

## Prescribing Statistics Quality Report

### What are these statistics?

Prescription statistics published by the Welsh Government are based on information obtained from prescriptions sent to Prescribing Services, NHS Wales Shared Services Partnership for payment. Data captured by Prescribing Services in the prescription pricing and remuneration process are also available on their website at: <http://www.wales.nhs.uk/sites3/home.cfm?orgid=428>

A large amount of complex data on prescriptions is available from these sources and should be interpreted with the explanatory notes provided. Information is available within the latest versions of each release and in the “Explanatory Notes” document which is associated with the Prescription Cost Analysis data and includes worked examples of accessing the data. All of these are held on our [Prescribing and pharmacies](#) theme page.

Two statistical releases of prescribing statistics are published each year, one summarising prescribing by GPs, “Prescriptions by General Medical Practitioners”, and one publishing the annual Prescription Cost Analysis (PCA) data, “Prescriptions dispensed in the Community and Prescription Cost Analysis data”). In addition a statistical release is also published on the services offered by community pharmacies (see separate quality report).

### Source of the data

Prescribing data is provided by Prescribing Services, NHS Wales Shared Services Partnership.

### Coverage

The data included in the two statistical releases are slightly different:

Prescriptions by General Medical Practitioners:

This release covers prescription items prescribed (and dispensed) or dispensed by General Medical Practitioners in Wales. It also covers prescriptions submitted by prescribing doctors for items personally administered. The time period covered is the financial year 1 April to 31 March.

Prescription Cost Analysis (PCA):

The statistics cover all prescriptions dispensed by community pharmacists (including supermarket pharmacies), appliance contractors and dispensing doctors in Wales including items personally administered. The vast majority are written by General Medical Practitioners in Wales; however prescriptions written by nurses, dentists and hospital doctors are also included provided they were dispensed in the community. Also included are prescriptions written in England, Scotland, Northern Ireland and the Isle of Man but dispensed in Wales. The analyses do not include prescriptions written in Wales but dispensed outside Wales. The time period covered is the calendar year 1 January to 31 December.

## Users and uses:

We believe 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;
- To inform debate in the National Assembly for Wales and beyond.

If you are a user and do not feel the above list adequately covers you, or if you would like to be added to our circulation list, please let us know by e-mailing [stats.healthinfo@wales.gsi.gov.uk](mailto:stats.healthinfo@wales.gsi.gov.uk)

## Strengths and Limitations of the data

### Strengths

- The information is processed and published regularly and in an ordered manner to enable users to see the statistics when they are current and of greatest interest.
- Outputs have a clear focus on Wales and have been developed to meet the internal and external user need in Wales. They aim to contribute to the statistical context for current policy in the area of prescribing and pharmacy services in Wales.
- Efficient use has been made of administrative data sources to produce outputs.
- Detailed statistics are provided via our StatsWales website

### Limitations

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

Information on prescribing policy in Wales is accessible from the [Welsh Government website](#).

## Definitions

More information on interpreting prescribing statistics is available in the Explanatory Note available from the [Prescribing and pharmacies](#) theme page.

### 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

Prescribing data are based on the therapeutic grouping used in the British National Formulary.

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: <http://www.nhsbsa.nhs.uk/PrescriptionServices/949.aspx>

A 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
- 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, Gynaecology and Urinary Tract Disorders

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

### 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

- Anti-infective eye preparations
- Corticosteroids and other anti-inflammatory preparations
- Mydriatics and cycloplegics
- Treatment of glaucoma
- Local anaesthetics
- Miscellaneous ophthalmic preparations
- Contact lenses

### Ear, Nose and Oropharynx

- Drugs acting on the ear
- Drugs acting on the nose
- Drugs acting on the oropharynx

### Skin

- Vehicles and emulsifying agents
- Emollient and barrier preparations
- Local anaesthetics and antipruritics
- Topical corticosteroids
- Preparations for eczema and psoriasis
- Preparations for acne
- Preparations for warts and calluses
- Sunscreens and camouflagers
- Shampoos and some other scalp preparations
- Anti-infective skin preparations
- Disinfectants and cleansers
- Antiperspirants
- Wound management products
- Topical circulatory preparations
- Miscellaneous topical preparations

### Immunological Products and Vaccines

- Vaccines and antisera
- Immunoglobulins

### Anaesthesia

- General anaesthesia
- Local anaesthesia

### Preparations used in Diagnosis

- X-ray contrast media

### Other Drugs and Preparations

### Dressings

### Appliances

### Incontinence Supplies

### Stoma Appliances

## **Drug name**

In the PCA data the drug is shown by individual preparation name, which may be proprietary (trade name) or generic (chemical name), followed by form and strength. The names used are often presented in an abbreviated form.

