clock starts) are the number of new RTT pathways where the clock start date is within the reporting period.

While most RTT clocks start with a referral, RTT clock start figures are not the same as referrals data, such as the information published on referrals made via the NHS e-Referral Service (e-RS) (NHS e-Referral Service (e-RS) open data dashboard - NHS England Digital). This is for several reasons, such as:

- A decision to start a substantively new or different treatment that doesn't already form part of the patient's agreed care plan will result in a clock start without an associated referral
- RTT clocks that restart because of a decision to treat following a period of active monitoring will be a source of a new clock start without a referral
- Patients who are rebooked following a missed first appointment will start a new RTT clock without a referral
- RTT clock starts where a patient becomes ready for the second of a bilateral procedure will not have an associated referral
- RTT clock starts are for consultant-led services only

Unreported removals

The term unreported removal describes any flow on or off the waiting list not captured in the submitted clock starts (new RTT periods) and completed pathways numbers. It is calculated as the balancing item between the waiting list at the start of a period, the additions onto the list during the period (new RTT periods), those taken off the list during the period (completed pathways) and the size of the waiting list at the end of the period:

> Unreported removals = waiting list at start of period + clock starts during period – completed pathways during period – waiting list at end of period.

The unreported removals figure represents the difference between the expected waiting list figure (given the reported clock start and completed pathway figures) and the reported waiting list. See the 'Derived Unreported Removals' explainer at https://www.england.nhs.uk/statistics/statistical-work-areas/rtt-waiting-times/rtt-guidance/#unreported-removals for more information.

Standards, rights and pledges

Patient right

The NHS Constitution states that patients have the right to start non-emergency consultant-led treatment within 18 weeks of referral, unless they choose to wait longer or it is clinically appropriate that they wait longer, and for the NHS to take all reasonable steps to offer them a range of alternative providers if this is not possible.

92% operational standard (incomplete pathway standard)

The NHS Constitution standard sets out that at least 92% of patients on incomplete pathways should have been waiting no more than 18 weeks from referral. The standard was announced in November 2011 and introduced from April 2012.

The standard leaves an operational tolerance to allow for patients for whom starting treatment within 18 weeks would be inconvenient or clinically inappropriate. These circumstances can be categorised as:

- Patient choice – patients who choose to delay treatments for personal or social reasons
- Co-operation – patients who do not attend appointments along their pathways
- Clinical exceptions – patients for whom it is not clinically appropriate to start treatment within 18 weeks

52+ weeks

NHS England introduced a zero tolerance of any referral to treatment waits of more than 52 weeks in 2013/14.

Current interim targets/ambitions

The Reforming Elective Care for Patients plan published in January 2025 outlined the target of achieving the standard that at least 92% of patients are waiting no more than 18 weeks for treatment by March 2029 and set out that NHS England's annual operational planning guidance is the primary mechanism for formally setting objectives for the NHS system to achieve this.

Previous standards

In June 2015, Simon Stevens accepted Sir Bruce Keogh's recommendations for improvements to the waiting time standards for elective care. The completed admitted and completed non-admitted operational standards, which came into effect in 2008, were abolished, and the incomplete pathway standard became the sole measure of patients' constitutional right to start treatment within 18 weeks. The details of the now abolished standards were:

- at least 90% of patients on completed admitted pathways should have waited no more than 18 weeks from referral. This was measured on an adjusted basis, meaning that adjustments were made to admitted pathways for clock pauses, where a patient had declined reasonable offers of admission and chose to wait longer.
- at least 95% of patients on completed non-admitted pathways should have waited no more than 18 weeks from referral

On 1 October 2015, the National Health Service Commissioning Board and Clinical Commissioning Groups (Responsibilities and Standing Rules) (Amendment) (No.2) Regulations 2015 came into effect, removing the provision to report pauses in completed admitted pathways in monthly RTT returns to NHS England and removing the admitted and non-admitted standards.

