

# Publication Report



## Prescribing & Medicines: Prescription Cost Analysis

Financial Year – 2013/14

Publication date – 24 June 2014



## Contents

Prescribing & Medicines: Prescription Cost Analysis.....	1
Introduction .....	2
Prescription Cost Analysis .....	2
Top 10 drugs .....	2
Generic Prescribing .....	2
Volume and Cost (Summary Statistics) .....	3
Changes to the publication .....	3
Dispensed items .....	3
Summary Statistics changes.....	3
Preparations with ten items or less .....	4
Key points .....	5
Results and Commentary.....	6
Top 10 .....	6
Gross Ingredient Cost.....	6
Dispensed Items .....	7
Generic Prescribing.....	8
Volume and Cost.....	10
NHSScotland .....	10
NHS Board.....	11
Glossary.....	13
List of Tables.....	15
Contact.....	16
Further Information.....	16
Rate this publication.....	16
A1 – Background Information .....	17
How the data is obtained .....	17
Top 10 – assumptions.....	17
Changes to publications – June 2014.....	17
A2 – Publication Metadata (including revisions details).....	19
A3 – Early Access details (including Pre-Release Access) .....	23
A4 – ISD and Official Statistics.....	24

## Introduction

Prescription cost analysis information is obtained from NHS prescriptions dispensed in Scotland that are prescribed in Scotland and elsewhere in the United Kingdom. All these prescriptions are dispensed by community pharmacies, dispensing doctors, a small number of specialist appliance suppliers and stoma providers. GPs write the vast majority of these prescriptions, with the remainder written by authorised prescribers such as nurses and dentists. Also included are prescriptions written in hospitals that were dispensed in the community, but prescriptions dispensed within hospitals are not included.

## Prescription Cost Analysis

The prescription cost analysis tables show details of the number of items and the gross ingredient cost of all NHS prescriptions dispensed in the community in Scotland. The gross ingredient cost is the cost of drugs and appliances reimbursed before the deduction of any dispenser discount. The items dispensed are listed in order by British National Formulary (BNF) therapeutic class or alphabetically within chemical entity (for drugs).

## Top 10 drugs

This report includes statistics on the top 10 drugs. These statistics detail the ten most commonly dispensed products in terms of both volume and cost in Scotland during 2013/14. These figures come from the Prescription Cost Analysis data, and use number of items dispensed and gross ingredient cost.

## Generic Prescribing

This report includes statistics on prescribing of 'generic' drugs. When the patent expires on a branded drug, the manufacturer loses exclusive rights to produce it. Generic drugs are non-branded versions produced by different manufacturers that produce equivalent clinical effects, and are generally less expensive than the branded versions. Normally, the differences in formulation make no difference clinically. GPs are encouraged to prescribe drugs by generic name even when they are in patent so that potential savings can be realised as generic products become available.

For certain drugs, very small differences in bio-availability<sup>1</sup> can be important, e.g. anticonvulsants, lithium, immunosuppressants and theophylline. For these drugs the patient should always receive the version produced by a particular company, therefore the drug must be prescribed by brand name.

---

<sup>1</sup> The bio-availability of a drug is the fraction of the dose administered which reaches the systemic circulation. It is influenced by the physical properties of the drug such as solubility, particle size, the formulation (tablets, capsules, size, enteric coatings etc.) and by the gut environment, i.e. presence of other drugs, temperature, gut transit time etc.

## Volume and Cost (Summary Statistics)

General medical practitioners prescribe most of the prescriptions dispensed in the community, whilst dentists, nurses and pharmacists prescribe proportionally fewer. In addition to this, some prescriptions written in hospitals may be dispensed within the community. Prescriptions dispensed in the community are processed by [Practitioner Services](#). Information from these prescriptions is used to calculate a variety of statistics. The two main statistics are volume, which is the count of all the prescriptions dispensed, and cost. There are various ways of calculating the cost: from the cost of the drugs; to the cost of fees to contractors for dispensing those drugs, deducting patient charges. The cost discussed in this report is the total net cost, which is the cost to the Scottish Government. This is the gross cost (the net ingredient cost plus dispensing fees and allowances) minus charges paid by patients. This volume and costing information is presented for a ten year trend. Comparisons between NHS Boards are also included.

## Changes to the publication

### Dispensed items

Where one of several items on a form is not dispensed, it is marked as 'not dispensed' by the dispenser. Historically, these items have been processed as if they were dispensed, resulting in items that appeared to have been dispensed but with zero costs associated.

Recent work to improve the accuracy of prescriptions data has included a change to ensure these 'not dispensed' items are now excluded from both dispensed item counts and associated costs.

In the PCA publication this affects the data in the PCA, Top 10 and Generic Prescribing tables. This does not affect the Summary Statistics tables as they are based on 'Paid items' rather than 'Dispensed Items' (i.e. Summary Statistics only counts items with an associated cost).

For more detailed information about all these changes please see Appendix 1.

### Summary Statistics changes

Two changes have been made to the Summary Statistics data tables for the June 2014 publication. Firstly, the way in which the number of items is calculated for the Summary Statistics publication has changed slightly to bring it into line with other publications. Previously, the numbers of items dispensed in Summary Statistics and the Remuneration publication differed as the number of items dispensed in Summary Statistics included the number of stock order forms, while Remuneration includes the number of items on stock order forms.

From the 2014 publication onwards Summary Statistics will use the number of items on stock order forms (hence the number of items dispensed in the Summary Statistics and Remuneration tables will match).

The second change is that the populations in the Summary Statistics tables have been updated to the NRS re-based estimates based on the 2011 census. The rebased population estimates are only available for the current NHS Board breakdown while the Summary Statistics data on patient charges for 2004/05 and 2005/06 are only available for

the pre 2006/07 NHS Board breakdown. Therefore, the NHS Board data is only shown for 2006/07 onwards (8 years trend data rather than 10). The national data continue to show a ten year trend).

The changes to stock order items have been applied to all years in the data tables for this publication, as have the re-based NRS estimates. Previous publications should not be used for comparison. For more detailed information about all these changes please see Appendix 1.

### Preparations with ten items or less

Previously in the PCA data tables any preparations with ten dispensed items or less were aggregated into an overall '10 items or less' row in order to avoid disclosure of small numbers. This policy has been reconsidered and it has been decided that these items can now be presented at their individual preparation level in the output. For further information please see appendix 1.

