18 weeks Referral to Treatment
Quarter ending 30 June 2020
Publication date: 25 August 2020
This is an Official Statistics publication


All official statistics should comply with the UK Statistics Authority’s Code of Practice which promotes the production and dissemination of official statistics that inform decision making. They can be formally assessed by the UK Statistics Authority’s regulatory arm for National Statistics status.

Find out more about the Code of Practice at:

Find out more about official statistics at:
Contents

Introduction ...................................................................................................................................3

Data Completeness ..................................................................................................................3

Main Points ...................................................................................................................................5

Results and Commentary .............................................................................................................6

Completed 18 weeks RTT patient journeys each month ........................................................6

 Variation across NHS Boards ...............................................................................................8

RTT Patients seen within 18 weeks, performance against National Standard ......................9

 18 weeks performance across NHS Boards ......................................................................11

Calculating the Patient Waiting Time .....................................................................................12

 Variation across NHS Boards .............................................................................................14

Glossary ......................................................................................................................................15

Contact ........................................................................................................................................16

Further Information .....................................................................................................................16

Open data ...................................................................................................................................16

Rate this publication ...................................................................................................................16

Appendices .................................................................................................................................17

Appendix 1 – Background information ...................................................................................17

 History ......................................................................................................................................17

Other Waiting Times Targets & Standards ...........................................................................17

What is a Unique Care Pathway Number (UCPN) and Clinical Outcome Code Recording? ..........................................................................................................................18

Data Limitations ......................................................................................................................18

Calculation & Exclusions .......................................................................................................19

Data collection and methods .................................................................................................20

UK Comparisons ....................................................................................................................20

Appendix 2 – Data Quality ......................................................................................................21

Appendix 3 – Publication Metadata ........................................................................................25

Appendix 4 – Early access details .........................................................................................27

Appendix 5 – PHS and Official Statistics ...............................................................................28
Introduction

Waiting times are important to patients and are a measure of how the NHS is responding to demand for services. Measuring and regular reporting of waiting times highlight where there are delays in the system and enables monitoring of the effectiveness of NHSScotland’s performance. Public Health Scotland (PHS, previously known as Information Services Division (ISD)), continues to be committed to improving the information presented in waiting times publication in partnership with our key stakeholders, NHS Boards and the Scottish Government. This publication reports on completed patient pathways covered by the 18 weeks Referral to Treatment (RTT) Standard providing detail on the proportion of journeys that can be fully measured from referral to treatment.

The 18 weeks RTT Standard has been determined by the Scottish Government and states:

“90% of patients should have a completed pathway from referral to first treatment commencing within 18 weeks”.

The 18 weeks RTT Standard builds on previous targets, which set maximum waiting times for stages of treatment - first outpatient consultation, diagnostic tests, and inpatient and day case treatment. The standard does not focus on a single stage of treatment, for example, the time from referral to first outpatient appointment, or the time from being added to the waiting list until treatment starts. Instead, it applies to the whole pathway i.e. from referral to the point where each patient is treated. As a result, 18 weeks RTT performance is dependent on both Stage of Treatment and Diagnostics waiting times.

This standard applies to waiting times for consultant led services and waits are adjusted to account for periods of unavailability. Further information about services covered by the RTT standard and waiting time calculations can be found in Background information section of the appendix.

This report reflects on how the national response to the COVID-19 pandemic has impacted the experience of patients waiting for elective care and is split into 3 sections; completed 18 weeks RTT patient pathways, percentage of fully measurable journeys seen within 18 weeks and detail on the proportion of patient journeys which could be fully tracked from referral to treatment each month.

Data Completeness

PHS receives monthly aggregated data from each NHS Board. This data details the number of eligible patient pathways which concluded in that month and the proportion which could be fully linked from referral to treatment. The overall number of fully measurable patient journeys is divided into those which were less than or equal to 18 weeks and those greater than 18 weeks. Additional detail is provided on the proportion of outpatient appointments where clinical outcome codes were recorded, this is a crucial step in being able to accurately measure and link up all stages of a patient’s journey.
NHS Boards extract the data from their systems and carry out quality assurance checks before sending it to PHS where further quality assurance checks are made.

It can be challenging for Boards to provide RTT information, under normal circumstances, as it requires the full patient pathway to be measured. Some Boards are able to link all parts of a patient pathway however, others find this more challenging within the constraints of their local systems.

Providing RTT data requires significant local resource to collate and quality assure data submissions. This has been especially challenging over the last two quarters, when additional local demands have been placed on Boards during the COVID-19 pandemic.

The previous release of this publication scheduled for 26 May 2020, reporting on data up to 31 March 2020, was cancelled due to national reporting pressures that NHS Boards were facing in response to the COVID-19 pandemic. While national statistics are available for release this time, there remains a significant pressure on local resource and planning as the response to the pandemic evolves. As a result, the data submitted for recent months may not have been subject to the same level of checking and scrutiny as previous reports. In addition:

- NHS Grampian are unable to provide data on completed eligible RTT patient pathways which concluded in March, April, May and June 2020 due to the burden of national reporting and diversion of resource.