The Delivery plan for tackling the COVID-19 backlog of elective care released in February 2022 set the ambition of eliminating the longest waits of over two years (104 weeks) by July 2022.

Data collection

Scope

Any organisation that provides consultant-led non-emergency services commissioned by English NHS commissioners, and for those patients for whom English commissioners are responsible, should submit weekly and monthly RTT data.

This includes acute trusts, specialist trusts, mental health trusts and any other provider of consultant-led services for NHS patients in England or provider of interface services. An interface service is defined as being any arrangement that incorporates an intermediary level of clinical triage, assessment and treatment in or

between traditional primary and secondary care. From February 2024, community service pathways are no longer reported in RTT datasets and should instead be captured in community health services data collections.

Structure of monthly aggregate data collection

The national monthly aggregate RTT data collection gathers RTT waiting times in weeks (from 0-1 weeks to 104+ weeks), split by treatment function categories. Returns are submitted by providers, split by commissioner. The monthly RTT data collection template is in three sections:

1. Completed pathways (split by admitted and non-admitted)
2. Incomplete pathways (including a split for patients with a decision to admit for treatment)
3. New RTT periods

Treatment function categories

Data are submitted for the following treatment function categories in the monthly aggregate data return:

- 100 General Surgery Service
- 101 Urology Service
- 110 Trauma & Orthopaedics Service
- 120 Ear, Nose & Throat Service
- 130 Ophthalmology Service
- 140 Oral Surgery Service
- 150 Neurosurgery Service
- 160 Plastic Surgery Service
- 170 Cardiothoracic Surgery Service
- 300 General Internal Medicine Service
- 301 Gastroenterology Service
- 320 Cardiology Service
- 330 Dermatology Service
- 340 Respiratory Medicine Service
- 400 Neurology Service
- 410 Rheumatology Service
- 430 Elderly Medicine Service
- 502 Gynaecology Service
- X02 Other – Medical Services (All other TREATMENT FUNCTIONS in the Medical Services group not reported individually)
- X03 Other – Mental Health Services (All other TREATMENT FUNCTIONS in the Mental Health group not reported individually)
- X04 Other – Paediatric Services (All other TREATMENT FUNCTIONS in the Paediatric group not reported individually)

- X05 Other – Surgical Services (All other TREATMENT FUNCTIONS in the Surgical group not reported individually)
- X06 Other – Other Services (All other TREATMENT FUNCTIONS in the Other group not reported individually)

The 18 treatment functions listed out separately in the data collection were chosen as areas with a large volume of RTT pathways. The 'Other' category was split into five subgroups from April 2021. Data for any other treatment functions not separately reported should be aggregated and reported in the 'other' treatment function subcategories, depending on which treatment function group they fall under. NHS Digital's Treatment Function and Main Specialty Standard Code List Specification provides details of the treatment function group for all treatment function codes (accessed here: https://digital.nhs.uk/data-and-information/information-standards/governance/latest-activity/standards-and-collections/dcb0028-treatment-function-and-main-specialty-standard/).

For example, General Medicine (300) should include data relating to 300 and exclude subspecialties 306, 307, 308 and 309. These sub-specialties are all within the Medical Services group and should therefore be included in the 'Other – Medical Services' line in the data collection.

The only exceptions to this rule are:

- Cardiothoracic Surgery, which can be either specialty 170 (Cardiothoracic) or an aggregation of 172 (Cardiac) and 173 (Thoracic);
- Spinal Surgery Service (108), Orthopaedic Service (111) and Trauma Surgery Service (115) should be included in Trauma and Orthopaedics (110).
- Oral and Maxillofacial Surgery (145) and Maxillofacial Surgery (144) should be included in Oral Surgery (140).

As more subspecialty treatment function codes are introduced over time, some pathways may move from one of the treatment function categories separately listed out in the aggregate data return into one of the new 'other' treatment function categories.

