Prescriptions in Wales, 2018-19

There are two main sections: ‘GP prescriptions’ which are items prescribed by GPs in Wales (and non-medical prescribers that have prescribed on behalf of GP practices) and dispensed within the community in Wales or elsewhere in the UK; and ‘UK comparisons’ which use slightly different data called ‘prescriptions dispensed in the community’ which are items prescribed by any prescribing health professionals in the UK that were subsequently dispensed in the community in Wales.

GP prescriptions data are the primary focus of this report because it demonstrates which medicines and appliances are being prescribed by Welsh GP practices.

Prescriptions dispensed in the community are similar in number to GP prescriptions but differ for two main reasons; firstly, some people registered with a Welsh GP practice may have their prescription dispensed by a pharmacy outside Wales; and secondly, people registered with a GP practice outside Wales may have their prescription dispensed by a pharmacy in Wales. The difference between GP prescriptions and prescriptions dispensed in the community is largely the result of this ‘cross border’ flow.

It is recommended that GP prescriptions data are used as the primary source of prescriptions analysis in Wales. Prescriptions dispensed in the community are secondary data, but should be used when making comparisons across countries in the UK.

<table>
<thead>
<tr>
<th>80.1 million</th>
<th>25.5</th>
<th>£563.2 million</th>
</tr>
</thead>
<tbody>
<tr>
<td>items prescribed by GPs</td>
<td>items per head</td>
<td>net ingredient cost</td>
</tr>
</tbody>
</table>

Key facts

- 80.1 million items were prescribed by GPs, and dispensed in the community. This is 0.3% higher than 2017-18 and 29.2% higher than in 2007-08

- The number of prescriptions per head of population registered with a GP was 25.5 in 2018-19. This is 0.6 items (or 2.4%) higher than the previous year and 5.5 items (or 27.3%) higher than in 2007-08.

- The net ingredient cost of the items prescribed was £563.2 million, a decrease of £15.3 million (or 2.6%) on the previous year, and £21.2 million (or 3.6%) less than in 2007-08.
Information about prescriptions data in Wales

Prior to 2019, prescriptions data had been published in two separate statistical releases, Prescriptions by GPs last published on 19 September 2018 and Prescriptions dispensed in the community last published on 23 May 2018.

This new statistical release replaces both of the previous statistical releases on prescriptions, to provide a clearer prescriptions analysis in Wales.

NHS Shared Service Partnership also publish data on GP prescriptions every month, based on the same data which is presented in this publication.

Changes to previous releases

Publication of new interactive data tool in Power BI: This new tool allows users to search data on BNF chapters, sections, and sub paragraphs, based on GP prescriptions. Previously this data was published in only in Excel files using only prescriptions dispensed in the community data.

Which data should I use?

In general, when analysing prescriptions data for Wales, GP prescriptions should be used as the primary source. This is because the data shows what is being prescribed to people registered with Welsh GP practices and this activity is monitored and influenced by health boards. This data includes items that are prescribed in Wales by GPs and non-medical prescribers that have prescribed on behalf of the GP practice.

‘Prescriptions dispensed in the community’ should be used for more specific purposes where users are interested only in the items actually dispensed in Wales, and if direct comparisons are being made between different UK countries. While broadly the number of items prescribed by GPs is close to the number of items prescribed and dispensed in Wales it does not exactly match for a number of reasons including:

- prescriptions written in Wales but dispensed elsewhere in the UK (including the Isle of Man) are counted in GP prescriptions but not ‘prescriptions dispensed in the community’. This is particularly common for specialist items such as stomas and incontinence appliances which are often dispensed by appliance contractors rather than pharmacies, many of which are not located in Wales
- prescriptions written in another UK country (including the Isle of Man) but dispensed in Wales are not included in GP prescriptions, but are included in ‘prescriptions dispensed in the community’
- people who have had a hospital outpatient appointment and have their prescription items dispensed in their local pharmacy rather than the hospital one will not be included in GP Prescriptions, but they would be in ‘prescriptions dispensed in the community’

Note that both ‘GP prescriptions’ and ‘prescriptions dispensed in the community’ capture prescriptions which are dispensed by dispensing doctors, appliance contractors and community (high street) pharmacies. Neither source contains data for items prescribed and dispensed in hospitals.
The following table shows a comparison between the items prescribed by GPs and the prescriptions dispensed in the community in 2018-19:

