**Antimicrobial Stewardship - Pharmacy First Dashboard**

**Dashboard and Comparator Specification**

# Table of Contents

[Table of Contents 2](#_Toc189144420)

[Introduction 4](#_Toc189144421)

[Dashboard Comparators 5](#_Toc189144422)

[Medicines supply and prescribing data used in the dashboard 7](#_Toc189144423)

[Derivation of organisational units 8](#_Toc189144424)

[Patient identifiable data completeness 8](#_Toc189144425)

[Age bands 8](#_Toc189144426)

[Gender 8](#_Toc189144427)

[Patient counts 9](#_Toc189144428)

[Practice list sizes 9](#_Toc189144429)

[Medicines included in the comparators 9](#_Toc189144430)

[Data quality assurance 10](#_Toc189144431)

[Dashboard availability and redaction of small numbers 10](#_Toc189144432)

[Data Source 10](#_Toc189144433)

[Data owner & contact details 10](#_Toc189144434)

[Frequency of updates 10](#_Toc189144435)

[Comparator Specifications 11](#_Toc189144436)

[Comparator: Population Access 11](#_Toc189144437)

[Comparator: Pathway by Consultation Outcome 11](#_Toc189144438)

[Comparator: Pathway by Medicine Selected 14](#_Toc189144439)

[Comparator: Pathway by Medicine Supply 16](#_Toc189144440)

[Comparator: Pathway by Demographic 18](#_Toc189144441)

[Comparator: Uncomplicated UTI Pathway 19](#_Toc189144442)

[Comparator: Monthly Summary 21](#_Toc189144443)

[Datasets Section 23](#_Toc189144444)

[Appendix 1: Supply of nitrofurantoin 100mg modified release with a quantity of 6, vs nitrofurantoin 50mg instant release capsules or tablets with a quantity of 12, for the Uncomplicated UTI pathway. 24](#_Toc189144445)

[Appendix 2: Limitations and known issues 28](#_Toc189144446)

[Naming convention of consultation outcomes 28](#_Toc189144447)

[Incorrect assignment of gender for consultations in Sonar pharmacy sites 29](#_Toc189144448)

[Incorrect categorisation of consultation outcomes for Sonar pharmacy sites 30](#_Toc189144449)

[Consultations with missing or unmatched GP practice ODS codes 31](#_Toc189144450)

[Consultation records without valid NHS numbers 32](#_Toc189144451)

[Variation in nitrofurantoin MR 100mg quantities 33](#_Toc189144452)

[Appendix 3: Data completeness and dashboard inclusion 34](#_Toc189144453)

[Appendix 4: Working Group 40](#_Toc189144454)

# Introduction

Combatting antimicrobial resistance, the [UK’s second five-year national action plan](https://www.gov.uk/government/publications/uk-5-year-action-plan-for-antimicrobial-resistance-2024-to-2029) continues to promote optimal use of antimicrobials in humans to ensure safe and effective patient care by strengthening antimicrobial stewardship programmes. There is also an ambition to reduce UK antimicrobial use in humans by 5% by 2029, and to prevent any increase in Gram-negative blood stream infections in humans from a 2019/2020 baseline.

The *Antimicrobial Stewardship - Pharmacy First* dashboard is intended to support Integrated Care Board led antimicrobial stewardship following the introduction of the [NHS Pharmacy First](https://www.england.nhs.uk/primary-care/pharmacy/pharmacy-services/pharmacy-first/) service on 31st January 2024. This service is designed to provide people with quick and convenient access to safe and high-quality healthcare. It includes the supply of appropriate medicines via Patient Group Direction for 7 common infections via consultation with a community pharmacy.

The 7 common infection clinical pathways are

* Acute Otitis Media for children aged 1 to 17 years
* Acute Sore Throat for adults and children aged 5 years and over
* Impetigo (non-bullous) for adults and children aged 1 year and over
* Infected Insect Bites for adults and children aged 1 year and over
* Shingles for adults aged 18 years and over
* Acute Sinusitis for adults and children aged 12 years and over
* Uncomplicated Urinary Tract Infection for women aged 16 to 64 years with suspected lower UTIs

Further detail is published in the [Community Pharmacy advanced service specification: NHS Pharmacy First Service](https://www.england.nhs.uk/publication/community-pharmacy-advanced-service-specification-nhs-pharmacy-first-service/)

While people can access the Pharmacy First service from any participating pharmacy, the Antimicrobial Stewardship - Pharmacy First dashboard reports consultation activity by Integrated Care Board where the person is registered with an NHS General Practice, providing Integrated Care Boards with insight into their population use of the Pharmacy First service. The dashboard will support clinicians and NHS integrated care systems monitor access to infection pathways and monitor exposure to medicines including antimicrobials for defined populations.

# Dashboard Comparators

This dashboard contains seven separate comparators, each reporting a different facet of Pharmacy First activity.

Each of the following five comparators are shown at national (England), NHS region and Integrated Care Board (hereafter ICB) levels, where the organisational unit is derived from the ODS code of the GP practice for the patient who has received treatment.

* Population Access
* Pathway by Medicine Supply
* Pathway by Demographic
* Uncomplicated UTI Pathway
* Monthly Summary

The following two comparators are shown at national, NHS region and ICB level as above, but are also shown for community pharmacies at ICB level, where the ICB is based on the location of the pharmacy accessed.

* Pathway by Consultation Outcome
* Pathway by Medicine Selected

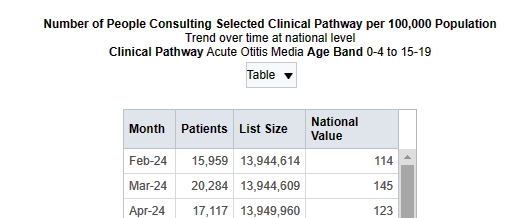
See the section ‘[Derivation of organisational units](#_Derivation_of_organisational)’ below, for more information on the methods used to assign Pharmacy First activity to organisations.

**Datasets**

Summary datasets are available to download from this section, at national, NHS region and ICB levels, again based on patient GP practice data. The following datasets are available:

|  |  |  |  |
| --- | --- | --- | --- |
| **Dataset** | National | NHS Region | ICB |
| Pathway by Consultation Outcome |  | **🗸** | **🗸** |
| Pathway by Medicine Selected |  | **🗸** | **🗸** |
| Pathway by Medicine Supply |  | **🗸** | **🗸** |
| Pathway by Demographic | **🗸** | **🗸** | **🗸** |
| Uncomplicated UTI Pathway | **🗸** | **🗸** | **🗸** |

Please note that data can also be downloaded from each dashboard comparator, by selecting ‘Table’ in the View Selector beneath the visualisation title:



# Medicines supply and prescribing data used in the dashboard

Users of the dashboard should be aware of the following parameters:

The data -

* Includes medicines supplied under Pharmacy First Patient Group Directions and paid by NHSBSA in the month shown on the dashboard. Please note that the month in which the consultation activity took place may be earlier than the month shown, as pharmacies have a 3-month grace period in which to declare consultations for payment.
* Excludes all FP10 prescribing by all NHS organisations, other than in the Uncomplicated UTI Pathway comparator, where FP10 prescribing for nitrofurantoin 100mg capsules with a prescribed quantity of 6, to female patients aged 16-64 at the point of prescribing, is also included.

