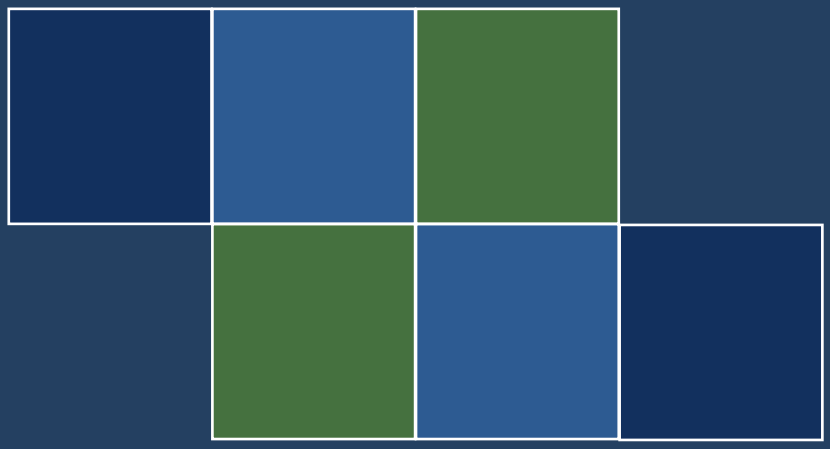
NISRA
Northern Ireland
Statistics and Research Agency
Gníomhaireacht Thuaisceart Éireann
um Staitisticí agus Taighde

Family Practitioner Services

Background Quality Report

General Pharmaceutical Services Statistics



June 2026

HSC Business Services Organisation
Family Practitioner Services

Published by	BSO Family Practitioner Services Information and Registration Unit , 2 Franklin St, Belfast BT2 8DQ
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Preface

This document constitutes a quality report for annual and quarterly statistics issued by Family Practitioner Services (FPS) covering General Pharmaceutical Services.

Prior to 2020, the annual pharmaceutical statistics were issued in the FPS Compendium Report, which covered all aspects of family practitioner activity in Northern Ireland i.e. dental, ophthalmic, pharmacy and general medical. They are now issued on an individual basis in line with user needs and to improve their timeliness and punctuality.

There were no material changes which affected the underlying quality assessment of pharmacy statistics as it moved from the Compendium Report to a standalone publication. All references to the pharmacy publication should be read to cover also the pharmacy statistics within the Compendium Report.

Introduction

This document constitutes a data quality report for the Family Practitioner Services (FPS) General Pharmaceutical Services statistics and in-year quarterly updates. As the same data sources are used to produce reports on Sodium Valproate & Topiramate monitoring, this report should be used for that publication also, in conjunction with other details provided in that report.

This report is primarily derived from administrative data from four sources. These are:-

- Pharmaceutical Family Practitioners Payment System[1]
- FPS Pharmaceutical List
- The National Health Application and Infrastructure System (NHAIS)
- Drug Tariff Masterfile

Information is extracted from the live payment system following the close of the financial payment year (or relevant in-year quarters – ending March 31st, June 30th, September 30th and December 31st).

The statistics are then compiled and quality assured by independent statisticians, on secondment to the Business Service Organisation's (BSO) FPS Information Unit, from the Northern Ireland Statistics and Research Agency (NISRA) in accordance with the Code of Practice for Statistics.

Context

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

[1] Also referred to as the FPS pharmacy payment system.

The FPS division within BSO provides a range of services to General Medical, Dental, Ophthalmic and Pharmaceutical practitioners across Northern Ireland.

The administrative information which is produced as a by-product of these activities provides information on FPS payments as well as on service provision and the relative health of the population at NI and sub-regional level. It complements official statistics relating to other aspects of the NI health care system, namely secondary, community and social care released by the Department of Health.

Purpose of this document

This document aims to provide users with an evidence based assessment of the quality of data held within the FPS General Pharmaceutical Services statistics by reporting against nine quality dimensions and principles appropriate to this output.

In doing so, this meets our obligation to comply with the UK Statistics Authority (UKSA) Code of Practice for Statistics, particularly the pillar of Quality, principle 7 Be open about quality which states:

Producers must prominently explain the quality of the statistics, including strengths and limitations, and communicate the uncertainty in estimates so that the public can have confidence in using the statistics to make decisions and take actions.

This is a live document and will evolve and include additional material as further intelligence is gathered against each of the nine quality dimensions.

