NHS Beds in Wales, 2017-18

Key points

- The long-term trend shows that while the average number of beds has decreased, the percentage occupancy has increased.
- The average daily available beds continued to fall this year and has now declined by almost a third since 1996-97.
- The percentage occupancy of available NHS beds decreased slightly this year after a general increase since 1996-97.
- Out of the 8 health boards and trusts, 5 had decreases in available beds this year whilst 2 had increases in percentage occupancy.
- Beds available for the specialty old age psychiatry had the highest decrease this year compared to 2016-17 while the biggest increase was for Paediatrics.

The Average daily available beds and percentage occupancy of NHS beds in Wales from 1996-97

About this release

This annual release presents summary information, provided by the NHS Wales Informatics Service (NWIS), on bed use in Wales.

Data is presented at Wales and local health board (LHB) level as well as by speciality for average daily available beds, average daily occupied beds and occupancy rates.

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Introduction

This annual Statistical Release publishes information on NHS bed use and availability in NHS Wales. It summarises average daily available beds, occupied beds and percentage occupancy. The data is shown broken down by Local Health Boards (LHB) and Trusts as well as by Specialty, giving further context to the figures.

Data is available for all specialties on StatsWales; we focus on the ten largest in this report. We exclude the following specialities from totals in this release: ‘Special Care Baby Unit’, ‘High Dependency Care’, ‘Intensive Care’, ‘Paediatric Intensive Therapy Unit’ and ‘Bone Marrow Unit’.

NHS Wales Informatics Service (NWIS) collect the information as part of the QueSt 1 (QS1) return received from health boards each month. We use the annual averages in this release. Find more information in the Key quality information section of this release, or in the Quality report published separately.

The QS1 changed from a quarterly to a monthly collection in January 2013. QS1 data items derived from other NHS Wales datasets (such as patient level datasets) were retired from this point onwards. The main impact of this change has been a shortened beds release published including only average daily available beds, average daily occupied beds and percentage occupancy while the quality of these other sources are reviewed. Where applicable we have added discontinuity lines to charts to highlight this.

The data was first collected in its current form in 1996 so this release provides long-term trend comparisons from the 1996-97 financial year. Data is available back to 1989 on StatsWales.

Definitions

**Average daily available beds**: This is the average daily number of available staffed and temporary beds excluding those in special care baby units or intensive therapy units. This is based on a count from midnight and 9am.

Average = Total of daily counts divided by number of days in month.

**Average daily occupied beds**: This is the average daily number of beds occupied by patients under the care of a consultant in a particular specialty. A bed may only be occupied by one patient at any given time. The count only includes inpatients, not day cases. This is based on a count taken between midnight and 9am.

Average = Total of daily counts divided by number of days in month

**Percentage occupancy**: The proportion of occupied beds out of available beds e.g. ‘average daily occupied beds’ divided by the ‘average daily available beds’ multiplied by 100
Average daily available beds

Chart 1: Average daily available NHS beds, 1996-97 to 2017-18\(^1\)

<table>
<thead>
<tr>
<th>Financial Year</th>
<th>Average daily available beds</th>
</tr>
</thead>
<tbody>
<tr>
<td>96-97</td>
<td>16,000</td>
</tr>
<tr>
<td>97</td>
<td>14,000</td>
</tr>
<tr>
<td>98</td>
<td>12,000</td>
</tr>
<tr>
<td>99</td>
<td>10,000</td>
</tr>
<tr>
<td>00</td>
<td>8,000</td>
</tr>
<tr>
<td>01</td>
<td>6,000</td>
</tr>
<tr>
<td>02</td>
<td>4,000</td>
</tr>
<tr>
<td>03</td>
<td>2,000</td>
</tr>
<tr>
<td>04</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: QueSt 1 return, NWIS

\(^1\)Methodology changes in 2012-13, see Key quality information

This year

- The average daily available NHS beds in 2017-18 was 10,712.

Change since last year

- Over the last year, the total has fallen by 144 (1.3 per cent), it is now the lowest on record.

Ten year change

- 10 years ago in 2007-08 the average daily available beds was 13,357, 2,645 more than this year (19.8 per cent higher).