Table 1: Items prescribed by GPs and dispensed in the community, 2018-19

<table>
<thead>
<tr>
<th>BNF Chapter</th>
<th>BNF Chapter Name</th>
<th>Items prescribed by GP</th>
<th>Items dispensed in the community</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Gastro-Intestinal System</td>
<td>7,328,332</td>
<td>7,363,420</td>
<td>35,088</td>
</tr>
<tr>
<td>02</td>
<td>Cardiovascular System</td>
<td>23,305,369</td>
<td>23,330,618</td>
<td>25,249</td>
</tr>
<tr>
<td>03</td>
<td>Respiratory System</td>
<td>5,888,292</td>
<td>5,909,047</td>
<td>20,755</td>
</tr>
<tr>
<td>04</td>
<td>Central Nervous System</td>
<td>16,479,104</td>
<td>16,744,711</td>
<td>265,607</td>
</tr>
<tr>
<td>05</td>
<td>Infections</td>
<td>2,521,074</td>
<td>2,741,400</td>
<td>220,326</td>
</tr>
<tr>
<td>06</td>
<td>Endocrine System</td>
<td>7,871,981</td>
<td>7,898,183</td>
<td>26,202</td>
</tr>
<tr>
<td>07</td>
<td>Obstetrics, Gynae+Urinary Tract Disorder</td>
<td>2,050,770</td>
<td>2,062,718</td>
<td>11,948</td>
</tr>
<tr>
<td>08</td>
<td>Malignant Disease &amp; Immunosuppression</td>
<td>427,785</td>
<td>450,623</td>
<td>22,838</td>
</tr>
<tr>
<td>09</td>
<td>Nutrition And Blood</td>
<td>3,968,511</td>
<td>4,037,188</td>
<td>68,677</td>
</tr>
<tr>
<td>10</td>
<td>Musculoskeletal &amp; Joint Diseases</td>
<td>2,279,494</td>
<td>2,304,371</td>
<td>24,877</td>
</tr>
<tr>
<td>11</td>
<td>Eye</td>
<td>1,320,090</td>
<td>1,355,740</td>
<td>35,650</td>
</tr>
<tr>
<td>12</td>
<td>Ear, Nose And Oropharynx</td>
<td>960,215</td>
<td>1,005,069</td>
<td>44,854</td>
</tr>
<tr>
<td>13</td>
<td>Skin</td>
<td>2,146,025</td>
<td>2,194,924</td>
<td>48,899</td>
</tr>
<tr>
<td>14</td>
<td>Immunological Products &amp; Vaccines</td>
<td>749,357</td>
<td>749,414</td>
<td>57</td>
</tr>
<tr>
<td>15</td>
<td>Anaesthesia</td>
<td>102,784</td>
<td>105,132</td>
<td>2,348</td>
</tr>
<tr>
<td>18</td>
<td>Preparations used in Diagnosis</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>19</td>
<td>Other Drugs And Preparations</td>
<td>76,343</td>
<td>74,390</td>
<td>-1,953</td>
</tr>
<tr>
<td>20</td>
<td>Dressings</td>
<td>452,898</td>
<td>342,497</td>
<td>-110,401</td>
</tr>
<tr>
<td>21</td>
<td>Appliances</td>
<td>1,796,360</td>
<td>1,780,593</td>
<td>-15,767</td>
</tr>
<tr>
<td>22</td>
<td>Incontinence Appliances</td>
<td>95,722</td>
<td>118,164</td>
<td>22,442</td>
</tr>
<tr>
<td>23</td>
<td>Stoma Appliances</td>
<td>325,446</td>
<td>201,148</td>
<td>-124,298</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>80,145,953</strong></td>
<td><strong>80,769,351</strong></td>
<td><strong>623,398</strong></td>
</tr>
</tbody>
</table>

Source: NHS Wales Shared Services

Key Definitions

**Items dispensed:** A prescription item refers to a single item prescribed by a doctor on a prescription form. If a prescription form includes three items it is counted as three prescription items. A prescription item may be for a variable quantity, for example: 14, 28 or 56 tablets. A prescription item can consist of a varying amount of tablets or measure for the same preparation, therefore the cost per item refers to the cost per average measure of that preparation. It does not refer to the cost per single tablet or per pack of tablets.

**Net Ingredient Cost (NIC):** NIC refers to the cost of the drug before discounts and does not include any dispensing costs or fees paid to the dispenser.

Figures quoted for net ingredient cost for all years are unadjusted for inflation. Standard adjustments for inflation are not considered appropriate as drug prices are subject to controls under the Pharmaceutical Price Regulation Scheme and to other central controls.
What does the data show?

In 2018-19 the number of items prescribed by GPs in Wales and dispensed in the community increased slightly from the previous year and was the highest on record, with just over 80.1 million items prescribed and dispensed.

The long-term trend shows large increases in the number of items prescribed and dispensed over time, however the increases have slowed down over the most recent five years, and have been broadly unchanged over the last three years.

In contrast the Net Ingredient Cost of the items prescribed by GPs and dispensed in the community has been broadly stable over the past 15 years, with some year-to-year volatility.

In 2018-19, the total Net Ingredient Cost decreased since the previous year and was at the same level as in 2005-06. Note that Net Ingredient Costs are not adjusted for inflation.

The BNF chapters with the most items prescribed by GPs in Wales and dispensed in the community has been unchanged over the past three years. These are cardiovascular system, central nervous system and endocrine system and combined they cover nearly 60% of all items.

The differences in costs of prescription items is reflected in that the top three BNF chapters in terms of Net Ingredient Costs are not the same as the top three by number of items prescribed. These are central nervous system, endocrine system and respiratory system which account for 46% of the total Net Ingredient Cost of all items.

There are some differences between health boards in terms of both the number of items and net ingredient cost of items, which may be reflected in the different demographics between health board areas. The largest health board area in Wales (Betsi Cadwaladr) had the highest number of items prescribed by a GP and dispensed in the community, but Cwm Taf had the largest when per prescribing unit (when population and age of population is adjusted for), while the cost per item ranged from £6.63 in Aneurin Bevan to £7.79 in Cardiff & Vale.