**NB** in the Uncomplicated UTI Pathway comparator, the FP10 data is not linked or joined with Pharmacy First data in any way but is provided alongside Pharmacy First data for the same time periods and organisational units, for comparison.

The data in each dashboard comparator is derived from Pharmacy First activity data, aggregated by month. Historic data is included to allow users to monitor activity over time.

The data is based on consultation records which have been processed for payment by NHSBSA only. Any Pharmacy First activity which has been submitted for payment but is yet to be processed, or which has been conducted in the pharmacy but not yet submitted for payment, is not included in the data.

# Derivation of organisational units

For selected dashboard comparators, the organisational structure shown relates to the General Practice of patients receiving a consultation, based on the ODS code[[1]](#footnote-2) of the practice as captured during the consultation activity. There is no guarantee of the accuracy of this data, and no guarantees are made in the dashboard that the organisational structure accurately reflects the registered practice of the underlying population; furthermore, any changes to individual patients’ registered GP practices, or the GP codes captured in the Pharmacy First consultation data for a given patient over time, will not be reflected in the data. Refer to the section [Consultations with missing or unmatched GP practice ODS codes](#_Consultations_with_missing) for more information on data quality.

Please note this only applies to the comparators under the National, Region and ICB headings, and for the Monthly Summary comparator.

# Patient identifiable data completeness

The data in this dashboard contains an element of activity which was provided to patients who could not be identified in the data by means of a valid NHS number on the consultation record.

For context, at the time of writing (based on data between January and October 2024), 98.94% of Pharmacy First consultations can be attributed to an identifiable patient.

Please refer to [Appendix 3: Data completeness and dashboard inclusion](#_Appendix_3:_Data_1) for more details on data completeness and dashboard inclusion -

While NHS numbers are used to formulate these comparators, no personal identifiable data are released through these comparators.

# Age bands

In the Pathway by Demographic comparator (and in the tables for this comparator in the Datasets section), the data is segmented by 5-year age band. This age band is based on the patient age at the time of the consultation. Where no patients have received treatment for a month and organisational unit, the age band will not be displayed on the graph. When present, patients aged 110 or older are grouped into a single 110+ age band.

In the Uncomplicated UTI Pathway comparator, the data is segmented into 5-year age bands with values ranging from 15-19 to 60-64. This is designed to encompass patients who fall within the scope of the Patient Group Directions for the pathway (female patients aged 16-64), but users should be aware than any patients who have been assessed under this pathway, or who have had an FP10 prescription and fall outside of the age range, will not be shown in this comparator view (they will however be shown in the Pathway by Demographic comparator).

# Gender

In the Pathway by Demographic comparator, the data is segmented by gender, as captured during the Pharmacy First consultation; only data values of Male and Female are shown in the comparator view. For context, between January and October 2024, 98.2% of all Pharmacy First consultations were recorded against patients with a gender of Male or Female.

In the Uncomplicated UTI Pathway comparator, data is limited to patients with a recorded gender of Female only. Any non-Female supply activity will not be shown in this comparator.

# Patient counts

Each comparator in the dashboard allows users to see the number of unique patients who have met the criteria for that comparator, at the selected organisational level, and in the selected time period (certain comparators show the count of consultations in the graph view, but show patient counts in the table view).

Patients are counted only once in any given combination of comparator, time period and organisational unit, but may appear in different comparators in different time periods, or in multiple organisational units in the same comparator and time periods. It is important to note that patient counts should not be combined outside of the categories in which they are shown, or double counting of patients may occur.

# Practice list sizes

The following dashboard comparators display patient counts as a rate per 100,000 patients, as well as an absolute figure:

* Population Access (National, NHS Region and ICB levels)
* Monthly Summary (performance tiles only)

Population denominators are derived from General Practice list sizes, based on practice ODS codes as captured on the Pharmacy First consultation record (see [Derivation of organisational units](#_Derivation_of_organisational) and [Consultations with missing or unmatched GP practice ODS codes](#_Consultations_with_missing) for more information on how practice ODS codes are captured and analysed in the dashboard).

# Medicines included in the comparators

For information on the medicines included in the comparators, please refer to the Pharmacy First PGD guidance documents on the NHS England website:

<https://www.england.nhs.uk/publication/community-pharmacy-advanced-service-specification-nhs-pharmacy-first-service/>

# Data quality assurance

The Pharmacy First data reported in this dashboard is based upon data entered into pharmacy IT systems that have not been implemented by and are not managed by NHS Business Services Authority. This data is not validated or regulated by the same NHSBSA processes that are used in prescription processing.

With the exception of the FP10 graph in the Uncomplicated UTI Pathway comparator, the dashboard reports the data as submitted for payment via the Manage Your Service (MYS) platform, and contains several known issues and limitations. Please refer to [Appendix 2: Limitations and known issues](#_Appendix_2:_Limitations) for further information on Pharmacy First data quality.

For FP10 data presented in the Uncomplicated UTI Pathway only, the following statement applies:

NHS Prescription Services have their own internal quality process to assure the data they provide matches what was originally submitted as part of the prescription processing activity. Some processes are complex and manual therefore there may be random inaccuracies in capturing prescription information which are then reflected in the data, but checks are in place to reduce the chance of issues occurring. The processes operate to a number of key performance comparators, one of which is Prescription Information Accuracy, the target being 99.85% accuracy; for April 2024 prescribing (the most recent month measured at the time of writing), the accuracy level achieved over the previous 12 month rolling period was 99.90%[[2]](#footnote-3).

# Dashboard availability and redaction of small numbers

The comparators are available on ePACT2 (NHS controlled access), and include national, NSH region, ICB and community pharmacy level data. No data is publicly available, and as the data is presented either at higher levels of geographical aggregation or, in the case of community pharmacy level datasets, no correlation can be made between a person and any pharmacy they might visit, no statistical disclosure controls have been applied to this dashboard.

# Data Source

This data product is provided by NHS Business Services Authority. The information contained herein is based on data from the NHSBSA’s data warehouse system which contains data on all Pharmacy First consultation activity, and all NHS prescription data, with the exception of prescriptions which are dispensed in prisons, hospitals and private prescriptions.

# Data owner & contact details

This data product is managed by NHS Business Services Authority Information Services.

For any queries email [DataServicesSupport@nhsbsa.nhs.uk](mailto:DataServicesSupport@nhsbsa.nhs.uk).

# Frequency of updates

The data for this dashboard is refreshed monthly.