Change since 1996-97

- The average available beds have fallen every year since the QueSt 1 return was first available in its current form in 1996-97. During this time there has been an overall decrease of 4,870 (31.3 per cent) from 15,582 beds to 10,712.

Policy context

- The long term strategy for healthcare in Wales is to provide care closer to home by increasing community and GP services. More detail on this can be found in the "A Healthier Wales” report.
- Advances in healthcare technology have also resulted in shorter lengths of stay and more day surgery. Data on average length of stay is available from PEDW online.
Percentage occupancy

Chart 2: Percentage occupancy, 1996-97 to 2017-18

This year

- The percentage occupancy of NHS beds in 2017-18 was 87.0 per cent.

Change since last year

- The percentage occupancy is 0.4 percentage points lower than in 2016-17. The year on year difference in percentage occupancy is generally quite small, usually fluctuating by less than a percentage point.

Ten year change

- 10 years ago in 2007-08 the percentage occupancy was 82.8 per cent, 4.3 percentage points lower than this year.

Change since 1996-97

- Despite falls in some years, there has been a general increase in percentage occupancy since 1996-97 when it was 78.3 per cent, 8.7 percentage points lower than it is today.

Source: QueSt 1 return, NWIS

*Methodology changes in 2012-13, see Key quality information
Summary by local health board

Table 1: Summary statistics by local health board

<table>
<thead>
<tr>
<th>Local health board (LHB)</th>
<th>Average daily available beds</th>
<th>Average daily occupied beds</th>
<th>Percentage occupancy (%)</th>
<th>Percentage point difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2016-17</td>
<td>2017-18</td>
<td>2016-17</td>
<td>2017-18</td>
</tr>
<tr>
<td></td>
<td>Percentage change</td>
<td>Percentage change</td>
<td>Percentage change</td>
<td>Percentage change</td>
</tr>
<tr>
<td>Betsi Cadwaladr University</td>
<td>2,249</td>
<td>2,205</td>
<td>-2.0</td>
<td>1,944</td>
</tr>
<tr>
<td>Powys Teaching</td>
<td>218</td>
<td>215</td>
<td>-1.1</td>
<td>181</td>
</tr>
<tr>
<td>Hywel Dda University</td>
<td>1,218</td>
<td>1,229</td>
<td>0.8</td>
<td>1,069</td>
</tr>
<tr>
<td>Abertawe Bro Morgannwg University</td>
<td>2,266</td>
<td>2,199</td>
<td>-2.9</td>
<td>2,020</td>
</tr>
<tr>
<td>Cwm Taf University</td>
<td>1,261</td>
<td>1,264</td>
<td>0.2</td>
<td>1,061</td>
</tr>
<tr>
<td>Aneurin Bevan University</td>
<td>1,812</td>
<td>1,796</td>
<td>-0.9</td>
<td>1,606</td>
</tr>
<tr>
<td>Cardiff and Vale University</td>
<td>1,793</td>
<td>1,765</td>
<td>-1.5</td>
<td>1,578</td>
</tr>
<tr>
<td>Velindre</td>
<td>40</td>
<td>40</td>
<td>0.0</td>
<td>35</td>
</tr>
<tr>
<td>Wales</td>
<td>10,857</td>
<td>10,712</td>
<td>-1.3</td>
<td>9,493</td>
</tr>
</tbody>
</table>

1 The proportion of average daily occupied beds to average daily available beds.

Source: QueSt 1 return, NWIS

This year

- In 2017-18, Betsi Cadwaladr and Abertawe Bro Morganwg had the most average daily available beds (2,205 and 2,199 respectively). Velindre and Powys had the least available beds (40 and 215 respectively). Cardiff had the highest percentage occupancy of available beds this year with 88.4 per cent, Velindre had the least with 76.8 per cent.

Change since last year

- The average daily available beds decreased between 2016-17 and 2017-18 in 5 out of the 8 local health boards and trusts in Wales. Hywel Dda and Cym Taf had an increase in beds during this time and Velindre stayed the same.

