Referral to treatment (RTT) waiting times statistics for consultant-led elective care

2017/18 Annual Report
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1. **Summary**

1.1 **Incomplete pathways**

1.1.1 As at the end of March 2018, 87.2% of patients waiting to start treatment (incomplete pathways) had been waiting up to 18 weeks.

1.1.2 Nationally, the operational standard for incomplete pathways was not met throughout 2017/18.

1.1.3 At the end of March 2018, 92% of patients had been waiting less than 21.9 weeks to start treatment (this is the 92nd percentile waiting time).

1.1.4 The number of RTT patients waiting to start treatment at the end of March 2018 was 3.84 million. Of those, 2,755 had been waiting more than 52 weeks.

1.1.5 Factoring in estimates based on the latest data submitted for missing trusts suggests the total number of RTT patients waiting to start treatment at the end of March 2018 may have been 4.1 million.

1.1.6 Since August 2013, there has been a reduction in the percentage of incomplete pathways within 18 weeks in every month compared to the same month in the previous year. During 2017/18, performance ranged from 90.4% (May 2017) to 87.2% (March 2018).

1.1.7 Since April 2012, the RTT waiting list has been at a higher level each month than the same month in the previous year. During 2017/18, the waiting list was on average 160,000 pathways (or around 4%) higher each month when compared to the previous year, including estimates for missing data.

1.1.8 For patients on incomplete pathways, the median waiting time at the end of March 2018 was 6.9 weeks.

1.2 **Completed admitted pathways**

1.2.1 In 2017/18, 14,500 patients started admitted treatment per working day, compared to 15,100 in 2016/17 (a decrease of 3.7%), including estimates for missing trusts.

1.2.2 In 2017/18, the median wait for admitted treatment was 10.0 weeks.

1.3 **Completed non-admitted pathways**

1.3.1 In 2017/18, just under 51,000 patients started non-admitted treatment per working day, compared with approximately 48,700 in 2016/17 (an increase of 4.7%), including estimates for missing trusts.

1.3.2 In 2017/18, the median wait for non-admitted treatment was 5.9 weeks.
2. Introduction

2.1.1 This report presents a summary of English NHS referral to treatment (RTT) waiting times statistics for consultant-led elective treatment up to March 2018.

2.1.2 Patients have a legal right under the NHS Constitution to access services within maximum referral to treatment waiting times, or for the NHS to take all reasonable steps to offer them a range of alternative providers if this is not possible. The continued publication of waiting times information will ensure that the NHS is accountable to the patients and public it serves. This information, combined with the quality of patients’ experiences and outcomes, will inform patients’ choices of where they want to be treated.

2.1.3 The incomplete pathway operational standard is the measure of patients’ constitutional right to start treatment within 18 weeks.

2.1.4 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 Official Statistics.

2.1.5 The Government Statistical Service (GSS) statistician with overall responsibility for the data in this report is:

  Debbie Moon
  Operational Information for Commissioning – Activity and Planning
  NHS England
  Room 5E24, Quarry House, Leeds LS2 7UE
  E-mail: england.rtt@nhs.net
3. **Key terms**

The following are key terms used in this report. For a more comprehensive list of terminology, please see the glossary.

3.1 **RTT pathway**

Patients referred for non-emergency consultant-led treatment are on RTT pathways. An RTT pathway is the length 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.

The following activities end 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.

Each pathway relates to an individual referral rather than an individual patient so if a patient was waiting for multiple treatments they may be included in the figures more than once. Where we refer to the number of ‘patients’ waiting or starting treatment in this report, technically, we are considering the number or percentage of ‘pathways’.

3.2 **Incomplete pathway**

Incomplete pathways, often referred to as waiting list times, are the waiting times for patients waiting to start treatment, as at the end of each month. The volume of incomplete RTT pathways is often referred to as the size of the RTT waiting list.

The incomplete waiting time standard was introduced in 2012 and states that the time waited must be 18 weeks or less for at least 92% of patients on incomplete pathways. For more information see section 3.6.

3.3 **Admitted pathway**

Admitted pathways are the waiting times for patients whose treatment started during the period and involved admission to hospital. These are also often referred to as inpatient waiting times. They include the complete time waited from referral until start of inpatient treatment. Although data on
admitted pathways are still collected, there is no longer an operational waiting time standard.

3.4 Non-admitted pathway

Non-admitted pathways are the waiting times for patients whose wait ended during the period for reasons other than an inpatient or day case admission for treatment. These are also often referred to as outpatient waiting times. Although data on non-admitted pathways are still collected, there is no longer an operational waiting time standard.

3.5 RTT waiting time rights and pledges

Patients have a legal right under the NHS Constitution to access services within maximum referral to treatment waiting times, or for the NHS to take all reasonable steps to offer them a range of alternative providers if this is not possible.

3.6 Operational waiting time standard

The operational waiting time standards are set out in the NHS Constitution¹ (in conjunction with the Handbook to the NHS Constitution²) and in the NHS Standard Contract³.

