

Family Practitioner Services

# General Pharmaceutical Service

Annual Statistics 2019/20



**Published June 2020**

**Purpose**

The data contained in this publication are presented on a financial year basis during the year ending 31st March 2020. They represent a look at prescription dispensing and are based on claims submitted by primary pharmaceutical contractors to Family Practitioner Services. They do not cover secondary and private pharmaceutical provision.

Information is provided on dispensing contractors as well as volumes and costs of items dispensed by various patient demographics and therapeutic groups. Comparator information on dispensing contractors and dispensed items from across the UK is also presented. Data detailed in this publication are also available in spreadsheet format (Microsoft Excel) to aid secondary analysis, at the following link: <http://www.hscbusiness.hscni.net/services/3176.htm>

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**We want your feedback**

We welcome any feedback on any aspect of these statistics, which can be provided by email to: [Info.BSO@hscni.net](mailto:Info.BSO@hscni.net)

Additional information about these statistics is located at the back of this publication.

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## Introduction

This publication provides a statistical overview of pharmaceutical activity in Northern Ireland between April 2019 and March 2020. It is based on payment claims submitted by community pharmacists, dispensing doctors and appliance suppliers to Family Practitioner Services (FPS). The information does not include prescribing in a secondary care (e.g. hospital) or private setting.

It has been produced by independent statisticians within the FPS Information Unit. They are on secondment from the Northern Ireland Statistics and Research Agency (NISRA). This publication has been compiled in accordance with the Code of Practice for Statistics.

Further information about the work of FPS and the manner in which these statistics were produced can be found at the back of this publication.

## Key Figures

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- **Northern Ireland had 531 community pharmacies**

This was a reduction of one pharmacy compared to 2018/19. It was the first drop in pharmacy numbers since 2016/17.

- **There were 28 pharmacies per 100,000 people**

Fermanagh & Omagh had the highest concentration of pharmacies (39 per 100,000 people).

Lisburn & Castlereagh had the lowest concentration with 18.3 pharmacies per 100,000 people.



- **Pharmacies dispensed 42.8 million items**

The average number of items dispensed each month was 6,716 items per pharmacy, a rise of 3.1% on 2018/19

- **The total ingredient cost was £444.1 million**

This was an increase of 5.4% on the previous year's total.

# 1. Overview

*This section provides statistics on dispensing activity across all contractors in Northern Ireland in 2019/20.*

## 1.1 Dispensing by contractor type

There were 541 contractors dispensing prescription items in Northern Ireland on 31st March 2020. This was a decrease of one contractor compared with the previous year. Contractor numbers have remained relatively stable in recent years, only decreasing by 0.9% since 2014/15 when there were 546 active contractors.

Contractor Type	Number of contractors	
	Total	%
Community Pharmacy	531	98.2
Appliance contractors	2	0.4
Dispensing doctors	8	1.5
<b>Overall Total</b>	<b>541</b>	<b>100</b>

**Table 1.1:** Total number of contractors by type, 2019/20

## 1.2 Total dispensing

There were 43.1 million items dispensed in the community in Northern Ireland in 2019/20 across all contractor categories. This was an increase of 2.9% on the previous year.

The 2019/20 total represents a continuation of a long-term trend towards higher dispensing levels. The total number of items dispensed has risen by 7.5% since 2014/15, when the figure stood at 40.1 million items.

As illustrated by the table on the following page, dispensing activity in Northern Ireland in 2019/20 was dominated by community pharmacies, who accounted for 99.3% of all items dispensed during that year.

Contractor Type	No of items (millions)	
	Items	%
Community Pharmacy	42.8	99.3
Appliance contractors	0.2	0.5
Dispensing doctors	0.1	0.2
<b>Overall Total</b>	<b>43.1</b>	<b>100</b>

**Table 1.2:** Items dispensed broken down by contractor type, 2019/20

### 1.3 Most dispensed medications

The ten most commonly dispensed medications accounted for nearly one quarter (22.5%) of total dispensing in Northern Ireland in 2019/20. The most commonly dispensed medication was the statin Atorvastatin with 1.3 million items dispensed. It was closely followed by Omeprazole, which is typically used to treat excess stomach acid.

A list of the ten commonly dispensed medications and some of their typical uses is provided below. All medications are listed under their generic non-branded name and the figures incorporate all strengths available on prescription.

Medication	Items Dispensed	Typical use
Atorvastatin	1,328,637	Treatment of high blood cholesterol
Omeprazole	1,306,037	Treatment of excess stomach acid
Co-codamol	1,249,663	Pain relief
Levothyroxine	1,063,786	Treatment for thyroid hormone deficiency
Salbutamol	918,888	Treatment for respiratory conditions
Aspirin	842,819	Pain relief / heart attack prevention
Bisoprolol	807,889	Treatment for hypertension
Sertraline	766,685	Treatment for depression and anxiety
Lansoprazole	732,911	Treatment of excess stomach acid
Amlodipine	682,226	Treatment for hypertension / angina

**Table 1.3:** Ten most commonly dispensed medications in Northern Ireland, 2019/20

## 1.4 Total ingredient cost

The total ingredient cost<sup>1</sup> for prescription items dispensed in Northern Ireland in 2019/20 was £444.1 million. This was an increase of 5.4% on the previous year.

Annual ingredient cost totals have fluctuated over the past five years due to changes in drug pricing and prescribing patterns over time. As a result, the total ingredient cost has risen by just 4.3% since 2014/15 even though total items dispensed has risen by 7.5% during that time.

As shown below, dispensing from community pharmacies accounted for 96.9% of ingredient costs which could be attributed to a specific contractor<sup>2</sup>.

Contractor Type	Ingredient cost (£ millions)	
	Total	%
Community Pharmacy	427.3	96.9
Appliance contractors	13.1	3.0
Dispensing doctors	0.6	0.1
<b>Overall Total</b>	<b>441.0</b>	<b>100</b>

**Table 1.4:** Attributable ingredient cost by contractor type, 2019/20

## 1.5 Total ingredient costs by medication

The ten medications with the highest ingredient costs accounted for 13.2% of total ingredient costs in 2019/20.

Apixaban, a medication used for the treatment and prevention of blood clots, had the highest ingredient cost at £14.9 million. It was the only medication with a total ingredient cost above £10 million in 2019/20.

<sup>1</sup> Ingredient cost is based on the gross cost of items before discounts. It will not necessarily reflect the actual amount paid by FPS. It also excludes payments made to community pharmacists for providing dispensing services.

<sup>2</sup> The ingredient cost figures for 2019/20 include £3.1 million of retrospective cost adjustments which cannot be matched to a specific contractor based on available data from the FPS payment system.

Table 1.5 lists the ten medications with the highest ingredient costs in 2019/20 and some of their typical uses. All medications are listed under their generic non-branded name and the figures incorporate all strengths available on prescription.

Medication	Ingredient Cost (£ millions)	Typical use
Apixaban	14.9	Treatment and prevention of blood clots
Budesonide/Formoterol	6.7	Treatment for asthma
Fluticasone/Salmeterol	6.3	Treatment for asthma
Lamotrigine	5.0	Treatment for epilepsy
Buprenorphine	4.4	Pain relief
Tiotropium	4.4	Treatment for COPD
Co-codamol	4.4	Pain relief
Chlorpromazine	4.2	Treatment of psychotic disorders
Insulin Aspart	4.1	Treatment of diabetes
Mesalazine	4.1	Treatment for inflammatory bowel disease

**Table 1.5:** Ten medications with highest total ingredient costs in Northern Ireland, 2019/20

It is interesting to observe that there is little crossover between the ten most dispensed medications (see Table 1.3) and the ten with the highest ingredient costs. Co-codamol is the only medication to appear on both lists. This divergence relates to the relatively low ingredient costs of many commonly dispensed medications.