- Percentage occupancy increased in two of the local health boards/trusts; Betsi Cadwaladr, and Cardiff and Vale, the remaining boards/trusts experienced a decrease. Betsi Cadwaladr had the largest increase (1.2 percentage points) and Velindre had the largest decrease (11.3 percentage points) in percentage occupancy.

Change since 2009-10

- These health boards were established in 2009-10, since then, average number of daily available beds has decreased for all of them. Betsi Cadwaladr has had the largest decrease with a fall of 540 beds (19.7 per cent). Velindre has had the smallest fall with a decrease of 11 beds (22.2 per cent). Betsi Cadwaladr has also had the largest increase in percentage occupancy, rising by 13.3 percentage points from 74.3 per cent to 87.6 per cent. Of the two health boards with a decrease in occupancy, Powys Teaching had the largest, falling by 3.5 percentage points from 85.6 per cent to 82.1 per cent.
## Summary by specialty

### Table 2: Summary statistics by top 10 specialties

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Average daily available beds 2016-17</th>
<th>Average daily available beds 2017-18</th>
<th>Percentage change 2016-17</th>
<th>Average daily occupied beds 2016-17</th>
<th>Average daily occupied beds 2017-18</th>
<th>Percentage change 2016-17</th>
<th>Percentage occupancy (%) 2016-17</th>
<th>Percentage occupancy (%) 2017-18</th>
<th>Percentage point difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Medicine</td>
<td>2,162</td>
<td>2,118</td>
<td>-2.0</td>
<td>2,066</td>
<td>2,025</td>
<td>-2.0</td>
<td>95.6</td>
<td>95.6</td>
<td>0.1</td>
</tr>
<tr>
<td>Geriatric Medicine</td>
<td>1,229</td>
<td>1,205</td>
<td>-2.0</td>
<td>1,173</td>
<td>1,160</td>
<td>-1.1</td>
<td>95.4</td>
<td>96.3</td>
<td>0.9</td>
</tr>
<tr>
<td>Trauma and Orthopaedics</td>
<td>929</td>
<td>920</td>
<td>-0.9</td>
<td>764</td>
<td>762</td>
<td>-0.3</td>
<td>82.3</td>
<td>82.8</td>
<td>0.5</td>
</tr>
<tr>
<td>General Surgery</td>
<td>869</td>
<td>882</td>
<td>1.4</td>
<td>762</td>
<td>739</td>
<td>-3.0</td>
<td>87.6</td>
<td>83.8</td>
<td>-3.8</td>
</tr>
<tr>
<td>Adult Mental Illness</td>
<td>740</td>
<td>727</td>
<td>-1.8</td>
<td>681</td>
<td>674</td>
<td>-1.1</td>
<td>92.1</td>
<td>92.7</td>
<td>0.6</td>
</tr>
<tr>
<td>Rehabilitation Service</td>
<td>604</td>
<td>597</td>
<td>-1.2</td>
<td>587</td>
<td>569</td>
<td>-3.1</td>
<td>97.2</td>
<td>95.3</td>
<td>-1.9</td>
</tr>
<tr>
<td>Old Age Psychiatry</td>
<td>655</td>
<td>597</td>
<td>-8.9</td>
<td>563</td>
<td>509</td>
<td>-9.6</td>
<td>86.0</td>
<td>85.4</td>
<td>-0.7</td>
</tr>
<tr>
<td>Paediatrics</td>
<td>472</td>
<td>491</td>
<td>4.0</td>
<td>269</td>
<td>269</td>
<td>-0.2</td>
<td>57.1</td>
<td>54.8</td>
<td>-2.3</td>
</tr>
<tr>
<td>Obstetrics</td>
<td>391</td>
<td>389</td>
<td>-0.3</td>
<td>194</td>
<td>186</td>
<td>-4.0</td>
<td>49.6</td>
<td>47.8</td>
<td>-1.8</td>
</tr>
<tr>
<td>GP Other Than Maternity</td>
<td>320</td>
<td>326</td>
<td>2.0</td>
<td>287</td>
<td>301</td>
<td>4.8</td>
<td>89.8</td>
<td>92.2</td>
<td>2.5</td>
</tr>
</tbody>
</table>

1 Only the top 10 specialties based on average daily available beds in 2017-18 are shown  
2 The proportion of average daily occupied beds to average daily available beds.