The NHS Constitution standard sets out that more than 92% of patients on incomplete pathways should have been waiting no more than 18 weeks from referral. 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 choose not to accept earliest offered appointments along their pathway or choose to delay treatments for personal or social reasons
- co-operation – patients who do not attend appointments along their pathways
- clinical exceptions – where it is not clinically appropriate to start a patient’s treatment within 18 weeks.

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

In June 2015, Simon Stevens accepted Sir Bruce Keogh’s recommendations for improvements to the waiting time standards for elective care. The admitted (90%) and non-admitted (95%) operational standards were abolished, and the incomplete pathway standard (above) became the sole measure of patients’ constitutional right to start treatment.

¹ https://www.gov.uk/government/publications/the-nhs-constitution-for-england
³ https://www.england.nhs.uk/nhs-standard-contract/16-17/
within 18 weeks. 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 or suspensions in RTT waiting time clocks in monthly RTT returns to NHS England and removing the admitted and non-admitted standards.
4. RTT waiting times

4.1 Operational waiting time standards

4.1.1 As at March 2018, 87.2% of patients on incomplete RTT pathways had waited 18 weeks or less from time of referral, thus not meeting the 92% standard (Table 1).\(^4\)

4.1.2 Nationally, the operational standard for incomplete pathways was not met throughout 2017/18.

4.1.3 At the end of March 2018, 92% of patients had been waiting less than 21.9 weeks for consultant led treatment (this is the 92\(^{nd}\) percentile waiting time) (Table 1 and Chart 2).

4.1.4 The number of RTT patients waiting to start treatment at the end of March 2018 was 3.84 million.

4.1.5 Over the longer term, prior to the announcement in November 2011 and introduction from April 2012 of the 92% incomplete standard, the percentage of incomplete pathways within 18 weeks at England level fluctuated around 90%. Performance increased in response to the new standard before broadly stabilising between May 2012 and May 2013.

4.1.6 Since August 2013, there has been a reduction in the percentage of incomplete pathways within 18 weeks in every month compared to the same month in the previous year (Table 1 and Chart 1). During 2017/18, performance ranged from 90.4% (May 2017) to 87.2% (March 2018).

Table 1: Percentage of incomplete RTT pathways within 18 weeks, and the incomplete 92\(^{nd}\) percentile waiting time, England

<table>
<thead>
<tr>
<th>Month</th>
<th>Incomplete pathways % within 18 weeks</th>
<th>Incomplete 92(^{nd}) Percentile waiting time (weeks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mar-09</td>
<td>87.6%</td>
<td>23.3</td>
</tr>
<tr>
<td>Mar-10</td>
<td>91.1%</td>
<td>18.9</td>
</tr>
<tr>
<td>Mar-11</td>
<td>89.4%</td>
<td>20.7</td>
</tr>
<tr>
<td>Mar-12</td>
<td>93.3%</td>
<td>17.0</td>
</tr>
<tr>
<td>Mar-13</td>
<td>94.2%</td>
<td>16.6</td>
</tr>
<tr>
<td>Mar-14</td>
<td>93.7%</td>
<td>16.9</td>
</tr>
<tr>
<td>Mar-15</td>
<td>93.1%</td>
<td>17.2</td>
</tr>
<tr>
<td>Mar-16</td>
<td>91.5%</td>
<td>18.5</td>
</tr>
<tr>
<td>Mar-17</td>
<td>90.3%</td>
<td>19.5</td>
</tr>
<tr>
<td>Mar-18</td>
<td>87.2%</td>
<td>21.9</td>
</tr>
</tbody>
</table>

\(^4\) Incomplete pathways are a snapshot of the patients waiting at the end of a month, hence why the final month in the financial year is used; it would be inappropriate to sum the incomplete pathways across the entire year.
4.1.7 NHS England introduced a zero tolerance of any RTT waits of more than 52 weeks in 2013/14. The number of incomplete pathways greater than 52 weeks fell from over 400,000 at the end of 2007 to just under 500 at the end of March 2015. Over the course of 2015/16, 2016/17, 2017/18 the number of 52 week waiters has increased, reaching 2,755 in March 2018 (Table 2). As for previous years, this does not include waiters at trusts that have not submitted data. Further detail regarding missing data is provided in Section 7.4.