**Part One**

**Community Pharmacy  
in Northern Ireland 2019/20**

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## 2. Pharmacy Statistics

*This section contains basic statistics on community pharmacies including the number, size and distribution of pharmacies throughout Northern Ireland<sup>3</sup>.*

### 2.1 Number of Pharmacies

There were 531 community pharmacies in Northern Ireland on 31<sup>st</sup> March 2020. This was a reduction of one pharmacy compared to 2018/19. It was the first decline in pharmacy numbers since 2016/17.

From a long-term perspective, the number of pharmacies in Northern Ireland has been relatively stable over the past decade. This trend, however, has not been consistent throughout the region due to local variations in terms of openings and closures.

At Local Government District (LGD) level, Fermanagh & Omagh has seen the greatest increase in pharmacy numbers. It had 46 pharmacies at the end of 2019/20, an increase of 7.0% since 2010/11.

Meanwhile, Lisburn & Castlereagh has experienced the greatest percentage drop in pharmacy numbers. It had 27 pharmacies at the end of 2019/20, a reduction of 6.9% on its total in 2010/11.

A full breakdown of the changes in pharmacy numbers across all LGDs over the past decade is provided on the following page.

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<sup>3</sup> All geographic breakdowns in this chapter are based on pharmacy location

LGD	Number of pharmacies		
	2010/11	2019/20	% Change
Antrim & Newtownabbey	33	33	0.0
Ards & North Down	40	39	▼ 2.5
Armagh City, Banbridge & Craigavon	48	48	0.0
Belfast	132	131	▼ 0.8
Causeway Coast & Glens	40	40	0.0
Derry City & Strabane	43	44	▲ 2.3
Fermanagh & Omagh	43	46	▲ 6.5
Lisburn & Castlereagh	29	27	▼ 6.9
Mid & East Antrim	31	31	0.0
Mid Ulster	39	39	0.0
Newry, Mourne & Down	51	53	▲ 3.9
<b>Northern Ireland</b>	<b>529</b>	<b>531</b>	<b>▲ 0.3</b>

**Table 2.1:** Change in pharmacy numbers at LGD level between 2010/11 and 2019/20

## 2.2 Pharmacies per 100,000 population

The number of pharmacies per 100,000 people in Northern Ireland was 28 in 2019/20, a reduction of 0.8% on 2018/19.

This continues the slow decline in the ratio of pharmacies to population which began in 2011/12. At that time, there were 29.4 pharmacies per 100,000 population. This trend has been caused by population growth combined with stable pharmacy numbers.

There is considerable variation in the figures for individual LGDs across Northern Ireland, which can be seen in Table 2.2 on the following page.

In 2019/20, Fermanagh & Omagh had the most pharmacies per 100,000 people. Its figure, 39 pharmacies, was more than twice that of Lisburn & Castlereagh, which was the LGD with the lowest ratio of pharmacies to population in Northern Ireland.

LGD	Pharmacies per 100,000 population <sup>4</sup>
Fermanagh & Omagh	39.0
Belfast	38.2
Derry City & Strabane	29.1
Newry, Mourne & Down	29.0
Causeway Coast and Glens	27.6
Mid Ulster	26.0
Ards & North Down	24.0
Antrim & Newtownabbey	22.9
Mid & East Antrim	22.2
Armagh City, Banbridge & Craigavon	22.0
Lisburn & Castlereagh	18.3
<b>Northern Ireland</b>	<b>28.0</b>

**Table 2.2:** Pharmacies per 100,000 population for Northern Ireland LGDs, 2019/20

On a national level, Northern Ireland continues to have the most pharmacies per 100,000 population in the UK. The most recent available statistics, which relate to 2018/19, indicate that the UK average was 21.1 pharmacies per 100,000 people. Northern Ireland's figure was 28.3, which was over one third higher (34%) than the national average.

Region	Pharmacies per 100,000 population
Northern Ireland	28.3
Scotland	23.1
Wales	22.8
England	20.6
<b>United Kingdom</b>	<b>21.1</b>

**Table 2.3:** Pharmacies per 100,000 population across the United Kingdom, 2018/19

The higher figure for Northern Ireland may be linked to the low number of dispensing GP practices here. These practices can dispense prescriptions directly to patients who meet certain criteria<sup>5</sup>. In Northern Ireland, there are four such practices, accounting for 0.2% of

<sup>4</sup> The LGD figures have been calculated using a 2018-based population projection for 2019 due to the unavailability of 2019 mid-year estimates at the time of production.

<sup>5</sup> Full details of these criteria are available in the technical notes at the back of this publication.

all dispensing. In the rest of the UK, there are 1,199 dispensing practices, representing 7% of all medicines dispensed annually.

## 2.3 Distance to Nearest Pharmacy<sup>6</sup>

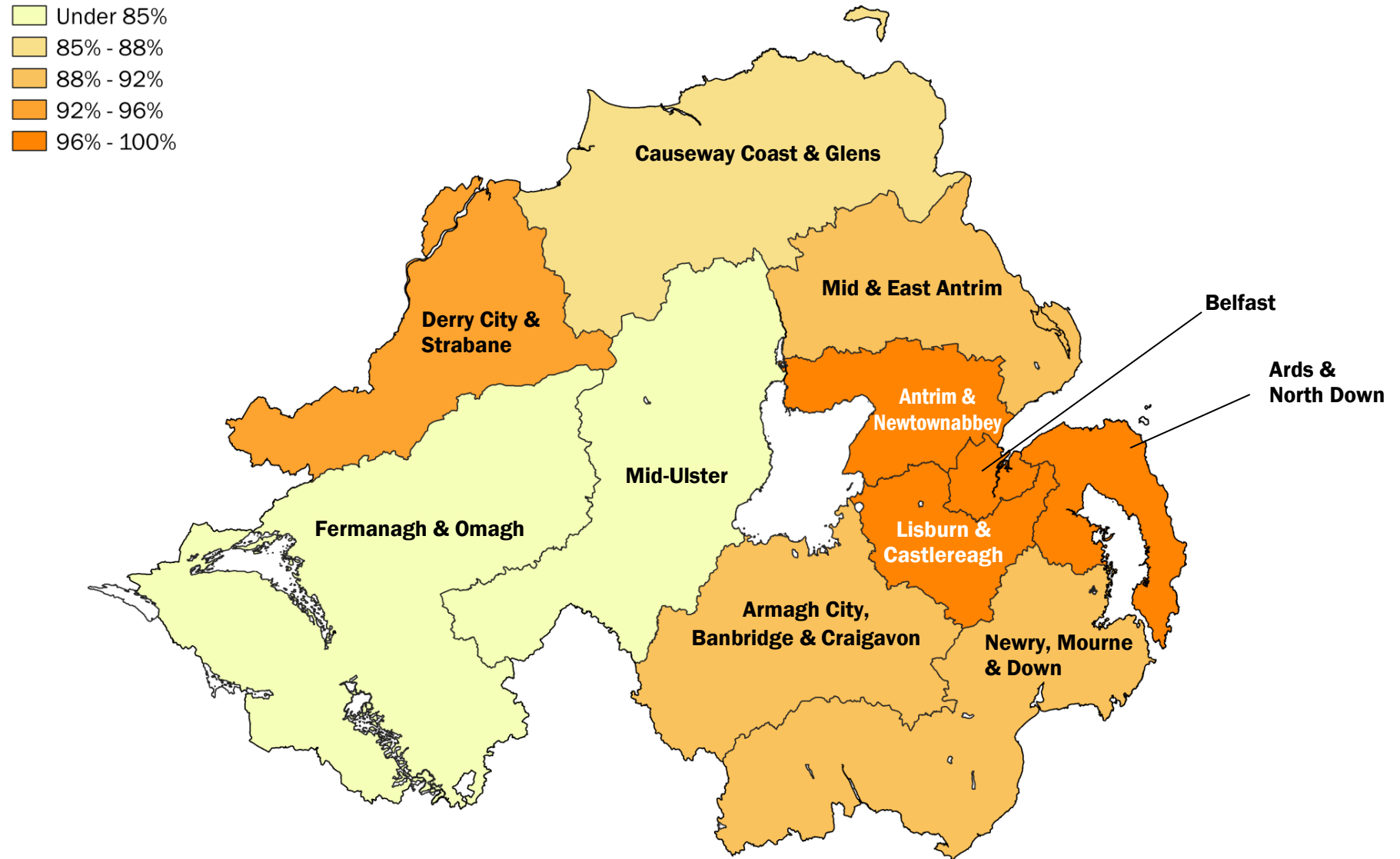
It is estimated that over 99% of the Northern Ireland population lived within five miles of their nearest pharmacy in 2019/20. In many cases, the distance between home and pharmacy was far shorter – 72.6% of all people lived within one mile of their nearest pharmacy. This meant that the average distance from home to pharmacy was 0.9 miles. A full overview is provided in Table 2.5 below.