A Quality Assessment of Administrative Data (QAAD) for General Pharmaceutical Services statistics is available on the General Pharmaceutical page of the Information Unit's website.

Assessment of statistics against quality dimensions and principles

Relevance

This dimension covers the degree to which the product meets user need in both coverage and content.

The FPS Information and Registration Unit launched an online survey using Citizen Space on 21st February 2018. The survey invited users/potential users of summary statistics related to Primary Care Services to provide feedback to help shape our statistical publications. The survey closed on March 13th 2018 and received 86 responses. A follow up online survey was launched on 12th March 2019, closing on 1st April 2019; 20 responses were received. A further survey was launched in December 2021, closing in January 2022 to identify any further needs.

The findings of the user engagement surveys have been published here and highlighted that the formal and regular publication of these statistics would help address an important information gap. The survey also informed the types of analyses users wished to have access to, and in what format. This informed the development of the Compendium report and the subsequent individual reports.

Statisticians in the Information Unit are regularly in contact with key users of the statistics. Initially the readership surveys were used to provide an overall assessment of whether user needs were being met. However, the current approach employed is to undertake focused consultations with key users on a rolling basis. This approach helps to gain greater insight into how the statistics are used and to identify additional specific requirements. In addition, any ad hoc requests for information are recorded centrally in a database and these records are used to provide intelligence from a wider set of users in relation to changing requirements. User Engagement Action Plans, incorporating summaries of identified user requirements, together with their current status and timescales for addressing these needs are provided here. These will be updated regularly as new user needs are identified or addressed as part of our ongoing programme of engagement.

Where appropriate and practical, identified user needs will result in changes to the statistical outputs. For example, following an identified user requirement, key tables and analyses of the number of patients dispensed three specific drug groups - anti-depressants, diabetes medication and products, and opioid analgesics - were provided for the first time in the 2020/21 report, published in June 2021.

Following user feedback from an online survey launched in December 2021, additional analyses of dispensing data for anti-depressant medication, diabetes medication and products and opioid analgesics by multiple deprivation quintile were included in the 2021/22 report, published in June 2022.

Two additional drug groups – oral anticoagulants and antibiotics - were identified as drugs of interest following user feedback in May 2023. Analyses of the number patients dispensed these drugs were introduced in the 2023/24 report, published in June 2024.

Gabapentin and Pregabalin were identified as specific drugs of interest following user feedback in February 2026. Additional analyses of the number of patients dispensed these drugs were introduced in the 2025/26 report, published in June 2026 for the first time in a pivot table format along with the other drug groups previously published in the annual annex tables.

The introduction of figures relating to additional pharmacy payments, which include payments for the delivery of specific services, in the 2024/25 report was published in June 2025. This followed user engagement in April 2024 which identified interest in additional funding to community pharmacy.

To ensure that understanding of user needs is as up-to-date as possible, a pilot User Engagement showcase event was held on 28th March 2023 to advise users of the current capabilities and future developments of the statistics and obtain feedback from users. An outline of future developments as a result of user engagement is provided in the General Pharmaceutical Services Statistics User Engagement Action Plan at the following link.

BSO had historically released a statistical compendium, which ceased following the 2007/08 publication. The revival of this output had been identified by internal customers as a high

priority in order that there would be a definitive source of quality assured figures related to FPS activity. A new statistical compendium was launched in 2017/18 and released again the following year. Following user consultation, the compendium was split into separate FPS service areas in 2018/19, including General Pharmaceutical Services statistics. This has allowed more detailed statistics to be produced, better targeted at the main users of these figures. Note: a short summary Key Facts compendium has also been developed to meet the needs of users with a cross cutting interest in primary care statistics.

In order to cater for different levels of user need, the main body of the annual report is intended to be a high level summary of activity, supplemented by charts and commentary, with the detailed statistical tables which underpin the report included in its annexes. More detailed breakdowns can be provided on request.

BSO was specified in legislation as a Producer of Official Statistics in the Official Statistics Order (Northern Ireland) 2012. The information held by the Family Practitioners Service is of interest both to the Government and wider public as it relates to the provision of primary care in Northern Ireland.

The pharmaceutical payment information can be used to understand prescribing patterns across Northern Ireland at varying levels and also as a proxy for morbidity. For example, information on dispensed prescription items by BNF chapter provides an indication of patient morbidity by condition type.