# Comparator Specifications

## Comparator: Population Access

|  |  |  |
| --- | --- | --- |
| **Section 1: Introduction / Overview** | | |
| 1.1 | **Title** | Population Access |
| 1.2 | **Definition** | This comparator reports the number of people who have a Pharmacy First consultation for the selected clinical pathway, organisation and month as a rate per 100,000 population based on list size of the population in scope for the selected clinical pathway.  This data is available at ICB, NHS region and national (England) organisational levels. |
| 1.3 | **Reporting Details** | This comparator reports the count of people accessing a Pharmacy First consultation and the proportion of the population in scope for each clinical pathway. The population in scope for each clinical pathway is defined in the Pharmacy First service specification.   * Acute Otitis Media: patients aged 0-4 to 15-19 * Acute Sore Throat: patients aged 5-9 to 110+ * Impetigo: patients aged 0-4 to 110+ * Infected Insect Bites: patients aged 0-4 to 110+ * Shingles: patients aged 15-19 to 110+ * Sinusitis: patients aged 10-14 to 110+ * Uncomplicated UTI: patients aged 15-19 to 60-64, with recorded gender Female   The age ranges used in the dashboard comparator may be broader than those specified in the Pharmacy First clinical pathway specification. This is due to the NHSBSA use of population denominator values which are calculated by 5-year age bands.  Consultation data has been attributed to the ICB with which the patient was registered with a General Practice, based on the General Practice ODS code as reported in the Pharmacy First consultation data set. |
| 1.4 | **Numerator** | The number of unique patients consulting the Pharmacy First service by selected clinical pathway, selected month, and selected organisation |
| 1.5 | **Denominator** | The General Practice population list size for the selected age band and gender appropriate to the specific clinical pathway and aggregated to the selected organisation |
| 1.6 | **Methodology** | Numerator divided by denominator, expressed per 100,000 population. |
| 1.7 | **Medicines** | Please refer to the Patient Group Directions for the relevant clinical pathway, which can be found at <https://www.england.nhs.uk/publication/community-pharmacy-advanced-service-specification-nhs-pharmacy-first-service/> |
| **Section 2: Rationale** | | |
| 2.1 | **Purpose and Limitations** | The purpose of this dashboard is to help support clinicians and ICBs monitor access to infection pathways, and to monitor exposure to medicines including antimicrobials for defined populations.  To enable this, patient consultation data has been attributed to the ICB with which the patient is currently registered at a General Practice, based on the General Practice ODS code as reported in the Pharmacy First consultation data set.  This comparator allows ICBs to identify population access to the 7 clinical pathways provided by the Pharmacy First service and identify variation in access both between ICBs for a selected clinical pathway, and within individual ICBs across all 7 clinical pathways.  The comparator is also reported as a monthly trend for each clinical pathway to allow access over time to be identified for the selected organisation. |

## Comparator: Pathway by Consultation Outcome

|  |  |  |
| --- | --- | --- |
| **Section 1: Introduction / Overview** | | |
| 1.1 | **Title** | Pathway by Consultation Outcome |
| 1.2 | **Definition** | This comparator reports consultation activity by defined mutually exclusive outcome categories. It reports the number and proportion of consultations for a selected clinical pathway, by selected organisation and month. It reports as a count of consultations and count of patients (patient counts are available in the Table view only) as well as a proportion of consultations for the selected clinical pathway.  This data is available at ICB, NHS region and national (England) organisational levels. A red V marker identifies the selected organisation (NHS region and ICB) in the dashboard graphs.  It is also available at Community Pharmacy organisation level, by selected ICB. |
| 1.3 | **Reporting Details** | This comparator reports the single consultation outcome for all 7 clinical pathways by defined mutually exclusive outcome categories:   * Medicines supply/ non-supply (please refer to [Naming convention of consultation outcomes](#_Naming_convention_of) for information on this naming convention) * Referral into an appropriate locally commissioned NHS service, such as a patient group direction (refer to [Incorrect categorisation of consultation outcomes for Sonar pharmacy sites](#_Incorrect_categorisation_of) for information on data limitations with this consultation outcome) * Advice given only * Non-urgent signposting to another service * Urgent escalation to another service * Other * Sale of an Over the Counter (OTC) medicine   It reports as a stacked proportion of consultation outcome categories, and as a stacked count of consultation outcome categories which allows comparison with other organisations and within the selected organisation over time.  The graphs show, for the month in which the consultation claim was submitted, selected organisation, and clinical pathway:   * The proportion of consultations by outcome category * Count of the number of consultations by outcome category * Count of the number of patients consulting by outcome category (Table view only) * Count of the number of items supplied by outcome category (Table view only) * Monthly trend of the above, from Feb 2024.   The National level views displays the trend graph only.  This comparator also reports the quartile ICB ranking value for the selected ICB for each of the consultation outcome categories (not available in NHS Region, National or Community Pharmacy views).  Consultation data has been attributed to the ICB with which the patient was registered with a General Practice, based on the General Practice ODS code as reported in the Pharmacy First consultation data set. The exception to this is when this comparator is reported by Community Pharmacy organisation. |
| 1.4 | **Numerator** | The total number of Pharmacy First consultations by consultation outcome, for the selected organisational unit, month and clinical pathway. |
| 1.5 | **Denominator** | The total number of Pharmacy First consultations for all consultation outcomes, for the selected organisational unit, month and clinical pathway. |
| 1.6 | **Methodology** | Numerator divided by denominator, expressed as a percentage. Consultation counts are also shown as an integer in the visualisation tooltip (hover), as well as in the Table and Graph (Values) views. |
| 1.7 | **Medicines** | Please refer to the Patient Group Directions for the relevant clinical pathway, which can be found at <https://www.england.nhs.uk/publication/community-pharmacy-advanced-service-specification-nhs-pharmacy-first-service/> |
| **Section 2: Rationale** | | |
| 2.1 | **Purpose and Limitations** | The purpose of this dashboard is to help support clinicians and ICBs monitor access to infection pathways and monitor exposure to medicines including antimicrobials for defined populations.  To enable this, patient consultation data has been attributed to the ICB with which the patient is currently registered at a General Practice, based on the General Practice ODS code as reported in the Pharmacy First consultation data set.  This comparator allows ICBs to identify the outcome of Pharmacy First consultations for the population of their integrated care system by selected clinical pathway. It also identifies variation in consultation outcome between ICBs for a selected clinical pathway, and within individual ICBs across all 7 clinical pathways, using the Monthly Summary comparator.  Quartile ranking of ICBs by consultation outcome categories supports the identification of issues that may warrant further investigation such as high/low urgent escalation outcomes for uncomplicated UTI consultations.  The comparator is also reported as a monthly trend for each clinical pathway to allow access over time to be identified for the selected organisation.  Please note there is a known data issue with consultation outcome categories for pharmacies using the Sonar IT system – see [Incorrect categorisation of consultation outcomes for Sonar pharmacy sites](#_Incorrect_categorisation_of_1) for more information. |