LGD	% Population within radius		
	< 1 mile	< 3 miles	< 5 miles
Antrim & Newtownabbey	76.5	96.7	100
Ards & North Down	84.2	99.0	100
Armagh City, Banbridge & Craigavon	60.4	90.0	98.8
Belfast	98.8	100	100
Causeway Coast & Glens	56.0	86.5	98.9
Derry City & Strabane	81.3	94.3	99.1
Fermanagh & Omagh	48.2	82.0	97.9
Lisburn & Castlereagh	80.6	96.3	100
Mid & East Antrim	70.9	89.8	98.7
Mid Ulster	48.8	83.4	98.8
Newry, Mourne & Down	59.4	91.5	99.9
<b>Northern Ireland</b>	<b>72.6</b>	<b>92.8</b>	<b>99.4</b>

**Table 2.4:** Population proximity to pharmacies at LGD level, 2019/20

While pharmacy coverage is almost universal at five mile level, there is some local variation across Northern Ireland at shorter distances. This is illustrated in Map 2.1 on the following page which shows percentage of population living within a three mile radius of a community pharmacy by LGD.

<sup>6</sup> Population is defined as active GP registration person counts at postcode level at October 2019. Distance is calculated on a straight line basis. See technical notes for further information. The LGD figures have been calculated using a 2018-based population projection for 2019 due to the unavailability of 2019 mid-year estimates at the time of production.



Map 2.1: Percentage of population living within three miles of a pharmacy by LGD, 2019/20

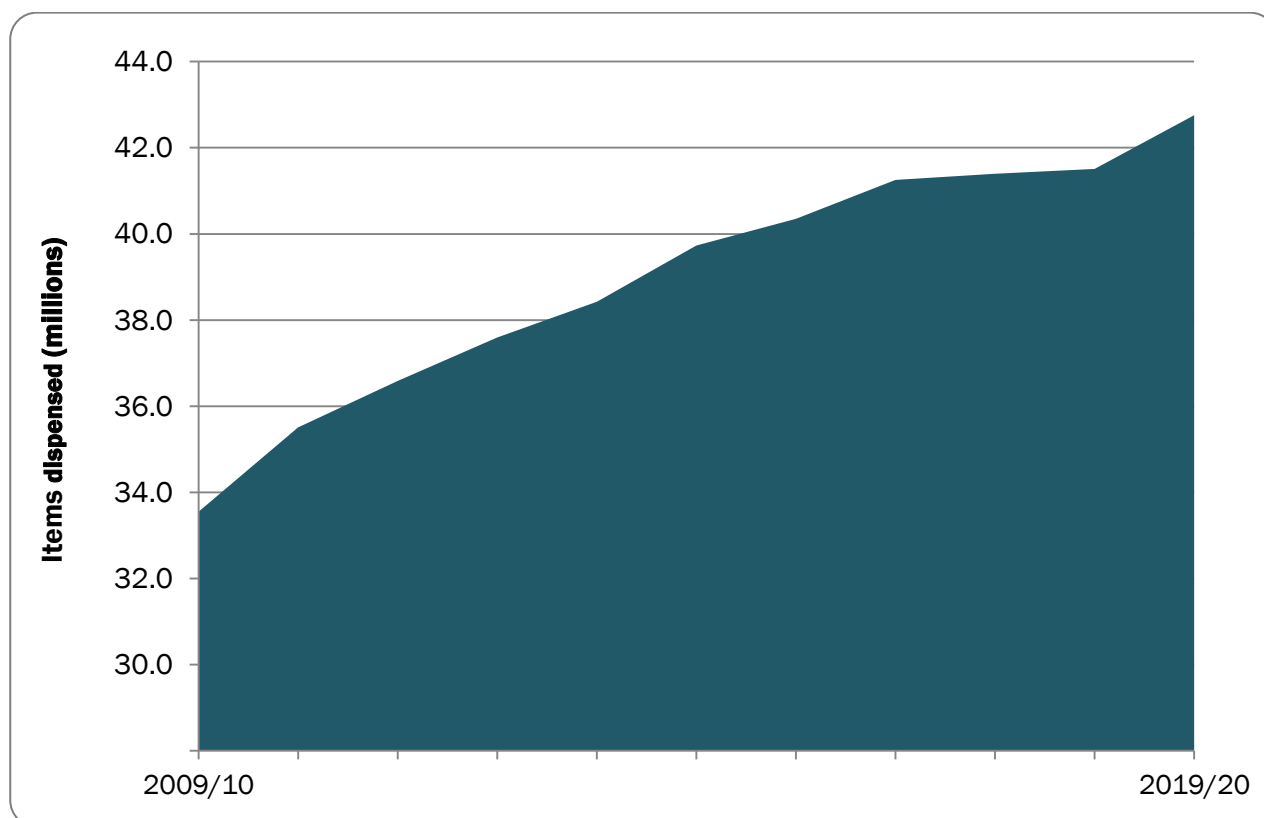
## 3. Pharmacy Dispensing Volumes

*This section contains information on items dispensed within community pharmacies throughout Northern Ireland in 2019/20<sup>7</sup>.*

### 3.1 Total Dispensing

The total number of prescription items dispensed by community pharmacies was 42.8 million in 2019/20. This was an increase of 3.3% on the previous year.

The 2019/20 total represents a continuation of a long-term trend towards higher dispensing levels. The total number of items dispensed has risen by over a quarter (27.4%) since 2009/10, when the figure stood at 33.5 million items.