The data is derived from the FPS pharmacy payment system, all prescriptions prescribed in primary care in Northern Ireland that are subsequently dispensed by a pharmacist, dispensing doctor or appliance supplier and are finally submitted to the BSO for payment are included. The data will include items that have been ordered on a stock form, Hospice Invoices and Pharmacy Vouchers. The information does not include private prescriptions or prescribing in a secondary care setting, for example medications received while in hospital.

Accuracy and Reliability

This dimension covers the statistics proximity between an estimate and the unknown true value.

All information is based on data collected during the pharmaceutical payment process where prescriptions have been submitted to BSO for reimbursement. Prescriptions are scanned and subject to a rigorous automatic and manual validation process to ensure accurate payments are made. If BSO identifies any errors made by the dispensing body in claiming for the pharmaceutical products and services, then these will be corrected in the next available payment month.

Reliability/known data quality issues

Patient information is captured where a prescription form has been successfully scanned and automatically coded. 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. The historic reduction in scanning quality was widespread across Northern Ireland and not just isolated to any particular areas. However, with the purchase of new scanners in BSO, this has since improved and in 2025/26 92% of prescription items had attributed patient information through automatic scanning. This has meant that at most, this proportion of prescriptions will have a geographical area or patient profile assigned.

In 2024/25, Optical Character Recognition (OCR) software was introduced for the first time to help capture additional patient information previously unknown as a result of unsuccessfully scanned prescriptions. This is achieved by reading the Health and Care Number (HCN) on prescription images and matching these to the National Health Application and Infrastructure Services (NHAIS) system where information on patient age, gender and location can be assigned.

While the adoption of OCR software has enabled the capture of additional patient information, it has not been possible to match a valid HCN from every prescription and there may still be some prescriptions that were not able to be assigned demographic or geographical information. In 2025/26 the rate of valid HCNs captured using OCR software was 42.6% of unsuccessfully scanned prescriptions, improving the overall scan rate from 92.0% to 95.4%.

In order to assess the representativeness of the resultant dataset, for those prescriptions that were GP prescribed, LGD and LCG (Health Trust) were assigned to items based upon the origin of the prescribing GP practice. Tables 1 and 2 below provide the respective scan rates for each LGD and Trust for 2025/26.

Local Commissioning Group (Health Trust)	% Scan Rate
Belfast	97.2%
Northern	97.4%
South Eastern	97.9%
Southern	97.7%
Western	96.2%
Northern Ireland	**97.3%**

Table 1: GP Prescription Scan Rate by Local Commissioning Group (Health Trust), 2025/26

LGD	% Scan Rate
Antrim & Newtownabbey	98.2%
Ards & North Down	97.9%
Armagh City, Banbridge & Craigavon	98.3%
Belfast	97.2%
Causeway Coast & Glens	95.9%
Derry City & Strabane	96.4%
Fermanagh & Omagh	96.0%
Lisburn & Castlereagh	98.4%
Mid & East Antrim	97.3%
Mid Ulster	97.7%
Newry, Mourne & Down	97.1%
Northern Ireland	97.3%

Table 2: GP Prescription Scan Rate by Local Government District (LGD), 2025/26

The scan rate did not vary considerably across Health Trusts, ranging from 96.2% in Western to 97.9% in South Eastern. Variability was higher at LGD level, with rates ranging from 95.9% in Causeway Coast & Glens to 98.4% in Lisburn & Castlereagh.

It is important to note, however, that this analysis can only provide an approximation of whether the scanned prescriptions are representative of the NI population as not all patients will reside in the same area as the GP practice which they attend – particularly in Belfast. Given this important caveat, and the figures above, there is no strong evidence to suggest significant bias in the prescription dataset. The limitation should be borne in mind, however, when comparing absolute numbers across LGDs/Trusts and it is preferable to calculate percentage rates when making geographical or demographic comparisons.

Data on patient numbers presented in the report (chapter 6 of the main report and section 3 of the accompanying tables) have been estimated based on unique patients whose dispensed scripts have been successfully matched against the central GP patient register in a given year. There is a chance that some patients may have been missed if none of the scripts dispensed to them in a given year were successfully scanned, or HCN captured using OCR technology. However, because patients receiving these medications will generally have submitted multiple prescriptions in a year, there is a high probability they will have been picked up at least once, although it is possible that some patients who started a course of medications late in the reporting period could be missed. The other exception is with antibiotics, which would typically be prescribed for a one-off course for the duration of treatment.