4.1.8 It is likely that some of the decrease in incomplete pathways greater than 52 weeks between 2007 and the introduction of the zero tolerance target in April 2013 resulted from some trusts identifying 52+ week incomplete pathways that were data errors through validation work.
Table 2: Number of incomplete pathways greater than 52 weeks, England

<table>
<thead>
<tr>
<th>Month</th>
<th>Incomplete pathways 52 week waits(^5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mar-08</td>
<td>240,689</td>
</tr>
<tr>
<td>Mar-09</td>
<td>47,013</td>
</tr>
<tr>
<td>Mar-10</td>
<td>18,494</td>
</tr>
<tr>
<td>Mar-11</td>
<td>14,355</td>
</tr>
<tr>
<td>Mar-12</td>
<td>5,149</td>
</tr>
<tr>
<td>Mar-13</td>
<td>473</td>
</tr>
<tr>
<td>Mar-14</td>
<td>488</td>
</tr>
<tr>
<td>Mar-15</td>
<td>475</td>
</tr>
<tr>
<td>Mar-16</td>
<td>871</td>
</tr>
<tr>
<td>Mar-17</td>
<td>1,529</td>
</tr>
<tr>
<td>Mar-18</td>
<td>2,755</td>
</tr>
</tbody>
</table>

4.2 Average waiting times

4.2.1 The median waiting time is the middle value when all patients are ordered by length of wait.

4.2.2 For patients on incomplete pathways, the median waiting time at the end of March 2018 was 6.9 weeks. In 2017/18, the median wait for admitted treatment was 10.0 weeks; for non-admitted treatment, it was 5.9 weeks.

4.2.3 The median time waited for incomplete pathways was higher for each month in 2017/18 than the equivalent in 2016/17. However, the overall trend has remained broadly stable since 2009 and follows the seasonal pattern seen in previous years (Chart 3).

4.2.4 During 2017/18, the median time waited for admitted patients was broadly stable compared to 2016/17. Prior to 2017/18, the long term trend shows a gradual increase in median admitted waiting times, with a clear seasonal pattern.

\(^5\) See Section 7.4 for details of missing data for some trusts.
4.2.5 There was a step change in the median time waited for non-admitted patients in April 2013, which likely resulted from the transfer of responsibility for commissioning consultant-led sexual health services to local authorities. The median time waited for non-admitted patients increased during 2014/15, 2015/16 and 2016/17 and was broadly stable in 2017/18.

Chart 3: Average (median) RTT waiting times, England.

4.2.6 The incomplete pathway median waiting time tends to peak in the middle of winter around December and January, and also in summer around August. These peaks are both followed by an increase in the median time waited for admitted and non-admitted pathways. The delayed peaks for completed pathways demonstrate the relationship between incomplete pathway waiting times and admitted and non-admitted pathway 'time waited' waiting times.

4.2.7 Incomplete pathways are the waiting times for patients waiting to start treatment. When these patients start treatment, the time that they waited is captured in the admitted and non-admitted waiting times. Therefore, if there is an increase in the waiting times of patients who have not started treatment, in subsequent months this will be followed by an increase in the 'time waited' admitted and non-admitted waiting times.

4.2.8 The seasonal pattern of peaks in median waiting times corresponds with winter and summer holiday seasons. The winter peak is associated with poorer weather which is likely to affect the balance within a hospital between elective and non-elective care.

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6 From April 2013, reported consultant-led RTT waiting times no longer included waiting times for consultant-led sexual health 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.
4.3 Incomplete Pathways and Activity

4.3.1 On average six acute trusts were unable to submit monthly RTT data each month during 2017/18. See Section 7.4 for a detailed breakdown of data coverage.

4.3.2 The biggest impact of missing data is on measures of volume, such as the number of patients who started treatment and the size of the RTT waiting list.

As a result, throughout this section, the published monthly data have been adjusted to include estimates for missing trusts. See Section 7.4 for an explanation of the methodology for estimating missing data.

Incomplete Pathways

4.3.3 The numbers of incomplete pathways are often referred to as the RTT waiting list because these are the patients recorded as waiting at the end of the month to start treatment.

4.3.4 The number of RTT patients waiting to start treatment at the end of March 2018 was 4.1 million, including estimates for missing data.

4.3.5 Since April 2012, the RTT waiting list has been at a higher level each month than the same month in the previous year, including estimates for missing data. During 2017/18, the waiting list was on average 160,000 pathways (or around 4%) higher each month when compared to the previous year.

4.3.6 Over the longer-term, the RTT waiting list fell from just over 4 million patients waiting at the end of August 2007 to around 2.5 million patients at the end of October 2008. Between October 2008 and the middle of 2012, the number of RTT patients waiting was broadly stable around 2.5 million patients, subject to a clear seasonal trend with the number of patients waiting peaking in summer and generally lower in winter.

4.3.7 Since 2012/13\(^7\), an underlying upward trend has caused the seasonal pattern in waiting list size to become less apparent (Chart 4).

4.3.8 The RTT waiting list grew by 9.6% in 2012/13 and by around 11% per year on average in 2013/14, 2014/15 and 2015/16. Waiting list growth slowed during 2016/17 and the growth rate remained relatively stable at around 5% during 2017/18 (see Chart 5).

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\(^7\) The annex also includes versions of the charts from Section 4.3 without missing data estimates.