- NHS Ayrshire and Arran data for July 2017 to June 2020, contains estimates for some of the measures in this report. These estimates are deemed statistically robust by PHS up to December 2019 and PHS are working with Board on an ongoing basis to understand the impact of recent reporting constraints on the methodology.

As a result, the overall data shown within this report is incomplete and will not provide a comprehensive picture of 18 week RTT activity in Scotland.

Figures and trends in this report have been highlighted to show which months are affected by the missing data, and caution should be applied when interpreting any of the long term trends as Scotland figures are incomplete from March to June 2020 (inclusive).

For further information on the collection, quality assurance and reporting of this data along with information about RTT standards including data collected across the 4 UK nations, please refer to the Data Quality and Background information sections of this report.
Main Points

Performance against the 18 weeks RTT Standard is based on fully measurable completed patient journeys.

The data presented in this release has been impacted in part by COVID-19 (Coronavirus) outbreak. In particular, on 17 March NHSScotland was placed under emergency footing by the Cabinet Secretary, NHS Boards were asked to suspend all non-urgent elective treatment. Later, on 23 March the nation entered a period of ‘lockdown’. This has affected normal referral and treatment patterns since then. As Scotland moved into Phase 2 of the ‘lockdown’, from the 19 June, Boards started to resume some services as part of the planned remobilisation of services. Where possible we have highlighted aspects of the statistics that are influenced by these factors, see Results and Commentary for further information.

Please note, all Boards have endured significant pressure on local resource and planning as the response to the pandemic evolves. As a result, the data submitted for recent months may have not been subjected to the usual levels of quality assurance. In addition, NHS Grampian have been unable to submit data from March 2020 onwards. Please therefore interpret the latest statistics with caution.

- In June 2020, a total of 45,166 patient journeys eligible under the 18 weeks RTT Standard were identified by NHS Boards in Scotland. The waiting time could be fully measured for 84.5% of these patient journeys. This compares to 89.5% in February 2020 and is representative of a sustained drop-off in this measure since April.

- Of the fully measurable patient journeys which were completed in June 2020, 77.8% of patients across Scotland were reported as being treated within 18 weeks of referral. The figures for April and May were 81.2% and 80.7% respectively. Given the impact of the COVID-19 response on the volume of patients seen, caution should be taken when comparing these percentages with previous statistics.

- Including those patient journeys that cannot be measured against the standard, there has been a substantial reduction in the overall number of eligible 18 weeks RTT waits reported from March onwards; dropping to a low of 27,900 in April before gradually increasing to 45,166 in June. The comparable figure for February was 94,481 (excluding NHS Grampian). Figure 1 shows the detail.
Results and Commentary

This publication summarises national data on waiting times for completed patient pathways covered by the 18 weeks Referral to Treatment (RTT) Standard in NHSScotland, between November 2011 and June 2020. This report includes additional detail about completed 18 weeks RTT patient pathways, performance against the National Standard and proportion of patient journeys which could be fully tracked from referral to treatment each month.

The data presented in this report has also been impacted in part by COVID-19 pandemic.

On 17 March NHSScotland was placed on an emergency footing by the Cabinet Secretary, NHS Boards were asked to suspend all non-urgent elective treatment.

Later on 23 March the nation entered a period of ‘lockdown’. These measures affected normal referral and treatment patterns from March 2020 to present. Where possible we have highlighted aspects of the statistics that are influenced by this.

As Scotland has progressed through the different recovery phases following lockdown, NHS services have been starting to resume and there has been an expansion in the use of virtual consultations and appointments, allowing patients to be seen remotely. During Phase one, urgent procedures, along with primary care and community services began operating although at reduced capacity. In Phase two, remobilisation plans began being implemented by NHS Boards and Integrated Joint Boards to increase the provision for the backlog of demand, urgent referrals and the triage of routine services.


As outlined in the introduction, there are a number of data quality issues affecting the data shown in this report. Figures and trends throughout have been highlighted to show which months are affected and caution should be applied when interpreting any of the long term trends for Scotland particularly March to June 2020 (inclusive).

For more information please refer to the Data Quality section of this report.

Completed 18 weeks RTT patient journeys each month

The number of completed patient journeys, eligible under the 18 weeks RTT Standard, is shown in Figure 1 below.

There is monthly variation in the number of eligible RTT patient journeys and the overall trend shows a gradual decrease from 2011. In addition, there has been a substantial reduction in completed patient journeys recorded from March 2020 onwards as usual referral and treatment patterns have been impacted by COVID-19 outbreak. Specifically:
• In March 2020, a total of 74,313 patient journeys eligible under the 18 weeks RTT Standard were identified by NHS Boards in Scotland. This represents a decrease of 26% from February 2020, when 100,448 journeys were recorded across Scotland (note that this figure for February includes NHS Grampian).

• Excluding NHS Grampian from the February figures (92,875), to provide a direct comparison, the number of eligible patient journeys decreased by 20%.

• The number of completed patient journeys decreased further during April 2020 to 27,900, which equates to 38% of the patient journeys completed during March 2020.

• There was a slight increase in the number of completed patient journeys recorded during May up 4,456, an increase of 16%. Followed by a greater increase of 12,810 (40%) in June.