**Chart 3.1:** Trend in number of items dispensed, 2009/10 to 2019/20

In terms of LGDs, Belfast had the greatest number of items dispensed. Its total of 9.1 million items accounted for 21.2% of total items dispensed for Northern Ireland. The lowest

<sup>7</sup> All geographic breakdowns in this chapter are based on pharmacy location

figure was recorded in Lisburn & Castlereagh where 2.6 million items were dispensed in 2019/20.

LGD	Items dispensed (millions)	Items per person <sup>8</sup>
Belfast	9.1	26.4
Armagh City, Banbridge & Craigavon	4.3	19.6
Derry City & Strabane	4.2	27.5
Newry, Mourne & Down	4.1	22.3
Ards & North Down	3.6	22.0
Causeway Coast & Glens	3.2	22.1
Mid Ulster	3.1	20.7
Mid & East Antrim	3.1	22.0
Antrim & Newtownabbey	2.9	19.8
Fermanagh & Omagh	2.8	23.3
Lisburn & Castlereagh	2.6	17.7
<b>Northern Ireland</b>	<b>42.8</b>	<b>22.6</b>

**Table 3.2:** Total number of items dispensed by LGD, 2019/20

The number of items dispensed per head of population was varied across LGDs in 2019/20. The LGDs with the highest figures were Derry City & Strabane (27.5 items) and Belfast (26.4 items).

Lisburn & Castlereagh had the lowest figure at 17.7 items dispensed per head of population. These figures, however, are likely to have been affected by commuting patterns which may lead residents of one LGD to collect their prescriptions in another.

### 3.2 Dispensing by pharmacy

The average number of items dispensed per pharmacy was 80,569 in 2019/20. This was an increase of 3.3% on the previous year. Increasing dispensing volumes and a stable number of pharmacies has meant that the average number of items dispensed per year has risen by 26.1% since 2009/10.

<sup>8</sup> The LGD figures have been calculated using a 2018-based population projection for 2019 due to the unavailability of 2019 mid-year estimates at the time of production.



There were substantial differences across LGDs in the average number of items dispensed per pharmacy in 2019/20. The pharmacies with the highest average dispensing were those in Mid & East Antrim, which dispensed an average of 99,088 items in 2019/20. Fermanagh & Omagh had the lowest average figure at 60,750 items per pharmacy.

LGD	Average items dispensed
Mid & East Antrim	99,088
Lisburn & Castlereagh	96,208
Derry City & Strabane	94,595
Ards & North Down	90,853
Armagh City, Banbridge & Craigavon	89,154
Antrim & Newtownabbey	86,575
Causeway Coast & Glens	80,178
Mid Ulster	79,517
Newry, Mourne & Down	77,057
Belfast	69,192
Fermanagh & Omagh	60,750
<b>Northern Ireland</b>	<b>80,569</b>

**Table 3.3:** Average annual dispensing per pharmacy by LGD, 2019/20

While lower dispensing volumes are often associated with rural areas, the figures for Belfast suggest that this is not always the case. It had the second-lowest average in Northern Ireland at 69,192 items per pharmacy. This will be driven by the high concentration of pharmacies in this council area.

Despite the general rise in dispensing volumes, there were still 20 pharmacies with an average dispensing level of 2,000 or fewer items per month in 2019/20. This represented a decrease of 48.7% on 2009/10. Half of these pharmacies were located in Belfast, accounting for 7.7% of premises open in that LGD.

On a national level, Northern Ireland has the lowest average dispensing volumes per pharmacy in 2018/19, the most recent year for which comparable statistics are available.

At the time, the UK average was 87,110 items per pharmacy. Northern Ireland’s figure was 77,908 items, which was 10.6% lower than the national average.

Region	Average items dispensed
Wales	104,663
England	87,212
Scotland	80,076
Northern Ireland	77,908
<b>United Kingdom</b>	<b>87,109</b>

**Table 3.4:** Average annual dispensing at UK level, 2018/19

It should be noted that average dispensing numbers may not be directly comparable across the UK due to differences in prescribing practices. For example, in Northern Ireland and Scotland, GPs and other prescribers can instruct pharmacists to split single items and dispense them at set intervals in the interest of patient safety. In England and Wales, the practice can be to prescribe a reduced quantity of items at a greater frequency. See the further information section for additional details.

Further information about monthly average dispensing volumes, including historical trend data, is available in Annex tables 1.4 and 1.5.

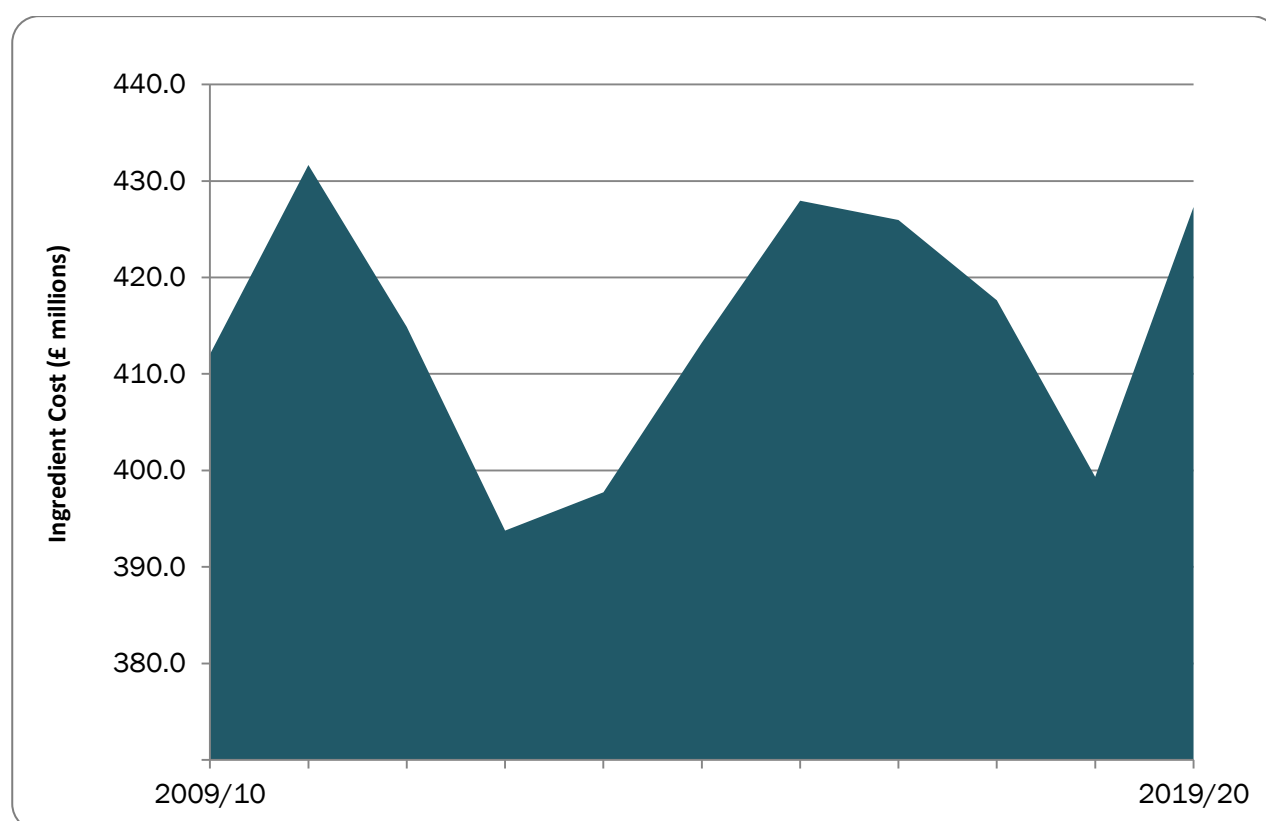
## 4. Pharmacy Dispensing Costs

*This section contains information on ingredient cost<sup>9</sup> of items dispensed within community pharmacies throughout Northern Ireland in 2019/20<sup>10</sup>.*

### 4.1 Total ingredient cost

The total ingredient cost for prescription items dispensed by community pharmacies in 2019/20 was £427.3 million. This was an increase of 7.0% on the previous year.