\(^8\) The announcement of the operational waiting time standard for incomplete pathways in November 2011 and its introduction from April 2012 is likely to have led to improvements in data capture of RTT incomplete pathways in some hospital trusts, particularly with regard to short waiters. It is likely that this caused some of the increase in the RTT waiting list during 2012/13.
Comparing the total RTT waiting list year on year demonstrates the seasonal trend and the increase in the size of the waiting list from the middle of 2012 (Chart 6). Prior to 2012/13, the number of patients waiting in winter was generally lower, while the number of patients waiting peaked during summer. However, from 2012/13, the seasonal reduction in waiting list size has become less apparent.
4.3.10 In line with the overall trend, the number of incomplete RTT pathways increased for all but two weekly time bands between March 2017 and March 2018 (those waiting between 0-1 weeks and 5-6 weeks decreased by 6.8% and 2.3%, respectively) (Chart 7). The over 26 week bands saw the largest increases, of more than 30%, compared to March 2017.

Chart 7: The total number of incomplete RTT pathways waiting at the end of March 2018, and the same date for the two years previous, shown by number of weeks waited, including estimates for missing data, England.
Activity

4.3.11 The numbers of completed admitted and non-admitted pathways are often referred to as RTT activity because these are the numbers of patients who started treatment. Admitted RTT activity is broadly stable while non-admitted RTT activity has increased since the beginning of 2014, both follow a clear seasonal pattern. The removal of consultant-led sexual health services from RTT waiting times data contributed to a step change in the number of RTT patients starting non-admitted treatment in April 2013 (Chart 8).

4.3.12 The number of working days in a month, which is affected by the presence of bank holidays and the number of weekends, influences the level of RTT activity undertaken. When this is accounted for (by weighting activity according to the number of working days in each month), a smoother trend is observed (Chart 8).

Chart 8: Number of RTT patients who started treatment in each month, including estimates for missing data, England

4.3.13 In 2017/18, 14,500 patients started admitted treatment per working day in 2017/18, compared to 15,100 in 2016/17 (a decrease of 3.7%) (Chart 9).

4.3.14 Admitted pathways per working day were slightly lower than the levels in the previous year from April to December 2017 (-2.4%). Levels were down on the previous year to a greater degree in January to March 2018 (-7.5%). In January 2018, the National Emergency Pressures Panel (NEPP) issued guidance recommending that NHS providers maintain the reduction in elective activity seen over Christmas and New Year. This was in response to increasing emergency admissions partly due to high rates of flu hospitalisation and significant norovirus outbreaks (Chart 9).

Data were weighted by dividing the average number of working days per month in the reference period (Aug-07 to Mar-16) by the number of working days in each individual month, then by multiplying this value by the number of pathways completed in each individual month.
4.3.15 In 2017/18, just under 51,000 patients started non-admitted treatment per working day, compared with approximately 48,700 in 2016/17 (an increase of 4.7%). Since April 2014, the number of RTT patients starting non-admitted treatment per working day has been higher every month compared to the same month in the previous year with the exception of March 2018 (Chart 10).
5. **RTT waiting times by specialty**

5.1.1 There is some variation at specialty level in the percentage of RTT patients starting treatment within 18 weeks.

5.1.2 RTT waiting times data are collected against 18 treatment functions, which cover the main treatment areas. RTT waiting time data for types of treatments that are not covered by these 18 treatment functions are collected under ‘Other’. The treatment functions are based on consultant specialties.

5.1.3 At the end of 2017/18, 2 specialties (General Medicine and Geriatric Medicine) met the incomplete waiting time standard of 92%, compared with 8 specialties meeting the standard at the end of 2016/17.

5.1.4 A breakdown of RTT pathways completed in 2017/18 and the percentage of incomplete pathways within 18 weeks as at March 2018, by treatment function, is provided in Table 3.

<table>
<thead>
<tr>
<th>Treatment function</th>
<th>Completed, 2017/18</th>
<th>Incomplete, Mar-18&lt;sup&gt;10&lt;/sup&gt;</th>
<th>% &lt;18 weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Admitted</td>
<td>Non-admitted</td>
<td>Total</td>
</tr>
<tr>
<td>General Surgery</td>
<td>403,044</td>
<td>793,597</td>
<td>309,089</td>
</tr>
<tr>
<td>Urology</td>
<td>221,738</td>
<td>475,760</td>
<td>210,820</td>
</tr>
<tr>
<td>Trauma &amp; Orthopaedics</td>
<td>613,067</td>
<td>1,198,187</td>
<td>461,370</td>
</tr>
<tr>
<td>Ear, Nose &amp; Throat</td>
<td>169,253</td>
<td>880,032</td>
<td>286,124</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>496,319</td>
<td>1,154,981</td>
<td>394,757</td>
</tr>
<tr>
<td>Oral Surgery</td>
<td>167,797</td>
<td>370,847</td>
<td>156,370</td>
</tr>
<tr>
<td>Neurosurgery</td>
<td>28,708</td>
<td>74,810</td>
<td>30,041</td>
</tr>
<tr>
<td>Plastic Surgery</td>
<td>131,695</td>
<td>115,349</td>
<td>45,968</td>
</tr>
<tr>
<td>Cardiothoracic Surgery</td>
<td>23,545</td>
<td>14,034</td>
<td>8,494</td>
</tr>
<tr>
<td>General Medicine</td>
<td>36,868</td>
<td>201,689</td>
<td>51,486</td>
</tr>
<tr>
<td>Gastroenterology</td>
<td>212,186</td>
<td>484,561</td>
<td>190,036</td>
</tr>
<tr>
<td>Cardiology</td>
<td>103,193</td>
<td>555,748</td>
<td>187,134</td>
</tr>
<tr>
<td>Dermatology</td>
<td>103,932</td>
<td>819,045</td>
<td>181,298</td>
</tr>
<tr>
<td>Thoracic Medicine</td>
<td>22,267</td>
<td>317,801</td>
<td>97,375</td>
</tr>
<tr>
<td>Neurology</td>
<td>7,792</td>
<td>338,223</td>
<td>109,526</td>
</tr>
<tr>
<td>Rheumatology</td>
<td>23,751</td>
<td>298,892</td>
<td>76,250</td>
</tr>
<tr>
<td>Geriatric Medicine</td>
<td>3,693</td>
<td>111,149</td>
<td>19,712</td>
</tr>
<tr>
<td>Gynaecology</td>
<td>222,975</td>
<td>857,242</td>
<td>232,412</td>
</tr>
<tr>
<td>Other</td>
<td>513,768</td>
<td>3,181,820</td>
<td>794,920</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3,505,591</td>
<td>12,243,767</td>
<td>3,843,182</td>
</tr>
</tbody>
</table>