Source: QueSt 1 return, NWIS

Please note that some of the changes above may have been down to reclassification of beds between specialties as well as changes in the coding specification used to record the numbers.

The following commentary focusses on the top ten specialties this year; data on all specialities is available on StatsWales.

### This year

- The top ten specialties in 2017-18 made up 77.0 per cent of Wales’ average daily available beds.

- The specialty in 2017-18 with the largest average daily available beds was General Medicine, with 2,118 beds. In this specialty, the percentage occupancy has increased slightly by less than a percentage point compared to 2016-17.

- Of the top ten largest specialities, ‘Geriatric Medicine’ had the highest percentage occupancy in 2017-18 (96.3 per cent). ‘Obstetrics’ had the lowest percentage occupancy this year, with less than half occupied (47.8 per cent).

### Change since last year

- Between 2016-17 and 2017-18, the largest fall in available NHS beds was in the specialty old age psychiatry (down 58, 8.9 per cent). Paediatrics had the largest increase (up 19, 4.0 per cent).

- Between 2016-17 and 2017-18 the largest fall in percentage occupancy was for ‘General Surgery’ which decreased by 3.8 percentage points from 87.6 percent to 83.8 per cent. The largest increase was in ‘GP other than maternity’, 2.5 percentage points from 89.8 per cent to 92.2 per cent.
Change since 1996-97

- Since 1996-97 the largest fall in the number of available beds was in geriatric medicine (down 1,647, a decrease of over half from 2,852), followed by Old Age Psychiatry (down 759, a decrease of over half from 1,356). The largest increase over this period was for Rehabilitation Service beds (up 432, more than 2 and half times the beds available in 1996-97, 165),

- Between 1996-97 and 2017-18, of the largest specialties this year, obstetrics has had the largest decrease in percentage occupancy, falling 13 percentage points from 60.8 per cent to 47.8 per cent, the largest increase was for ‘General Practice other than Maternity’ rising by 17.8 per cent from 74.4 per cent to 92.2 per cent.
Key quality information

Relevance
The information presented in this release is derived from the QueSt 1 (QS1) return. The QS1 return, introduced in its current form in 1996, provides aggregate data on bed availability and occupation in NHS hospitals in Wales. In this release we compare current figures with figures for 1996-97 as this was the first financial year since the introduction of the QS1. Data are collected from individual local health boards in Wales by NHS Wales Informatics Service (NWIS) and are subject to validation checks centrally prior to publication. It is the responsibility of these organisations to ensure that the figures have been compiled correctly in accordance with central definitions and guidelines.

The QS1 return saw a change in January 2013, when the reporting of bed usage and clinic information went from being a quarterly requirement to a monthly one. QS1 data items that were able to be derived from other NHS Wales datasets (such as patient level datasets) were retired from this point onwards. The main impact of this change is that the data for deaths and discharges (used in calculations for average length of stay, turnover interval and bed use factor) will be derived from the Patient Episode Database for Wales (PEDW) for 2012-13 data onwards.

The amendments to the QS1 return in January 2013 have resulted in some changes to this beds release for 2013-14 onwards. Details of this and other relevant information about this dataset are provided below.

The data covers all beds in NHS hospitals in Wales.

Methodology
There is a different methodology for calculating the average annual available and occupied daily beds in order to take into account of the change from the reporting of quarterly QS1 information to monthly in January 2013. From 2013-14, the methodology is as follows:

Annual average daily available beds =

$$\frac{M_1 + M_2 + M_3 + M_4 + M_5 + M_6 + M_7 + M_8 + M_9 + M_{10} + M_{11} + M_{12}}{12}$$

Where M = Monthly data. The same methodology is applied to the annual average daily occupied beds.