History of changes in monthly aggregate data collection

Prior to the introduction of the monthly aggregate RTT data collection, the Department of Health and Social Care collected data on waiting times for stages of treatment:

1987

Start of publication of information on how long patients on the inpatient waiting list had been waiting (numbers waiting more than 4, 6, 9 and 12 months)

1995

Start of publication of information about the outpatient waiting list (number waiting more than 3 and 6 months)

2004

Start of publication of the total size of the outpatient waiting list

Monthly RTT waiting times data has been published since March 2007. Changes have been made to the collection and publication over time:

2007

The publication of monthly RTT waiting times data started in 2007. Initially (for April 2007 onwards) data were only published for cases where patients completed their RTT pathway with an admission for treatment (completed admitted pathways). Completed non-admitted and incomplete RTT pathway data were published for August 2007 onwards.

2008

The publication of adjusted admitted RTT pathway data started for March 2008. Adjustments were permitted to admitted pathways for clock pauses, where a decision to admit for treatment had been made, and the patient had declined at least two reasonable appointment offers for admission. The RTT clock was paused for the duration of the time between the earliest reasonable date offered and the date from which the patient made themselves available for admission for treatment.

2015

For October 2015 data onwards, the following reporting requirements changed:

- There was no longer a requirement for providers to submit completed admitted adjusted data.
- Unadjusted admitted and non-admitted completed pathway data was still required but no longer used for monitoring against operational standards.
- The requirement to report incomplete pathway data remained unchanged – as it had always been an unadjusted submission.
- Two new data items were added to the monthly data return: incomplete pathways where a decision has been made to admit the patient for treatment and new RTT pathways.

The figures for incomplete pathways with a decision to admit for treatment consist of cases where first definitive treatment has not started and a clinical decision to admit to a hospital bed for treatment has been made and the patient is awaiting admission, regardless of whether a date to admit has been given. The difference between the values submitted for this data item and for total incomplete pathways equates to the number of incomplete pathways without a decision to admit for treatment. This will include patients where first contact has not yet been made, patients waiting for first

definitive treatment as an outpatient and patients where a decision to admit for a diagnostic procedure has been made.

2019

From the publication of August 2019 data, performance against the 18 week standard was not calculated or published for providers involved in the field testing of changes to access standards for elective care. See Publication-of-RTT-Waiting-Times-data-CRS.pdf for more information. While performance figures were not calculated for the affected providers or commissioners, performance at regional and England level continued to be calculated and published using all data, therefore a fully comparable national time series was available. This change applied until data for August 2022.

2020

For April 2020 data onwards, the overarching commissioning code X24, which was used for all NHS England-commissioned activity until March 2020, began to be phased out from the monthly RTT data return. Providers that were able to submit data under the relevant commissioner code as outlined in the NHS England Commissioning Responsibilities Matrix were asked to do so from the April 2020 data return onwards. However, the X24 code continued to be available for those providers not able to make the change at this time because of the need to divert resources to support the response to COVID-19.

2021

For April 2021 data onwards, the following reporting requirements changed:

- The code X24, previously used to group together NHS England-commissioned services under a single code, was phased out entirely and the more granular NHS England commissioning codes used instead. The commissioner codes for NHS England-commissioned services are outlined in the NHS England Commissioning Responsibilities Matrix (see the latest Commissioner Assignment Method – Supporting Tables Spreadsheet at https://www.england.nhs.uk/data-services/commissioning-flows/)
- Additional weekly time bands from 52-53 weeks to 104+ were added to the completed admitted, completed non-admitted and incomplete pathway sections of the collection.
- Changes to the treatment function categories to:
    - Reflect 2021/22 changes as notified by NHS Digital. The changes fell into two categories:
        - Update to treatment function names.
        - Update to the guidance on reporting ‘exceptions’ in response to the introduction of new treatment function codes. Two new exceptions were added:
            - Orthopaedic Service (111) and Trauma Surgery Service (115) should be included in Trauma and Orthopaedics (110). Note

this is in addition to the existing reporting exception that Spinal Surgery Service (108) should be included in Trauma and Orthopaedics (110).
        - Oral and Maxillofacial Surgery (145) and Maxillofacial Surgery (144) should be included in Oral Surgery (140).
    - Separate the 'Other' category into five groups:
        - Other – Medical Services
        - Other – Mental Health Services
        - Other – Surgical Services
        - Other – Paediatric Services
        - Other – Other Services