5.1.5 Trauma & Orthopaedics, Ophthalmology, and General Surgery are the three specialties with the largest waiting lists, by volume (Table 3). These three specialties with the largest waiting lists, by volume (Table 3). These

<sup>10</sup> Incomplete pathways are a snapshot of the patients waiting at the end of a month; therefore, it is inappropriate to sum the incomplete pathways across a year. The equivalent annual figure for incomplete pathways is the waiting times of the patients waiting at the end of the year.
specialties have, therefore, been used to illustrate specialty level performance against the incomplete standard over time.

5.1.6 For patients waiting to start treatment in these three specialties (incomplete pathways), we see broadly similar long term trends to the England level (all specialties) waiting times (Chart 11).

Chart 11: Percentage of incomplete RTT pathways within 18 weeks, by three treatment functions, England
6. RTT waiting times by region

6.1.1 In 2017/18, there were four\(^\text{11}\) NHS England regions in England. There is some variation in the waiting times for services commissioned by Clinical Commissioning Groups within these regions (Table 4 and Chart 12).

6.1.2 At the end of March 2018, the percentage of patients that had been waiting up to 18 weeks across the four regions ranged from 86.4% to 88.4%.

6.1.3 As expected, given that they cover populations of varying sizes, the volume of RTT activity carried out in 2017/18 and the size of the RTT waiting list at the end of March 2018 differs for each NHS England region (Table 4).

Table 4: RTT pathways completed in 2017/18 and percentage of incomplete pathways within 18 weeks as at Mar-18, by NHS England region\(^\text{12}\)

<table>
<thead>
<tr>
<th>Region</th>
<th>Completed, 2017/18</th>
<th>Incomplete, Mar-18(^\text{13})</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Admitted</td>
<td>Non-admitted</td>
</tr>
<tr>
<td>North</td>
<td>958,018</td>
<td>3,445,459</td>
</tr>
<tr>
<td>Midlands and East</td>
<td>970,797</td>
<td>3,504,703</td>
</tr>
<tr>
<td>London</td>
<td>406,861</td>
<td>1,873,065</td>
</tr>
<tr>
<td>South</td>
<td>877,654</td>
<td>2,545,222</td>
</tr>
<tr>
<td>England(^\text{14})</td>
<td>3,213,330</td>
<td>11,368,449</td>
</tr>
</tbody>
</table>

Chart 12: Percentage of incomplete pathways within 18 weeks, by four regions.

\(^{11}\) From April 2018, the NHS England South region has been divided into two – South West and South East.

\(^{12}\) The figures in this table exclude trusts who did not supply information (see Section 7.4).

\(^{13}\) Incomplete pathways are a snapshot of the patients waiting at the end of a month; therefore, it is inappropriate to sum the incomplete pathways across a year. The equivalent annual figure for incomplete pathways is the waiting times of the patients waiting at the end of the year.

\(^{14}\) The total numbers of patients who started treatment and were waiting by NHS England region does not add up to the England total due to RTT pathways commissioned by NHS England, including specialised services, offender healthcare and some services for members of the armed forces.
7. **Methodology**

7.1 **Data collection**

7.1.1 RTT data is collected from providers of consultant-led services for NHS patients in England.

7.1.2 Data for the period until February 2018 was submitted monthly to NHS England via Unify2. For March 2018 data onwards the collection has transferred to NHS Digital’s Strategic Data Collection System (SDCS).