In June 2020, a total of 45,166 patient journeys eligible under the 18 weeks RTT Standard were identified by NHS Boards in Scotland, this compares to 101,743 in June 2019 (or 94,481 excluding NHS Grampian for June 2019). Figures for June 2020 are equivalent to 48% of the total patient journeys completed in June 2019 (note this comparison excludes NHS Grampian from June 2019 figures).

The fall in completed journeys in March and April 2020 followed by the gradual recovery in subsequent months, reflects the immediate impact of the National 'lockdown' when NHS Services were placed on emergency footing to prepare for the COVID-19 pandemic, along with the start of the phased remobilisation and recovery of some NHS services which has occurred since 19 June when Scotland moved into Phase two of the 'lockdown'.
Figure 1: Total number of patient journey eligible under 18 weeks RTT; Monthly trend, NHSScotland\textsuperscript{1,2}: from November 2011 to June 2020

1. Note that NHS Grampian data is not available for March to June 2020 inclusive
2. NHS Ayrshire and Arran have provided partially estimates figures from July 2017 to June 2020

Variation across NHS Boards

Table 2 demonstrates the variation in reduction of completed journeys across Scotland when comparing the number of completed patient journeys during June 2020, in comparison to the same month for the previous year by NHS Board.
Table 2: Comparison of eligible RTT patient journeys completed in June 2019 and June 2020\(^1,2\) by NHS Board of Treatment

<table>
<thead>
<tr>
<th>Health Board of Treatment</th>
<th>Total completed 18 weeks RTT patient journeys</th>
<th>Difference from June 2019 to 2020</th>
<th>Percentage change</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHSScotland</td>
<td>101,743</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>NHSScotland (^2) (adjusted to exclude NHS Grampian)</td>
<td>94,481</td>
<td>45,166</td>
<td>-49,315</td>
</tr>
<tr>
<td>Golden Jubilee</td>
<td>169</td>
<td>95</td>
<td>-74</td>
</tr>
<tr>
<td>NHS Ayrshire &amp; Arran</td>
<td>7,399</td>
<td>2,251</td>
<td>-5,148</td>
</tr>
<tr>
<td>NHS Borders</td>
<td>2,331</td>
<td>1,160</td>
<td>-1,171</td>
</tr>
<tr>
<td>NHS Dumfries &amp; Galloway</td>
<td>2,231</td>
<td>849</td>
<td>-1,382</td>
</tr>
<tr>
<td>NHS Fife</td>
<td>6,005</td>
<td>2,499</td>
<td>-3,506</td>
</tr>
<tr>
<td>NHS Forth Valley</td>
<td>4,752</td>
<td>2,597</td>
<td>-2,155</td>
</tr>
<tr>
<td>NHS Grampian (^1)</td>
<td>7,262</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>NHS Greater Glasgow &amp; Clyde</td>
<td>28,131</td>
<td>15,103</td>
<td>-13,028</td>
</tr>
<tr>
<td>NHS Highland</td>
<td>8,564</td>
<td>5,207</td>
<td>-3,357</td>
</tr>
<tr>
<td>NHS Lanarkshire</td>
<td>11,087</td>
<td>3,098</td>
<td>-7,989</td>
</tr>
<tr>
<td>NHS Lothian</td>
<td>14,976</td>
<td>7,460</td>
<td>-7,516</td>
</tr>
<tr>
<td>NHS Orkney</td>
<td>582</td>
<td>435</td>
<td>-147</td>
</tr>
<tr>
<td>NHS Shetland</td>
<td>469</td>
<td>250</td>
<td>-219</td>
</tr>
<tr>
<td>NHS Tayside</td>
<td>7,193</td>
<td>3,934</td>
<td>-3,259</td>
</tr>
<tr>
<td>NHS Western Isles</td>
<td>592</td>
<td>228</td>
<td>-364</td>
</tr>
</tbody>
</table>

1. Note June 2020 data is not available for NHS Grampian.
2. NHSScotland figures have been adjusted to exclude NHS Grampian from June 2019 figures.

NHS Lanarkshire and NHS Ayrshire and Arran have reported the largest decreases in completed patient journeys when comparing the month of June for the last two years, with reductions of 72.1% and 69.6% respectively. NHS Orkney and NHS Highland have seen the smallest percentage reductions in total patient pathways, reporting 25.3% and 39.2% respectively.

NHS Greater Glasgow and Clyde is the largest NHS Board in Scotland and has seen the largest reduction in overall numbers of patient pathways (-13,028) as shown in Table 2 above, however this only represents a fall of 46.3% in 18 weeks RTT patient journeys when compared to June 2019.

RTT Patients seen within 18 weeks, performance against National Standard

Performance against the 18 weeks RTT standard can only be measured for patient journeys which can be fully linked from referral to treatment each month, this equates to 84.5% of the
total patient journeys reported in the previous section. Further information about the proportion of patient journeys which could be fully measured is described in the concluding section.

During June 2020, 77.8% of patients on eligible journeys across Scotland were reported as being treated within 18 weeks of referral, this is similar to performance in June 2019 (79.2% or 77.9% when NHS Grampian is excluded). In March, April and May 2020, the figures were 80.2%, 81.2% and 80.7% respectively.