## Key points

- The total volume of items dispensed in Scotland in 2013/14 was 98.8 million, a rise of 1.8% between 2012/13 and 2013/14.
- The number of items dispensed has been increasing year on year with a total increase of 31.8% between 2004/05 and 2013/14.
- Over the last 10 years, the number of items dispensed has increased at a greater rate than the total cost of drugs, this is because a number of high volume and high cost drugs have come out of patent, and increasingly drugs are prescribed generically.
- The rate of generic prescribing was 83.2% in 2013/14. The percentage of generic prescribing has increased steadily since 2004/05.
- The total (net) cost of items dispensed in Scotland in 2013/14 was £1.15 billion, an increase of 2.5% compared to 2012/13. The net cost has increased overall by 21.9% over the last ten years, although it has fluctuated slightly in recent years.
- In 2013/14 omeprazole (used for reducing stomach acid) was the most commonly prescribed drug by volume. This was also the case in 2012/13.
- Inhalers containing the drug salmeterol with fluticasone propionate used for respiratory conditions such as asthma had the highest total gross ingredient cost in 2013/14 at £43.5 million. This has been the highest cost drug to NHSScotland since 2011/12.

## Results and Commentary

The top 10 drugs, generic prescribing rate, prescribing volume and costs for the financial year 2013/14 have been reviewed, and are reported on in more detail in the following sections.

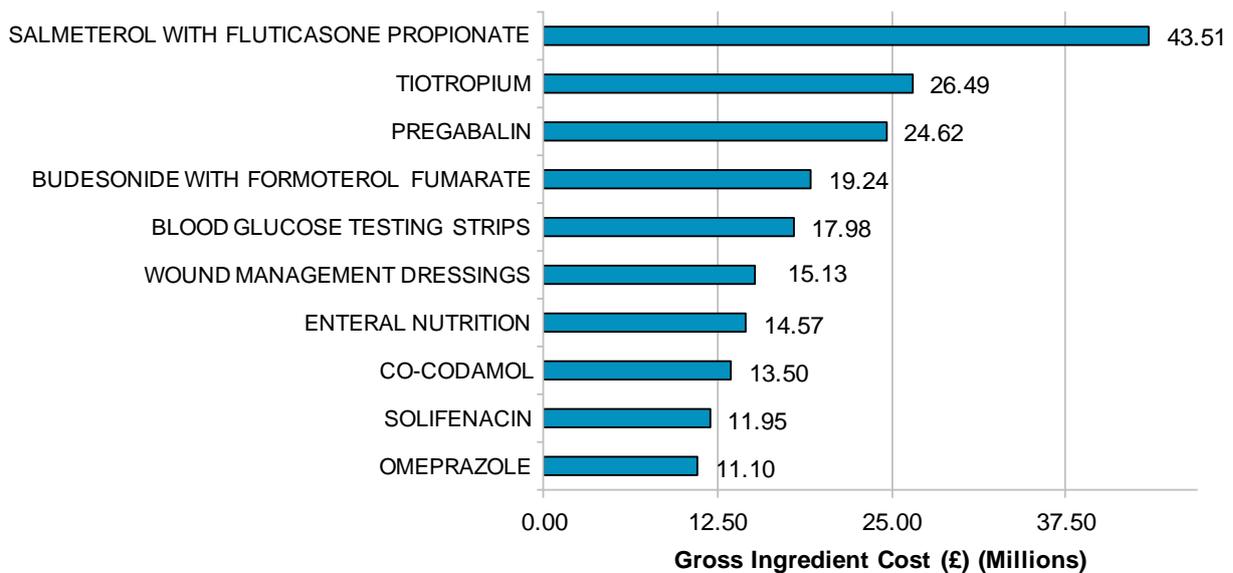
### Top 10

The top ten most commonly dispensed products in Scotland during the year 2013/14 varied depending on whether cost or volume is being considered.

#### Gross Ingredient Cost

The top 10 products by gross ingredient cost (£), dispensed in NHSScotland during financial year 2013/14 are shown in Figure 1. For NHSScotland in this time period, salmeterol with fluticasone propionate had the highest total gross ingredient cost (GIC) at £43.5 million (Figure 1).

**Figure 1 – Top 10 products by Gross Ingredient Cost (£) dispensed in NHSScotland – 2013/14**



Source: Prescribing Information System, ISD Scotland

Table 1 shows the top 10 products by gross ingredient cost dispensed during 2013/14 and gives examples of what the drugs might be used for. Drugs used for respiratory conditions feature frequently in the top ten by gross ingredient cost, being the first, second and fourth highest costs for drugs dispensed within Scotland.

With the exceptions of omeprazole and co-codamol the products in the 2013/14 top 10 by cost are medicines under patent protection or where prescribing is largely by brand e.g. enteral feeds.

In recent years atorvastatin routinely appeared in the top 10 products in terms of Gross Ingredient Cost. In May 2012 this drug came out of patent and the price subsequently dropped as generic versions became available. Expenditure on atorvastatin has reduced

from over £40 million in 2011/12 down to £5 million in 2013/14. As a result this drug no longer appears in the top 10 by Gross Ingredient Cost.

**Table 1 – Reason for prescribing – gross ingredient cost (£)**

Chemical Name	Most commonly used
salmeterol with fluticasone propionate	For respiratory conditions
tiotropium	For respiratory conditions
pregabalin	For epilepsy
budesonide with formoterol fumarate	For respiratory conditions
blood glucose testing strips	For blood glucose monitoring
wound management dressings	For dressing wounds
enteral nutrition	As nutritional supplements
co-codamol	As a painkiller
solifenacin	For bladder conditions
omeprazole	For reducing stomach acid