Unlike dispensing volumes, annual ingredient cost totals have fluctuated over the past ten years. This situation has arisen due to changes in drug costs and prescribing patterns over time. As a result, the total ingredient cost has risen by just 3.7% since 2009/10, seven times lower than the growth rate in items over the same period.



**Chart 4.1:** Trend in total ingredient cost, 2009/10 to 2019/20

<sup>9</sup> Ingredient cost is based on the gross cost of items before discounts. It will not necessarily reflect the actual amount paid by FPS. It also excludes payments made to community pharmacists for providing dispensing services.

<sup>10</sup> All geographic breakdowns in this chapter are based on pharmacy location

LGD	Ingredient Cost (£ millions)	Cost per item
Belfast	89.5	£9.87
Armagh City, Banbridge & Craigavon	42.1	£9.84
Ards & North Down	39.9	£11.16
Newry, Mourne & Down	38.9	£9.52
Derry City & Strabane	37.9	£9.11
Causeway Coast & Glens	33.4	£10.40
Mid & East Antrim	31.5	£10.24
Mid Ulster	29.7	£9.57
Antrim & Newtownabbey	29.5	£10.31
Lisburn & Castlereagh	28.3	£10.87
Fermanagh & Omagh	26.8	£9.73
<b>Northern Ireland</b>	<b>427.3</b>	<b>£9.99</b>

**Table 4.2:** Total ingredient cost and cost per item by LGD, 2019/20

At LGD level, Belfast had the highest total ingredient cost at £89.5 million. This accounted for 20.9% of the total ingredient cost for Northern Ireland. Fermanagh & Omagh had the lowest total cost at £26.8 million.

The average cost per item dispensed by community pharmacies across Northern Ireland was £9.99 in 2019/20. There was, however, some variation at LGD level. The average figure ranged from £9.11 per item in Derry City & Strabane to £11.16 per item in Ards & North Down.

## 4.2 Ingredient cost per pharmacy

The average ingredient cost of items dispensed per pharmacy was £805,214 in 2019/20. This was an increase of 7.3% on the previous year. Fluctuating ingredient costs over time meant, however, that this was an increase of just 2.6% on 2009/10.

As with dispensing volumes, there were noticeable local variations at LGD level. There were three LGDs where the average ingredient cost was over £1 million per pharmacy. By contrast, pharmacies in Fermanagh & Omagh had an average ingredient cost of £592,453

in 2019/20. A full breakdown of average ingredient costs per pharmacy at LGD is provided below.

LGD	Average total ingredient cost (£)
Lisburn & Castlereagh	1,046,171
Mid & East Antrim	1,014,934
Ards & North Down	1,013,381
Antrim & Newtownabbey	892,492
Armagh City, Banbridge & Craigavon	877,196
Derry City & Strabane	861,454
Causeway Coast & Glens	833,808
Mid Ulster	760,950
Newry, Mourne & Down	733,845
Belfast	683,106
Fermanagh & Omagh	592,453
<b>Northern Ireland</b>	<b>805,214</b>

**Table 4.3:** Average annual ingredient cost per pharmacy by LGD, 2019/20

**Part Two**

**Dispensing in  
Northern Ireland 2019/20**

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## 5. Dispensing Analysis

*This section provides a detailed analysis of total dispensing activity in Northern Ireland in 2019/20. Unlike previous sections, it includes dispensing information from all dispensing contractors i.e. community pharmacies, dispensing doctors and appliance contractors<sup>11</sup>.*

### 5.1 Background information

The majority of the figures within this section are based on the matching of patient attributes, such as age, gender and geographical location, to prescription records.

This process relies on data captured during the scanning of paper prescriptions submitted for payment by contractors to FPS. In some cases, the data capture is unable to successfully read the patient attributes printed on the prescription.

In 2019/20, patient attribute information was retrieved for 87.6% of all prescription items dispensed. This sample is considered to be representative of patient prescribing patterns across Northern Ireland.

But the incomplete nature of this data should be taken into account when examining absolute numbers or trends across time. In particular, it should be noted that scan rates vary on an annual basis. For instance, patient attributes were only retrieved from around 75% of prescriptions scanned in 2018/19.

This limitation only applies to demographic or geographical breakdowns based on patient attributes within this part of the publication. Overall figures for Northern Ireland are not affected by the scanning issue.

### 5.2 Dispensing by age and gender

Females accounted for 56.6% of all prescriptions which could be attributed to a gender. This proportion varied little at LGD level – the highest figure was 57.8% in Antrim & Newtownabbey, while the lowest was 54.7% in Fermanagh & Omagh.

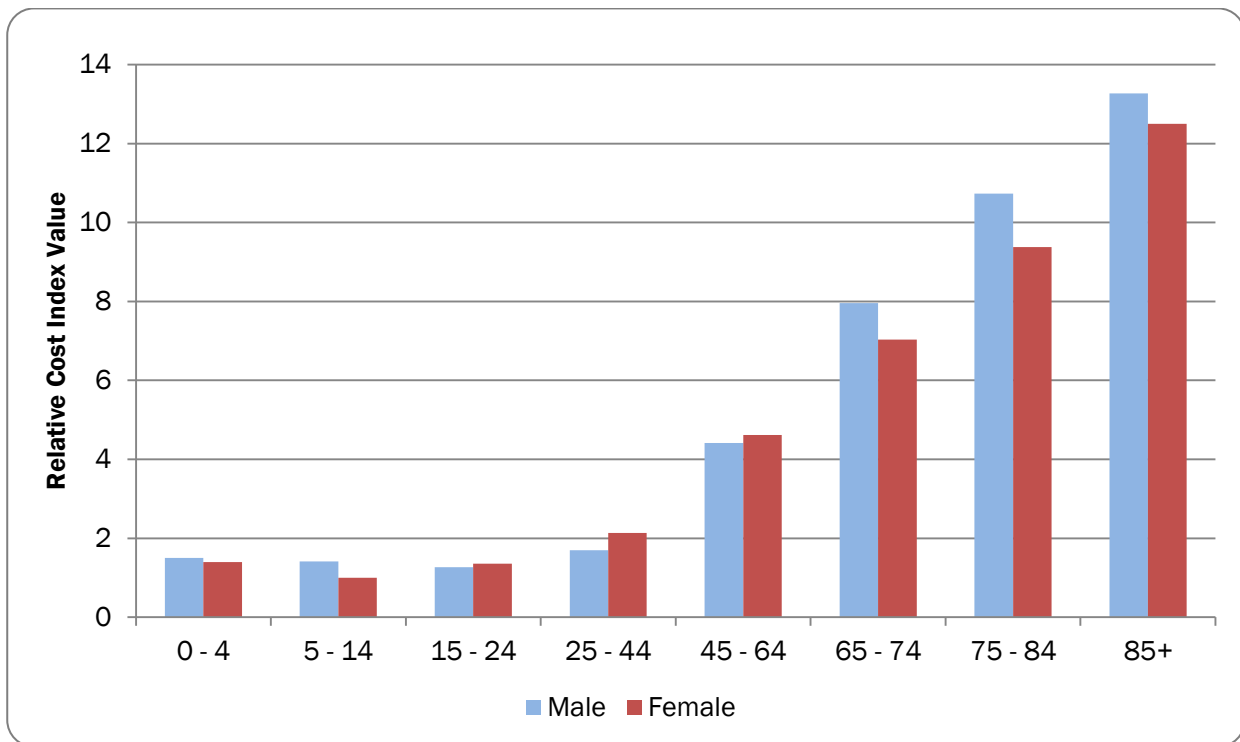
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<sup>11</sup> All geographic breakdowns in this chapter are based on patient location.