Assigning commissioner codes

The basic rules for assigning a commissioner code to RTT pathways are as follows:

- where it is known that the commissioner is NHS England, use the relevant commissioner code as outlined in the NHS England Commissioning Responsibilities Matrix (see the latest Commissioner Assignment Method – Supporting Tables Spreadsheet at https://www.england.nhs.uk/data-services/commissioning-flows/);
- use the code NONC for non-English commissioners in the aggregate monthly RTT data return (note that the specific relevant commissioner code should be used for non-English commissioners in the record-level Waiting List Minimum Dataset (WLMDS) collection);
- use a Sub ICB location code for everything else:
    - Sub ICB location of GP practice if known;
    - then Sub ICB location of residence if no GP;
    - then 'host' Sub ICB location if no GP or resident postcode.

Commissioner changes

The following changes to commissioning arrangements have impacted the assignment of RTT pathways to commissioner codes:

2013

From April 2013, reported consultant-led RTT waiting times no longer include waiting times for consultant-led sexual health (Genito-urinary medicine or GUM) services as they are no longer commissioned by the NHS. Consultant-led sexual health pathways included in the RTT waiting times data prior to April 2013 were predominantly within a week long and involved non-admitted treatment.

From 2020

The code X24, previously used to group together NHS England-commissioned services under a single code in the monthly aggregate collection, began to be phased out from the collection from April 2020 onwards, and was phased out entirely

from April 2021, and the more granular NHS England commissioning codes used instead.

2023

From April 2023, secondary dental services are no longer commissioned by NHS England and instead are commissioned by sub-integrated care board locations (sub-ICB locations).

2024

From April 2024, a process of service delegation was established to pass the responsibility for commissioning some specialised services to ICBs. This only relates to specialised services. Other directly commissioning services (health and justice, public health and armed forces) are not subject to delegation.

Guidance changes

Since the introduction of the monthly aggregate RTT data collection, the following changes have been made to RTT recording and reporting guidance:

October 2015

Refreshed guidance to consolidate and simplify the previous published guidance and related advice (see Annex A of the RTT recording and reporting guidance for a list of the documents that were consolidated into the 2015 refreshed guidance)

March 2021

Updated to reflect changes to the monthly aggregate data return from April 2021 onwards.

October 2023

Updated to reflect the change to the Referral to treatment consultant-led waiting times rules suite (effective from October 2022) designed to help hospitals with the management of patients who decline offered treatment dates. The change meant that where patients wish to delay treatment, and have rejected two offers of reasonable treatment dates, providers can place them into a period of active monitoring following a clinical conversation and agreement with the patient.

February 2024

Updated to say that community service pathways should, from February 2024, no longer be reported in RTT datasets and should instead be captured in community health services data collections. The updated guidance primarily impacted Community Paediatric and Paediatric Neurodisability specialties, which along with other treatment functions are recorded under “Other – Paediatric Services” and “Other – Other services” in the published monthly RTT data.

Management information indicated that the impact on the overall waiting list would be a decrease of approximately 43,000 pathways within the community paediatric specialty and a more limited impact on other community services. Analysis indicates

that about 36,000 of those pathways were excluded from the February 2024 figures and most of the remaining 7,000 pathways were excluded from the March 2024 figures. The analysis indicates that virtually all of the expected impact on long waiters was seen in the February 2024 figures: approximately 4,400 fewer 52-week waits, 2,500 fewer 65-week waits and 1,400 fewer 78-week waits.

Where community service related pathways are no longer reported in the published RTT data they should now be reported in Community Health Services datasets. See the Community Health Services Waiting List publication https://www.england.nhs.uk/statistics/statistical-work-areas/community-health-services-waiting-lists/ for further details.