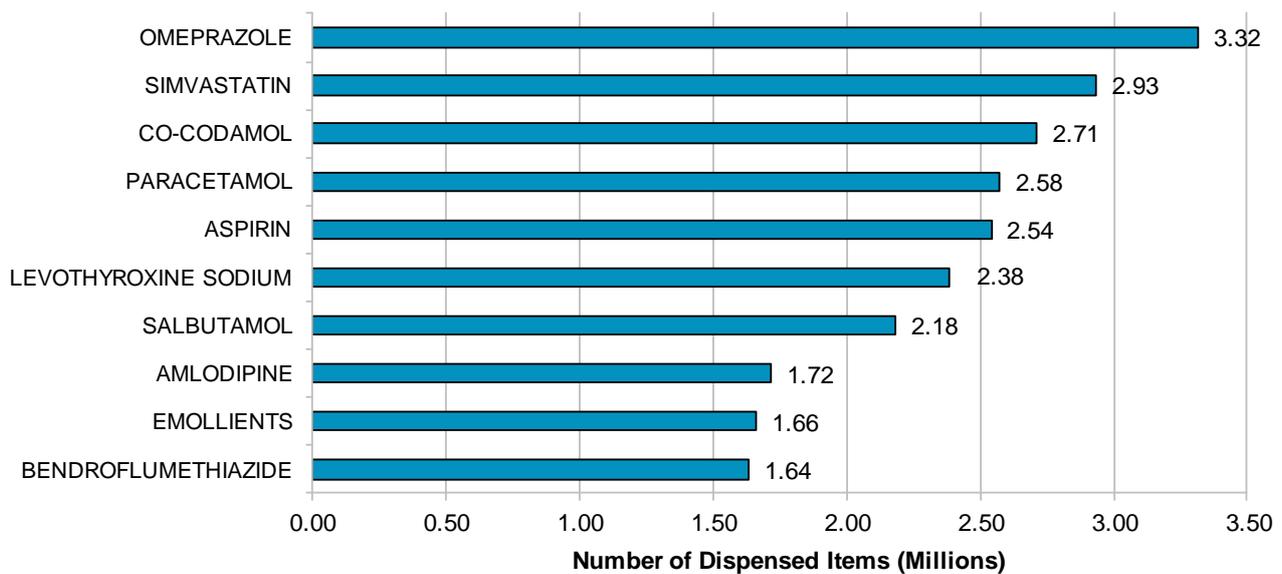
Source: Prescribing Information System, ISD Scotland

In total, all the drugs featured in Figure 1 and Table 1 summed to a gross ingredient cost of £198.1 million, which equated to 20.2% of the community drugs bill for the financial year 2013/14.

### Dispensed Items

The top 10 products dispensed in NHSScotland by volume (the number of dispensed items) during financial year 2013/14 are shown in Figure 2. Omeprazole and simvastatin are the most commonly prescribed drugs in NHSScotland, accounting for a total of 6.2 million items between them (Figure 2).

**Figure 2 – Top 10 products by the number of items dispensed in NHSScotland – 2013/14**



Source: Prescribing Information System, ISD Scotland

Reasons why the top 10 drugs dispensed in NHSScotland by volume might be prescribed are shown in table 2. All of the drugs featured in Table 2 are no longer in patent and have been in the Scottish Drug Tariff<sup>2</sup> for several years. High rates of prescribing by generic name (as expanded on in the next section) may contribute to keeping the overall costs of these products down. In total, all of the drugs featured in Figure 2 and Table 2 account for 23.7 million items, which equated to 23.9% of the total dispensed volume for financial year 2013/14.

**Table 2 – Reason for prescribing – number of dispensed items**

Chemical Name	Most commonly used
Omeprazole	For reducing stomach acid
Simvastatin	For controlling cholesterol
Co-codamol	As a painkiller
Paracetamol	As a painkiller
Aspirin	As a blood thinning agent
Levothyroxine sodium	To supplement low thyroid levels
Salbutamol	For respiratory conditions
Amlodipine	For angina and lowering blood pressure
Emollients	For skin conditions
Bendroflumethiazide	For lowering blood pressure

Source: Prescribing Information System, ISD Scotland

Co-codamol and omeprazole appear in both top ten lists in terms of cost and volume; they appear near the top of the top 10 number of items dispensed but towards the bottom of the top 10 for total cost. The disparity between cost and volume suggests that their high total cost is in part due to the high volume of prescribing.

## Generic Prescribing

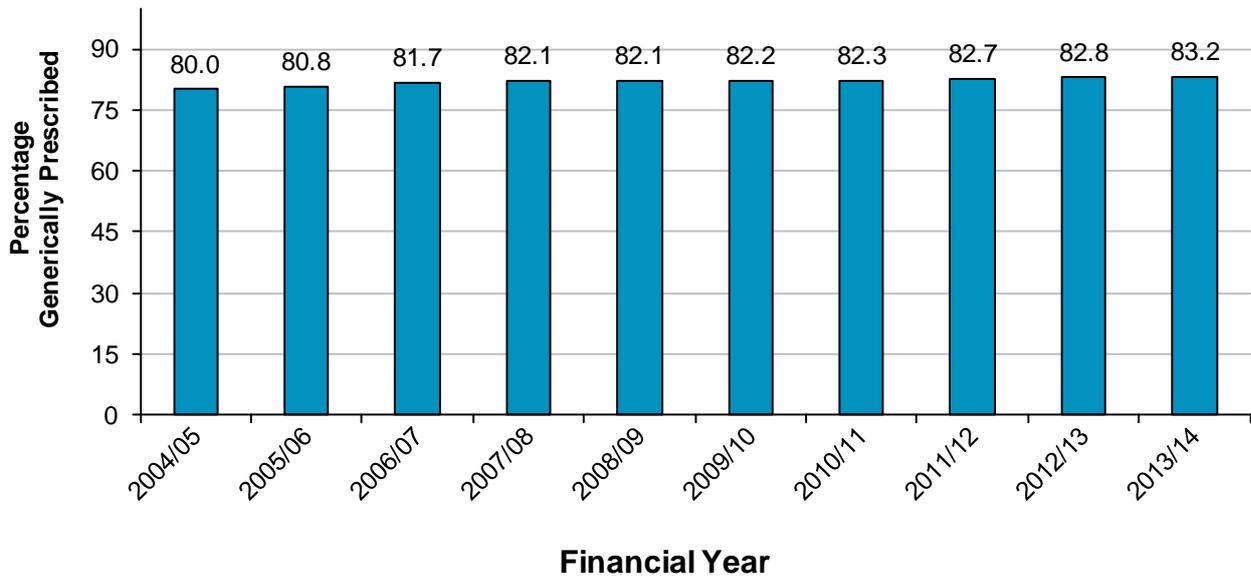
Prescribers are strongly encouraged to write prescriptions by generic name where clinically appropriate. Generic medicines are equally effective, but generally less expensive than proprietary products (particularly those in the Scottish Drug Tariff). New medicines are expensive to develop and in order to recover these costs new medicines are initially available at a premium price exclusively from the pharmaceutical company who developed them for a number of years (a period known as ‘in patent’).