7.1.3 NHS commissioners review the data and NHS England performs central validation checks to ensure good data quality.

7.1.4 The data measures RTT waiting times in weeks, split by treatment function. The treatment functions are based on consultant specialties. The data return includes all patients whose RTT clock stopped at any point in the reporting period or whose RTT clock is still running at the end of the reporting period.

7.1.5 For the period April to September 2015, there were two main central returns:

- unadjusted: covering admitted patients, non-admitted patients and patients on incomplete pathways
- adjusted: covering admitted patients on an adjusted basis (i.e. including legitimate pauses to patients’ waiting time clocks).

7.1.6 As per the changes detailed in Section 3.6, from October 2015 data onwards, the reporting requirements changed, as follows:

- no longer a requirement for providers to submit admitted adjusted data to NHS England
- unadjusted admitted and non-admitted completed pathway data still collected but no longer used for monitoring against operational standards
- requirement to report incomplete pathway data unchanged
- two new data items added to the data return: incomplete pathways for patients with a decision to admit for treatment and new RTT periods (see section 7.2).

7.2 **Additional data items**

7.2.1 In October 2015 two new experimental data items were introduced to the RTT collection:

- The number of new RTT periods during the month, i.e. clock starts which occurred within the reporting period
Monthly RTT waiting times for incomplete pathways with a decision to admit for treatment

7.2.2 The purpose of the new data items is to gain further understanding of waiting list dynamics and reduce the reliance on creating estimates based on proxy measures.

7.2.3 Previously RTT clock starts could be estimated using other data sources and parts of the RTT data return. However, collecting this measure from providers gives a direct measure of new RTT demand in the same ‘currency’ as the monthly data for completed and incomplete pathways.

7.2.4 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. Collecting this new data item therefore gives an indication of the admitted/non-admitted composition of the waiting list.

7.2.5 Some providers initially experienced difficulties submitting the new data items. However, where necessary, they were able to implement processes to capture the data.

7.2.6 NHS England have been closely monitoring data quality through validation checks and contacting providers whose data shows unusual patterns in comparison to estimated figures. Most providers are submitting the new data items without any problems and only a small minority have experienced difficulties.

7.2.7 Feedback from providers has enabled NHS England to understand the process behind collecting these new data items and how unusual patterns have occurred in some instances. Those providers who were alerted to such patterns have identified discrepancies in how they were reporting the new data items have improved, or are now working to review and improve, their processes. Below are some examples of the errors that were initially made when reporting the new data items:

- New periods not included in the data return where a patient had subsequently transferred to another provider
- Reporting patients as new periods when their clock was started at another provider earlier in the pathway
- Database not pulling through certain referral sources leading to a low number of new periods reported
• Reporting errors leading to a duplication of new periods
• Patients on active monitoring incorrectly included in the values for incomplete pathways with a decision to admit for treatment

7.2.8 Following the experimental period, the data quality of both new data items is considered satisfactory. The additional data items allow for a more robust data set without having to rely on estimates and will therefore continue to be collected in the RTT return. Both data items will no longer be referred to as experimental. Standard monthly validation checks will continue to identify any unusual patterns or changes which will be queried with providers.

7.2.9 Further papers and guidance describing the RTT clock rules and measurement of consultant-led RTT waiting times are available on the NHS England website, as follows:


7.3 Data availability

7.3.1 RTT waiting times figures are published to a pre-announced timetable, roughly 6 weeks after the end of the reference month. This typically occurs the second Thursday of each calendar month. Future publication dates are available on the NHS England website at the following address:

https://www.england.nhs.uk/statistics/12-months-statistics-calendar/

7.3.2 Monthly RTT data are published on the NHS England website at the following location:


7.3.3 The annual statistical report is published once a year. Prior to 2015/16, the report was based on calendar years and was published in February. The report is now based on financial years, and published in June.

7.4 Data coverage

7.4.1 The NHS Standard Contract requires providers to report monthly RTT data; data submission is mandatory for all NHS trusts that provide services that fall within the scope of consultant-led RTT waiting times measurement.

7.4.2 Independent Sector providers are encouraged to engage in the RTT data collection process by monitoring RTT times for NHS patients being seen/treated within their organisation and by submitting this information in the same way as NHS provider organisations. When Independent Sector providers do not have the technical capability to submit data, NHS commissioners can submit on their behalf.
Sometimes a provider organisation is unable to submit RTT data in time for monthly publication (for example, due to technical issues resulting from the introduction of a new computing system). Table 5 lists acute provider organisations for which data is missing for the period April 2014 to March 2018.

The impact of missing data varies by measure. 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.

For this reason, Section 4.3 of this report is based on data which includes estimates for missing data from acute NHS providers.

The estimates for missing data are based on the latest data submitted for each trust prior to the gap in reporting. For example, Colchester Hospital University NHS Foundation Trust was unable to submit RTT data from December 2014 to April 2015 inclusive, so the data submitted by the trust for November 2014 was used to produce estimates of the missing data. For incomplete pathways, the total number of incomplete pathways in the month prior to the gap in reporting is applied to all missing months. For completed (admitted and non-admitted) pathways, the total number of pathways per working day in the month prior to the gap in reporting is applied to all missing months, multiplied by the relevant number of working days in each month.