When comparing the percentage of completed journeys within 18 weeks in recent months to performance prior to COVID-19 outbreak, consideration should be given to the reduction in referrals and additional screening/triage of patients that is being implemented to ensure urgent patients are prioritised and seen by services. For example, the small increases seen in performance during March, April and May 2020, are likely to reflect changes in referral and treatment patterns during a period where many NHS services have been working at reduced capacity.

Figure 2 below shows a monthly trend for the national performance against the 18 weeks RTT standard based on fully measurable patient journeys completed each month since 2011 (excluding NHS Tayside from July-December 2017, and NHS Grampian from March to June 2020).

Since the introduction of the 90% RTT standard, NHSScotland performance has decreased from a reported peak of 92.4% in May and June 2012. The target was last met in June 2014 and since then has been in gradual decline until September 2019, before stabilising prior to the onset of the pandemic.
Figure 2: 18 weeks RTT performance, NHSScotland between November 2011 and June 2020\(^1,2\)

1. NHSScotland figures are incomplete from March-June 2020 due to missing data for NHS Grampian
2. These percentages are based on those patients’ journeys which concluded in that month and could be fully measured.

18 weeks performance across NHS Boards

In June 2020, NHS Borders, NHS Orkney and NHS Western Isles met the 18 weeks Referral to Treatment Standard. 11 NHS Boards did not meet the Standard. Figure 3 below shows the detail.

In March 2020, NHS Borders, NHS Orkney, NHS Shetland and NHS Western Isles met the 18 weeks Referral to Treatment Standard. 10 NHS Boards did not meet the Standard. Please refer to the excel tables on the PHS webpage for detail on each NHS Board.

Performance reported for both March and June 2020 should be seen within the context of COVID-19 pandemic as outlined above.
Calculating the Patient Waiting Time

To measure an individual patient’s whole journey waiting time under the 18 weeks RTT target, it is necessary for NHS Boards to link all the stages of the patient’s journey, including all delays.

Figure 4 below shows the percentage of patients whose journey could be fully measured (i.e. % linkage) across NHSScotland since November 2011.
At least 89% of patient journeys each month from February 2012 to March 2020, could be fully measured from referral to treatment. Linkage fell to 85% in April 2020 and figures have remained at a similar level during May and June 2020.

This the first time that linkage figures have been below 86% since record began in 2011, this fall in linkage is likely to be because usual patient care pathways have been disrupted during COVID-19 pandemic. Table 3 below compares linkage in 2019 and 2020.

Figure 4: Percentage of Patients whose 18 weeks RTT Journey could be fully measured each month, NHSScotland, November 2011 to June 2020¹

¹. NHSScotland figures are incomplete from March-June 2020 due to missing data for NHS Grampian
Table 3: Fully measurable 18 weeks RTT patient journeys in 2019 and 2020.

<table>
<thead>
<tr>
<th>Month</th>
<th>2019</th>
<th></th>
<th>2020</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fully Measureable journeys</td>
<td>All Patients journeys</td>
<td>% Linkage</td>
<td>Fully Measureable journeys</td>
</tr>
<tr>
<td>January</td>
<td>103,093</td>
<td>113,251</td>
<td>91.0%</td>
<td>95,735</td>
</tr>
<tr>
<td>February</td>
<td>95,908</td>
<td>105,289</td>
<td>91.1%</td>
<td>89,892</td>
</tr>
<tr>
<td>March</td>
<td>102,593</td>
<td>112,692</td>
<td>91.0%</td>
<td>66,271</td>
</tr>
<tr>
<td>April</td>
<td>93,936</td>
<td>103,924</td>
<td>90.4%</td>
<td>23,747</td>
</tr>
<tr>
<td>May</td>
<td>98,305</td>
<td>108,898</td>
<td>90.3%</td>
<td>27,752</td>
</tr>
<tr>
<td>June</td>
<td>91,530</td>
<td>101,743</td>
<td>90.0%</td>
<td>38,147</td>
</tr>
</tbody>
</table>

1. NHSScotland figures are incomplete from March-June 2020 due to missing data for NHS Grampian

Variation across NHS Boards

Linkage varies across NHS Boards in NHSScotland, six NHS Boards reported that all eligible 18 weeks RTT patient journeys could be fully measured in June 2020. They are NHS Forth Valley, NHS Lanarkshire, NHS Shetland, NHS Tayside, NHS Western Isles and Golden Jubilee National Hospital.

Due to the possibility of treatments being carried out at multiple tertiary centres or the added complexity of some patients being on multiple concurrent pathways, some NHS Boards are unable to fully link the patient’s pathway.

To see the trend of the number of patient journeys completed within 18 weeks and the percentage of patient journeys that could be fully measured by NHS Boards please refer to the excel tables on the PHS webpage.