## Comparator: Pathway by Medicine Selected

|  |  |  |
| --- | --- | --- |
| **Section 1: Introduction / Overview** | | |
| 1.1 | **Title** | Pathway by Medicine Selected |
| 1.2 | **Definition** | This comparator reports the number of and proportion of Pharmacy First consultations where a medicine has been supplied under the Patient Group Direction, and reports details of the type of medicine supplied for a selected clinical pathway, by organisation and month.  This data is available at ICB, NHS region and national (England) organisational levels. A red V marker identifies the selected organisation (NHS region and ICB) in the dashboard graphs. |
| 1.3 | **Reporting Details** | Where a consultation results in a supply of a medicine by Patient Group Direction, the selected medicines are reported in this comparator, categorised by type of medicine in scope for the selected clinical pathway. All medicines included in the Pharmacy First service specification are listed below.   * Amoxicillin * Macrolides * Phenazone/lidocaine * Phenoxymethylpenicillin (Penicillin V) * Flucloxacillin sodium * Fusidic acid * Hydrogen peroxide * Valaciclovir * Aciclovir * Doxycycline * High dose corticosteroid nasal spray * Nitrofurantoin   Some of the above medicines are considered ‘antibiotic sparing’ as they may provide an appropriate alternative to an antibiotic. These include   * Phenazone/lidocaine * Hydrogen peroxide * High dose corticosteroid nasal spray   The comparator reports as a stacked proportion of consultations by selected medicines and as a stacked count of selected medicines which allows comparison with other organisations and within the selected organisation over time.  The graphs show, for the month in which the consultation claim was submitted, selected organisation and clinical pathway:   * The proportion of consultations by selected medicine * Count of the number of consultations by selected medicine * Count of the number of patients consulting by selected medicine (Table view only) * Count of the number of items supplied by selected medicine (Table view only) * Monthly trend of the above, from Feb 2024.   The National level views displays the trend graph only.  Consultation data has been attributed to the ICB with which the patient was registered with a General Practice, based on the General Practice ODS code as reported in the Pharmacy First consultation data set.  This comparator does not report consultations that did not result in the supply of a selected medicine. |
| 1.4 | **Numerator** | The total number of Pharmacy First consultations by medicine category, for the selected organisational unit, month and clinical pathway. |
| 1.5 | **Denominator** | The total number of Pharmacy First consultations which resulted in supply of a medicine, for the selected clinical pathway, month and organisation. |
| 1.6 | **Methodology** | Numerator divided by denominator, expressed as a percentage. Consultation counts are also shown as an integer in the visualisation tooltip (hover), as well as in the Table and Graph (Values) views. |
| 1.7 | **Medicines** | Please refer to the Patient Group Directions for the relevant clinical pathway, which can be found at <https://www.england.nhs.uk/publication/community-pharmacy-advanced-service-specification-nhs-pharmacy-first-service/> |
| **Section 2: Rationale** | | |
| 2.1 | **Purpose and Limitations** | The purpose of this dashboard is to help support clinicians and ICBs monitor access to infection pathways and monitor exposure to medicines including antimicrobials for defined populations.  To enable this, patient consultation data has been attributed to the ICB with which the patient is currently registered at a General Practice, based on the General Practice ODS code as reported in the Pharmacy First consultation data set.  This comparator allows ICBs to identify the supply of medicines for each of the 7 clinical pathways provided by the Pharmacy First service and identify variation in medicines supplied both between ICBs for a selected clinical pathway, and within individual ICBs across all 7 clinical pathways.  Medicines supplied vary by selected pathway and are defined by the service specification and supplied via use of a Patient Group Direction. Some medicines have been combined to facilitate reporting, i.e. macrolides and high dose corticosteroid nasal spray.  The comparator is also reported as a monthly trend for each clinical pathway to allow supply of medicines over time to be identified for the selected organisation.  Users should be aware that the analysis presented in this comparator is not dependent on consultation outcome but is based on the evidence of a medicine having been supplied on the consultation record. |

## Comparator: Pathway by Medicine Supply

|  |  |  |
| --- | --- | --- |
| **Section 1: Introduction / Overview** | | |
| 1.1 | **Title** | Pathway by Medicine Supply |
| 1.2 | **Definition** | This comparator reports all Pharmacy First consultations, showing the number and proportion of consultations by the type of medicine supplied by Patient Group Direction, or where no medicine has been supplied, for a selected clinical pathway, organisation and month.  This data is available at ICB, NHS region and national (England) organisational levels. A red V marker identifies the selected organisation (NHS region and ICB) in the dashboard graphs.  It is also available at Community Pharmacy organisation level by selected ICB.  This comparator differs from the previous comparator, ‘Pathway by Medicine Selected’ by also including a category ‘No medicines supply’ |
| 1.3 | **Reporting Details** | This comparator reports details of a consultation based on whether a medicine is supplied or not for the selected clinical pathway. Where a consultation results in a supply of a medicine by Patient Group Direction, the supplied medicines are reported in this comparator, categorised by type of medicine in scope for the selected clinical pathway. All medicines included in the Pharmacy First service specification are listed below.   * Amoxicillin * Macrolides * Phenazone/lidocaine * Phenoxymethylpenicillin (Penicillin V) * Flucloxacillin sodium * Fusidic acid * Hydrogen peroxide * Valaciclovir * Aciclovir * Doxycycline * High dose corticosteroid nasal spray * Nitrofurantoin   Some of the above medicines are considered ‘antibiotic sparing’ as they may provide an appropriate alternative to an antibiotic. These include   * Phenazone/lidocaine * Hydrogen peroxide * High dose corticosteroid nasal spray   The comparator reports as a stacked proportion of consultations by selected medicines and as a stacked count of selected medicines which allows comparison with other organisations and within the selected organisation over time. It also includes consultations where no medicine was supplied.  The graphs show, for the month in which the consultation claim was submitted, selected organisation and clinical pathway:   * The proportion of consultations by selected medicine / no medicines supply * Count of the number of consultations by selected medicine / no medicines supply * Count of the number of patients consulting by selected medicine / no medicines supply   (Table view only)   * Count of the number of items supplied by selected medicine / no medicines supply   (Table view only)   * Monthly trend of the above, from Feb 2024.   The National level views displays the trend graph only.  Consultation data has been attributed to the ICB with which the patient was registered with a General Practice, based on the General Practice ODS code as reported in the Pharmacy First consultation data set.  The exception is when this comparator is reported by Community Pharmacy organisation. This reports the data for patients who have consulted at the named pharmacy irrespective of where the patient is registered with a General Practice. |
| 1.4 | **Numerator** | The total number of Pharmacy First consultations by chemical substance (or where no supply was made), for the selected organisational unit, month and clinical pathway. |
| 1.5 | **Denominator** | The total number of Pharmacy First consultations for all chemical substances (or where no supply was made), for the selected organisational unit, month and clinical pathway. |
| 1.6 | **Methodology** | Numerator divided by denominator, expressed as a percentage. Consultation counts are also shown as an integer in the visualisation tooltip (hover), as well as in the Table and Graph (Values) views.  In the Community Pharmacy view, the default presentation is by consultation counts – percentage rates can be accessed by changing the view selected to Graph (Percentage) or Table. |
| 1.7 | **Medicines** | Please refer to the Patient Group Directions for the relevant clinical pathway, which can be found at <https://www.england.nhs.uk/publication/community-pharmacy-advanced-service-specification-nhs-pharmacy-first-service/> |
| **Section 2: Rationale** | | |
| 2.1 | **Purpose and Limitations** | The purpose of this dashboard is to help support clinicians and ICBs monitor access to infection pathways and monitor exposure to medicines including antimicrobials for defined populations.  To enable this, patient consultation data has been attributed to the ICB with which the patient is currently registered at a General Practice, based on the General Practice ODS code as reported in the Pharmacy First consultation data set.  This comparator allows ICBs to identify the supply of medicines for each of the 7 clinical pathways provided by the Pharmacy First service and identify variation in medicines supplied both between ICBs for a selected clinical pathway, and within individual ICBs across all 7 clinical pathways.  This comparator differs from the comparator *Pathway by Medicine Selected* in that it also includes consultations where no medicine was supplied. This provides additional support for antimicrobial stewardship and allows users to understand the supply of antimicrobials and antibiotic sparing medicines within the context of all consultations.  Medicines supplied vary by selected pathway and are defined by the service specification and supplied via use of a Patient Group Direction. Some medicines have been combined to facilitate reporting, i.e. macrolides and high dose corticosteroid nasal spray.  The comparator is also reported as a monthly trend for each clinical pathway to allow supply of medicines over time to be identified for the selected organisation.  Users should be aware that the medicine analysis presented in this comparator is not dependent on consultation outcome but is based on the evidence, or lack thereof, of a medicine having been supplied on the consultation record. |