Estimates are only applied for total admitted, non-admitted and incomplete pathways and are included for acute NHS providers. A spreadsheet showing a time series for total admitted, non-admitted and incomplete pathways with and without estimates for missing data accompanies this report.
Table 5: Non-reporting acute providers, by month

<table>
<thead>
<tr>
<th>Provider</th>
<th>2015/16</th>
<th>2016/17</th>
<th>2017/18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barking, Havering &amp; Redbridge NHS Trust</td>
<td></td>
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<tr>
<td>Barts Health NHS Trust</td>
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<tr>
<td>Bradford Teaching Hospitals NHS Foundation Trust</td>
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<tr>
<td>Burton Hospitals NHS Foundation Trust</td>
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<tr>
<td>Calderdale and Huddersfield NHS Foundation Trust</td>
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<tr>
<td>Colchester Hospital University NHS Foundation Trust</td>
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<tr>
<td>East and North Hertfordshire NHS Trust</td>
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<tr>
<td>Gloucestershire Hospitals NHS Foundation Trust</td>
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<tr>
<td>Great Ormond Street Hospital for Children NHS Foundation Trust</td>
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<td>Homerton University Hospital NHS Foundation Trust</td>
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<td>Kettering General Hospital NHS Foundation Trust</td>
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<tr>
<td>King's College Hospital NHS Foundation Trust</td>
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<tr>
<td>Lewisham and Greenwich NHS Trust *</td>
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<tr>
<td>Liverpool Women's NHS Foundation Trust</td>
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<td>Medway NHS Foundation Trust</td>
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<td>Mid Essex Hospital Services NHS Trust</td>
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<tr>
<td>Northern Devon Healthcare NHS Trust</td>
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<tr>
<td>Royal Free London NHS Foundation Trust †</td>
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<tr>
<td>Sherwood Forest Hospitals NHS Foundation Trust ‡</td>
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<tr>
<td>St George's Healthcare NHS Trust</td>
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<td>Tameside Hospital NHS Foundation Trust</td>
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<td>The Princess Alexandra Hospital NHS Trust</td>
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<td>The Royal Orthopaedic Hospital NHS Foundation Trust</td>
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<td>United Lincolnshire Hospitals NHS Trust</td>
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<td>University Hospital of South Manchester NHS Foundation Trust</td>
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<td>Walsall Healthcare NHS Trust</td>
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<td>Wye Valley NHS Trust §</td>
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<tr>
<td>Yeovil District Hospital NHS Foundation Trust §</td>
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</tr>
</tbody>
</table>

| Number of acute providers not submitting any incomplete RTT data       | 8       | 7       | 6       |

Legend:  
- Did not submit any (admitted, non-admitted or incomplete) RTT pathway data  
- Did not submit any incomplete RTT pathway data  
- Other scenario (see footnotes)

* Lewisham and Greenwich NHS Trust did not submit any data for Lewisham Hospital in June or July 2015.  
† Royal Free London NHS Foundation Trust did not submit any (admitted, non-admitted or incomplete) data for the former Barnet and Chase Farm Hospitals NHS Trust, with whom it merged from July 2014, from July 2014 to April 2015 inclusive.  
‡ Sherwood Forest Hospitals NHS Foundation Trust did not submit any admitted or non-admitted data for October 2016.  
§ Wye Valley NHS Trust did not submit any non-admitted data, or the non-admitted element of its incomplete pathway data, for April 2015 and did not submit any non-admitted or incomplete pathway data from May 2015 to November 2016 inclusive.  
|| Calderdale and Huddersfield did not submit any admitted or non-admitted data. The trust submitted RTT incomplete pathways data but did not provide values for the number of incomplete pathways with a DTA for treatment.
7.5 Data revisions

7.5.1 Revisions to published figures are released 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:


7.5.2 The most recent set of revisions were published on 12 January 2018. The RTT waiting time’s data contained in this report was current at the time of publication.

7.5.3 NHS England may receive and publish revisions to RTT data contained in the 2017/18 annual statistical report. However, this annual report will not be updated and re-released to take into account any future changes.

7.5.4 Under the usual timetable revisions to data for October 2017 to March 2018 would be released in July 2018, however, this release will be delayed as a result of the transfer of the RTT data collection from Unify2 to NHS Digital’s Strategic Data Collection System (SDCS). Once the date for the next release of revised data has been confirmed it will be added to the NHS England 12 month statistics publication plan: https://www.england.nhs.uk/statistics/12-months-statistics-calendar/.

