

NHS Wales Referral to Treatment Times

This report covers the processes leading up to the publication of the Referral to Treatment (RTT) waiting times statistics and also considers issues of quality such as: coverage, strength and limitations of the data, relevance and comparability.

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What are these statistics?

The Referral to Treatment times statistics show monthly data on the waiting times and total time waited from referral by a GP or other medical practitioner to hospital for treatment in the NHS in Wales. Data on Welsh residents treated or waiting for treatment outside of Wales is not included in the release. Information is available by Local Health Board and by treatment function. The treatments included in the return can be found in the [NHS Wales Data Dictionary](#). In addition waiting times for outpatients and inpatients that are not reported in Referral to Treatment times statistics are also presented separately in the release.

These statistics are published together with a statistical release on NHS Wales diagnostic and therapy services waiting times. A document on how these data series are related is in the form of [Frequently Asked Questions](#).

In terms of referral to treatment times, a patient is defined to have been treated if either, following consultation with a hospital specialist, no hospital treatment is necessary or if treatment begins. This could include:

- Being admitted to hospital for an operation or treatment;
- Starting treatment that does not require a stay in hospital (for example, medication or physiotherapy);
- Beginning the fitting of a medical device such as leg braces; or
- Starting an agreed period of time to monitor the patient's condition to see if further treatment is needed.

The patient will also be reported as treated if they are transferred to another provider for the continuation of their care. They will then start a new referral to treatment pathway with their next provider. However, if they are transferred for cardiac treatment, they will not be recorded as having been treated and the accumulated waiting time will continue with the subsequent provider.

For the purpose of the release, the day of referral is defined as the day that the referral letter is received by the hospital.

Policy and operational context

The [NHS Wales Delivery Framework 2018-19](#) is used to measure delivery throughout 2018-19.

Waiting times for referral to treatment have the following targets (operational standards for maximum waiting times):

- 95 per cent of patients waiting less than 26 weeks from referral to treatment
- No patients waiting more than 36 weeks for treatment

Users and uses

An understanding of trends in waiting times is crucial for those involved in planning and decision making at the national and local level.

We believe the key users of statistics are:

- Ministers and their advisors
- Assembly members and Members Research Service in the National Assembly for Wales
- Officials within the Department for Health and Social Services at Welsh Government
- NHS Wales
- Students, academics and universities
- Other areas of the Welsh Government
- Other government departments
- Media
- Individual citizens.

The statistics are used in a variety of ways. Some examples of these include:

- Advice to Ministers
- To assess, manage and monitor NHS Wales performance against targets/standards
- To inform service improvement projects for areas of focus and opportunities for quality improvement
- As a source of information to inform GP referral decisions and to advise patients when referring them for diagnostic or therapy services
- To contribute to news articles on waiting times in Wales
- By NHS Local Health Boards, to benchmark themselves against other Local Health Boards
- To help determine the service the public may receive from NHS Wales.

If you are a user and do not feel the above list adequately covers you please let us know via stats.healthinfo@gov.wales.

Using administrative data for statistical purposes

The referral to treatment data collection uses administrative data held by hospital systems within local health boards. As detailed in the following paragraphs, the health boards submit aggregate data to the NHS Wales Informatics Service (NWIS), who then provides the data to Welsh Government for publication. The aggregate data is subject to validation checks as detailed in the sections that follow.

We have used the guidance provided by the UK Statistics Authority's [Administrative Data Quality Assurance Toolkit](#) to carry out an initial assessment of the risk profile of the aggregate data used to produce the Referral to Treatment Times release.

We consider the data to be medium risk in terms of data quality, and high profile in terms of public interest. The reasons for this are that there are well defined standards and definitions in place for the data collected, but the data are collected from multiple hospital sites across local health boards and there may be some variation in how the data are collected and processed at different sites.

According to the UK Statistics Authority toolkit, this suggests we should be seeking enhanced or comprehensive assurance (A2/A3) in areas such as the collection process, communication with data suppliers, quality assurance methods and documentation

Strengths and Limitations of the data

Strengths

The information is processed and published frequently and in an ordered manner to enable users to see the statistics when they are current and of greatest interest.

Outputs have a clear focus on Wales and have been developed to meet the internal and external user need in Wales.