Using supplementary data for prescriptions dispensed in the community, comparisons between the four UK countries can be made. The number of items prescribed per person in Wales was higher than in the other 3 countries, with Wales having 6.7 more prescription items per person, on average, than Scotland (lowest in UK).

However, the Net Ingredient Cost per head in Wales was lower than both Scotland and Northern Ireland, but higher than England. And the Net Ingredient Cost per item prescribed was lower in Wales than all 3 other countries, with cost per item in Wales 37% cheaper than in Scotland (highest in the UK).
GP Prescriptions

Chart 1: Prescription items issued by GPs in Wales and dispensed, since 1973

Latest data
In 2018-19 there were 80,145,953 items prescribed by GPs in Wales and dispensed in the community. This is equivalent to 25.5 items per head of the population registered with a GP in Wales.

Change since last year
Almost a quarter of a million (242,223) more items were prescribed in 2018-19 compared to 2017-18, an increase of 0.3%.

This is an increase of 0.6 items (2.4%) per head of the population registered with a GP in Wales.

Change over the last 5 years
1.6 million (1,633,227) more items were prescribed in 2018-19 than in to 2014-15, an increase of 2.1%.

This is an increase of 0.8 items (3.2%) per head of the population registered with a GP in Wales.

Change since introduction of free prescriptions on 1 April 2007
More than 18 million (18,134,778) additional items were prescribed in 2018-19 compared to 2007-08, an increase of 29.2%.

This is an increase of 5.5 items, or 27.3% per head of the population registered with a GP in Wales.

Change since 1973
In 1973, the first year for which we have data, just over 21.3 million (21,332,305) items were prescribed in Wales, equivalent to 7.6 items per head of population registered with a GP. Since then, the number of items prescribed has gone up by almost 60 million, or 176%.
Latest data

In 2018-19, the total net ingredient cost was more than 560 million pounds (£563,162,205); equivalent to £179.36 per head of population registered with a GP in Wales.

Change since last year

Total net ingredient costs fell by more than 15 million pounds (£15,265,278) or 2.6% in 2018-19 compared with the previous year; the cost per head of population registered with a GP in Wales went down by £1.09 (0.6%).

Change over the last 5 years

There has been a reduction in the total net ingredient cost of more than 18 million pounds (£18,253,055), or 3.1% since 2014-15. The cost per head of population registered with a GP in Wales has gone down by £3.88 (2.1%).

Change since introduction of free prescriptions on 1 April 2007

The total net ingredient cost has reduced by more than 21 million pounds (£21,252,409), or 3.6% since 2007-08, when free prescriptions were introduced in Wales. The cost per head of population registered with a GP in Wales has gone down by £9.54 (5.0%).

Change since 1973

In 1973, the total net ingredient cost was almost 14.5 million pounds (£14,402,992.41). The cost regularly went up by more than 10% each year until 2003-04 when annual increases slowed down, with costs reaching a peak of almost 600 million pounds (£594,329,295.68) in 2010-11. Since then, the annual change has ranged from a reduction of 5% to an increase of 2%, but the total costs are still 3,710% higher than in 1973.

In 1973 the cost per head of the population registered with a GP was £5.14.
**Chart 3: Average net ingredient costs per prescription item prescribed by GPs in Wales (£)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Mean cost per item (annual) (a)</th>
<th>Median cost per item (March) (b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001-02</td>
<td>9.90</td>
<td>4.07</td>
</tr>
<tr>
<td>2002-03</td>
<td>10.44</td>
<td>4.22</td>
</tr>
<tr>
<td>2003-04</td>
<td>10.73</td>
<td>4.34</td>
</tr>
<tr>
<td>2004-05</td>
<td>10.70</td>
<td>4.20</td>
</tr>
<tr>
<td>2005-06</td>
<td>9.88</td>
<td>3.84</td>
</tr>
<tr>
<td>2006-07</td>
<td>9.80</td>
<td>3.70</td>
</tr>
<tr>
<td>2007-08</td>
<td>9.42</td>
<td>2.63</td>
</tr>
<tr>
<td>2008-09</td>
<td>9.12</td>
<td>2.58</td>
</tr>
<tr>
<td>2009-10</td>
<td>8.67</td>
<td>2.63</td>
</tr>
<tr>
<td>2010-11</td>
<td>8.48</td>
<td>2.26</td>
</tr>
<tr>
<td>2011-12</td>
<td>8.08</td>
<td>2.08</td>
</tr>
<tr>
<td>2012-13</td>
<td>7.51</td>
<td>2.01</td>
</tr>
<tr>
<td>2013-14</td>
<td>7.47</td>
<td>1.96</td>
</tr>
<tr>
<td>2014-15</td>
<td>7.41</td>
<td>2.10</td>
</tr>
<tr>
<td>2015-16</td>
<td>7.50</td>
<td>1.85</td>
</tr>
<tr>
<td>2016-17</td>
<td>7.21</td>
<td>1.71</td>
</tr>
<tr>
<td>2017-18</td>
<td>7.24</td>
<td>1.56</td>
</tr>
<tr>
<td>2018-19</td>
<td>7.03</td>
<td>1.60</td>
</tr>
</tbody>
</table>

*Source: NHS Wales Shared Services Partnership*

(a) Mean cost per item, shows the average (mean) cost per prescription item over the whole calendar year.