7.6 Data comparability

7.6.1 Scotland also collects and publishes RTT waiting times data and has an 18 weeks ‘time waited’ standard of 90%. Care needs to be taken when comparing English and Scottish RTT waiting times data as differences exist in the measurement rules; for example, some consultant-led services are not included in RTT measurement in Scotland. RTT data for Scotland are available here:

http://www.isdscotland.org/Health-Topics/Waiting-Times/18-Weeks-RTT/

7.6.2 Wales also collects and publishes RTT waiting times data and has a 26 week ‘waiting time’ standard of 95% and a 36 week ‘time waited’ standard of 100%. Care needs to be taken when comparing English and Welsh RTT waiting times data as differences exist in the measurement rules; for example, there are differences in the circumstances where RTT clock restarts are allowed between Wales and England. RTT data for Wales are available here:


7.6.3 Northern Ireland does not measure RTT waiting times. They collect and publish stage of treatment inpatient and outpatient waiting times. These data are available here:
The Government Statistical Service has released a technical document summarising (i) what is measured in each of the four UK countries, (ii) how the statistics are similar and (iii) where they have key differences. The document is available here:

https://gss.civilservice.gov.uk/health-waiting-time-statistics/
8. Glossary

8.1.1 Adjusted

Prior to the decision to retire the operational performance standard for completed pathways, as detailed in Section 3.6, NHS England collected data on waiting times for admitted pathways where adjustments had been made for clock pauses (which occurred when a patient declined reasonable offers of admission and chose to wait longer).

8.1.2 Admitted pathway

The waiting times (time waited) for patients whose treatment started during the month and involved admission to hospital.

8.1.3 Clock start

The date on which a patient's RTT pathway starts, when a patient is referred for consultant-led treatment and the referral is received by the provider.

8.1.4 Clock stop

The date on which a patient's RTT pathway ends. The following activities end the RTT pathway and lead to the RTT clock being stopped:

- first treatment - the start of the first treatment that is intended to manage a patient's disease, condition or injury
- 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.

8.1.5 Commissioner

A commissioner is normally a Clinical Commissioning Group (CCG). CCGs commission services from providers of NHS care.

8.1.6 Incomplete pathway

The waiting times for patients waiting to start treatment at the end of the month. These 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.
8.1.7 **Median and percentile waiting times**

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 times is the middle value when all patients are ordered by length of wait. This is the mid-point of the RTT waiting times distribution. For completed pathways, 50% of patients started treatment within the median waiting time, and for incomplete pathways 50% of patients were 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 92% of patients had been waiting less than (and 8% of patients had been waiting more than). For example, if the 92\textsuperscript{nd} percentile is 17 weeks, then 92% of patients had been waiting less than 17 weeks at the end of the reporting period and 8% of patients 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.

8.1.8 **NHS England region**

England is split into four NHS England regions. NHS England regions support the commissioning of health services in their area.

8.1.9 **Non-admitted pathway**

The waiting times (time waited) for patients whose treatment started during the month and did not involve admission to hospital.

8.1.10 **Provider**

An organisation that provides NHS treatment or care, for example, an NHS Acute Trust, Mental Health Trust, Community provider, or an Independent Sector organisation.

8.1.11 **RTT pathway/RTT period**

The length of time between a patient's RTT clock start and the clock stop for a particular treatment. Alternatively, if the patient has not yet started treatment, it is the length of time from the clock start to the end of the reference month.

8.1.12 **Treatment function**

RTT waiting times are measured within 19 treatment functions (including “Other”), which were chosen to capture the main treatment areas. Treatment functions are based on specialties.
9. **Additional information**

We welcome feedback on the content and presentation of RTT statistics within this report and those published on the NHS England website. Comments on this report, or general queries regarding RTT data and statistics, can be e-mailed to england.rtt@nhs.net.

9.1.1 Full details of RTT data for individual organisations is available at:


9.1.2 For press enquiries, please e-mail the NHS England media team at nhsengland.media@nhs.net or call 0113 825 0958 or 0113 825 0959.

9.1.3 The Government Statistical Service (GSS) statistician with overall responsibility for the data in this report is:

Debbie Moon
Operational Information for Commissioning – Activity and Planning
NHS England
Room 5E24, Quarry House, Leeds LS2 7UE
E-mail: england.rtt@nhs.net
10. **Annex**

10.1.1 The tables and charts shown in Section 4.3 include estimates for missing data (see Section 7.4 for more information). Equivalent versions of the charts based on published data only – in other words, without any adjustments for the impact of missing data – are shown here for reference.

**Chart 14: Number of RTT patients who started treatment in each month, published figures, England (alternative version of Chart 8, Section 4.3)**

Data were weighted by dividing the average number of working days per month in the reference period (Aug-07 to Mar-17) by the number of working days in each individual month, then by multiplying this value by the number of pathways completed in each individual month.
Chart 15: Number of RTT patients starting admitted treatment per working day, published figures, England (alternative version of Chart 9, Section 4.3)

Chart 16: Number of RTT patients starting non-admitted treatment per working day, published figures, England (alternative version of Chart 10, Section 4.3)
Chart 17: Number of RTT patients waiting at the end of the month, published figures, England (alternative version of Chart 4, Section 4.3)

Chart 18: Number of RTT patients waiting at month end year on year, published figures, England (alternative version of chart 6, Section 4.3)