## Comparator: Pathway by Demographic

|  |  |  |
| --- | --- | --- |
| **Section 1: Introduction / Overview** | | |
| 1.1 | **Title** | Number of people prescribed trimethoprim more than once in a three consecutive month period |
| 1.2 | **Definition** | This comparator reports a count of patients who have received a Pharmacy First consultation for the selected clinical pathway and reports patient count by 5-year age band and by gender for the selected organisation and month.  This data is available at Integrated Care Board, NHS Region and national England organisational level. |
| 1.3 | **Reporting Details** | This comparator reports the population demographic for patients who have received a Pharmacy First consultation, for each of the 7 clinical pathways.  Patient 5-year age band and gender are derived from the age and gender as captured for patients during a Pharmacy First consultation. Details how age bands are used, and data completeness for patient gender are reported in detail [here](#_Age_bands)  The age ranges used in the dashboard comparator may be broader than those specified in the Pharmacy First clinical pathway specification. This is due to the NHS BSA use of population denominator values which are calculated by 5-year age bands.  The comparator shows, for the month in which the consultation claim was submitted, selected organisation and clinical pathway:   * Count of the number of patients * Count of the number of consultations (Table view only) * Count of the number of items of medicines supplied (Table view only)   The data is further broken down by 5-year age band and gender, in each graph. Where no data exists for a given age band, that age band will not appear on the horizontal axis of the graphs.  Organisation levels are derived from the GP practice of the patient receiving treatment under the selected pathway and month, based on the practice ODS code as captured in the Pharmacy First assessment. |
| 1.4 | **Numerator** | The total number of unique patients, for the selected organisational unit, month and clinical pathway, by 5-year age band and gender. |
| 1.5 | **Denominator** | None. |
| 1.6 | **Methodology** | Data is presented as numerator only. |
| 1.7 | **Medicines** | Please refer to the Patient Group Directions for the relevant clinical pathway, which can be found at <https://www.england.nhs.uk/publication/community-pharmacy-advanced-service-specification-nhs-pharmacy-first-service/> |
| **Section 2: Rationale** | | |
| 2.1 | **Purpose and Limitations** | The purpose of this dashboard is to help support clinicians and ICBs monitor access to infection pathways and monitor exposure to medicines including antimicrobials for defined populations.  To enable this, patient consultation data has been attributed to the ICB with which the patient is currently registered at a General Practice, based on the General Practice ODS code as reported in the Pharmacy First consultation data set.  This comparator allows ICBs to identify the use of the Pharmacy First service for the population of their ICB by age band and gender, by selected clinical pathway.  This comparator reports a count of patients consulting the Shingles clinical pathway who may be included in the population who are eligible for a singles vaccination and provides an opportunity to improve shingles vaccination uptake. |

## Comparator: Uncomplicated UTI Pathway

|  |  |  |
| --- | --- | --- |
| **Section 1: Introduction / Overview** | | |
| 1.1 | **Title** | Uncomplicated UTI Pathway |
| 1.2 | **Definition** | This comparator reports a count of items of Nitrofurantoin MR 100mg capsules (branded or generic) supplied by Patient Group Direction to female patients via the Pharmacy First for Uncomplicated UTI clinical pathway.  It also reports a count of FP10 items prescribed to female patients for Nitrofurantoin MR 100mg capsules (branded or generic) with a prescribed quantity of 6 capsules, by NHS GP practices.  Both data sets report item count by 5-year age bands.  This data is available at ICB, NHS region and national (England) organisational levels. |
| 1.3 | **Reporting Details** | This comparator reports the number of Nitrofurantoin MR 100mg Items supplied to female patients via the Pharmacy First Uncomplicated UTI clinical pathway,  Patient 5-year age band and gender are derived from the age and gender captured for patients during a Pharmacy First consultation. Details how age bands are used, and data completeness for patient gender are reported in detail [here](#_Age_bands).  The age ranges used in the dashboard comparator may be broader than those specified in the Pharmacy First clinical pathway specification. This is due to the NHS BSA use of population denominator values which are calculated by 5-year age bands.  The comparator shows, for the month in which consultation claim was submitted, selected organisation and clinical pathway:   * Count of the number of patients for both Pharmacy First and FP10 * Count of the number of consultations (Pharmacy First Table view only) * Count of the number of Pharmacy First or FP10 items supplied (Table view only)   The data is further broken down by 5-year age band in each graph. Where no data exists for a given age band, that age band will not appear on the horizontal axis of the graphs. The Patient Group Direction for the pathway states that patients in scope should be aged between 16 and 64, but as the dashboard reports in discrete 5-year age bands, the lower limit for the numerators is 15-19. This means that any out-of-scope supply or FP10 prescribing to patients aged 15 will be included in the data.  Organisation levels are derived from the GP practice of the patient receiving treatment under the selected pathway and month, based on the practice ODS code as captured in the Pharmacy First assessment. |
| 1.4 | **Numerator** | There are two numerators displayed in this comparator:   * The total number of unique female patients within the 5-year age bands 15-19 to 60-64, who have been treated under the Uncomplicated UTI Pharmacy First clinical pathway, and have been supplied with nitrofurantoin 100mg modified-release capsules (generic or branded). * The total number of unique female patients within the 5-year age bands 15-19 to 60-64, who have been prescribed nitrofurantoin 100mg modified-release capsules (generic or branded) with a quantity of 6 on an FP10 prescription |
| 1.5 | **Denominator** | None. |
| 1.6 | **Methodology** | Data is presented as numerator only. |
| 1.7 | **Medicines** | For this comparator, the data is limited to the Pharmacy First supply and FP10 prescribing of:   * Nitrofurantoin 100mg modified-release capsules (BNF Code 0501130R0AAAGAG) * Macrobid 100mg modified-release capsules (BNF Code 0501130R0BGAAAG) |
| **Section 2: Rationale** | | |
| 2.1 | **Purpose and Limitations** | The purpose of this dashboard is to help support clinicians and ICBs monitor access to infection pathways and monitor exposure to medicines including antimicrobials for defined populations.  To enable this, patient consultation data has been attributed to the ICB with which the patient is currently registered at a General Practice, based on the General Practice ODS code as reported in the Pharmacy First consultation data set.  This comparator allows ICBs to identify the use of Nitrofurantoin MR 100mg by female patients aged 16 to 64 years by both the usual GP practice pathway and by the Pharmacy First pathway.  NHS GP practice prescribing of nitrofurantoin MR 100mg capsules with a quantity of 6 via FP10 is considered likely to have been prescribed for an uncomplicated UTI, but as FP10 data does not include a clinical indication this cannot be confirmed.  Note that while the Pharmacy First clinical pathway for suspected uncomplicated UTI can only supply a 3-day course of nitrofurantoin, patients consulting other NHS pathways may be supplied or prescribed a different duration nitrofurantoin, and/or a different antibiotic to treat uncomplicated UTI.  The Patient Group Direction for the pathway states that the supplied quantity of nitrofurantoin MR 100mg capsules should be 6, but there is evidence of supply where the quantity differs. At present, such consultation activity is included in the Pharmacy First element of this comparator but not in the FP10 graph, where a filter is placed on prescribed quantity. Please refer to [Variation in Nitrofurantoin MR 100mg quantities](#_Variation_in_Nitrofurantion) in Appendix 2 for more information.  Nitrofurantoin 50mg immediate release preparations may also be supplied via a Pharmacy First consultation for Uncomplicated UTI, and consultations supplying this formulation have been excluded from this comparator to facilitate comparison with nitrofurantoin prescribed by FP10.  This comparator is unable to include use of Nitrofurantoin MR 100mg by female patients consulting other healthcare pathways, such as NHS urgent care or private Community Pharmacy UTI services. |