The 45 – 64 age group accounted for the largest number of items dispensed in 2019/20 at 13 million, equating to over 30% of all items. This group also had the highest total ingredient cost at 125.5 million. A full breakdown of dispensing by age and gender is provided in the statistical tables accompanying this publication.

### 5.3 Relative Cost Index

The relationship between age/gender and prescribing cost can be examined through the use of a relative cost index. The index values are calculated by dividing the total ingredient cost of items dispensed to each age and gender group divided by the equivalent mid-year population estimates.



**Chart 5.2:** Relative Cost Index values by age and gender, 2019/20

The chart above shows that, as might be expected, that prescribing costs for both genders progressively increase with age. For example, a male in the 85+ group will typically have a cost index value which is 13.3 times higher than that for a female in the 5-14 group. In older age brackets, men tend to have higher costs than their female counterparts, reflecting the generally poorer health status found in older males.



## 5.4 Dispensing by BNF Chapter

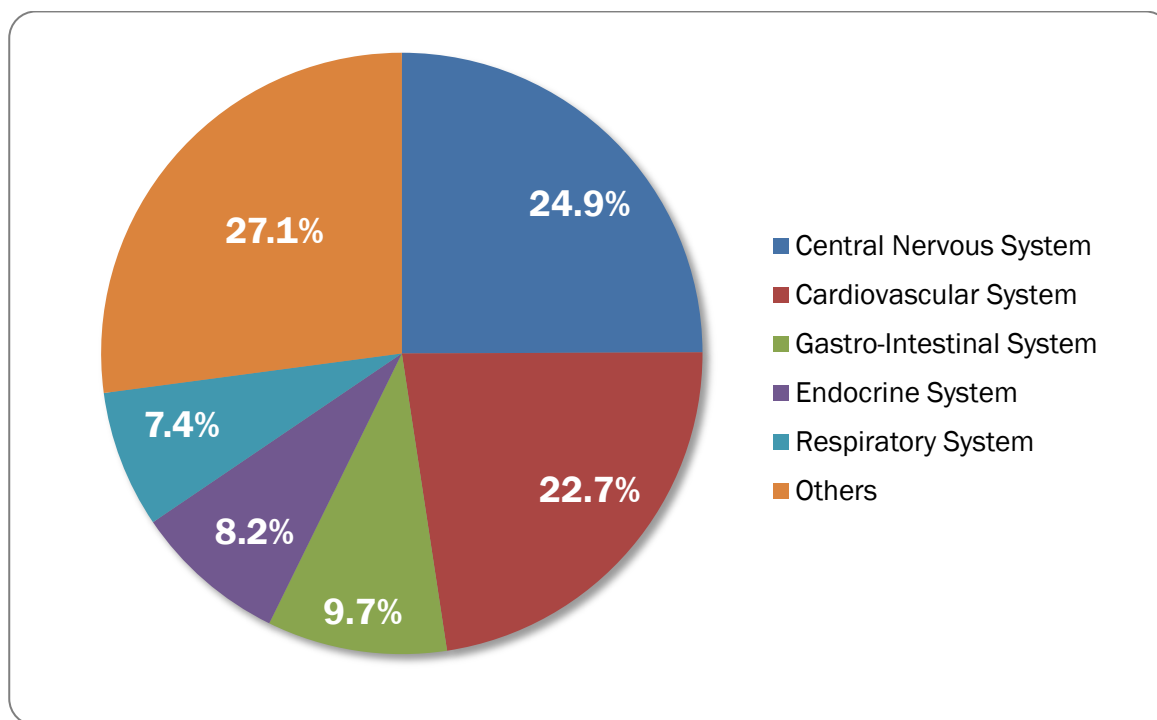
The British National Formulary (BNF) is a reference source published jointly by the British Medical Association and the Royal Pharmaceutical Society providing professional guidelines on medicine use. It is divided into chapters relating to therapeutic groups, which provide an indication of the condition for which they have generally been prescribed.

The table below contains an overview of dispensing and associated ingredient cost by BNF chapter in Northern Ireland during 2019/20.

BNF Chapter	No of items (millions)	Ingredient cost (£ millions)
1. Gastro-Intestinal System	4.16	24.1
2. Cardiovascular System	9.75	59.7
3. Respiratory System	3.18	44.1
4. Central Nervous System	10.74	94.5
5. Infections	1.93	10.3
6. Endocrine System	3.55	56.8
7. Obstetrics, Gynaecology And Urinary Tract Disorders	1.12	14.4
8. Malignant Disease And For Immunosuppression	0.18	12.2
9. Nutrition And Blood	2.15	33.6
10. Musculoskeletal And Joint Diseases	1.46	12.2
11. Eye	0.48	4.7
12. Ear, Nose And Oropharynx	0.61	4.5
13. Skin	1.68	14.9
14. Immunological Products And Vaccines	0.04	1.0
15. Anaesthesia	0.07	3.0
19. Other Drugs And Preparations	0.08	1.9
20. Dressings	0.36	10.7
21. Appliances	1.17	19.6
22. Incontinence Appliances	0.06	1.8
23. Stoma Appliances	0.18	11.0
99. Unclassified	0.08	9.3
<b>Overall Total</b>	<b>43.05</b>	<b>444.1</b>

**Table 5.4:** Items dispensed and total ingredient cost by BNF chapter, 2019/20

It is clearly evident from the overview that a small number of BNF chapters represent the bulk of items dispensed. These are the chapters for the central nervous system, the cardiovascular system, the gastro-intestinal system, the endocrine system and the respiratory system. As Chart 5.5 shows, they accounted for nearly three quarters of items dispensed in Northern Ireland in 2019/20.



**Chart 5.5:** Items dispensed by BNF chapter, 2019/20

The same five chapters also represent, in broadly similar proportions, the bulk of items dispensed to patients living in each of Northern Ireland’s LGDs.

In terms of costs, there isn’t necessarily a correlation between dispensing volumes and ingredient costs at BNF chapter level. This is particularly evident in terms of the average cost per item.

The highest average cost in 2019/20 was for items related to BNF chapter 8 (Malignant Disease and for Immunosuppression) at £66.76. By comparison, the average cost per item for treatments relating to the Central Nervous System was £8.80.

## 5.5 Dispensing by Age Group and BNF chapter

The overall pattern of dispensing by BNF chapter hides some variation in the type of conditions treated across age groups. Most notably, none of the five chapters which dominate dispensing were among the most dispensed chapters for the 0 – 4 age group.