Prescribing by generic name ensures that when a product comes out of patent, generic products can be dispensed against the prescriptions, allowing savings to be realised without any change having to be made to the prescription.

Figure 3 below shows the generic prescribing rate for items prescribed in NHSScotland, between financial years 2004/05 and 2013/14. The data shows a slight increase in prescribing by generic name from 82.8% in 2012/13 to 83.2% in 2013/14. The percentage of prescribing by generic name has increased slowly but steadily since 2004/05.

<sup>2</sup> For more information on the Scottish Drug Tariff see: <http://www.isdscotland.org/Health-Topics/Prescribing-and-Medicines/Scottish-Drug-Tariff/>

**Figure 3 – Generic prescribing rates, NHSScotland, 2004/05 – 2013/14**



Source: Prescribing Information System, ISD Scotland

Data are presented by the NHS Board from which the prescription originated. Table 3 below shows the generic prescribing rate for each NHS Board for 2012/13, 2013/14 and the change between the years.

**Table 3 – Percentage of prescriptions written as generic by NHS Board, 2012/13 and 2013/14**

NHS Board	Percentage of Generic Prescribed 2012/13	Percentage of Generic Prescribed 2013/14	Percentage change between 2012/13 and 2013/14 (percentage points)
NHS Ayrshire & Arran	85.0	85.8	+ 0.8
NHS Borders	85.4	85.8	+ 0.3
NHS Greater Glasgow & Clyde	84.7	85.6	+ 0.9
NHS Western Isles	84.3	85.5	+ 1.2
NHS Shetland	84.6	84.9	+ 0.4
NHS Orkney	84.4	84.5	+ 0.0
NHS Forth Valley	83.4	84.2	+ 0.7
NHS Dumfries & Galloway	83.6	83.8	+ 0.2
NHS Lothian	82.4	82.7	+ 0.3
NHS Fife	81.8	82.4	+ 0.6
NHS Highland	81.8	82.0	+ 0.2
NHS Grampian	81.1	81.0	- 0.1
NHS Tayside	81.1	80.9	- 0.2
NHS Lanarkshire	80.2	80.4	+ 0.1

Note: Table ranked in descending order of generic prescribing rate for 2013/14

Source: Prescribing Information System, ISD Scotland

NHS Ayrshire & Arran and NHS Borders had the highest percentage of prescribing by generic name at 85.8% in 2013/14. NHS Lanarkshire had the lowest rate at 80.4%. Nearly all NHS Boards have shown an increase in prescribing by generic name since 2012/13, with only NHS Grampian and NHS Tayside showing a slight decline (Table 3).

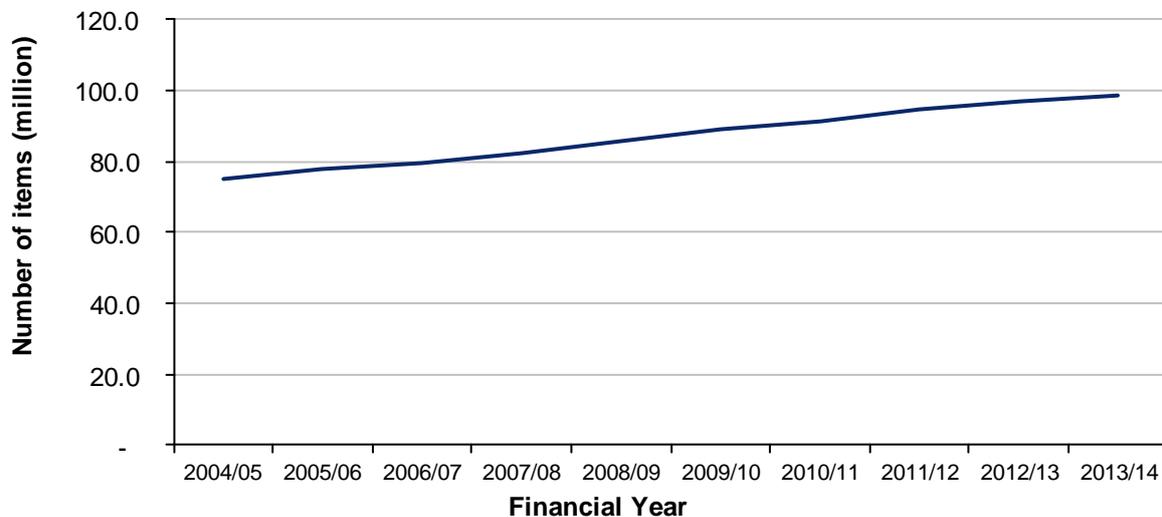
## Volume and Cost

### NHSScotland

Information on the number of dispensed items (volume) and the total (net) cost has been analysed over a ten year period from the Summary Statistics data tables.

The number of items dispensed in NHSScotland over a ten year trend for financial years 2004/05 to 2013/14 is shown in Figure 4. Prescribing volumes increased by 31.8% from 75.0 million items in 2004/05 to 98.8 million items in 2013/14. This growth reflects not only the availability of new or more effective medicines, but also increasing patient expectation, demographic changes and latterly the implementation of clinical guidelines and recommendations. The rate of increase in prescribing volumes has fallen slightly recently; between 2012/13 and 2013/14 the rate of increase was 1.8% compared to 2.3% between 2011/12 and 2012/13 (Figure 4).