For further commentary of the linkage figures for individual Health Boards, October 2018 – June 2020 refer to the Data Quality section within this report.
# Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient journey</td>
<td>A patient's 18 weeks RTT journey begins with the receipt of referral for treatment and ends with the start of treatment.</td>
</tr>
<tr>
<td>NHS Board of Treatment</td>
<td>The NHS Board in which treatment starts.</td>
</tr>
<tr>
<td>Number of patient journeys with 18 weeks</td>
<td>The number of patient journeys where the start of treatment was within 18 weeks (126 days or less) of the initial referral, minus any periods of patient unavailability.</td>
</tr>
<tr>
<td>Number of patient journeys over 18 weeks</td>
<td>The number of patient journeys where the start of treatment was over 18 weeks (greater than 126 days) from the initial referral, minus any periods of patient unavailability.</td>
</tr>
<tr>
<td>Patient unavailability</td>
<td>Unavailability, for patients without a date for treatment, is a period of time when the patient is unavailable for treatment. Unavailability can be for medical or patient advised reasons.</td>
</tr>
<tr>
<td>Unique Care Pathway Number (UCPN)</td>
<td>A unique number allocated to all new referrals, to enable identification of patient journeys and the linking of all the stages in the patient's journey.</td>
</tr>
<tr>
<td>Clinical Outcome Code Recording (COCR)</td>
<td>COCR indicates the status of the patient's journey after every Outpatient appointment</td>
</tr>
</tbody>
</table>
Contact

Helen Tierney Kirk, Senior Information Analyst
Phone: 0141 282 2056

Marios Alexandropoulos, Information Analyst
Phone: 0141 282 2136

For 18 week Referral to Treatment waiting times queries please email:
PHS.isdwaitingtimes@nhs.net

Further Information

Further information and data for this publication are available from the publication page on our website.

The next release of this publication will be 23 November 2020.

Open data

Data from this publication is available to download from the Scottish Health and Social Care Open Data Portal.

Rate this publication

Let us know what you think about this publication via. the link at the bottom of this publication page on the PHS website.
Appendices

Appendix 1 – Background information

History

Better Health Better Care was published by the Scottish Government in December 2007 which set out a commitment:

"The 18 weeks 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 18 weeks Referral to Treatment (18 weeks RTT) Standard builds on previous waiting time targets, which set maximum waiting times for stages of treatment - first outpatient consultation, diagnostic tests and for inpatient and day case treatment. 18 weeks RTT focuses on the entire patient journey from the initial referral to the start of treatment, including for the first time treatment undertaken in an outpatient setting, and promotes a holistic approach to providing clinically effective, safe and efficient care in a timely manner.

The responsibility for delivering the 18 weeks RTT Standard lies with the NHS Board who receives the initial referral, as this Board will be responsible for agreeing with the patient and relevant clinicians the most appropriate pathway of care. In some cases, patients may be initially referred to one NHS Board and then have an onward referral to another for treatment.

Definitions and guidance for 18 weeks RTT have been developed to help ensure that each patient's journey is measured fairly and consistently.

Further details can be found on the 18 weeks RTT website.

Other Waiting Times Targets & Standards

The 18 weeks RTT Standard is part of a variety of targets and standards set by the Scottish Government around waiting times. While 18 weeks RTT covers the full patient pathway, there is a standard specifically around diagnostics, focussing on 8 key diagnostic tests. For the stage of treatment part of the pathway, there is a guarantee for inpatients and day cases and a standard for new outpatient appointments.

Details on each of these, and other waiting times guarantee/standards that PHS publish, are available within the Support Documentation web page.

Further detail about all NHSScotland targets/standards can be found at the Scottish Government's Scotland Performs website.
What is a Unique Care Pathway Number (UCPN) and Clinical Outcome Code Recording?

The complete patient journey from referral to treatment can be difficult to measure as patients may require treatment at more than one hospital and/or out with their NHS Board of residence. The Unique Care Pathway Number (UCPN) is designed to link all stages of the patient journey, allowing for the recording of all delays and hence a determination of their wait. The Unique Care Pathway Number is being rolled out in IT systems across Scotland to identify individual patient journeys, along with codes for outcomes following clinical consultations (Clinic Outcome Code recording, COCR).

A UCPN is a unique number that should be allocated to all new referrals and will identify patient journeys in and across NHS Boards. COCR indicates the 'status' of a patient's journey after every outpatient appointment, i.e. whether treatment has started or not. UCPN and COCR will facilitate the linking of all stages of the patient's journey and the measurement of the 18 weeks RTT waiting time. NHS Boards are at various stages of implementing changes.

Data Limitations

The 18 weeks RTT data submitted to PHS is not at patient level, but an aggregated return from NHS Boards. The derivation of these data and their accuracy is a matter for individual NHS Boards. Whilst it is not possible for PHS to fully validate the underlying data, PHS are developing and refining methods to compare the submitted data to data previously reported for management information purposes and to other PHS data sources. NHS Boards are working with PHS and the Scottish Government to update systems in order to further improve the whole pathway information capture and data submission to support the measuring and reporting against the 18 weeks RTT Standard. A group of representatives from NHS Boards, Scottish Government and PHS meet on a regular basis to look at new ways to improve data submission and ease the burden on NHS Boards workloads.

Since the data is sent to PHS at an aggregate level a distribution of the data is not possible. For example; it is not possible to calculate the average, shortest or longest patient journey times from the aggregated data supplied. PHS only holds data on the number of patient journeys that are less than 18 weeks, over 18 weeks, over 26 weeks for key specialties, and unknown waits.