February 2025

Provided clearer and further guidance on:

- Application of active monitoring for patients who wish to delay their pathway (sections 3.4.4, 4.4.1.4 and 8)
- Clarification of guidance on clock starts following DNA (Did Not Attend) for first appointment (sections 3.4.5 and 4.4.1.3)
- Clarification of guidance on management of multiple patient-initiated cancellations (section 4.4.2.1)
- Management of planned pathways and subsequent RTT clock starts (section 5)
- Subcontracting relationships and RTT reporting (section 11.2)

This update did not involve any changes to the scope of the RTT data collection. The clarification was intended to support all providers across the country to report pathways in the same way. Discussions with clinicians suggested that existing recording practice was typically in line with the updated guidance, however, there may have been some variation in the application of previous guidance. Therefore, the update may have caused differences for some providers.

Unknown clock starts

Providers are responsible for the proper validation of any patients on RTT pathways. It is important that clock starts can be accurately identified for all patients on an RTT pathway. However, in the unlikely event that the provider may not be able to accurately identify the RTT clock start date, completed pathways can be reported in the ‘unknown clock start’ column of the RTT data return. Pathways with an unknown clock start accounted for less than 0.05% of total completed pathways in 2025/26.

Measuring RTT pathway length

Data for incomplete and completed pathways is allocated to the following time bands: 0-1 weeks, >1-2 weeks, >2-3 weeks, then for all weekly time bands through to >103-104 weeks, >104 weeks.

Waits should be allocated to the weekly time bands as follows:

- 0 to 1 weeks includes patients waiting/having waited 0, 1, 2, 3, 4, 5, 6 or 7 days (note there are eight reporting days in this time band)
- 1 to 2 weeks includes patients waiting/having waited 8, 9, 10, 11, 12, 13 or 14 days
- 17 to 18 weeks includes patients waiting/having waited 120, 121, 122, 123, 124, 125 or 126 days
- 51 to 52 weeks includes patients waiting/having waited 358, 359, 360, 361, 362, 363 or 364 days
- 104+ weeks includes patients waiting/having waited 729 days or more

A patient who has waited exactly 18 weeks (126 days) is included in the 17-18 weeks time band.

Using data

Navigating published files

England-level headline figures since the start of the data collection are published in the latest version of the ‘England-level time series’ file.

For more detail on the England-level waiting times figures, and to see regional, ICB or sub ICB location figures, use the ‘Commissioner’ data files. In regional aggregations in the publication files, all pathways commissioned by NHS England are aggregated into the 'NHS ENGLAND' region totals.

For waiting times at provider trusts, use the ‘Provider’ data files.

In the admitted and non-admitted completed pathway files, data for all individual weekly time bands is displayed as the file is opened. In the Incomplete pathway files, data by weekly time band is hidden by default to allow the headline performance and long waiter measures to be visible. Data for all time bands can be displayed by clicking the ‘+’ button at the top of the file.

If they wish, providers can submit data on RTT pathways commissioned by non-English commissioners under commissioner code “NONC”. However, it is not mandatory to provide details of these pathways in the monthly RTT data return and therefore the data collection does not provide a complete picture of non-English commissioned pathways. NONC pathways are excluded from all published outputs apart from the raw data CSV file published each month (titled ‘Full CSV data file [mmmyy] (ZIP, xxxxK). When using the CSV files, NONC pathways can be excluded by filtering out NONC records under the ‘Commissioner Org Code’ field.

An interactive dashboard of the monthly referral to treatment waiting times statistics is updated as part of the main publication. There may be a delay of around an hour following the main release of published figures until the dashboard is fully refreshed. The dashboard is intended to provide users with an alternative method of viewing the

published figures, making NHS performance statistics more accessible and transparent.

Timescales

The provider deadline for submission is 13 working days after the final day of the reference period.