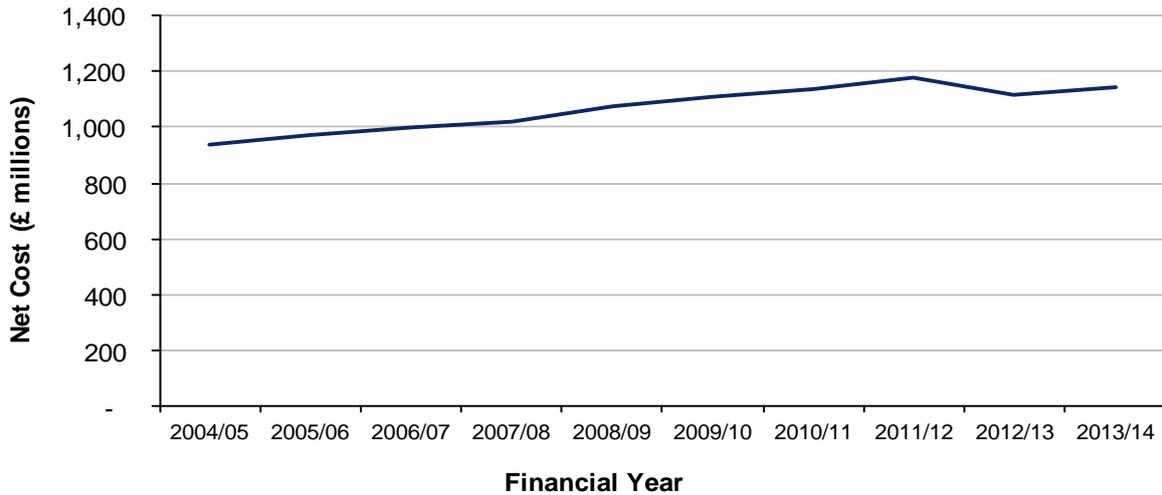
**Figure 4 – Number of items dispensed in NHSScotland, 2004/05 – 2013/14**



Source: Prescribing Information System, ISD Scotland

The total (net) cost of items dispensed in NHSScotland between 2004/05 and 2013/14 is shown in Figure 5. The cost to the Scottish Government is given by the net cost, which is the gross cost less any patient charges. Between 2012/13 and 2013/14 the net cost of items rose by 2.5% to £1,146 million. Between 2004/05 and 2013/14 the net cost increased by 21.9% overall, though there was a break in the upwards trend between 2011/12 and 2012/13 when the net cost of items dispensed fell by 5.0% (Figure 5). This fall is due to a number of major lines, e.g. atorvastatin, coming out of patent in 2011/12 and 2012/13.

**Figure 5 – Total (Net) cost (£) of items dispensed in NHSScotland, 2004/05 – 2013/14**



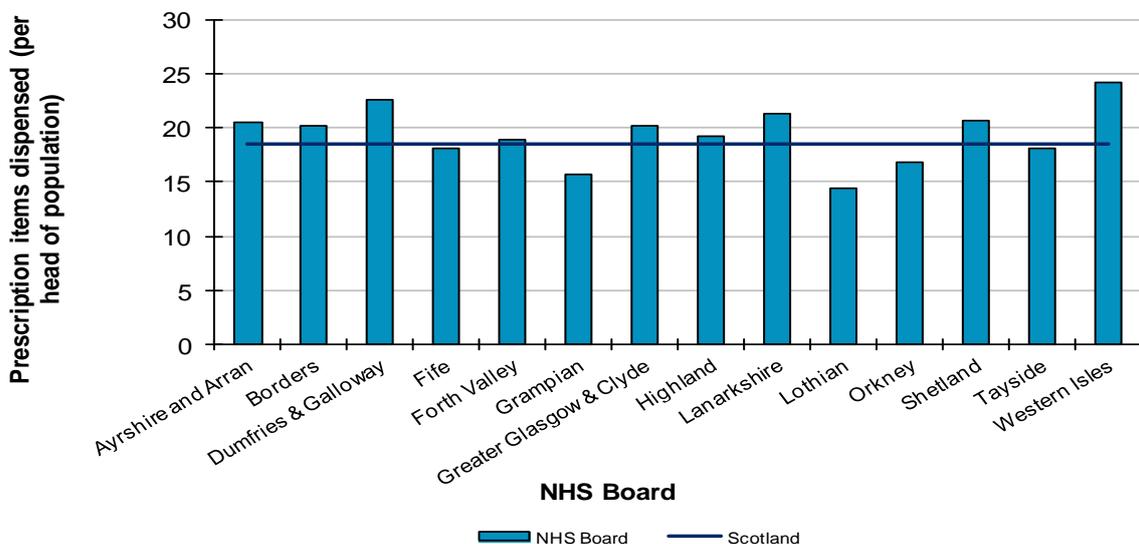
Source: Prescribing Information System, ISD Scotland

### NHS Board

Information on the NHS Board that the prescriptions were dispensed within has also been analysed. Data is shown per head of population and both volume and the total (net) cost have been evaluated.

Figure 6 shows that there is some variation between the NHS Boards in terms of the number of prescription items dispensed per head of population. Nine NHS Boards are above the Scottish average of 18.6 prescription items dispensed per person with NHS Western Isles the highest at 24.2 items per person and NHS Lothian the lowest at 14.5 items per person (Figure 6). There are multiple factors that contribute to regional variation in prescribing practice; these would include factors such as frequency of repeat prescribing, population demographics and prevalence of chronic disease etc.

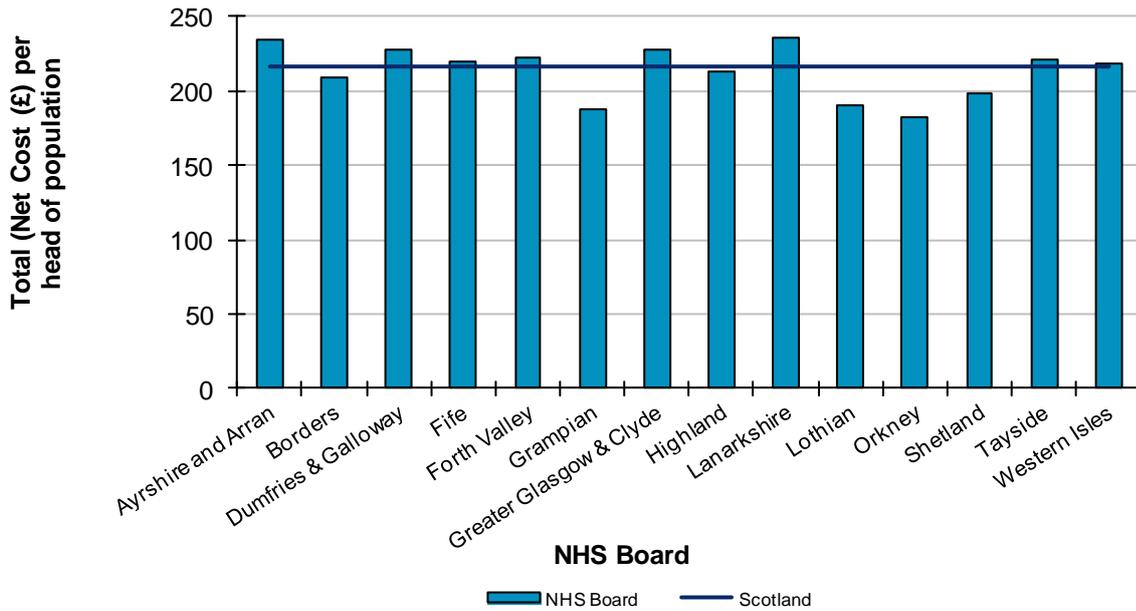
**Figure 6 – Number of prescription items dispensed per head of population by NHS Board, 2013/14**