Due to the constraints in current hospital information systems in linking all stages of a patient's journey to measure their waiting time, these statistics are presented on NHS Board of Treatment i.e. the NHS Board where the patient's treatment was started. NHS Boards are in the process of fully implementing upgrades to their systems to improve the data collection. There have been significant improvements in data quality and completeness over time and consequently the 18 weeks RTT data is now regarded to have a high level of data completeness and the recording is considered to be robust.
Calculation & Exclusions

The 18 weeks RTT clock start is the date when the referral is received by the NHS Board and the clock stop is the date the treatment commences.

A clock adjustment may occur for the following reasons (where it is reasonable and clinically appropriate):

- The patient has given reasonable notice that they cannot attend an appointment.
- Where the patient is unable to attend or did not attend an appointment.
- Where the patient refuses a reasonable offer.
- Periods of time when the patient is unavailable for treatment i.e. on holiday or medically not fit for treatment. These periods do not count towards the calculation of the patient’s waiting time.

The standard end point that the wait is measured to for diagnostic tests, i.e. when the clock stops, is when the verified results are available for reporting. However, due to system constraints, in some cases for both Endoscopic and Radiology tests, the clocks stop on the day the test is carried out.

Referrals to the following services for some specific procedures are currently excluded from the 18 weeks RTT and therefore do not trigger waiting-time clock starts:

- Direct referrals to Allied Health Professionals (AHPs). However, AHPs may deliver services that are part of the overall waiting time standard e.g. as part of a consultant led service.
- Assisted conception services.
- Dental treatment provided by undergraduate dental students.
- Designated national specialist service for Scoliosis.
- Direct access referrals to Diagnostics services where the referral is not part of a ‘straight to Test’ referral pathway as there is no transfer of clinical responsibility to the consultant-led team.
- Exceptional Aesthetic Procedures which have been specifically excluded in the CEL 27 (2011) Adult Exception Aesthetic Referral Protocol.
- Homoeopathy.
- Obstetrics.
- Organ and Tissues transplant.
- Mental Health Services.

For further information on the guidance regarding waiting times please refer to the Waiting Times Guidance document produced by the Scottish Government.
Data collection and methods

Data are collected via a standard template that is submitted monthly by each NHS Board. This standard template is populated, checked, verified and signed off by an authorised NHS Board colleague before being submitted to PHS.

After submission to PHS, the data are entered into the PHS Referral to Treatment database. The data are then extracted from the database to produce Monthly Management Information Reports for the Boards who then check the content for accuracy. The reports are also shared with the Scottish Government. PHS, in partnership with the Boards, look for unusual changes or patterns in the data which might indicate a data quality issue. Any potential anomalies are raised/discussed with the individual Board in order to verify the accuracy of the data or correct any problems.

The quarterly 18 Week RTT publication tables and charts are produced using the data from the PHS Referral to Treatment database. The tables and charts produced are checked by PHS and NHS Boards in order to ensure the quality and accuracy of the data. PHS keep a record of any data quality issues, and where appropriate, include them within the data quality section of the publication report.

Prior to publication, the data for each NHS Board is verified and signed off by the Chief Executive of that NHS Board. Data quality questions are asked and the summary of the responses to these can be found in the data quality section.

PHS continue to investigate ways in which the 18 Week RTT data submissions can be made more streamlined and efficient, including the potential to have submissions entered directly into the Waiting Times data warehouse. This is being reviewed as part of a wider piece of work across all waiting times submissions at the request of Scottish Government.

UK Comparisons

Other parts of the UK also have targets for the Referral to Treatment pathway; however, there are differences in how the time period is calculated and different lengths of targets. Further details on other UK targets can be found on their websites; NHS England, NHS Wales and Health and Social Care in Northern Ireland.

Information about the key similarities and differences between the 18 weeks RTT statistics published by the four nations of the UK has been collated by the Government Statistical Service and can be access via the following website: https://gss.civilservice.gov.uk/user-facing-pages/health-and-care-statistics/health-waiting-time-statistics/
Appendix 2 – Data Quality

PHS works closely with NHS Boards to quality assure data with respect to methodology, extraction process and continuity of trend data at specialty level. This section provides an overview of historical and outstanding data quality issues.

**NHS Ayrshire & Arran**

NHS Ayrshire and Arran have been experiencing technical issues from Quarter 2 2017. They report that they are not capturing all clock stopping events, specifically where results of investigations are reported back to patients’ out with the outpatient setting.

Previously, it was reported that from October to December 2019, 79% were actual 18 weeks RTT pathways and 21% estimated.

Methodology for linkage has been modified as a result of the resolution of the issues related to Stage of Treatment submissions and resulted in a further reduction in the number of estimated pathways.

**NHS Borders**

NHS Borders confirms that no changes to the linking methodology have been made.

NHS Borders confirms that the data submitted accurately identifies all patients on the 18 weeks RTT pathways and there are no new data quality issues.

**NHS Dumfries & Galloway**

NHS Dumfries & Galloway confirms that the data submitted accurately identifies all patients on the 18 weeks RTT pathways and there are no new data quality issues.