There are clear, well defined standards, definitions and accompanying guidance in place in the [NHS Wales Data Dictionary](#), helping to ensure consistency in data submitted by all LHBs across Wales.

Efficient use has been made of administrative data sources to produce outputs. The administrative data source used is the patient administrative system which collects demographic data, medical records and diagnostic information for patients at Welsh hospitals.

Detailed statistics are provided via our StatsWales website by LHB, waiting time and specialty.

Limitations

The StatsWales information is intended for a more informed audience, with little explanation to enable other users to interpret the data appropriately.

There is no mapped data.

Because of the devolved administrations and differing policy, there is less scope for direct UK comparisons (see 'Coherence' later in the document).

General

Care should be taken when making monthly comparisons of the Referral to Treatment (RTT) figures. Measures of waiting time performance are subject to seasonality. For example, adverse weather conditions may result in an impact on the health service's ability to preserve elective capacity. These factors can affect waiting times and should be considered when making comparisons across time.

Data processing cycle

Data collection

The data presented draws on management information held by Local Health Boards relating to the management of patients who have been referred for hospital treatment. Guidance is provided to the NHS in Wales about how such patients should be managed and how to measure and report the relevant data. The data is reported monthly by Local Health Boards via the NHS Wales Informatics Service (NWIS) switching service. The data collection has been in place since April 2007.

Information on the data collection for referral to treatment is available at [WHC\(2007\)014](#). This includes the scope of the data collection, guidance on measurement of referral to treatment times and details of the collection from Local Health Boards. Further details and examples of the application of rules are available at [WHC\(2007\)075](#).

There were further changes to the collection in 2011, details of which are available here in [DSCN 2011/07](#) and in the [Comparability](#) section of this report.

Waiting times for outpatient and inpatient appointments outside the scope of RTT are also reported by Local Health Boards via NHS Wales Informatics Service (NWIS). These include all those people resident in the Local Health Board area who are waiting for NHS-funded hospital treatment. The patients reported on these waiting lists are not reported in the referral to treatment times data as scope of the Referral to Treatment definitions excludes them. This data is presented separately in the release.

Validation and verification

NWIS validate the data using their Validation at Source facility. This allows Local Health Boards to check and correct or comment on their data and to provide contextual information where unexpected changes have occurred. Examples of the validation checks include month on month changes, checks that data for every expected specialty is present, checks to ensure data is within predefined tolerances, checks with other data sources (Patient Episode Database for Wales) and checks that valid codes are submitted for all the fields.

[The quality assurance protocols](#) followed by the Information Services Division of NWIS are available from their website.

Once the Health, Social Services and Population Statistics team receives the data, it goes through further validation and verification checks. For example, carrying out further arithmetic consistency checks and checking trends in the data. We may seek further commentary from Local Health Boards to assist with interpretation. The Welsh Government does not input any data to the submissions and any changes are made by the Local Health Boards and the data is resubmitted via NWIS.

Publication

The statistics published by the Health, Social Services and Population Statistics team are produced by summarising the information provided by the Local Health Boards. This is a semi automated process but key points and commentary are produced separately. The information in the release is

checked against the data supplied. The information presented in StatsWales is produced automatically.

The data for the latest month is published as provisional and may be revised in future updates. This is to enable Local Health Boards to submit revised data if they carry out further validation following submission.

Data is published monthly in the [NHS Performance and Activity Summary](#) as well as on [StatsWales](#). [A statistical release](#) containing more detailed analysis and commentary is published annually.

Changes to the statistical release

From April 2017 Welsh Government began publishing monthly NHS activity and performance statistics on one day, with annual rather than quarterly analytical releases. Please see the Chief Statistician's update for more information. We welcome feedback on the new look release as well as any further analysis that would be of interest.

National Statistics status

The United Kingdom Statistics Authority has designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the [Code of Practice for Statistics](#).

National Statistics status means that official statistics meet the highest standards of trustworthiness, quality and public value.

All official statistics should comply with all aspects of the Code of Practice for Statistics. They are awarded National Statistics status following an assessment by the UK Statistics Authority's regulatory arm. The Authority considers whether the statistics meet the highest standards of Code compliance, including the value they add to public decisions and debate.

It is Welsh Government's responsibility to maintain compliance with the standards expected of National Statistics. If we become concerned about whether these statistics are still meeting the appropriate standards, we will discuss any concerns with the Authority promptly. National Statistics status can be removed at any point when the highest standards are not maintained, and reinstated when standards are restored.