Source: Prescribing Information System, ISD Scotland

The average total (net) cost per person by NHS Board is shown in Figure 7. This varies between the NHS Boards with eight NHS Boards whose average cost was over that of the Scottish average of £215.66. These are not necessarily the same NHS Boards that had a high number of items per person. For example NHS Shetland dispensed 20.7 items per person (over the Scottish average) yet their spend was £197.90 (well under the Scottish average). NHS Orkney has the lowest cost per person for 2013/14 and NHS Lanarkshire had the highest cost per person (Figure 7).

**Figure 7 – Average total (net) cost (£) per head of population by NHS Board, 2013/14**



Source: Prescribing Information System, ISD Scotland

## Glossary

Appliance Supplier (AS)	Appliance suppliers are a specific sub-set of NHS dispensing contractors who are contracted to supply approved medical devices on prescriptions (e.g. stoma).
Approved Drug Name	As listed in BNF, being the recognised official non-proprietary title (recommended International Non-Proprietary Name - rINN). This is presented as 'Chemical name' in the PCA tables
British National Formulary (BNF)	A standard classification of drugs into conditions of primary therapeutic use, the aim is to provide prescribers, pharmacists and other healthcare professionals with sound up-to-date information about the use of medicines.
Community Pharmacy (CP)	A retail pharmacy outlet holding a contract with a Health Board to provide NHS pharmaceutical services
Dispensing Doctor (practice)	Dispensing practices exist in those areas of Scotland where the population density is considered too low to support a pharmacy and where the NHS Board has determined that a dispensing service should be supplied.
Dispensing Health Board	The NHS Board with which the dispenser holds a dispensing contract, i.e. Community Pharmacy, Dispensing Doctor or Appliance Supplier.
Dummy items	Items which were not recognised by the prescription pricing system or where payment was rejected.
Generic drugs	An item that has lost its patent. When the patent expires on a branded drug, the manufacturer loses exclusive rights to produce it. Generic drugs are non-branded versions produced by different manufacturers that produce equivalent clinical effects.
Generic prescribing	An item written with its non-proprietary name, also referred to as the approved name. Approved [generic] names may be used for items in patent where only 1 brand exists and it is clinically safe to use the non-proprietary title.
Gross cost	Net Ingredient Cost plus dispensing fees plus other fees and allowances centrally paid.
Gross Ingredient Cost (GIC)	Cost of drugs and appliances reimbursed before deduction of any dispenser discount (note: this definition differs from other parts of the UK).
Net Ingredient Cost (NIC)	Cost of drugs and appliances reimbursed after deduction of any dispenser discount (note: this definition differs from other parts of the UK).
Over the counter	A drug for which a prescription is not needed.
Patient Charges	Income generated from paid prescriptions (£0.0 per item as at 1st April 2011) excludes prepayment certificates.

Prescribed Health Board	The NHS Board with which the prescriber holds a contract to prescribe, i.e. GP, Dentist, Non-medical prescriber.
Prescription form	A prescription form that can contain up to three items.
Prescription item	An item is an individual product prescribed e.g. 100 aspirin tablets of 300mg, they are also called a dispensed item.
Prescribable Item Name	The drug name written on the prescription - can be by approved name or a brand name. This is presented as 'Drug name' in the PCA tables.
Prescribing Information System	NSS Scotland's national prescribing dataset. Known as PIS.
Quantity	Quantity dispensed of an individual item e.g. 100 tablets.
Scottish Drug Tariff	The <a href="#">Scottish Drug Tariff</a> contains information regarding the prescribing, dispensing and reimbursement of medicines and appliances on primary care NHS prescriptions.
Total (net) cost	Gross cost minus charges paid by patients. This was previously called the exchequer cost.

## List of Tables

Table No.	Name	Time period	File & size
1	<a href="#">Prescription Cost Analysis</a>	FY 2013/14	Excel [2,755kb]
2	<a href="#">Top 10 Drugs</a>	FY 2013/14	Excel [121kb]
3	<a href="#">Generic Prescribing</a>	FY 2004/05 - 2013/14	Excel [100kb]
4	<a href="#">Summary Statistics (NHSScotland)</a>	FY 2004/05 - 2013/14	Excel [190kb]
5	<a href="#">Summary Statistics (NHS Board)</a>	FY 2006/07 - 2013/14	Excel [302kb]

## Contact

**Lucy Aitken**

Senior Information Analyst

[lucyaitken@nhs.net](mailto:lucyaitken@nhs.net)

0131 275 6801

**Catriona Young**

Senior Information Analyst

[catriona.young@nhs.net](mailto:catriona.young@nhs.net)

0131 275 6599

## Further Information

Further information can be found on the [ISD website](#)

## Rate this publication

Please [provide feedback](#) on this publication to help us improve our services.

Appendix

## A1 – Background Information

### How the data is obtained

[Practitioner Services](#) process all NHS prescriptions for payment of pharmacists, dispensing doctors and appliance suppliers. This gives a full record from which trends in prescribing can be investigated at a detailed level. The data includes prescribing by GPs, nurses, dentists, pharmacists and hospitals, where the latter was dispensed in the community. Hospital dispensed prescriptions are not included in the figures. The Information Services Division (ISD) cannot ascertain what proportion of the drug dispensed is actually consumed. These data do not include products purchased "over the counter". Prescriptions processed internally by Boards for payment purposes are not included in these data.