The data are published by NHS England based on a schedule that is published in advance at: https://www.england.nhs.uk/statistics/12-months-statistics-calendar/. The publication date is usually the second working Thursday of the month.

Data quality

Roles and responsibilities

Providers must ensure that any information provided is "submitted completely and accurately" (in accordance with NHS Standard Contract terms).

Commissioners should review monthly provider data for their commissioned patients (by the 18th working day after the end of the reference period) to confirm it is accurate, in particular, to check for errors, inconsistencies and missing data. If any issues are identified, the commissioner should work with providers to resolve data quality issues.

NHS England carries out validation checks on aggregate waiting times data and works with providers to resolve data quality issues identified at an aggregate level. NHS England publishes national guidance on RTT waiting time recording and reporting and provides ongoing support to trusts on recording waiting times, responding to individual queries. Annex B of the recording and reporting guidelines outlines the validation checks carried out by NHS England.

Revisions process

Revisions to published figures are released, generally on a six-monthly basis, in accordance with the NHS England statistics revision policy. This policy is available from the NHS England website at the following address: https://www.england.nhs.uk/statistics/wp-content/uploads/sites/2/2018/12/SDCS-Revisions-Policy_v1.0.pdf. RTT revisions are usually released in January and July.

Missing data

For months where one or more acute trusts do not submit RTT data, we use the following approach to reduce the extent to which the missing data impacts national time series:

- For incomplete RTT pathways, we factor in estimates based on the latest data submitted for the missing acute trust.
- To estimate the impact of missing data on completed (admitted and non-admitted) pathways, the total number of pathways per working day in each provider in the month prior to the gap in reporting multiplied by the relevant

number of working days in each missing month is applied to all missing months.

The impact of missing data varies depending on the measure being considered. The biggest impact is on measures of volume, such as the number of completed pathways and the size of the RTT waiting list. The impact of missing trusts on the percentage of incomplete pathways within 18 weeks at England is generally minimal, however, where a large trust that has previously had a particular high or low percentage of incomplete pathways within 18 weeks does not submit data there can be a material impact on the England-level percentage.

Seasonality/month-on-month comparisons

Care should be taken when making month-on-month comparisons of RTT figures as measures of waiting time performance are subject to seasonality. For example, adverse weather during winter may change the balance between elective and emergency care. Similarly, the number of cases of patients starting treatment will be influenced by the number of working days in the calendar month.

UK comparability

The provision of health services is devolved across the four nations of the UK. As a result, the way we measure NHS activity and performance in each nation differs.

Each UK country has developed its own minimum targets and operational standards for planned care waiting times, reflecting each country's policies and needs. These affect the data available on referral to treatment or stage of treatment waiting lists, and the extent to which data can be compared across the four countries.

Despite the differences, there is value in considering trends across the UK in waiting lists for RTT and different stages of treatment.

A joint statement on the coherence of these statistics, and advice on how and when to make comparisons across the UK has been published on the Analysis Function website:

https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthcaresystem/articles/nhsplannedcarewaitingtimesacrosstheuk/2024-06-18

Reproducibility and derived measures

Performance against the operational standard and long waiters

Performance against the RTT operational standard is calculated as the sum of incomplete pathways in the 0-1 weeks to 17-18 weeks time bands at the end of the reporting period divided by the total number of incomplete pathways. This measure is included in the published provider and commissioner files. The England-level performance measure can also be calculated from the CSV file with the following steps and filters:

Sum (Gt 00 To 01 Weeks SUM 1 to Gt 17 To 18 Weeks SUM 1) / Total All

Filters: Commissioner Org Code <> NONC, RTT Part Type = Part_2, Treatment Function Name = Total

Measures of long waiters are calculated as follows:

- More than 52 weeks: sum of incomplete pathways from 52-53 weeks to 104+ weeks. The % of 52 plus weeks is calculated as this value divided by the total number of incomplete pathways.
- More than 65 weeks: sum of incomplete pathways from 65-66 weeks to 104+ weeks
- More than 104 weeks: incomplete pathways in the 104+ weeks time band category

These measures are included in the published provider and commissioner files. They can also be calculated from the CSV file with the following filters: Commissioner Org Code <> NONC, RTT Part Type = Part_2, Treatment Function Name = Total.