## Comparator: Monthly Summary

|  |  |  |
| --- | --- | --- |
| **Section 1: Introduction / Overview** | | |
| 1.1 | **Title** | Monthly Summary |
| 1.2 | **Definition** | This comparator provides the selected organisation with an overview of the Pharmacy First service for all 7 clinical pathways for the selected month, reporting data from 3 different comparators in the same view:   * Population Access * Consultation Outcome * Consultation Mode   Population Access is reported as a separate comparator in the dashboard and details are provided [here](#_Comparator:_Population_Access).  Consultation Outcome is reported as a separate comparator in the dashboard and details are provided [here](#_Comparator:_Pathway_by).  Consultation Mode is a metric unique to the Monthly Summary comparator and reports consultation mode by two categories:   * face to face * telemedicine   The comparator shows, for each clinical pathway in the selected month and organisation   * The proportion of consultations by consultation mode * Count of the number of consultations by consultation mode * Count of the number of patients consulting by consultation mode (Table view only) * Count of the number of items of medicines supplied by consultation mode (Table view only)   This data is available at ICB, NHS region and national (England) organisational levels. |
| 1.3 | **Reporting Details** | The comparator reports single-month totals calculated at ICB, NHS region and national levels by clinical pathway, for the selected organisation.  Performance tiles show the total unique count of patients for each clinical pathway for the selected month and organisation, per 100,000 population. These figures are expressed as integers.  Organisation levels are derived from the General Practice of the patient receiving treatment under the selected pathway and month, based on the practice ODS code as captured in the Pharmacy First assessment.  Practice list sizes are derived from the General Practice of the patient receiving treatment under the selected pathway and month, based on the practice ODS code as captured in the Pharmacy First assessment. |
| 1.4 | **Numerator** | Consultation Mode is a metric unique to the Monthly Summary comparator   1. The total number of Pharmacy First consultations for both consultation modes, by each clinical pathway, for the selected organisation and month   Please refer to the Population Access and Pathway by Consultation Outcome specifications for numerator details. |
| 1.5 | **Denominator** | Consultation Mode is a metric unique to the Monthly Summary comparator   1. The total number of Pharmacy First consultations by each clinical pathway, for the selected organisation and month   Please refer to the Population Access and Pathway by Consultation Outcome specifications for denominator details. |
| 1.6 | **Methodology** | 1. Numerator divided by denominator, expressed as a percentage   Consultation counts are also shown as an integer in the visualisation tooltip (hover), as well as in the Table and Graph (Values) views.    The default view for the graphs shows the percentage composition of consultations by consultation outcome or mode, but the data can also be viewed as a graph showing actual values by selecting Graph (Values) from the view selector, or as a data table by selecting the Table view. |
| 1.7 | **Medicines** | Please refer to the Patient Group Directions for the relevant clinical pathway, which can be found at <https://www.england.nhs.uk/publication/community-pharmacy-advanced-service-specification-nhs-pharmacy-first-service/> |
| **Section 2: Rationale** | | |
| 2.1 | **Purpose and limitations** | The purpose of this dashboard is to help support clinicians and ICBs monitor access to infection pathways and monitor exposure to medicines including antimicrobials for defined populations.  To enable this, patient consultation data has been attributed to the ICB with which the patient is currently registered at a General Practice, based on the General Practice ODS code as reported in the Pharmacy First consultation data set.  This comparator provides a summary of all Pharmacy First consultations by selected organisation for selected month for population access, consultation outcome and consultation mode. This summary allows organisations to identify variation within the selected organisation across all 7 clinical pathways.  Population Access and Consultation Outcome comparators can also be selected and viewed as individual comparators. However, Consultation Mode is only reported in the Monthly Summary view.  Please note there is a known data issue with consultation outcome categories for pharmacies using the Sonar IT system – see [Incorrect categorisation of consultation outcomes for Sonar pharmacy sites](#_Incorrect_categorisation_of_1) for more information. |

## Datasets Section

The following datasets are available for download at ICB and Region levels:

* Pathway by Consultation Outcome
* Pathway by Medicine Selected
* Pathway by Medicine Selected
* Pathway by Demographic
* Uncomplicated UTI Pathway

For each of these, one or more months, organisations and clinical pathways can be selected.

At National level, the following datasets can be accessed:

* Pathway by Demographic
* Uncomplicated UTI Pathway

For each, one or more months and clinical pathways can be selected.

# Appendix 1: Supply of nitrofurantoin 100mg modified release with a quantity of 6, vs nitrofurantoin 50mg instant release capsules or tablets with a quantity of 12, for the Uncomplicated UTI pathway.

This table reports the total number of nitrofurantoin items supplied under the Patient Group Direction for the Pharmacy First Uncomplicated UTI clinical pathway by presentation and quantity.

The Uncomplicated UTI Pathway comparator only reports Pharmacy First consultation activity where supply of nitrofurantoin MR 100mg capsules was made. Pharmacy First consultation activity which resulted in the supply of nitrofurantoin 50mg tablets have been excluded from this comparator to facilitate comparison with GP practice prescribing of nitrofurantoin MR 100mg capsules with a quantity of 6, via FP10.

Note that the Pharmacy First element of the data in the table below includes supply of nitrofurantoin MR 100mg capsules with any quantity (see [Variation in nitrofurantoin MR 100mg quantities](#_Variation_in_nitrofurantoin) for more information on the volume of this supply which is out of scope based on quantity).

Both generic and branded presentations are included in the data below. The data is restricted to Pharmacy First consultation activity which resulted in the supply of nitrofurantoin under the Pharmacy First Patient Group Direction.