Disclosure and confidentiality

While there are some small numbers in the data collected and presented, the information is not considered to be sensitive in nature and there is no identifying information presented.

We adhere to our [statement on confidentiality and data access](#) and the Data governance principle of the Trustworthiness pillar in the [Code of Practice for Statistics](#).

Well-being of Future Generations Act (WFG)

The Well-being of Future Generations Act 2015 is about improving the social, economic, environmental and cultural well-being of Wales. The Act puts in place seven well-being goals for

Wales. These are for a more equal, prosperous, resilient, healthier and globally responsible Wales, with cohesive communities and a vibrant culture and thriving Welsh language. Under section (10)(1) of the Act, the Welsh Ministers must (a) publish indicators (“national indicators”) that must be applied for the purpose of measuring progress towards the achievement of the Well-being goals, and (b) lay a copy of the national indicators before the National Assembly. The 46 national indicators were laid in March 2016.

Information on the indicators, along with narratives for each of the well-being goals and associated technical information is available in the [Well-being of Wales report](#).

Further information on the [Well-being of Future Generations \(Wales\) Act 2015](#).

The statistics included in this release could also provide supporting narrative to the national indicators and be used by public services boards in relation to their local well-being assessments and local well-being plans.

Quality

Health, Social Care and Population Statistics team adhere to our [quality strategy](#) and the Quality pillar of the [Code of Practice for statistics](#).

Specifically, the list below details the six dimensions of the European Statistical System and how we adhere to them.

Relevance

The degree to which the statistical product meets user needs for both coverage and content.

The statistics cover all aspects of referral to treatment times and are used as the measure of performance against national targets for the NHS in Wales - see [Policy and operational context](#). Other interests and uses of this data are outlined in users and uses.

We encourage users of the statistics to contact us to let us know how they use the data. It would not be possible to provide tables to meet all user needs, but the tables published in the release and StatsWales aim to answer the common questions.

We consult with key users prior to making changes, and where possible publicise changes on the internet, at committees and other networks to consult with users more widely. We aim to respond quickly to changes from policy colleagues to ensure our statistics remain relevant.

We actively review all our outputs and welcome feedback.

Accuracy

The closeness between an estimated result and an (unknown) true value

Accuracy can be broken down into sampling and non-sampling error. Non-sampling error includes areas such as coverage error, non-response error, measurement error, processing error.

This is an established data collection based on 100% data i.e. not a sample.

We haven't yet investigated non-sampling error; however processing errors could occur where clerks in hospitals incorrectly input data into their administrative systems or measurement errors could occur from staff in hospitals having different interpretations of definitions. To reduce non-sampling error, standards and guidance are provided about the data collections. Standards relating to this data collection have been reviewed and passed by the Welsh Information Standards Board. Where non-sampling error affects the data, we provide full information for users to allow them to make informed judgements on the quality of the statistics, particularly if there are limitations of the data.

For most months, all LHBs supply data and as such no estimation of the figures is needed. Where estimates are used, because an LHB is unable to supply data for a particular month, this is clearly outlined in the release.

The outputs include key quality information on coverage, timing and geography.

There are quality assurance procedures in place to understand and explain movements in the data and to check that the computer system is calculating the published statistics correctly.

Estimates

Occasionally local health boards do not submit complete information in time for the release. When this occurs an estimate is included within the data presented. Figures which include a known estimate are marked with an "(e)".

Month	Description
December 2011 to February 2012 – open pathways (waiting) December 2011 to March 2012 – closed pathways (those treated)	December 2011 to February 2012 figures for Aneurin Bevan for those waiting to start treatment and those treated, as well as March 2012 figures for those treated, are estimated using their data for November 2011. Also, the data since April 2012 for those treated is not fully validated. This is following the implementation of a new Patient Administration System at the end of 2011. Due to technical difficulties, Aneurin Bevan were unable to run the report to provide figures for those patient pathways treated for June and July 2012 and to avoid not submitting any figures, the figures for those treated that were previously submitted for May 2012 have been used as estimates.