(b) Median cost per item, shows the median cost using data from March in each year. Data for a single month is used for practical purposes given the volume of prescription items issued.

- In 2018-19 the net ingredient cost per item (mean) was £7.03. This is 21p less than in 2017-18 and £2.87 less than in 2001-02.
- Apart from two years when there were slight increases (2015-16 and 2017-18), the mean net ingredient cost per item has fallen every year since 2003-04.
- The median cost per item in March 2019 was £1.60, up slightly from the previous March. It has been less than £3 since 2007-08 and less than £2 for the last four years.

**Mean:** The mean cost per item shows the total net ingredient cost for all prescription items, divided by the total number of prescription items for the whole calendar year.

**Median:** The median cost per item is the middle amount when all costs per item are ranked in order from cheapest to most expensive; half of all costs are less than or equal to this amount, and the other half are more than or equal to this amount. The median is commonly used in preference to the mean as it is less susceptible to extreme values than the mean.
Therapeutic classes – 2017-18

Chart 4 shows the proportion of items prescribed in Wales, while Chart 5 shows the net ingredient cost (NIC) of prescription items in Wales, by the six largest therapeutic classes during 2018-19. A list of the therapeutic classes is included in the notes section of this release.

Chart 4: Items by therapeutic class, 2018-19

- Cardiovascular: 29%
- Central Nervous System: 21%
- Endocrine: 10%
- Gastro: 9%
- Respiratory: 7%
- Nutrition And Blood: 5%
- Other (a): 19%

Source: NHS Wales Shared Services Partnership

Chart 5: NIC by therapeutic class, 2018-19

- Central Nervous: 17%
- Endocrine: 16%
- Respiratory: 13%
- Cardiovascular: 13%
- Nutrition And Blood: 7%
- Gastro: 5%
- Other (a): 29%

Source: NHS Wales Shared Services Partnership

(a) Includes: Infections, Musculoskeletal & Joint Diseases, Skin, Obstetrics, Gynae+Urinary Tract Disorders, Appliances, Eye, Ear, Nose And Oropharynx, Immunological Products & Vaccines, Dressings, Malignant Disease & Immunosuppression, Stoma Appliances, Anaesthesia, Incontinence Appliances, Other Drugs And Preparations, and Preparations used in Diagnosis

- Half of all items prescribed in Wales were for the treatment of conditions of the cardiovascular or central nervous systems.
- 23.3 million items were prescribed for treatment of the cardiovascular system, equal to 7.4 items per head of population registered with a GP in Wales.
- 16.5 million items were prescribed for the treatment of the central nervous system, equal to 5.2 items per head of population registered with a GP in Wales.
- Although the number of items prescribed for treatment of the cardiovascular and central nervous systems accounted for half of the total items prescribed (Chart 3), the net ingredient cost (NIC) for the same classes only accounted for 30% of the total (Chart 4).
Analysis by local health board

The following charts show the numbers of items prescribed by GPs contracted to Welsh health boards together with the associated net ingredient cost (NIC). Rather than comparing items per head of population registered with a GP, the charts show items and NIC per Prescribing Unit. Prescribing units (PUs) are calculated by giving a greater weight (by a factor of three) to the registered population aged 65 or over. They have been adopted to take account of elderly patients’ greater needs for medication and so to make more meaningful comparisons between health boards. The remaining differentials may be related to relative need and local culture and practice.

The 2018 mid-year estimates show that 21% of the population in Wales were aged 65 or over. This varied between health boards, with a relatively greater percentage of older people in Powys (27%), Hywel Dda (24%), and Betsi Cadwaladr (23%); and a relatively smaller percentage of older people in Abertawe Bro Morgannwg (20%), Aneurin Bevan (20%), Cwm Taf (19%) and Cardiff and Vale (16%).

Chart 6: Analysis per prescribing unit, by local health board, 2018-19

- The number of items prescribed per prescribing unit in 2018-19 was 18.1 for Wales, and varied across the health boards from 15.0 in Cardiff & Vale to 21.3 in Cwm Taf.
- The net ingredient cost per prescribing unit in 2018-19 was £127.47 in Wales, and ranged from £115.76 in Betsi Cadwaladr to £147.85 in Hywel Dda.
- Cost per item averaged £7.03 across Wales, and ranged from £6.63 in Aneurin Bevan to £7.79 in Cardiff & Vale.
- GPs in Cardiff & Vale prescribed fewer items per prescribing unit than in other health boards but at a higher cost per item. In contrast, Cwm Taf had the highest rates per prescribing unit for items and the second highest cost but the second lowest cost per item.
An in-depth look at Gabapentin and Pregabalin

Gabapentin and Pregabalin are used to treat nerve pain, epilepsy and anxiety; both can bring about an elevated mood in users but can also have serious side effects, particularly when used in combination with other drugs.