NHS Dumfries & Galloway has not made any changes to their linking methodology.

**NHS Fife**

NHS Fife confirms that the 18 weeks RTT data submitted provides an accurate picture of all patients on an 18 weeks RTT pathway.

NHS Fife reports that that no linking methodological changes have been made and that they are not aware of any new or ongoing data quality issues.
NHS Forth Valley
NHS Forth Valley confirms that the data submitted accurately identifies all patients on an 18 weeks RTT pathway and that no changes have been made to their linking methodology.
There are no new or ongoing data quality issues reported by NHS Forth Valley.
NHS Forth Valley previously reported that data for May 2019 was an underestimate due to issues related to the recent implementation of Trakcare at the board and a change in culture of responsibility for data entry. Services are being supported and progress to resolve these issues are being made.

NHS Grampian
NHS Grampian RTT data is not currently available for March, April, May and June 2020. These submissions have been delayed and will be provided at a later date.
NHS Grampian confirms that the data submitted accurately identifies all patients on an 18 weeks RTT pathway and that no changes have been made to their linking methodology.
There are no new or ongoing data quality issues reported by NHS Grampian.

NHS Greater Glasgow & Clyde
NHS Greater Glasgow & Clyde confirms that the 18 weeks RTT data submitted provides an accurate picture of all patients on an 18 weeks pathway and confirms that no methodological changes have been made.
NHS Greater Glasgow & Clyde are not aware of any new or ongoing data quality issues.

NHS Highland
NHS Highland confirms that the 18 weeks RTT data submitted provides an accurate picture of all patients on an 18 weeks pathway and confirms that no methodological changes have been made.
NHS Highland are not aware of any new or ongoing data quality issues.

NHS Lanarkshire
NHS Lanarkshire confirms that the data submitted accurately identifies all patients on an 18 weeks RTT pathway and that no changes have been made to their linking methodology.
NHS Lanarkshire has made no changes to their linking methodology and there are no new data quality issues reported.
NHS Lothian

NHS Lothian reports that the data submitted does not include all patients as there are unknown journeys and clock stops outside of the main Trak system.

There have been no changes made to the linking methodology and there are no new data quality issues.

NHS Orkney

NHS Shetland

NHS Shetland confirms that the 18 weeks RTT data submitted provides an accurate picture of all patients on an 18 weeks pathway and confirms that no methodological changes have been made.

They are not aware of any ongoing data quality issues with regard to the 18 weeks RTT figures.

NHS Tayside

The 18 week RTT TrakCare methodology captures all clock stops within the month. The board highlights that it is not possible to identify any 18 week RTT pathways that do not have an 18 week RTT clock stop outcome and key dates entered.

Since moving Patient Admin System to TrakCare in June 2017, NHS Tayside experienced issues providing 18 weeks RTT performance information. A new solution was developed and data has been provided from January 2018. The methodology developed has been documented and shared with PHS in May 2018.

NHS Tayside reports that there were no new data quality issues or changes to the linking methodology.

NHS Western Isles

NHS Western Isles confirms that the 18 weeks RTT data submitted provides an accurate picture of all patients on an 18 weeks pathway and confirms that no methodological changes have been made.

They are not aware of any ongoing data quality issues with regard to the 18 weeks RTT figures.
Golden Jubilee National Hospital

Golden Jubilee National Hospital confirms that data submitted accurately identifies all patients on an 18 weeks RTT pathway. There have been no changes to linkage methodology this quarter and no new or ongoing data quality issues.
## Appendix 3 – Publication Metadata