June and July 2012 – closed pathways (those treated)	Due to technical difficulties, Aneurin Bevan were unable to run the report to provide figures for those patient pathways treated for June and July 2012 and to avoid not submitted any figures, the figures for those treated that were submitted for May 2012 have been used as estimates.
October 2015 – open pathways (waiting)	Figures for the specialities Allied Health Professionals and Diagnostic Services for the Cwm Taf University LHB could not be accurately provided. Therefore, figures for September 2015 have been used as estimates.
November 2016 – closed pathways (those treated)	November 2016 figures for paediatric surgery at Betsi Cadwaladr could not be accurately provided. Therefore, figures for October 2016 have been used as estimates.
April 2017 – open pathways (waiting).	Figures for the specialities Allied Health Professionals and Diagnostic Services for Cwm Taf University LHB could not be accurately provided. Therefore, figures for March 2017 have been used as estimates.

Revisions

Any revisions to the data will be noted in the information accompanying the StatsWales tables each month, and any large revisions will be noted on the summary headline page.

Notes at the end of the release inform the users whether the outputs have been revised or not (denoted r). We will also give an indication of the size of the revision between the latest and previous release. Revisions to data occur for a number of reasons, late returned data, incorrect estimates or revised back data.

In the unlikely event of incorrect data being published, revisions would be made and users informed in conjunction with the Welsh Government's Revisions, Errors and Postponements Arrangements.

Timeliness and punctuality

Timeliness refers to the lapse of time between publication and the period to which the data refer.

Punctuality refers to the time lag between the actual and planned dates of publication

All outputs adhere to the Code of Practice by pre-announcing the data of publication through the Upcoming calendar on our website. Furthermore, should the need arise to postpone an output this would follow the Welsh Government's Revisions, Errors and Postponements arrangements.

We publish releases as soon as practical after the relevant time period. Data for the end of month position is published around six weeks after the reference date. This allows for the significant validation by Local Health Boards, NWIS and the Health Statistics and Analysis Unit.

Accessibility and clarity

Accessibility is the ease with which users are able to access the data, also reflecting the format(s) in which the data are available and the availability of supporting information. Clarity refers to the quality and sufficiency of the metadata, illustrations and accompanying advice.

The statistics are published in an accessible, orderly, pre-announced manner on the Welsh Government website at 9:30am on the day of publication. An RSS feed alerts registered users to this publication. Simultaneously the releases are also published on the [National Statistics Publication Hub](#). All releases are available to download for free.

More detailed data is available at the same time on the StatsWales website and this can be manipulated online or downloaded into spreadsheets for use offline.

We aim to use Plain English in our outputs and all outputs adhere to the Welsh Government accessibility policy. Furthermore, all our headlines are published in Welsh and English.

Further information regarding the statistics can be obtained by contacting the relevant staff detailed on the release or via stats.healthinfo@wales.gsi.gov.uk

Comparability

The degree to which data can be agreed over both time and domain.

Where there are changes to the data provided, this is shown clearly in the outputs. Where advance warning is known of future changes these will be pre-announced in accordance with Welsh Government arrangements.

For example, when technical changes were made to waiting times in October 2010, this was clearly explained in the release and a separate technical note was also published with more details. A summary of changes over time has been added to the table below.

There is similar information available from other parts of the UK but the data is not exactly comparable due to local definitions and standards in each area – see Coherence below.

Agreed standards and definitions within Wales provide assurance that the data is consistent across as Local Health Boards.

The time series in the annual bulletin starts from September 2011. This is because from this date onwards local health boards submitted a combined RTT return rather than separate main RTT and Cardiac RTT returns as they had done previously (see table).

Summary of changes over time

Effective from date	Description
1st April 2007	As part of Access 2009 - Delivering a 26 week Patient Pathway, the new Referral to Treatment Times monthly data collection commenced on 1st April 2007. DSCN (2007) 08
1 st April 2008	Local Health Board code became mandatory in collection. DSCN (2008) 01 .

1st October 2009	New Local Health Boards established. DSCN (2009) 09
1 st September 2011	Referral to Treatment times and Cardiac Referral to Treatment times collections are retired, new Referral to Treatment Times (Combined) established which includes Cardiac RTT within it. DSCN (2011) 07

Coherence

The degree to which data that are derived from different sources or methods, but which refer to the same phenomenon, are similar.

Every month the data are all collected from the same sources and adhere to the national standard. They are also coherent within and across organisations in Wales.