In 2016, the Advisory Council on the Misuse of Drugs raised concerns over medicinal misuse, illegal diversion of the drugs and addiction, and recommended that Pregabalin and Gabapentin should be controlled as Class C Drugs under the Misuse of Drugs Act. On 1 April 2019, medicines containing Gabapentin and Pregabalin were re-classified as Schedule 3 controlled drugs under the Misuse of Drugs Regulations 2001.

Chart 7: Gabapentin and Pregabalin, items prescribed

- The number of items prescribed has risen considerably since 2001-02, from a combined total of just over half a million (500,832) to more than 19 million (19,304,046) in 2018-19, an increase of 3,754%.
- Across health boards a similar upward trend in items prescribed can be seen, although the number of both items prescribed per head of population varied. In 2018-19 Gabapentin ranged from 2.2 items per head in Cardiff & Vale to 4.0 items per head in Cwm Taf, with Pregabalin ranging from 1.9 items per head in Cardiff & Vale to 3.7 items per head in Cwm Taf.
Chart 8: Gabapentin and Pregabalin, items prescribed per head of population, by health board

Chart 8a: Abertawe Bro Morgannwg

![Chart 8a](source)

Chart 8b: Aneurin Bevan

![Chart 8b](source)

Chart 8c: Betsi Cadwaladr

![Chart 8c](source)

Chart 8d: Cardiff & Vale

![Chart 8d](source)

Chart 8e: Cwm Taf

![Chart 8e](source)

Chart 8f: Hywel Dda

![Chart 8f](source)

Chart 8g: Powys

![Chart 8g](source)

Chart 8h: WALES

![Chart 8h](source)
### Table 2: Top 25 items prescribed by GPs, 2018-19

<table>
<thead>
<tr>
<th>BNF Chapter Name</th>
<th>BNF Section Name</th>
<th>BNF Chemical Name</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiovascular System</td>
<td>Lipid-Regulating Drugs</td>
<td>Atorvastatin</td>
<td>2,606,952</td>
</tr>
<tr>
<td>Gastro-Intestinal System</td>
<td>Antisecretory Drugs+Mucosal Drugs</td>
<td>Omeprazole</td>
<td>2,535,801</td>
</tr>
<tr>
<td>Endocrine System</td>
<td>Thyroid And Antithyroid Drugs</td>
<td>Levotyroxine Sodium</td>
<td>2,475,088</td>
</tr>
<tr>
<td>Cardiovascular System</td>
<td>Hypertension and Heart Failure</td>
<td>Ramipril</td>
<td>2,277,330</td>
</tr>
<tr>
<td>Cardiovascular System</td>
<td>Nit</td>
<td>Amlodipine</td>
<td>2,080,361</td>
</tr>
<tr>
<td>Cardiovascular System</td>
<td>Lipid-Regulating Drugs</td>
<td>Simvastatin</td>
<td>1,958,494</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Co-Codamol (Codeine Phos/Paracetamol)</td>
<td>1,796,492</td>
</tr>
<tr>
<td>Central Nervous System</td>
<td>Analgesics</td>
<td>Bisoprolol Fumarate</td>
<td>1,760,784</td>
</tr>
<tr>
<td>Respiratory System</td>
<td>Bronchodilators</td>
<td>Salbutamol</td>
<td>1,744,188</td>
</tr>
<tr>
<td>Gastro-Intestinal System</td>
<td>Antisecretory Drugs+Mucosal Drugs</td>
<td>Lansoprazole</td>
<td>1,672,198</td>
</tr>
<tr>
<td>Cardiovascular System</td>
<td>Antiplatelet Drugs</td>
<td>Aspirin</td>
<td>1,651,938</td>
</tr>
<tr>
<td>Endocrine System</td>
<td>Drugs Used In Diabetes</td>
<td>Metformin Hydrochloride</td>
<td>1,424,160</td>
</tr>
<tr>
<td>Central Nervous System</td>
<td>Antidepressant Drugs</td>
<td>Citalopram Hydrobromide</td>
<td>1,297,560</td>
</tr>
<tr>
<td>Central Nervous System</td>
<td>Antidepressant Drugs</td>
<td>Sertraline Hydrochloride</td>
<td>1,247,626</td>
</tr>
<tr>
<td>Central Nervous System</td>
<td>Analgesics</td>
<td>Paracetamol</td>
<td>1,216,008</td>
</tr>
<tr>
<td>Central Nervous System</td>
<td>Antidepressant Drugs</td>
<td>Amitriptyline Hydrochloride</td>
<td>1,048,060</td>
</tr>
<tr>
<td>Cardiovascular System</td>
<td>Diuretics</td>
<td>Furosemide</td>
<td>928,229</td>
</tr>
<tr>
<td>Nutrition And Blood</td>
<td>Vitamins</td>
<td>Ergocalciferol</td>
<td>885,649</td>
</tr>
<tr>
<td>Cardiovascular System</td>
<td>Diuretics</td>
<td>Bendroflumethiazide</td>
<td>830,839</td>
</tr>
<tr>
<td>Respiratory System</td>
<td>Corticosteroids (Respiratory)</td>
<td>Diproplonate</td>
<td>814,018</td>
</tr>
<tr>
<td>Central Nervous System</td>
<td>Antidepressant Drugs</td>
<td>Mirtazapine</td>
<td>791,359</td>
</tr>
<tr>
<td>Cardiovascular System</td>
<td>Anticoagulants And Protamine</td>
<td>Warfarin Sodium</td>
<td>746,691</td>
</tr>
<tr>
<td>Cardiovascular System</td>
<td>Hypertension and Heart Failure</td>
<td>Losartan Potassium</td>
<td>723,915</td>
</tr>
<tr>
<td>Cardiovascular System</td>
<td>Hypertension and Heart Failure</td>
<td>Lisinopril</td>
<td>689,747</td>
</tr>
<tr>
<td>Cardiovascular System</td>
<td>Antiplatelet Drugs</td>
<td>Clopidogrel</td>
<td>648,916</td>
</tr>
</tbody>
</table>