## **Items dispensed**

A prescription item refers to a single item prescribed by a doctor (or dentist) 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 eg 14, 28 or 56 tablets

## **Cost: Net Ingredient Cost (NIC)**

NIC 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.

In the Prescriptions by General Medical Practitioners release figures quoted for net ingredient cost for all years are unadjusted for inflation which is a change from publications in earlier years of the output. 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.

## **“PropGenLink” Code**

This code is used in the PCA data and is a way of linking the brand to the generic for a given chemical ingredient and is derived from the first 9 and last 2 characters of the BNF code.

## **Quantity (QTY)**

This data is included in the PCA data for individual preparations. The quantity of a drug dispensed is measured in units depending on the formulation of the product. See standard quantity unit below. Quantities are not added together across preparations because of different strengths and formulations.

## **Standard quantity unit (StdQtyUnit)**

This data is included in the PCA data for individual preparations. It indicates the form of the drug and the units in which quantity is measured:

Code 1 - a unit (e.g. one tablet, capsule, pack, aerosol etc)

Code 3 - millilitres

Code 6 - grammes

Code 0 - individually formulated (unit varies)

## **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.

## **Data processing cycle**

**Data collection** - The Health Statistics and Analysis Unit of the Welsh Government receives data from Prescribing Services as follows:

Prescriptions by General Medical Practitioners: a single spreadsheet is received in May each year.

Prescription Cost Analysis (PCA) data: a single spreadsheet is received in March each year.

**Validation and verification** - Data is submitted on EXCEL spreadsheets via Afon, the Welsh Government secure web data transfer system. 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 for 2010-11 at 99.2 per cent accuracy (i.e. at least 99.2 per cent of prescriptions are processed accurately).

**Publication** - The statistics published by the Health Statistics and Analysis Unit are produced from the data provided by Prescribing Services. The releases are produced by updating the information from the previous edition. The information on the releases is checked against the data supplied independently. Summary data associated with the Prescriptions by General Medical Practitioners is also updated on StatsWales, our interactive web based tool. Equivalent data for other UK countries is acquired from them directly or from their websites and added to the Prescriptions by General Medical Practitioners statistical release. The detailed PCA data is presented in a series of Excel spreadsheets of a size suitable for download.

Wales PCA data together with a description of all the prescribing and pharmacy statistics published by the Welsh Government and notes on how to interpret this data including worked examples of extracting the PCA data are available at:

<http://wales.gov.uk/topics/statistics/theme/health/primary-care/prescribing/?lang=en>

**Disclosure and confidentiality** - These data are aggregated and therefore there is little risk of disclosing information about any individual. We adhere to our [statement on confidentiality and data access](#), issued in conformance with the requirements set out in Principle 5: Confidentiality of the Code of Practice for Official Statistics.

## Key Quality Information

National Statistics are produced to high professional standards set out in the Code of Practice for Official Statistics. They undergo regular quality assurance reviews to ensure that they meet customer needs. They are produced free from any political interference.

## Quality

Health Statistics and Analysis Unit adhere to a [quality strategy](#) and this is in line with Principle 4 of the [Code of Practice for Official Statistics](#). Specifically, the list below provides information according to the European Statistical System's six dimensions of quality.

## Relevance

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

On our [Health and Social Care theme page](#) we provide background to our statistics and information for users. We encourage users of the statistics to contact us to let us know how they use the data.

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

## Accuracy

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

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 for 2010-11 at 99.2 per cent accuracy (i.e. at least 99.2 per cent of prescriptions are processed accurately).