The data covers consultation activity between February and October 2024, which have been declared for payment and processed by NHSBSA. No consultation activity undertaken in that period which has not been declared for payment, or activity declared after October 2024 is included.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ICB** | **Assessments where nitrofurantoin 100mg MR capsules supplied** | **Assessments where nitrofurantoin 50mg IR tablets/capsules supplied** | **Total Assessments** | **Percentage of assessments where nitrofurantoin 100mg MR capsules supplied** | **Percentage of assessments where nitrofurantoin 50mg IR tablets/capsules supplied** |
| NHS BATH AND NORTH EAST SOMERSET, SWINDON AND WILTSHIRE INTEGRATED CARE BOARD | 5,836 | 73 | 5,909 | 98.8% | 1.2% |
| NHS BEDFORDSHIRE, LUTON AND MILTON KEYNES INTEGRATED CARE BOARD | 5,275 | 17 | 5,292 | 99.7% | 0.3% |
| NHS BIRMINGHAM AND SOLIHULL INTEGRATED CARE BOARD | 10,860 | 163 | 11,023 | 98.5% | 1.5% |
| NHS BLACK COUNTRY INTEGRATED CARE BOARD | 11,613 | 374 | 11,987 | 96.9% | 3.1% |
| NHS BRISTOL, NORTH SOMERSET AND SOUTH GLOUCESTERSHIRE INTEGRATED CARE BOARD | 8,997 | 115 | 9,112 | 98.7% | 1.3% |
| NHS BUCKINGHAMSHIRE, OXFORDSHIRE AND BERKSHIRE WEST INTEGRATED CARE BOARD | 9,936 | 69 | 10,005 | 99.3% | 0.7% |
| NHS CAMBRIDGESHIRE AND PETERBOROUGH INTEGRATED CARE BOARD | 5,030 | 38 | 5,068 | 99.3% | 0.7% |
| NHS CHESHIRE AND MERSEYSIDE INTEGRATED CARE BOARD | 25,569 | 356 | 25,925 | 98.6% | 1.4% |
| NHS CORNWALL AND THE ISLES OF SCILLY INTEGRATED CARE BOARD | 3,829 | 21 | 3,850 | 99.5% | 0.5% |
| NHS COVENTRY AND WARWICKSHIRE INTEGRATED CARE BOARD | 6,580 | 231 | 6,811 | 96.6% | 3.4% |
| NHS DERBY AND DERBYSHIRE INTEGRATED CARE BOARD | 8,332 | 45 | 8,377 | 99.5% | 0.5% |
| NHS DEVON INTEGRATED CARE BOARD | 8,295 | 132 | 8,427 | 98.4% | 1.6% |
| NHS DORSET INTEGRATED CARE BOARD | 4,592 | 87 | 4,679 | 98.1% | 1.9% |
| NHS FRIMLEY INTEGRATED CARE BOARD | 5,468 | 29 | 5,497 | 99.5% | 0.5% |
| NHS GLOUCESTERSHIRE INTEGRATED CARE BOARD | 4,359 | 128 | 4,487 | 97.1% | 2.9% |
| NHS GREATER MANCHESTER INTEGRATED CARE BOARD | 21,622 | 268 | 21,890 | 98.8% | 1.2% |
| NHS HAMPSHIRE AND ISLE OF WIGHT INTEGRATED CARE BOARD | 13,800 | 247 | 14,047 | 98.2% | 1.8% |
| NHS HEREFORDSHIRE AND WORCESTERSHIRE INTEGRATED CARE BOARD | 5,468 | 71 | 5,539 | 98.7% | 1.3% |
| NHS HERTFORDSHIRE AND WEST ESSEX INTEGRATED CARE BOARD | 10,884 | 99 | 10,983 | 99.1% | 0.9% |
| NHS HUMBER AND NORTH YORKSHIRE INTEGRATED CARE BOARD | 10,953 | 387 | 11,340 | 96.6% | 3.4% |
| NHS KENT AND MEDWAY INTEGRATED CARE BOARD | 11,515 | 104 | 11,619 | 99.1% | 0.9% |
| NHS LANCASHIRE AND SOUTH CUMBRIA INTEGRATED CARE BOARD | 15,133 | 188 | 15,321 | 98.8% | 1.2% |
| NHS LEICESTER, LEICESTERSHIRE AND RUTLAND INTEGRATED CARE BOARD | 8,930 | 85 | 9,015 | 99.1% | 0.9% |
| NHS LINCOLNSHIRE INTEGRATED CARE BOARD | 4,906 | 65 | 4,971 | 98.7% | 1.3% |
| NHS MID AND SOUTH ESSEX INTEGRATED CARE BOARD | 7,779 | 139 | 7,918 | 98.2% | 1.8% |
| NHS NORFOLK AND WAVENEY INTEGRATED CARE BOARD | 5,936 | 118 | 6,054 | 98.1% | 1.9% |
| NHS NORTH CENTRAL LONDON INTEGRATED CARE BOARD | 7,439 | 52 | 7,491 | 99.3% | 0.7% |
| NHS NORTH EAST AND NORTH CUMBRIA INTEGRATED CARE BOARD | 30,022 | 375 | 30,397 | 98.8% | 1.2% |
| NHS NORTH EAST LONDON INTEGRATED CARE BOARD | 12,102 | 271 | 12,373 | 97.8% | 2.2% |
| NHS NORTH WEST LONDON INTEGRATED CARE BOARD | 11,254 | 73 | 11,327 | 99.4% | 0.6% |
| NHS NORTHAMPTONSHIRE INTEGRATED CARE BOARD | 5,165 | 44 | 5,209 | 99.2% | 0.8% |
| NHS NOTTINGHAM AND NOTTINGHAMSHIRE INTEGRATED CARE BOARD | 10,060 | 69 | 10,129 | 99.3% | 0.7% |
| NHS SHROPSHIRE, TELFORD AND WREKIN INTEGRATED CARE BOARD | 4,066 | 56 | 4,122 | 98.6% | 1.4% |
| NHS SOMERSET INTEGRATED CARE BOARD | 4,070 | 44 | 4,114 | 98.9% | 1.1% |
| NHS SOUTH EAST LONDON INTEGRATED CARE BOARD | 9,613 | 98 | 9,711 | 99.0% | 1.0% |
| NHS SOUTH WEST LONDON INTEGRATED CARE BOARD | 7,618 | 66 | 7,684 | 99.1% | 0.9% |
| NHS SOUTH YORKSHIRE INTEGRATED CARE BOARD | 9,927 | 178 | 10,105 | 98.2% | 1.8% |
| NHS STAFFORDSHIRE AND STOKE-ON-TRENT INTEGRATED CARE BOARD | 11,415 | 217 | 11,632 | 98.1% | 1.9% |
| NHS SUFFOLK AND NORTH EAST ESSEX INTEGRATED CARE BOARD | 5,556 | 49 | 5,605 | 99.1% | 0.9% |
| NHS SURREY HEARTLANDS INTEGRATED CARE BOARD | 5,326 | 66 | 5,392 | 98.8% | 1.2% |
| NHS SUSSEX INTEGRATED CARE BOARD | 9,943 | 117 | 10,060 | 98.8% | 1.2% |
| NHS WEST YORKSHIRE INTEGRATED CARE BOARD | 17,350 | 179 | 17,529 | 99.0% | 1.0% |
| **Grand Total** | **402,423** | **5,603** | **408,026** | **98.6%** | **1.4%** |

# Appendix 2: Limitations and known issues

Users of the dashboard should be aware of the following limitations and issues.

## Naming convention of consultation outcomes

In the Pathway by Consultation comparator, one of the consultation outcome categories is labelled as ‘Medicines supply / non-supply’. This naming convention has been implemented as part of the NHS England service specification and is reported as captured in the NHSBSA data.

The NHS England Pharmacy First service specification describes the outcome as follows:

A close-up of a medical form

Description automatically generated

At the time of writing (latest data being October 2024), 0.07% of consultations with an outcome of ‘Medicines supply / non-supply’ have no medicine associated with them (803 consultations from a total of 1,134,603 total consultations).

## Incorrect assignment of gender for consultations in Sonar pharmacy sites

An issue has been identified for a number of consultation records in Sonar sites, where the patient gender has been incorrectly recorded as male. This issue has been corrected at source, and the data in the dashboard will be updated to reflect the correct gender in the near future.