Age Group	Most dispensed chapters	% of Items
0 - 4	5. Infections	18.7
	13. Skin	16.7
	9. Nutrition and Blood	15.6
5 - 14	3. Respiratory System	27.8
	4. Central Nervous System	14.0
	13. Skin	12.5
15 - 24	4. Central Nervous System	24.9
	3. Respiratory System	14.6
	13. Skin	11.2
25 - 44	4. Central Nervous System	37.6
	1. Gastro-Intestinal System	9.8
	3. Respiratory System	8.6
45 - 64	4. Central Nervous System	29.9
	2. Cardiovascular System	21.1
	1. Gastro-Intestinal System	10.5
65 - 74	2. Cardiovascular System	32.5
	4. Central Nervous System	19.7
	6. Endocrine System	9.7
75 - 84	2. Cardiovascular System	34.3
	4. Central Nervous System	17.6
	1. Gastro-Intestinal System	9.5
85+	2. Cardiovascular System	30.4
	4. Central Nervous System	18.5
	1. Gastro-Intestinal System	10.5

**Table 5.6:** The three most commonly dispensed chapters by age group, 2019/20

It is also evident that medications for the Cardiovascular System are less commonly dispensed to patients who are aged below 45. Even within the 25 – 44 age group, they accounted for just 7.3% of all items dispensed.

Table 5.6 also shows that the most-commonly dispensed chapters change little beyond the 45 – 64 age group. Although the Endocrine System was the third most dispensed chapter within the 65 – 74 group, it was only marginally ahead of the Gastro-Intestinal System.

## 5.6 Dispensing by Deprivation

Patient postcode information was available for 87.2% of all items dispensed in 2019/20. Data is unavailable for the remaining prescriptions due to the limitations of the prescription scanning process used by FPS.

The availability of postcode information allows dispensing activity to be mapped to the Multiple Deprivation Measure (MDM), which is the official measure of geographical deprivation for Northern Ireland.

For the purposes of this publication, the areas covered within the MDM were divided into five quintiles, each of which contained approximately 20% of Northern Ireland’s population.

The data indicates that the number of items dispensed and the total ingredient cost is higher for areas with higher levels of deprivation. There were 8.8 million items dispensed to patients living in the most deprived quintile in 2019/20 whereas 5.9 million were dispensed to those residing in the least deprived quintile.

Deprivation Quintile	Items dispensed		Ingredient Cost	
	Total (millions)	%	Total (£ millions)	%
1 (highest)	8.8	20.5	82.8	18.6
2	8.3	19.2	81.8	18.4
3	7.7	17.9	78.8	17.7
4	6.9	16.0	73.0	16.4
5 (lowest)	5.9	13.6	65.8	14.8
Unassignable	5.5	12.8	61.9	13.9

**Table 5.7:** Items dispensed and ingredient cost by deprivation quintile, 2019/20

The relationship between deprivation and ingredient cost is more complex. While more deprived quintiles have higher total ingredient costs, this arises due to the volume of prescriptions dispensed. For most BNF chapters, the ingredient cost per item is higher for patients residing in less deprived areas. This can be illustrated using the figures relating to the five most dispensed BNF chapters in 2019/20.

BNF Chapter	Cost per item by deprivation quintile				
	1	2	3	4	5
1. Gastro-Intestinal System	£5.07	£5.58	£5.68	£6.22	£6.73
2. Cardiovascular System	£5.14	£5.71	£6.01	£6.45	£7.04
3. Respiratory System	£13.42	£13.74	£13.65	£14.04	£15.03
4. Central Nervous System	£8.12	£8.54	£8.81	£8.70	£9.01
6. Endocrine System	£15.31	£15.24	£15.84	£16.36	£17.45

**Table 5.8:** Cost per item by deprivation quintile for five most dispensed BNF chapters, 2019/20

It is evident that the ingredient cost per item is substantially greater across all five chapters for patients residing in the least deprived quintile (number five) compared with those in the most deprived one.

The differences between the most and least deprived quintiles are particularly large in terms of the Gastro-Intestinal System and the Cardiovascular System. In both cases, the ingredient cost per item for the least deprived quintile is more than 30% greater than that for the most deprived quintile.

## 5.7 UK comparisons

There are some differences in how dispensing statistics are published across the UK, which can make comparisons difficult. As a result, the figures in this sub-section have been calculated on a calendar year basis to facilitate comparisons with England and Wales.

In 2019, Northern Ireland had the second-highest level of dispensing in the UK at 22.5 items per person. By comparison, Wales had the highest figure at 25.9 items. Both had a notably higher level of dispensing than either Scotland or England. These figures may,

however, not be directly comparable due to differing prescribing practices across each region as described in section 3.2.

Northern Ireland had the highest ingredient cost per person in the UK in 2019. Its figure increased by 1.6% compared with the previous year to £229.83 per person. By comparison, the equivalent figure for England was £161.29. A summary of the comparative figures for 2019 is provided in the table below.

Region	Prescription items per person	Ingredient cost per person
Northern Ireland	22.5	£229.83
England	19.9	£161.29
Wales	25.9	£209.05
Scotland <sup>†</sup>	19.0	£182.36

<sup>†</sup> Figures for 2018/19 financial year

**Table 5.9:** Prescription items and ingredient cost per person across the UK, 2019

## Additional Notes

### 1. Dispensing Contractors

There are three types of dispensing contractors featured in this report is based. These are:

#### *Community Pharmacy –*

Community Pharmacies provide various healthcare services to local communities in Northern Ireland. Although the dispensing of prescriptions is often seen as the primary part of their role, they do provide a range of other services such as Health Promotion, Medicines Usage Reviews, Manage Your Medicines and a Minor Ailments service.

#### *Dispensing Doctors –*

Dispensing doctors are general practitioners (GPs) who provide primary healthcare to patients who have difficulty getting access to a community pharmacy. Under current arrangements such patients can be put onto a dispensing patients list if they meet the following criteria:

- A patient lives more than five kilometres away from a community pharmacy; and
- The GP practice where a patient normally attends is more than one kilometre from a community pharmacy.

#### *Appliance Supplier –*

Appliance suppliers are authorised to dispense pharmaceutical appliance devices such as Stoma appliances.

### 2. Prescriptions

Prescription forms or prescriptions are submitted on a monthly basis to the Business Services Organisation (BSO) for payment by community pharmacies, appliance contractors and dispensing doctors. They are prescribed by GPs and other non-medical prescribers such as Community Nurses,

Supplementary Prescribers, Dentists and a small proportion from Consultants working in the community.

In addition, prescriptions written in other parts of the UK but dispensed in Northern Ireland are also included. The data will include prescriptions that have been ordered on Stock Orders, Hospice Invoices and Pharmacy Vouchers.

Only prescriptions that are subsequently dispensed are included in the data – for example, if a patient does not take a prescription to the pharmacy for dispensing, then no information about that prescription is included in the dataset.

### 3. Prescription Items

A prescription item is a single supply of a medicine, dressing or appliance written on a prescription form.

If a prescription form includes three medicines it is counted as three prescription items. Item figures do not provide any indication of the length of treatment or quantity of medicine prescribed.

Patients with a long term condition usually get regular prescriptions.

It should also be noted that the Northern Ireland drug tariff includes the facility of instalment or Multiple Dispensing where the pharmacy supplies part of the total quantity of a prescribed medicine at set intervals (e.g. weekly or daily) as requested by the GP or other authorised prescriber. Regardless of this method of dispensing the prescription item still only counts as one item.