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

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

As the PCA data is published in March for the previous calendar year the appropriate ONS mid year estimates of population are not available. Consequently the previous year's population figures are used and revised in the following years release.

## Timeliness and punctuality

*Timeliness refers to the lapse of time between publication and the period to which the data refer. Punctuality refers to the time lag between the actual and planned dates of publication.*

All outputs adhere to the Code of Practice by pre-announcing the date of publication through the [Due Out Soon](#) web pages. Furthermore, should the need arise to postpone an output this would follow the Welsh Government's [Revisions, Errors and Postponements](#) arrangements.

We publish releases as soon as practical after the relevant time period. Prescriptions by General Medical Practitioners is published annually in August and the Prescriptions Cost Analysis release in March.

## **Accessibility and clarity**

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

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

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

We aim to use Plain English in our outputs and all outputs adhere to the Welsh Government's [accessibility policy](#). Furthermore, all our headlines are published in Welsh and English.

## **Comparability**

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

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

Similar information is available from other parts of the UK but publication arrangements differ.

**Data for other UK countries** - The Prescription Cost Analysis (PCA) data provides a source of comparable data across UK countries.

All UK countries use the BNF classification but the way in which the PCA data is presented in each country varies slightly as described below.

Data for other UK countries:

England: [Prescriptions Dispensed in the Community, England](#)

Scotland: [Prescription Cost Analysis - Financial Year 2010/11](#)

Northern Ireland: [Prescription Cost Analysis N Ireland](#)

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

Below are summary details for England, Northern Ireland and Scotland PCA publications, taken from the details on their websites which existed at the time of this publication. These details represent our interpretation of what is available and should be taken as a guide only. Queries should be addressed to the responsible organisation - links to their websites are included above.

### **PCA in England published by NHS Information Centre.**

PCA in England is published by calendar year. The Information Centre (IC) publishes the data together with a statistical bulletin which provides analysis and comment on patterns and trends; both are available from the IC website.

Coverage is similar to PCA in Wales in terms of type of dispensers and prescribers included and that all prescriptions included are those dispensed in England only.

The data fields published are

- cost in NIC (equivalent to NIC in Wales)
- items

- quantity together with standard quantity unit and preparation class

All individual preparations are listed in the Excel version of the PCA data- no suppression of preparations which are rarely dispensed.

Figures are published at the following levels of aggregation.

- Overall total.
- BNF Chapter
- BNF Section
- BNF Paragraph
- BNF Sub - paragraph
- Chemical
- Individual preparations

### **PCA in Northern Ireland (NI) published by Business Services Organisation**

PCA in Northern Ireland is published by calendar year.

(Coverage is assumed to be similar to PCA in England and Wales in terms of type of dispensers and prescribers included and that all prescriptions included are those dispensed in NI only).

Fields are

- Ingredient cost before discount
- items
- quantity

All individual preparations are listed - no suppression of preparations which are rarely dispensed.

Figures are published at the following levels of aggregation.

- BNF Chapter
- BNF Section
- Individual preparations

### **PCA in Scotland published by ISD Scotland**

PCA in Scotland is published by financial year.

Coverage is similar to PCA in England and Wales in terms of type of dispensers and prescribers included and that all prescriptions included are those dispensed in Scotland only.

Fields are

- Paid gross ingredient cost (equivalent to NIC, in Wales)
- Items
- quantity

Only individual preparations where more than 10 items were dispensed are listed.

Figures are published at the following levels of aggregation.

- BNF Chapter
- BNF Section
- BNF Sub - section
- Chemical
- Individual preparations



## **Coherence**

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

Every year the data are all collected from the same sources and adhere to the national standard; they will also be coherent within and across health organisations.

## **Dissemination**

All the data is of sufficient quality following the processes outlined above to justify publication. The high level messages are published on the first page of the relevant release and high level charts are included in the release. All the actual data provided is published on our interactive website [StatsWales](#).

## **Evaluation and contact details**

We always welcome feedback on any of our statistics. If you would like to make any comments on any of our outputs or require any information please e-mail us at [stats.healthinfo@wales.gsi.gov.uk](mailto:stats.healthinfo@wales.gsi.gov.uk)

Produced by the Knowledge and Analytical Services, Welsh Government

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