In 2012-13, the methodology was:

Annual average daily available beds =

$$\frac{Q_1 + Q_2 + Q_3 + (\frac{M_{10} + M_{11} + M_{12}}{3})}{4}$$
In previous years, when the QS1 was collected quarterly the methodology was:

Annual average daily available beds = \( \frac{Q_1 + Q_2 + Q_3 + Q_4}{4} \)

Where Q = Quarterly data, M = Monthly data. The same methodology was applied to the annual average daily occupied beds.

**Specialties**

Each bed and patient attendance is classified by specialty. Information by specialty can be found on [StatsWales](#), and are aggregated to align with specialty groups presented in the [NHS Wales Data Dictionary](#). A number of specialties are excluded from the totals for average daily available beds, average daily occupied beds and percentage occupancy. These are: Special Care Baby Unit, High Dependency Care, Intensive Care, Paediatric Intensive Therapy Unit and Bone Marrow Unit. Data for these are included under the appropriate specialty. Beds data is also available for these specialties on StatsWales.

**Mental health beds in Powys**

From 1 April 2010, Powys Teaching LHB transferred mental health services to Aneurin Bevan LHB, Betsi Cadwaladr University LHB and Abertawe Bro Morgannwg University LHB. From 1 December 2015 the management of mental health services for Powys was transferred back to Powys from Abertawe Bro Morgannwg and Betsi Cadwaladr. This does not affect how the data is presented in this release or on StatsWales, as the data for the relevant hospitals affected by this in Powys have always been shown against Powys LHB (individually and in the LHB total), rather than against the LHB that the management of the service has been transferred to.

**Accuracy and reliability**

This data is not a sample, and should therefore include all relevant data.

Deaths and discharges (inpatients) data: This continues to be a shorter release than in previous years, because although information on average daily available beds and on occupancy rates is shown, it doesn’t present data on average length of stay, turnover interval and bed use factor. These indicators are calculated using data on deaths and discharges, which as mentioned above, are no longer collected via the QS1 return, and now need to be derived from the Patient Episode Database for Wales (PEDW) for 2012-13 onwards. When carrying out more detailed analysis of the deaths and discharges data from PEDW in preparation for the 2012-13 release, data quality issues arose in relation to assessment unit (AU) activity reporting in QS1 and in PEDW and how this should be treated in the data. It was identified that there is inconsistency in the reporting of assessment units, with some LHBs reporting AU activity within their beds data, and others omitting them.

Each indicator noted above (average length of stay, turnover interval and bed use factor) needs to be calculated using a combination of deaths and discharges data from PEDW and bed data from QS1. However, for each LHB, the PEDW data needs to be matched to the QS1 data in order to ensure that AU activity is reported on the same basis. For example, if an LHB includes AU activity...
within the QS1 bed data, the PEDW data will need to be derived so that AU activity is included within the deaths and discharges figure, so that the indicator can be calculated on a consistent basis. This exercise of matching the PEDW data to the QS1 data requires data quality work, and therefore this release only presents those indicators derived from QS1 alone, i.e. average available daily and occupied beds.

Despite the fact that this release only presents data from the QS1 return on average available daily and occupied beds, the quality assurance has highlighted that not all LHBs have reported AU activity in the same way for their beds data. Although this inconsistency in the reporting of AU activity was identified for the 2012-13 release, it is likely that historic data could also be affected.

Due to the data quality issues, users are advised to use caution when making data comparisons, particularly at LHB level.

Recoding in 2016-17: It has been identified that North Wales Adolescent Service moved from their site in Colwyn Bay to Abergele Hospital in 2009. Prior to 2009-10, these beds were recorded under North Wales Adolescent Service, while they have been recorded under the Betsi Cadwaladr University Health Board total, and were not recorded under a hospital site, from 2009-10 onwards. During 2016-17, it was agreed that this data should be recorded under Abergele, and this change is reflected in the publication.

Ysbyty Gwynedd and University Hospital Llandough submitted data under the neurology specialty in 2016-17. This has been reported under other neurology, as this is consistent with how data is submitted by other hospitals.

Recoding in 2017-18

From April 2016, new codes were introduced for describing specialties to add more detail to data collections. More detail on this here: Data Dictionary. Until all health boards are able to report data consistently using the more detailed codes, we have recoded specialties as their previous description to avoid inconsistent reporting. Specifically, ‘Breast Surgery’ data has been recoded as ‘General Surgery’ which is how it has been recorded historically. We recoded ‘Stroke Medicine’ as ‘General Medicine’ and ‘Interventional Radiology’ as ‘Radiology’.