*Source: NHS Wales Shared Services Partnership*

- Atorvastatin overtook both Omeprazole and Levothyroxine Sodium as the item most prescribed by GPs in Wales, and dispensed, in 2018-19
UK comparisons – 2018-19 (a)

Charts 11-13 show the number of prescription items dispensed and the costs¹ per head of population, and the cost per prescription item, in Wales compared with the other countries of the UK.

The prescription data for these charts is based on prescriptions dispensed in the community in Wales, rather than prescriptions issued by GPs in Wales so the figures for Wales will differ from those quoted in the other charts in the release. Prescriptions dispensed data is the only available data for comparison purposes in England, Scotland and Northern Ireland.

The population data used is the mid-year population estimates for 2018 rather than the population registered with a GP.

¹ Net ingredient cost – see notes section at the end of the release.

Chart 11: Prescription items dispensed per head of population, UK countries

More prescription items per head of population were dispensed in Wales than any of the other UK countries: 25.7 in Wales, compared with 19.1 in Scotland, 19.8 in England and 22.3 in Northern Ireland.

Chart 12: Net ingredient cost per head of population, UK countries

The net ingredient cost (NIC) per head of population in Wales was higher than in England, but lower than in Scotland and Northern Ireland.

Chart 13: Net ingredient cost per prescription item, UK countries

Wales has the lowest NIC per prescription item, at £6.94 compared with £7.96 in England, £10.11 in Northern Ireland and £11.01 in Scotland.

(a) The PCA data covers all prescriptions dispensed by community pharmacies, appliance contractors and dispensing doctors in Wales including items personally administered by GPs. The data refers to the financial year 2018-19 for Wales and Scotland, and the calendar year 2018 for England and Northern Ireland. These are the latest and most comparable data available. Please see notes on the use of PCA data in the Notes at the end of the release.
Key Quality Information

Quality report
We publish a detailed quality report on ‘Prescriptions by GPs in Wales’ statistics. The quality report includes information on definitions and coverage, and details of our users.

Accuracy and coverage

Source
The data are obtained from Prescribing Services, NHS Wales Shared Services Partnership and are based on information obtained from prescriptions sent to Prescribing Services for payment.

Further data is available on the Prescribing Services website; from April 2013, monthly prescribing data by individual GP practices is also available via the Prescribing Services website.

The main source of data in this statistical release covers prescription items prescribed by GPs in Wales and dispensed in the community. Excluded from this release are prescriptions which were prescribed but, for a variety of reasons, have not been dispensed. It also covers prescriptions submitted by prescribing doctors for items personally administered. Analysis by UK country can only be provided using the supplementary data for prescriptions dispensed in the community in Wales (but written by a GP or other qualified practitioner anywhere in the UK or Isle of Man).

The statistics are based on the data provided by Prescribing Services following their payment processing. Prescribing Services, NHS Wales Shared Services Partnership have stated that due to the complex and manual processes involved there may be inaccuracies in capturing prescription information which are then reflected in the data. Internal quality assurance processes exist and currently the prescription processing activity is internally audited at around 99% accuracy (i.e. at least 99% of prescriptions are processed accurately).

Accessibility and clarity
Alt text is provided for all charts and tables so that they can be read with a screen-reader.

Data for individual drugs are published in accompanying spreadsheets and data by BNF chapters is published on StatsWales.

A new interactive dashboard was first published in 2019 alongside this statistical release which allows users to easily view detailed data and produce bespoke analysis to meet their needs.

The statistical release in 2019 combines two previous statistical releases. Previously two sets of prescriptions data were published (one called GP prescriptions and the other called prescriptions dispensed in the community (including PCA data)). The 2019 release aims to improve on data clarity to users, providing clearer messages about which data source should be used for different purposes.

Timeliness and punctuality
Data is published as soon as is practicable. This statistical release is published in the autumn including data for the new financial year, ending in March. The short time lag allows data to be validated before being published.
Comparability and coherence
Using the supplementary data for prescriptions dispensed in the community, data can be compared across UK countries. BNF definitions are consistent across the UK.

Data for other UK countries
Data for other UK countries can be accessed via the following webpages:

England
Prescriptions Dispensed in the Community, Statistics for England

Scotland
Prescribing and Medicines

Northern Ireland
Pharmaceutical statistics

Note that varying prescribing practice may affect the interpretation of UK country comparisons.