<table>
<thead>
<tr>
<th>Metadata Indicator</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Publication title</td>
<td>18 weeks Referral to Treatment</td>
</tr>
<tr>
<td>Description</td>
<td>Monthly summaries of whole journey waiting times across NHSScotland</td>
</tr>
<tr>
<td>Theme</td>
<td>Health and Social Care</td>
</tr>
<tr>
<td>Topic</td>
<td>Access and Waiting Times</td>
</tr>
<tr>
<td>Format</td>
<td>Excel workbook and PDF</td>
</tr>
<tr>
<td>Data source(s)</td>
<td>Aggregate returns at specialty level are submitted monthly from individual NHS Boards to PHS using a defined Excel template. These are derived from local systems and methods of linking whole pathways vary between Boards. PHS in partnership with the UKSA are working towards achieving a national statistics status for this publication.</td>
</tr>
<tr>
<td>Date that data are acquired</td>
<td>Deadline for data submission is the 24th of each month, though files can be resubmitted up to 1 week before publication where the quality assurance process identifies differences with local figures.</td>
</tr>
<tr>
<td>Release date</td>
<td>25 August 2020</td>
</tr>
<tr>
<td>Frequency</td>
<td>Quarterly</td>
</tr>
<tr>
<td></td>
<td>Note that the publication for May 2020 was cancelled, however data for quarter ending 31 March 2020 is included within this release.</td>
</tr>
<tr>
<td>Timeframe of data and</td>
<td>From October 2011 to 30th June 2020</td>
</tr>
<tr>
<td>timeliness</td>
<td></td>
</tr>
<tr>
<td>Continuity of data</td>
<td>Monthly data is comparable</td>
</tr>
<tr>
<td>Revisions statement</td>
<td>Revisions have been made in the past to correct inaccuracies, no revisions have been made to this publication. Details on previous revisions can be found within the Excel data tables and in the previous reports.</td>
</tr>
<tr>
<td>Revisions relevant to this</td>
<td>If NHS boards discover that data submitted for publication is incorrect, or that data are missing, re-submissions can be made up until the publication submission deadline date. Any revised figures will then be reflected within the current publication. Figures contained within each publication may also be subject to change in future releases as submissions may be updated to reflect a more accurate and complete set of data.</td>
</tr>
<tr>
<td>publication</td>
<td></td>
</tr>
<tr>
<td>Concepts and definitions</td>
<td>A release by the Scottish Government can be found on the <a href="#">18 weeks RTT website</a></td>
</tr>
<tr>
<td>Relevance and key uses of</td>
<td>Waiting times are important to patients and are a measure of how the NHS is responding to demands for services. Measuring and regular reporting of waiting times highlights where there are delays in the system and enables monitoring of the effectiveness of NHS performance throughout the country. The NHS in Scotland has been set a number of targets for maximum waiting times. Other uses of the data include information requests for a variety of customers, e.g. research charities; public companies; freedom of Information requests; information support to NHS Boards; health intelligence work; parliamentary questions and LDP standards.</td>
</tr>
<tr>
<td>the statistics</td>
<td></td>
</tr>
<tr>
<td>Accuracy</td>
<td>PHS receives aggregate data from each NHS Board of Treatment, signed off as accurate by the Chief Executive.</td>
</tr>
<tr>
<td><strong>Completeness</strong></td>
<td>PHS is currently reviewing ways to compare these data against other sources including data submitted to the PHS national waiting times warehouse.</td>
</tr>
<tr>
<td>------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Comparability</strong></td>
<td>The 18 weeks Standard applies in England and Wales also. Methods of data collection vary.</td>
</tr>
<tr>
<td><strong>Accessibility</strong></td>
<td>It is the policy of Public Health Scotland to make its web sites and products accessible according to published guidelines.</td>
</tr>
<tr>
<td><strong>Coherence and clarity</strong></td>
<td>Key statistics for the latest quarter are linked to on the 18 weeks RTT PHS web page. Statistics are presented within Excel spreadsheets. NHS Board and National figures are presented. Further features to aid clarity: 1. All tables are printer friendly. 2. All Scotland summary data are presented first, with the option to view spreadsheets down to Board level. 3. Key data presented graphically.</td>
</tr>
<tr>
<td><strong>Value type and unit of measurement</strong></td>
<td>Count of clock stops over and under 18 weeks, percentage performance against 18 weeks, percentage of clock stops linked to clock starts total completed patient pathways regardless of whether they can be linked fully.</td>
</tr>
<tr>
<td><strong>Disclosure</strong></td>
<td>The PHS Statistical Disclosure Protocol is followed.</td>
</tr>
<tr>
<td><strong>Official Statistics designation</strong></td>
<td>Official Statistics</td>
</tr>
<tr>
<td><strong>UK Statistics Authority Assessment</strong></td>
<td>Ongoing assessment by the UK Statistics Authority in progress.</td>
</tr>
<tr>
<td><strong>Last published</strong></td>
<td>25 February 2020</td>
</tr>
<tr>
<td><strong>Next published</strong></td>
<td>23 November 2020</td>
</tr>
<tr>
<td><strong>Date of first publication</strong></td>
<td>31 May 2011</td>
</tr>
<tr>
<td><strong>Help email</strong></td>
<td><a href="mailto:phs.isdWAITINGTIMES@nhs.net">phs.isdWAITINGTIMES@nhs.net</a></td>
</tr>
<tr>
<td><strong>Date form completed</strong></td>
<td>06 August 2020</td>
</tr>
</tbody>
</table>
Appendix 4 – Early access details

Pre-Release Access

Under terms of the "Pre-Release Access to Official Statistics (Scotland) Order 2008", PHS is obliged to publish information on those receiving Pre-Release Access ("Pre-Release Access" refers to statistics in their final form prior to publication). The standard maximum Pre-Release Access is five working days. Shown below are details of those receiving standard Pre-Release Access.

Standard Pre-Release Access:

Scottish Government Health Department

NHS Board Chief Executives

NHS Board Communication leads

Early Access for Management Information

These statistics will also have been made available to those who needed access to ‘management information’, i.e. as part of the delivery of health and care:

Early Access for Quality Assurance

These statistics will also have been made available to those who needed access to help quality assure the publication:
Appendix 5 – PHS and Official Statistics

About Public Health Scotland (PHS)

PHS is a knowledge-based and intelligence driven organisation with a critical reliance on data and information to enable it to be an independent voice for the public’s health, leading collaboratively and effectively across the Scottish public health system, accountable at local and national levels, and providing leadership and focus for achieving better health and wellbeing outcomes for the population. Our statistics comply with the Code of Practice for Statistics in terms of trustworthiness, high quality and public value. This also means that we keep data secure at all stages, through collection, processing, analysis and output production, and adhere to the ‘five safes’.