All our outputs include information on coverage, timing and geography.

There have been no revisions to the data this year. In the unlikely event of incorrect data being published, revisions would be made and users informed in conjunction with our Revisions, Errors and Postponements arrangements.

Timeliness and punctuality

All outputs adhere to the Code of Practice by pre-announcing the date of publication through the Upcoming Calendar. Furthermore, should the need arise to postpone an output this would follow our Revisions, Errors and Postponements arrangements.

Data is collected monthly by NWIS.

Also, because the data are published annually, it is unlikely that late submissions would greatly affect the annual publication by Welsh Government.
Accessibility and clarity
The annual statistics will be published in an accessible, orderly, pre-announced manner on the Welsh Government website at 9:30am on the day of publication. An RSS feed alerts registered users to this publication. Simultaneously the outputs are also listed on the National Statistics Publication Hub. We also publicise the outputs on Twitter. All outputs are available to download for free.

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

We aim to use Plain English in our outputs and they adhere to the Welsh Government’s accessibility policy. Furthermore, all our headlines are published in Welsh and English. Further information regarding the statistics can be obtained by contacting the relevant staff detailed on this article/headline or via stats.healthinfo@gov.wales

Comparability and coherence
Other UK countries also publish bed use statistics.

NHS England publish statistics on bed use on their website.

The Information Services Division (ISD) in NHS Scotland publish statistics on bed use on their website.

In Northern Ireland, the Department of Health publish bed use statistics on their website.

Well-being of Future Generations Act (WFG)
The Well-being of Future Generations Act 2015 is about improving the social, economic, environmental and cultural well-being of Wales. The Act puts in place seven well-being goals for Wales. These are for a more equal, prosperous, resilient, healthier and globally responsible Wales, with cohesive communities and a vibrant culture and thriving Welsh language. Under section (10)(1) of the Act, the Welsh Ministers must (a) publish indicators (“national indicators”) that must be applied for the purpose of measuring progress towards the achievement of the Well-being goals, and (b) lay a copy of the national indicators before the National Assembly. The 46 national indicators were laid in March 2016.

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


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

We believe the key users of these statistics are:

- Ministers and their advisors;
- Assembly members and Members Research Service in the National Assembly for Wales;
- Policy makers of the Welsh Government;
- Other government departments;
- NHS Wales;
- Students, academics and universities;
- Media; and
- Individual citizens.

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

- To provide advice to Ministers;
- To inform debate in the National Assembly for Wales and beyond;
- To monitor bed use across the different specialties and in different areas of Wales; and
- To help determine the service that the public may receive from the relevant organisations.

If you are a user and do not feel the above list adequately covers you please let us know via the contact details below.
Further details


The data presented in this release can be downloaded from our StatsWales tables. These tables also include further data breakdowns such as by specialty and hospital.

More information on the definitions of terms used in this release, and on data sources, can be found in the NHS Wales Data Dictionary.

Change of data source for Outpatient Activity (not analysed in this release)

Following data quality assessments and reviews and in consultation with health board representatives, a decision was made that it was no longer a national requirement to collect data items from the QS1 return that were derivable from patient level datasets. Consequently, from 2012-13 onwards, the Outpatient Activity Minimum Dataset (OP MDS) is the source of official statistics for outpatient activity in the NHS in Wales, rather than the QS1 return. This approach has a number of benefits:

- Have just one definitive source of data for outpatient activity data;
- Remove the burden on data providers of supplying data for two similar data sets;
- Remove the confusion for analysts and users which exists by having two similar data sets, containing different data in some cases; and
- Allow more granularity for research and data mining (the OP MDS provides patient level data, whereas the QS1 data collection provides high level, summary data).

Data for outpatient activity is available on StatsWales.

Next update

August 2019 (provisional)

We want your feedback

We welcome any feedback on any aspect of these statistics that can be provided by email to stats.healthinfo@gov.wales

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