Relevance

Users and uses of these statistics
The key users of prescription statistics are:

- Ministers and the Members Research Service in the National Assembly for Wales
- policy makers of the Welsh Government
- other government departments
- National Health Service and Public Health Wales
- students, academics and universities
- General Medical Council and other professional organisations
- individual citizens and private companies.

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

- advice to Ministers
- inform the public
- to inform debate in the National Assembly for Wales and beyond.

Definitions

Items dispensed
A prescription item refers to a single item prescribed by a doctor on a prescription form. If a prescription form includes three items it is counted as three prescription items. A prescription item may be for a variable quantity; for example, 14, 28 or 56 tablets. A prescription item can consist of a varying amount of tablets or measure for the same preparation, therefore the cost per item refers to the cost per average measure of that preparation. It does not refer to the cost per single tablet or per pack of tablets.
Net Ingredient Cost (NIC)

Net Ingredient Cost refers to the cost of the drug before discounts and does not include any dispensing costs or fees. It does not include any adjustment where the patient has purchased a pre-payment certificate.

Figures quoted for net ingredient cost for all years are unadjusted for inflation. Standard adjustments for inflation are not considered appropriate as drug prices are subject to controls under the Pharmaceutical Price Regulation Scheme and to other central controls.

Notes on Net Ingredient Cost

Pharmaceutical Price Regulation Scheme

The Pharmaceutical Price Regulation Scheme is a voluntary agreement between the Department of Health and the Association of the British Pharmaceutical Industry. The scheme places some control on the costs of medicines to the NHS and applies to branded licensed medicines.

Category M

The category M scheme is an arrangement where the net ingredient cost for selected generic formulations is controlled, with the aim of reducing costs overall. Medicines subject to these arrangements are classified as category M in Part VIII of the Drug Tariff. The majority of these formulations have fallen in price, although some formulations have increased in price. These price adjustments have contributed to shifts in the relative positions of drug and affect overall cost per item.

Falling costs

Several factors have contributed to the fall in costs, notably changes to the price of many medicines under the category M scheme. Adjustments to prices under this scheme have seen dramatic changes to costs across therapeutic areas over recent years.

Other factors which have lowered costs include:

- decreased use of some medicines, in particular some of the more costly formulations
- generic versions of some medicines becoming available
- the fall in the price of some medicines outside of the category M scheme

Free prescriptions

Prescription charges were frozen on 1 April 2001 and gradually reduced each year until free prescriptions were introduced in Wales on 1 April 2007. Before 2007 prescriptions were free for those people under 16, 16-18 year olds in full-time education, over 60, pregnant women and those who had had a baby within the previous 12 months, those who were on certain benefits, or on a low income, or who had certain medical conditions. These exemptions accounted for around 90% of the population, leaving only around 10% to pay for their prescriptions.

Generic Prescribing

A prescription item prescribed generically refers to a prescription which has been written using the British Approved Name (BAN), International Non-proprietary Name (INN) or the scientific name of the
active ingredient rather than the proprietary name. In general, generic items are cheaper than non-
generic equivalents.

**Registered population:**
This is the number of people registered with a GP in Wales. In 2009 this was at 1 October, otherwise
this is at 30 September. The source is the annual [GP Census](#).

**Prescribing units (PUs)**
PUs are calculated by giving a greater weight (by a factor of three) to the population aged 65 or over
(used as the denominator). They have been adopted here to take account of the greater need of elderly
patients for medication and so to make more meaningful comparisons between health boards.

As an example for 2014-15:

Total prescription items: 78,512,726

Total population age 0-64, 2014 population registered with a GP: 2,555,500

Total population aged 65 or over: 617,494

PUs: 4,407,982 (2,555,500+(3 * 617,494))

Items per PU: 17.81

**The British National Formulary (BNF)**
The British National Formulary (BNF) is a joint publication of the British Medical Association and the
Royal Pharmaceutical Society. It is published biannually under the authority of a Joint Formulary
Committee which comprises representatives of the two professional bodies and of the UK Health Departments.

**Therapeutic classification**
PCA data are based on the therapeutic grouping used in the British National Formulary (BNF). The
classification in this report is based on the September 2018 BNF.

NHS Prescription Services have created pseudo-BNF chapters, for items that cannot be found in BNF
chapters 1 to 15. The majority of these items are dressings and appliances, which NHS Prescription
Services have classified into four pseudo-BNF chapters (20 to 23). However some gel and colloid
dressings that are classified as drugs are included in a pseudo section within BNF 13 (13.13). NHS
Prescription Services have produced a booklet on [BNF classifications](#) and the pseudo classifications
used.