Median and 92nd percentile

The median is the preferred measure of the average waiting time as it is less susceptible to extreme values than the mean. The median waiting time is the middle value when all pathways are ordered by length of wait, in other words, the midpoint of the RTT waiting times distribution or 50th percentile. For incomplete pathways, in 50% of cases the patient was waiting within the median waiting time.

The 92nd percentile waiting time is shown for incomplete pathways to correspond with the 92% operational standard. This is the time that in 92% of cases the patient had been waiting less than (and 8% of cases the patient had been waiting more than). For example, if the 92nd percentile is 17 weeks, then in 92% of cases the patient had been waiting less than 17 weeks at the end of the reporting period and in 8% of cases the patient had been waiting more than 17 weeks.

It should be noted that median and 92nd percentile waiting times are calculated from aggregate data, rather than patient-level data, and therefore are only estimates of the position on average waits. For February and March 2021, it was not possible to estimate a more precise 92nd percentile value than ‘greater than 52 weeks’ as the aggregate data return included all patients waiting more than 52 weeks in a ‘52+ week’ category for those months. For April 2021 data onwards, the monthly data return was amended to include time bands from ’52-53 weeks’ to ‘104+ weeks’.

For Oct-22 data onwards, the calculation used to estimate the median was changed to be in-line with that used to estimate the percentile times. The impact of this change was minimal.

Unique patients

The published overview time series includes an estimate of the number of unique patients for all months from September 2021 onwards. To calculate this estimate, the ratio of unique patients to the number of incomplete pathways is sourced from the weekly Waiting List Minimum Dataset (WLMDS). This ratio is then applied to the monthly figure for the number of incomplete pathways to estimate the number of unique patients. For each monthly position, we use the WLMDS data for the week ending that is closest to the end of the month.

Clearance time

Clearance time is a metric sometimes used in monitoring and analysis of RTT waiting times. It is a measure of the time it would take to clear the waiting list at the prevailing treatment rate, assuming there are no further joiners to the waiting list.

The standard methodology to calculate clearance time is:

> Completed pathways during last 3 months = X
>
> Total working days during last 3 months = D days
>
> RTT waiting list size (incomplete pathways) at the end of latest month = W
>
> Number of days to clear the waiting list = waiting list / [completed pathways during period / working days during period]
>
> = W / (X / D) = A days

This figure is then multiplied by a constant that accounts for leap years, working days in a week and bank holidays to turn this from days into the number of weeks to clear the waiting list:

> Constant C = (365.25/7) / [365.25 * (5/7) - 8]
>
> Clearance time (in weeks) = A * C = B weeks

Relationship with management information

From April 2024, data from the Waiting List Minimum Dataset (WLMDS) is being published alongside the monthly RTT data.

Provider organisations are responsible for ensuring that the data they submit is an accurate representation of RTT waiting and waited times, however, the WLMDS dataset is considered to be management information and is subject to less validation than the monthly official RTT statistics. There may be issues regarding the quality and completeness of the recorded WLMDS data which are not routinely reviewed centrally. The official monthly statistics should be used in preference to the management information for the headline figures, but the management information are also published as they enable more detailed breakdowns and to support transparency.

Feedback and user engagement

We welcome feedback on RTT statistical outputs and use several approaches to gather this.

You can contact us by emailing england.rtt@nhs.net, including contact details enabling us to reach out for further discussions.

We recommend signing up to the Government Statistical Service (GSS) health and social care newsletter to receive updates on developments to RTT waiting times statistics and other related official statistics: Office for National Statistics – Sign up for GSS Health and Care newsletter.

Our developments page brings together information on developments and plans relating to RTT waiting time statistics Statistics » Developments.