Prescription items are processed for payment via two methods: automatic or manual data entry. The majority of prescriptions will be processed for payment automatically via the successful scanning of each prescription, which will capture information on each item written on a prescription form including the quantity dispensed, to ensure accurate reimbursement for dispensed items. Where a prescription cannot be automatically coded, it will be processed through a manual data entry. This can occur when the prescription has been amended in some way, or if the prescription has been hand-written, or failed to scan successfully. In 2025/26 the proportion of automatically coded prescription items was 83.2%. While a rigorous validation process exists to ensure manually coded prescriptions are entered correctly, there can be instances where items are coded incorrectly, resulting in a different product recorded as being dispensed to that written on the prescription. A recent investigation carried out by FPS statisticians examined the extent to which these errors occur within manual data entry forms, and found that approximately 2% of items were

incorrectly coded. In conjunction with automatically coded prescriptions, this provides a reliability rate of 99.5% in identifying and reimbursing all prescribed items.

The errors that exist in these manual data entry prescriptions will affect figures in the detailed analysis supplementary tables which relate to unique patients in receipt of specific medications, and any tables or charts in the annual report and annex tables which report figures based on BNF chapter. It is possible that where a patient has been incorrectly attributed to a specific medicine (such as an antidepressant) they will be included in the total count in error. As most patients are likely to receive multiple prescriptions over the course of a year for these conditions (with the exception of antibiotics), each true individual patient is likely to be included in the dataset, even if one prescription has been miscoded in error. Therefore, any errors would result in an overcount of patients, however, as concluded by the recent investigation, this is likely to be very small.

Timeliness and punctuality

Timeliness refers to the time gap between publication and the reference period. Punctuality refers to the gap between planned and actual publication dates.

The first iteration of the compendium was released in October 2018 and covered data for financial year 2017/18. Future compendiums and annual pharmaceutical publications have been released in June of each year when the data for the entire year are complete – representing a three month lag between publication and the end of the period to which the data relate.

The quarterly updates of key report tables, supported by a key facts html report, are published within two months of the quarter-end. The quarterly updates will have a provisional status but will be finalised at year end, enabling in-year adjustments to be included.

All publications have been punctual, being released on the planned publication date.

Accessibility and clarity

Accessibility is the ease with which users are able to access the data, also reflecting the format 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.

In June 2025, the annual report was produced for the first time in HTML format on the BSO website along with accompanying tables presented in Excel format. This HTML mirrors the report as it had previously been produced in pdf format, including detailed commentary and analysis of the figures and trends, summary tables, interactive charts and infographics intended to appeal to a wide user base.

In June 2026, the patient level analyses of specific medications, previously reported in section 6 of the HTML report and tables 3.1 to 3.20 in the annex tables, were published for the first time in a separate set of supplementary tables. These statistics are now presented in a condensed pivot table format to enable users to more easily navigate between medications of interest.

The Excel tables will allow users to perform secondary analysis on the actual data and contains a separate tab with metadata.

The HTML and accompanying tables are presented in an accessible format. Assistive technology can be used with the supporting tables, which enables users with disabilities to have full access to the data. Alternative text exists to provide descriptions of charts and figures in the main report to further enhance the accessibility of the data.

More detailed user notes are provided in the Publication notes in the annual report and on a separate tab in the Excel/ODS tables which accompany the main report. This is supplemented by the information contained in this Background Quality Report and the most recent QAAD assessment for the General Pharmaceutical Services statistics published on the General Pharmaceutical page of the Information Unit's website.

In Quarter 3 of 2023/24 the quarterly report was produced for the first time in HTML format. This provided a key facts summary as well as interactive trend charts with downloadable data and more detailed downloadable tables, intended to appeal to a wide user base.

In August 2025, an interactive Power BI dashboard was developed and published to complement the Sodium Valproate monitoring tables. The trend charts in this dashboard replaced the previous static charts that existed within the tables. These new visuals allowed users to more easily navigate between indicators and demographic filters.

In May 2026 a combined dashboard was produced for both Sodium Valproate and Topiramate monitoring, which had previously been separate releases. This new dashboard improved user accessibility to both monitoring reports in a single location.

Coherence and comparability

Coherence is the degree to which data which have been derived from different sources or methods but refer to the same topic or similar. Comparability is the degree to which data can be compared over time and domain.