Examples of the conditions covered by each group (unless group is self-explanatory) are given below:

- **Gastro-intestinal system:** including preparations for the management of indigestion, diarrhoea,
constipation, haemorrhoids, ulcerative colitis and Crohn’s disease
- **Cardiovascular system:** including preparations for the management of arrhythmia (irregular heart
rhythm), hypertension (high blood pressure), heart failure and high cholesterol
- **Respiratory system:** including preparations for the management of asthma, chronic obstructive
pulmonary disease (COPD), cystic fibrosis, allergies, cough and congestion
Central nervous system: including preparations for the management of anxiety, sleeplessness, depression, pain, epilepsy, substance misuse, Parkinson’s disease and Alzheimer’s disease

Infections: including preparations for the treatment of infection

Endocrine system: including preparations for the management of diabetes, an under or over active thyroid gland and other hormonal conditions

Obstetrics (formerly obstetrics, gynaecology and urinary tract disorders): including contraceptives and preparations used in obstetrics

Malignant disease and immunosuppression: including preparations for the treatment and management of cancer and conditions affecting the immune system

Nutrition and blood: vitamins, minerals and prescribed foods

Musculoskeletal and joint disorders: including preparations for the management of rheumatoid arthritis and gout, myasthenia gravis, spasticity and topical treatments for pain

Eye: including preparations for the treatment and management of eye infections and glaucoma

Ear, nose and oropharynx: including preparations for the treatment and management of conditions affecting the ear, nose and throat

Skin: including preparations for the treatment and management of eczema, psoriasis, acne, warts and verrucae

Immunological products and vaccines: including preparations for the treatment of anaemia, vitamin preparations and supplements

Anaesthesia

Preparations used in diagnosis

Other drugs and preparations

Dressings

Appliances

Incontinence supplies

Stoma appliances

A full list of the therapeutic classes (BNF chapters) and their sub groups are shown in the following table.

**Therapeutic class**

**Gastro-intestinal System**
- Antacids
- Antispasmodic and other drugs altering gut motility
- Ulcer healing drugs
- Antidiarrhoeal drugs
- Treatment of chronic diarrhoeas
- Laxatives
- Preparations for haemorrhoids
- Stoma care
- Drugs affecting intestinal secretions

**Cardiovascular System**
- Positive inotropic drugs
- Diuretics
- Anti-arrhythmic drugs
- Beta-adrenoceptor blocking drugs
- Antihypertensive therapy
- Nitrates and other vasodilators, and calcium channel blockers
- Sympathomimetics
- Anticoagulants and protamine
- Antiplatelet drugs

**Malignant Disease and Immunosuppression**
- Cytotoxic drugs
- Drugs affecting the immune response
- Sex hormones and hormone antagonists in malignant disease

**Nutrition and Blood**
- Anaemias and other blood disorders
- Fluids and electrolytes
- Oral nutrition
- Minerals
- Vitamins
- Bitters and tonics
- Metabolic disorders
- Foods
- Compound vitamin / mineral formulations
- Health supplements
- Other health supplements

**Musculoskeletal and Joint Disorders**
- Drugs used in rheumatic diseases and gout
- Drugs used in neuromuscular disorders
- Drugs used for relief of soft tissue inflammation

**Eye**
Antifibrinolytic drugs and haemostatics
Lipid-lowering drugs
Local sclerosants

**Respiratory System**
- Bronchodilators
- Corticosteroids
- Cromoglycate and related therapy
- Allergic disorders
- Oxygen
- Mucolytics
- Aromatic inhalations
- Cough preparations
- Systemic nasal decongestants

**Central Nervous System**
- Hypnotics and anxiolytics
- drugs used in psychoses and related disorders
- Antidepressant drugs
- Central nervous system stimulants
- Appetite suppressants
- Drugs used in nausea and vertigo
- Analgesics
- Antiepiletics
- Drugs used in parkinsonism and related disorders
- Drugs used in substance dependence
- Drugs used in Alzheimer's disease

**Infections**
- Antibacterial drugs
- Antifungal drugs
- Antiviral drugs
- Antiprotozoal drugs
- Anthelmintics

**Endocrine System**
- Drugs used in diabetes
- Thyroid and antithyroid drugs
- Corticosteroids
- Sex hormones
- Hypothalamic and pituitary hormones and antioestrogens
- Other endocrine drugs

**Obstetrics**
- Drugs used in obstetrics
- Treatment of vaginal and vulval conditions
- Contraceptives
- Drugs used for genito-urinary disorders

**Pharmacy and Appliance Contractor Dispensing Data**

Data on Pharmacy and Appliance Contractor Dispensing Data in Wales is available from NHS Wales Shared Services Partnership, Primary Care Services at:
National Statistics status

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

National Statistics status means that official statistics meet the highest standards of trustworthiness, quality and public value, and it is our responsibility to maintain compliance with these standards.

The continued designation of these statistics as National Statistics was confirmed on 29 September 2011 following a compliance check by the Office for Statistics Regulation. These statistics last underwent a full assessment against the Code of Practice in 2011.

Since the latest review by the Office for Statistics Regulation, we have continued to comply with the Code of Practice for Statistics, and have made the following improvements:

- added more value by providing more detailed breakdowns, including maps and infographics
- enhanced trustworthiness by reducing pre-release access

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

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

Well-being of Future Generations Act:

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.
Further details
This release is available at: https://gov.wales/prescriptions-wales-april-2018-march-2019
Further information on methods and quality can be found in the Quality Report.

Next update
The next release covering 2019-20 will be published in autumn 2020.

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

Open Government Licence
All content is available under the Open Government Licence v3.0, except where otherwise stated.