Other UK countries also measure referral to treatment waiting times. However the outputs differ in different countries because they are designed to help monitor policies that have been developed separately by each government. Further investigation would be needed to establish whether the definitional differences have a significant impact on the comparability of the data.

Statisticians in all four home nations have collaborated as part of the 'UK Comparative Waiting Times Group'. The aim of the group is to look across published health statistics, in particular waiting times, and compile a comparison of (i) what is measured in each country, (ii) how the statistics are similar and (iii) where they have key differences. The comparison of Diagnostic data across the countries is available here: [Health Waiting Time Statistics](#).

England

In England, statistics on Referral to Treatment (RTT) waiting times are published on a monthly and annual basis by [NHS England](#).

The data measures RTT waiting times in weeks, split by treatment function. The treatment functions are based on consultant specialties. The length wait is reported by Incomplete or complete pathway. Complete pathways are split depending on if the patient was admitted or not.

In the NHS Operating Framework 2012-13, the operational standards are 90 per cent for admitted and 95 per cent for non-admitted completed waits as set out in the NHS Constitution. In order to sustain the delivery of these standards, trusts will need to ensure that 92 per cent of patients on an incomplete pathway should have been waiting no more than 18 weeks.

Scotland

In Scotland, statistics on Referral To Treatment (RTT) waiting times have been published on a quarterly basis by [Information Services Division \(ISD\) Scotland](#) since early 2011.

Better Health Better Care in Scotland which was published in December 2007 set out a commitment: "the 18 week Referral To Treatment (RTT) standard will address the whole patient care pathway,

from receipt of a GP referral, up to the point at which each patient is actually admitted to hospital for treatment".

The Scottish Government has determined that the 18 Weeks RTT target should be delivered for at least 90% of patients. This target allows, for example, the relatively small proportion of cases where it is not clinically appropriate for the patient to be seen and treated within 18 weeks and also to take account of any exceptional increase in demand for secondary care services.

These data are still under development. NHS Boards continue to work closely with the Scottish Government and ISD to update IT and other systems in order to continue to improve the linking of all stages of a patient's journey to support the measuring and reporting against the 18 Weeks RTT target. Some caution should be exercised in using and interpreting these data at this developmental stage.

Northern Ireland

In Northern Ireland, statistics on waiting times are published on a quarterly basis by the [Department of Health, Social Services and Public Safety \(DHSSPS\)](#).

Rather than an overall referral to treatment time for patients, data is published on the number of patients waiting at the end of each quarter for:

- a first outpatient appointment;
- a first appointment at an Integrated Clinical Assessment and Treatment Service (ICATS);
- a diagnostic service; and
- admission for inpatient treatment.

The 2017-18 Ministerial waiting times target, for outpatient waiting times in Northern Ireland, states that:

- By March 2018, 55% of patients should wait no longer than 13 weeks for inpatient/day case treatment, with no patient waiting longer than 52 weeks
- By March 2018, 50% of patients should wait no longer than 9 weeks for a first outpatient appointment; with no patient waiting longer than 52 weeks
- By March 2018, 75% of patients should wait no longer than 9 weeks for a diagnostic test, with no patient waiting longer than 26 weeks
- From April 2017, all urgent diagnostic tests should be reported on within two days of the test being undertaken

Dissemination

All the data is of sufficient quality following the significant checking outlined above to justify publication. The high level messages are published monthly in the NHS Activity and Performance Summary and annually in a more detailed release.

More detailed data is published on our interactive website, StatsWales. Long-term trends and additional context are also updated monthly in our interactive dashboard here.

Useful links

[NHS Wales Data Dictionary](#)

[NHS Wales Data Dictionary: pages on Referral to Treatment Waiting Times](#)

Referral to Treatment Welsh Health Circulars: [WHC\(2007\)014](#), [WHC\(2007\)075](#),

[Referral To Treatment Statistical Release](#)

[Diagnostics and Therapies Statistical Release](#)

[Waiting Times for NHS Services Frequently Asked Questions](#)

[StatsWales](#)

[Information Quality Improvement](#)

[NHS Information Standards](#)

[Local Health Board Data Quality Policies](#)

[UK Statistics Authority: Quality Assurance of Administrative Data](#)

Evaluation

We always welcome feedback on any of our statistics. Please contact us on stats.healthinfo@gov.wales

Produced by: Knowledge & Analytical Services, Welsh Government

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