Coherence

We are not aware of other sources of NI data relating to FPS pharmacy activity/payments covered by this report, nor in respect of community pharmacies, appliance contractors or dispensing doctors. This, however, will be kept under review and the section will be expanded in the event that alternative data sources are identified.

Comparability

Time series for the various statistics are produced on the same basis, ensuring that the information is comparable across time.

The Northern Ireland Pharmaceutical Services payment model is closely aligned to that in England and as such the prescription items and ingredient cost are presented in a similar manner to those published by England.

The Total Ingredient Cost (before discount) 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 amount that has been paid 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.

Dispensed Items and Ingredient Cost

The FPS Pharmacy Payment system data is based upon the same information presented in the annual Prescription Cost Analysis (PCA) published on the Information Unit website. However, this information is provided by calendar year and as such will differ from the financial year information presented in the publication.

BSO also publish prescribing information at GP Practice level on a monthly basis. This data only contains information on dispensed items prescribed by GPs or Nurses (within a GP Practice) and hence will only represent a subset of total community dispensing (albeit a fairly significant subset). The two sources are not, therefore, strictly comparable.

Community Pharmacies

The number of community pharmacies in Northern Ireland from 1985 and 2014 was previously published on the BSO website. But these figures may not compare to the data in this publication. Previously published information is based upon data at different time points whilst the current publication is based on data as at 31st March at the end of the relevant period.

NHS Business Services Authority produces statistics on General Pharmaceutical Services in England on a financial year basis. The community pharmacy information is comparable to information presented in FPS General Pharmaceutical publications.

The devolved administrations in both Scotland and Wales produce statistics on contractor activity. These offer some limited comparisons to the General Pharmaceutical Services statistics for Northern Ireland.

Trade-offs between output quality components

This dimension describes the extent to which different aspects of quality are balanced against each other.

The main trade-off in the report is the balance between timeliness and data quality. The data are derived from a live payment system which is constantly being updated so a decision needs to be made as to when to extract the frozen data files on which to produce the official statistics. The longer this is left the more accurate the final data will be (as it provides more time for post-hoc payment and other adjustments) but as a consequence will be less timely.

In respect of the annual report, the data will be extracted to prescription and community pharmacy frozen files around four weeks after the year end. This allows for production of the finalised annual statistics report within three months of the year-end to which they relate. The frozen file will only then be revisited should any significant data quality issues come to light (resulting in the need for the statistical publications to be revised).

The quarterly tabular and HTML updates are produced to a quicker timeline, releasing the statistics within two months of quarter-end. These will hence have a provisional status to allow more time for not only adjustments to the most recent quarter but also any subsequent adjustments that may be required later in the year. The in-year quarterly data will be finalised as part of the process in the production of the annual and Quarter 4 reports.

The need for the provisional status attached to the quarterly updates will continue to be monitored based on the magnitude of the resultant year end revisions.

Performance, cost and respondent burden

This dimension describes the effectiveness, efficiency and economy of the statistical output.

There is no respondent burden, since all of the data are extracted from existing BSO information and payments systems held on the HSCNI network. Additional sources such as the Central Postcode Directory and NISRA population data are available from organisational websites without the need for any intermediate intervention.

Over time, the production of the report tables will be further automated using Reproducible Analytical Pipelines (RAP) processes, with data extracted directly to the Excel templates with less need for manual intervention.

Using the Information Unit's time recording system, the total cost in staff time of producing a quarterly report is estimated at £1,000, while the total cost in staff time of producing the annual report and associated outputs is estimated at £15,000.

Confidentiality, transparency and security

The procedures and policy used to ensure sound confidentiality, security and transparent practices.

Data used to produce this report has been processed on PCs/laptops/servers connected to HSCNI network and are protected as per the HSC ICT Security Policy.

Suppression has been applied where the number of cases in a cell containing personal information could identify individuals. This is described in table footnotes where applicable. Where necessary additional values will be hidden to avoid disclosure of suppressed counts. Full details of the of the Information Unit's disclosure control policy, is available in the unit's Statistics Charter.

Within the Information Unit, access to data is only provided to those staff involved in the production of the reports.

Responsible Statistician

All queries relating to individual publications should be addressed to the statistician responsible for overseeing their preparation. The responsible statistician for FPS General Pharmaceutical Services statistics is:

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