A similar dispensing practice is available in Scotland whilst the instalment dispensing of controlled drugs in England and Wales is

facilitated through prescription items of lesser quantities being prescribed more frequently.

Further information on Multiple Dispensing in Northern Ireland can be found on page 9 of the latest version of the [NI Drug Tariff](#).

#### 4. Ingredient Cost

This is the basic cost of a drug as used in primary care. This is the cost at list price excluding VAT, i.e. the price listed in the national Drug Tariff or in standard price lists and is not necessarily the price that has been paid.

It does not take into account any contract prices or discounts, dispensing costs or fees, so the actual cost to the health service will be different.

In other parts of the UK the equivalent is called the Net Ingredient Cost (NIC) and is used in Prescription Services reports and other analyses, as it standardises prescribing costs nationally, and allows comparisons of data from different sources.

#### 5. British National Formulary (BNF)

From BNF Edition 70 onwards, the British National Formulary moved to a disease-based classification of drugs rather than a drug-based classification.

The Family Practitioner Services Payment System requires the drug-based classification to ensure the accurate reimbursement of drugs to community pharmacists. All statistics on BNF chapters are therefore based on pseudo BNF chapters as of Edition 69. This is consistent with the NHS Business Services Authority method of reporting.

#### 6. Patient Information

Patient information is linked to dispensing data when a prescription form has been successfully scanned. The captured patient Health and Care Number (HCN) is then used

to link to patient registration records on the National Health Application and Infrastructure Services (NHAIS) system. Further information on NHAIS data can be found [here](#).

In the past, BSO had experienced a reduction in scan rates resulting in around 25% of prescription items not having attributed patient information in 2017/18 and 2018/19.

However, this has recently improved and in 2019/20 almost 90% of prescription items had attributed patient information. This has meant that at most, this proportion of prescriptions will have a geographical area or patient profile assigned.

The historic reduction in scanning quality was widespread across Northern Ireland and not just isolated to any particular areas. Further information on scan rates by geographical location can be found in the [Background Quality Report](#).

#### 7. Population

NISRA population figures are used in this release. The 2019 mid-year estimate of population was used for Northern Ireland totals in this publication.

The 2019 estimate for smaller geographies was not available at the time of preparation. As a result, a 2018-based population projection for 2019 was used for LGD and deprivation geography breakdowns. All estimates used are published on NISRA website.



# Technical Notes

## Target Audience

The target audience for this publication has been defined as: the Department of Health, Chief Executives of HSC Board and Trusts in Northern Ireland, health professionals, academics, HSC Stakeholders, the media and the general public.

## Main usages

This publication contains official statistics on community pharmacy and general pharmaceutical dispensing for the most recent financial year (and earlier years where available on a comparable basis).

They can be used to monitor trends in general pharmaceutical service over time and across Northern Ireland.

The information can be used to support decision making, inform policy, provide advice to ministers, answer a wide range of Assembly Questions and Freedom of Information requests, for national and local press articles and, where appropriate, for international comparison.

## Data Source Information

The data has been primary sourced from the Family Practitioner Service (FPS) Pharmacy Payment System. Resident population data has been sourced from official NISRA demographic statistics.

The Pharmacy Payment System enables BSO to make payments to pharmaceutical contractors for dispensing prescription items that have been prescribed in primary care (e.g. by General Practitioner, Nurse Practitioner, Dentist, Podiatrist) as well as through the minor ailments scheme available in a number of pharmacies.

Further information on this process can be found [here](#) on the FPS website.

## Coverage

Data in this report are published by the financial year (1<sup>st</sup> April – 31<sup>st</sup> March) in which the dispensed prescriptions were reimbursed. Although the majority of prescriptions will have been reimbursed in the same month they were dispensed, there will be some that will lie outside this timeframe.

Such cases will include prescriptions submitted for payment at the end of the previous financial year and exclude some prescriptions submitted towards the end of this reporting year which was not submitted for payment by March 2020.

The data is based on prescriptions provided to the Family Practitioner Service (FPS) for reimbursement by community pharmacists, dispensing doctors and appliance suppliers. The information does not include prescribing in a secondary care or private setting for example medications received while in hospital.

Community Pharmacy counts are taken at 31st March for each financial year.

## Data Quality Summary

The Pharmacy Payment System is a business critical payment system which is subject to period audit. The data quality is assessed as very good based on the low percentage of claims which have to be adjusted following payment.

As an administrative data system, there will inevitably be some manual entry errors and, even for automated processes, they may be errors within the claims submitted by primary care contractors.

The extensive validation that occurs prior to payments being made, coupled with the consistency and variance checks carried out

during the compilation of this publication means that the data provides a good representation of FPS activity for the years covered by the report.

A background data quality report for this publication is available [here](#).

### **National/International comparisons**

This publication contains comparisons between Northern Ireland and other regions of the United Kingdom. The comparative data is available from the following sources:

#### **England**

Statistics on General Pharmaceutical Services:  
<https://digital.nhs.uk/data-and-information/publications/statistical/general-pharmaceutical-services/in-2008-09---2018-19-ns>

Prescription Cost Analysis:  
<https://www.nhsbsa.nhs.uk/prescription-data/dispensing-data/prescription-cost-analysis-pca-data>

#### **Wales**

Statistics on General Pharmaceutical Services:  
<https://gov.wales/sites/default/files/statistics-and-research/2019-10/community-pharmacy-services-april-2018-march-2019-071.pdf>

Prescription Cost Analysis:  
<https://gov.wales/sites/default/files/statistics-and-research/2019-09/prescriptions-wales-april-2018-march-2019-836.pdf>

#### **Scotland**

Statistics on General Pharmaceutical Services:  
<https://www.isdscotland.org/Health-Topics/Prescribing-and-Medicines/Community-Dispensing/Dispenser-Remuneration/>

Prescription Cost Analysis:  
<https://www.isdscotland.org/Health-Topics/Prescribing-and-Medicines/Community-Dispensing/Prescription-Cost-Analysis/>

# Publication Information

## Family Practitioner Services

Family Practitioner Services (FPS) is part of the BSO's Operations Directorate. It provides a range of essential services to Health and Social Care organisations, primary care contractors and patients.

FPS calculates payments to health professionals in the dental, pharmacy, general practice and ophthalmic sectors through Northern Ireland. It also maintains the central register of patients registered with GP practices in Northern Ireland, issuing medical cards and processing changes such as name, address and doctor.

It provides professional advice, support and information to customers and members of the public and maintains the pharmaceutical, dental and the Northern Ireland Primary Medical Performers lists. FPS also provides the call and recall services for breast, cervical and bowel cancer screening in Northern Ireland.

## About this publication

This report has been produced by independent statisticians within the FPS Information Unit. They are on secondment from the Northern Ireland Statistics and Research Agency (NISRA). This publication has been compiled in accordance with the Code of Practice for Statistics.

## Next edition

This publication is issued annually. It is expected that the next edition shall be published in June 2021. In the interim, quarterly tables are published separately [here](#). The quarterly figures are provisional until the annual publication for that year issues, at which point they are finalised. The release calendar for future statistical publications is available on the BSO website.

**This statistical bulletin and other published by Information Unit within BSO are available to download from the BSO Internet site at:**

**<http://www.hscbusiness.hscni.net/services/1802.htm>**