### Top 10 – assumptions

A drug may be available in a number of formulations, such as tablets and syrups, produced by different manufacturers. For example, co-codamol includes aggregated data for all preparations of that drug, both branded and generic.

### Changes to publications – June 2014

#### Dispensed items

Where one of several items on a form is not dispensed, it is marked as 'not dispensed' by the dispenser (known as an endorsement type 90). Historically, these items have been processed as if they were dispensed, resulting in items that appeared to have been dispensed but with zero costs associated. At Scotland level around 20,000 items per month have an endorsement type 90 attached to them.

Recent work to improve the accuracy of prescriptions data has included a change to ensure these 'not dispensed' items are now excluded from both dispensed item counts and associated costs. This change has been applied to data in the Prescribing Information System (NHSScotland's national prescribing database) from 1<sup>st</sup> April 2013 to date. When the 'not dispensed' items are excluded from analysis figures show an approximate reduction of less than 0.4% in the number of dispensed items and an increase in the cost per item compared to when they are included.

In the PCA publication this affects the data in the PCA, Top 10 and Generic Prescribing tables.

This change has been applied to 2013/14 data only, previous years' data will not be updated, this should be noted when considering time series data.

This does not affect the Summary Statistics tables as they are based on 'Paid items' rather than 'Dispensed Items' (i.e. Summary Statistics only counts items with an associated cost).

### **Summary Statistics changes**

Two changes have been made to the Summary Statistics data tables for the June 2014 publication. Firstly, the way in which the number of items is calculated for the Summary Statistics publication has changed slightly to bring it into line with other publications. Previously, the numbers of items dispensed in Summary Statistics and Remuneration differed as the number of items dispensed in Summary Statistics included the number of stock order forms, while Remuneration includes the number of items on stock order forms.

From the 2014 publication onwards Summary Statistics will use the number of items on stock order forms (hence the number of items dispensed in the Summary Statistics and Remuneration tables will match).

The second change is that the populations in the Summary Statistics tables have been updated to the NRS re-based estimates based on the 2011 census. The rebased population estimates are only available for the current NHS Board breakdown while the Summary Statistics data on patient charges for 2004/05 and 2005/06 are only available for the pre 2006/07 NHS Board breakdown. Therefore, the NHS Board data is only shown for 2006/07 onwards (8 years trend data rather than 10). The national data continue to show a ten year trend).

The change to the use of stock order items slightly increased the number of prescription items however the rebased populations were also slightly increased compared to previous estimates. The net effects of these changes are small reductions in the number of prescriptions per head of population and the average cost per prescription for 2012/13.

The changes to stock order items have been applied to all years in the data tables for this publication, as have the re-based NRS estimates. Previous publications should not be used for comparison.

### **Preparations with ten items or less**

Previously in the PCA data tables any preparations with ten dispensed items or less were aggregated in order to avoid disclosure of small numbers. They featured in a separate line at the bottom of each table as 'Preparations with 10 items or less'. This policy has been reconsidered and it has been decided that these items can now be presented. In last years data (2012/13) there were around 8,500 items with ten items or less, amounting to a Gross Ingredient cost of almost £700,000.

## A2 – Publication Metadata (including revisions details)

Metadata Indicator	Description
Publication title	Prescribing & Medicines: Prescription Cost Analysis
Description	Summary and detailed statistics on prescribing and dispensing in the community in Scotland including: drug costs and volumes and generic prescribing rates and detailed information on drugs dispensed by BNF Hierarchy and individual preparation level.
Theme	Health and Social Care
Topic	Health Care Personnel, Finance and Performance
Format	Excel Workbooks
Data source(s)	<p>Prescribing Information System (PIS). All data held in PIS is sourced from Practitioner Services within NHS National Services Scotland who are responsible for the remuneration and reimbursement of dispensing contractors within Scotland.</p> <p>NRS (formerly GROS): Mid-year population estimates taken from NRS.</p> <p>General Practice Team, ISD: Numbers of GPs and Dispensing Practices taken from GP pages of ISD website</p>
Date that data are acquired	Data is acquired on a monthly basis from Practitioner Services following payment approximately 2 calendar months after the end of the month being claimed for payment by contactors
Release date	24 June 2014
Frequency	Annual
Timeframe of data and timeliness	Data covering year to 31 March 2014
Continuity of data	Data is held in PIS for the most recent 14 years and is stored in archive files back to 1993/94. The definition of the main measures such as gross ingredient cost and number of items are unchanged over this period. Types and value of dispensing fees are agreed the Scottish Government and set annually. Details can be found in the Scottish Drug Tariff and in <a href="#">Primary Care circulars</a> issued by the Government. Drug products are first licensed as proprietary medicines but generic versions often appear once the original patent expires. This can affect the price and uptake of these drugs. The Scottish Government sets the reimbursement price of generic drug products via the

	<a href="#">Scottish Drug Tariff</a> which is updated and issued quarterly.
Revisions statement	Data are sourced from monthly pharmacy payments data on an ongoing basis therefore once published there is no routine requirement to revise historical data. However occasionally adjustments are made to pharmacy payments retrospectively by Practitioner Services for example due to an administrative error. Retrospective revisions can also be made to the classification of drugs in the <a href="#">British National Formulary</a> (BNF). Where either of these occur and are deemed to be significant in line with ISD's Revisions policy, a revision will be made to published data. This will be notified on the website.
Revisions relevant to this publication	<p>In this publication some changes have been made to the way the number of items is calculated for the Summary Statistics publication to bring it into line with other publications. Additionally, the populations used have been updated to the NRS re-based estimates based on the 2011 census. Both changes have been applied to all data in the accompanying tables (showing 2004/05 – 2013/14 data).</p> <p>Changes have also been made to dispensed items in the PCA, Top Ten and Generic Prescribing tables. Recently a change has been implemented to improve the accuracy of the information available. Data for 2013/14 has been updated but no previous data will be revised.</p> <p>Please see appendix 1 for further information about all these changes.</p>
Concepts and definitions	The data published in all these releases correspond to prescriptions that have been dispensed in the community in Scotland, i.e. dispensed by a pharmacy, dispensing doctor or appliance supplier. This includes prescriptions which were issued in another UK country but dispensed in Scotland. These data do not include prescription drugs that were supplied and administered to patients in a hospital setting. Prescriptions issued in hospital to patients on discharge and dispensed in the community are however included. Each excel workbook contains further detailed definitions of the main measures and links to a glossary.
Relevance and key uses of the statistics	These statistics are the primary source of data used to monitor the national community drugs bill within Scotland and the pharmacy contract agreed with dispensing contractors. They are also used to monitor national and local prescribing indicators covering both the quality and efficiency of prescribing in general practice.
Accuracy	The data is sourced from a payment system and routine monthly checks are carried out by Practitioner Services on a random sample of approximately 5% of prescription

	<p>payments. These check all data captured for payment and the accuracy of the payment calculation and have a target accuracy of 98% which is routinely met. Data that is captured but is not mandatory for payment purposes can be of lower quality; principally this includes the prescriber code which links a prescription back to the individual prescriber (e.g. GP) and their organisation (e.g. practice or NHS Board). Routine monitoring of unallocated prescriptions is carried out and correct codes are applied before publication. This ensures that unallocated prescriptions account for fewer than 2% of all prescriptions. For remaining unallocated prescriptions, the prescribing NHS Board is assumed to be the same as the dispensing NHS Board.</p>
<p>Completeness</p>	<p>The Prescribing Information System holds information on 100% of NHSScotland prescriptions dispensed within the community and claimed for payment by a pharmacy contractor (i.e. pharmacy, dispensing doctor or appliance supplier). It does not include data on prescriptions dispensed but not claimed (likely to be very small) or prescriptions prescribed but not submitted for dispensing by a patient. Some research has estimated these latter prescriptions to account for around 6% of all prescriptions issued to patients. It is not possible to determine from payment data how much of the medicine dispensed to patients is actually taken in accordance with dosage instructions.</p>
<p>Comparability</p>	<p>The main measures of drug ingredient cost and volumes of items dispensed in the community are comparable across the UK countries. However it should be noted that the Gross Ingredient Cost (GIC) within Scotland is equivalent to the Net Ingredient Cost (NIC) in England, i.e. the reimbursement cost of drugs before any pharmacy discounts are applied. Also each country determines its own dispensing fees based on separate contractual arrangements with dispensing contractors in each country. A common formulary called the <a href="#">British National Formulary</a> (BNF) is used to classify drugs based on therapeutic use.</p>
<p>Accessibility</p>	<p>It is the policy of ISD Scotland to make its web sites and products accessible according to <a href="#">published guidelines</a>.</p>
<p>Coherence and clarity</p>	<p>All prescribing tables are accessible via the <a href="#">ISD website</a>. Prescribing statistics are presented within excel spreadsheets for NHSScotland and where appropriate broken down by NHS Board.</p>
<p>Value type and unit of measurement</p>	<p>The main units of measure of drug reimbursement costs are Gross Ingredient Cost (GIC) and Net ingredient cost (NIC) quantity. The latter takes account of pharmacy discounts, the rates for which are set by the Scottish Government in the Scottish Drug Tariff. There are a large number of individual dispensing remuneration fees paid to</p>

	dispensing contractors details of which can be found in the Scottish Drug Tariff. The main measures of drug volume are items (the number of individual drug items on a prescription form), quantity (the total number of tablets, capsules etc), and defined daily doses (DDDs - estimated average daily maintenance doses for a total quantity of prescribed). Further details and definitions can be found in the glossary.
Disclosure	The <a href="#">ISD protocol on Statistical Disclosure Protocol</a> is followed.
Official Statistics designation	National Statistics
UK Statistics Authority Assessment	Completed assessment by UK Statistics Authority. Report published December 2011.
Last published	25 June 2013
Next published	30 June 2015
Date of first publication	March 2000
Help email	<a href="mailto:Nss.isdprescribing@nhs.net">Nss.isdprescribing@nhs.net</a>
Date form completed	19 May 2014

## **A3 – Early Access details (including Pre-Release Access)**

### **Pre-Release Access**

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

#### **Standard Pre-Release Access:**

- Scottish Government Health Department
- NHS Board Chief Executives
- NHS Board Communication leads

#### **Extended Pre-Release Access**

Extended Pre-Release Access of 8 working days is given to a small number of named individuals in the Scottish Government Health Department (Analytical Services Division). This Pre-Release Access is for the sole purpose of enabling that department to gain an understanding of the statistics prior to briefing others in Scottish Government (during the period of standard Pre-Release Access).

- Scottish Government Health Department (Analytical Services Division)

## A4 – ISD and Official Statistics

### About ISD

Scotland has some of the best health service data in the world combining high quality, consistency, national coverage and the ability to link data to allow patient based analysis and follow up.

Information Services Division (ISD) is a business operating unit of NHS National Services Scotland and has been in existence for over 40 years. We are an essential support service to NHSScotland and the Scottish Government and others, responsive to the needs of NHSScotland as the delivery of health and social care evolves.

**Purpose:** To deliver effective national and specialist intelligence services to improve the health and wellbeing of people in Scotland.

**Mission:** Better Information, Better Decisions, Better Health

**Vision:** To be a valued partner in improving health and wellbeing in Scotland by providing a world class intelligence service.

### Official Statistics

Information Services Division (ISD) is the principal and authoritative source of statistics on health and care services in Scotland. ISD is designated by legislation as a producer of 'Official Statistics'. Our official statistics publications are produced to a high professional standard and comply with the Code of Practice for Official Statistics. The Code of Practice is produced and monitored by the UK Statistics Authority which is independent of Government. Under the Code of Practice, the format, content and timing of statistics publications are the responsibility of professional staff working within ISD.

ISD's statistical publications are currently classified as one of the following:

- National Statistics (ie assessed by the UK Statistics Authority as complying with the Code of Practice)
- National Statistics (ie legacy, still to be assessed by the UK Statistics Authority)
- Official Statistics (ie still to be assessed by the UK Statistics Authority)
- other (not Official Statistics)

Further information on ISD's statistics, including compliance with the Code of Practice for Official Statistics, and on the UK Statistics Authority, is available on the [ISD website](#).

The United Kingdom Statistics Authority has designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the Code of Practice for Official Statistics. Designation can be broadly interpreted to mean that the statistics:

- meet identified user needs;
- are well explained and readily accessible;
- are produced according to sound methods, and
- are managed impartially and objectively in the public interest.

Once statistics have been designated as National Statistics it is a statutory requirement that the Code of Practice shall continue to be observed.