The following tables show the total number of consultations with incorrect gender by month, and the number of consultations with incorrect gender broken down by clinical pathway (February – October 2024), for all Sonar consultation activity, at the time of writing:

|  |  |  |  |
| --- | --- | --- | --- |
| **Month** | **Total Consultations** | **Total Consultations with incorrect gender** | **Pct Consultations with incorrect gender** |
| 202402 | 4,827 | 3,363 | 69.67 |
| 202403 | 6,815 | 4,614 | 67.70 |
| 202404 | 4,767 | 3,299 | 69.20 |
| 202405 | 8,368 | 941 | 11.25 |
| 202406 | 7,364 | 73 | 0.99 |
| 202407 | 8,414 | 80 | 0.95 |
| 202408 | 8,262 | 0 | 0.00 |
| 202409 | 8,721 | 0 | 0.00 |
| 202410 | 9,517 | 0 | 0.00 |
| 202411 | 10,363 | 0 | 0.00 |

*Total consultations, all pathways, by month*

|  |  |  |  |
| --- | --- | --- | --- |
| **Clinical Pathway** | **Total Consultations** | **Total Consultations with incorrect gender** | **Pct Consultations with incorrect gender** |
| Acute Otitis Media | 6,700 | 1,022 | 15.25 |
| Acute Sore Throat | 32,328 | 4,605 | 14.24 |
| Impetigo | 2,192 | 343 | 15.65 |
| Infected Insect Bites | 7,534 | 365 | 4.84 |
| Shingles | 1,554 | 256 | 16.47 |
| Sinusitis | 8,209 | 1,373 | 16.73 |
| Uncomplicated UTI | 18,901 | 4,406 | 23.31 |

*Total consultations by clinical pathway, Feb-Oct 2024*

As Sonar sites are predominantly found in London ICBs, users should be cautious when using the Pathway by Demographic comparator for ICBs in the London region.

When the data has been corrected, a notice will be posted on the ePACT2 landing page and this document will be updated to remove this section.

## Incorrect categorisation of consultation outcomes for Sonar pharmacy sites

At the time of writing there is a known issue in pharmacy sites using the Sonar IT system, whereby consultation outcomes are being mis-categorised. This has resulted in a large number of consultations being incorrectly recorded against the outcome of ‘Referral into an appropriate locally commissioned NHS service, such as a patient group direction’.

This has impacted most significantly on the ‘Medicines supply / non-supply’ outcome, with the distribution of consultations between consultation outcomes being as follows:

|  |  |  |  |
| --- | --- | --- | --- |
| **Consultation Outcome** | **Total Consultations** | **Total number of consultations where a medicine has been supplied** | **Percentage of consultations where a medicine has been supplied** |
| Advice given only | 20,521 | 0 | 0.0 |
| Medicines supply / non-supply | 84 | 83 | 98.8 |
| Non-urgent signposting to another service | 1,900 | 203 | 10.7 |
| Other (please specify) | 170 | 0 | 0.0 |
| Referral into a pharmacy local minor ailments service (MAS) | 2 | 2 | 100.0 |
| Referral into an appropriate locally commissioned NHS service, such as a patient group direction | 43,094 | 42,888 | 99.5 |
| Sale of an Over the Counter (OTC) medicine | 7 | 7 | 100.0 |
| Urgent escalation to another service | 1,277 | 58 | 4.5 |

*Sonar consultations by consultation outcome, where a medicine has been supplied (February – October 2024)*

In addition, there are also some records which appear to indicate that a medicine has been supplied, for consultation outcomes other than ‘Medicines supply / non-supply’, for sites using Pinnacle, Cegedim and EMIS systems:

|  |  |  |  |
| --- | --- | --- | --- |
| **Consultation Outcome** | **Total Consultations** | **Total number of consultations where a medicine has been supplied** | **Percentage of consultations where a medicine has been supplied** |
| Advice given only | 199,274 | 984 | 0.5 |
| Non-urgent signposting to another service | 35,542 | 3 | 0.0 |
| Onward referral to another CPCS pharmacy | 1 | 0 | 0.0 |
| Other (please specify) | 12,348 | 0 | 0.0 |
| Referral into a pharmacy local minor ailments service (MAS) | 2 | 0 | 0.0 |
| Referral into an appropriate locally commissioned NHS service, such as a patient group direction | 8,166 | 0 | 0.0 |
| Sale of an Over the Counter (OTC) medicine | 3,118 | 78 | 2.5 |
| Urgent escalation to another service | 37,059 | 7 | 0.0 |

*Consultations by consultation outcome, where a medicine has been supplied (February – October 2024), excluding Sonar sites and Medicines supply / non-supply’ outcomes.*

## Consultations with missing or unmatched GP practice ODS codes

The following tables show the proportion of consultations which have either no General Practice ODS recorded, or which have an ODS code recorded which does not match the organisation data held by NHSBSA.

The tables show the data by NHS region and by clinical pathway and cover all Pharmacy First activity up to and including consultations which were processed for payment in October 2024.

**Data by NHS Region**

|  |  |  |  |
| --- | --- | --- | --- |
| **Region** | **Total Consultations** | **Percentage with no GP ODS code** | **Percentage with GP ODS code not matching NHSBSA data** |
| EAST OF ENGLAND | 164,475 | 0.005 | 1.23 |
| LONDON | 195,137 | 0.014 | 1.67 |
| MIDLANDS | 309,298 | 0.011 | 1.66 |
| NORTH EAST AND YORKSHIRE | 251,721 | 0.006 | 0.98 |
| NORTH WEST | 219,939 | 0.016 | 1.78 |
| SOUTH EAST | 215,000 | 0.01 | 1.92 |
| SOUTH WEST | 141,514 | 0.004 | 1.48 |

**Data by Clinical Pathway**

|  |  |  |  |
| --- | --- | --- | --- |
| **Clinical Pathway** | **Total Consultations** | **Percentage with no GP ODS code** | **Percentage with GP ODS code not matching NHSBSA data** |
| Acute Otitis Media | 168,390 | 0.008 | 1.39 |
| Acute Sore Throat | 473,243 | 0.011 | 1.64 |
| Impetigo | 65,316 | 0.015 | 1.45 |
| Infected Insect Bites | 180,819 | 0.006 | 1.57 |
| Shingles | 42,399 | 0.012 | 1.5 |
| Sinusitis | 146,880 | 0.007 | 1.49 |
| Uncomplicated UTI | 420,037 | 0.011 | 1.49 |

General Practice ODS data is reported as captured in pharmacy IT systems and is not validated by NHSBSA in any way during processing. For context, a monthly average of 91.5% of GP ODS codes captured in Pharmacy First match the data held for patient registered practice by NHSBSA, for the period February to October 2024.

## Consultation records without valid NHS numbers

Some Pharmacy First consultation records have been recorded without a valid NHS number. This is more prevalent in pharmacy sites using the Cegedim system and is not linked to any specific ICB, NHS region or clinical pathway.

For the period February to October 2024, the number and percentage of consultations captured without a valid NHS number are as follows (shown by region, clinical pathway, and supplier):

|  |  |  |  |
| --- | --- | --- | --- |
| **Region** | **Total Consultations** | **Consultations without valid NHS number** | **Percentage of consultation without NHS number** |
| EAST OF ENGLAND | 164,475 | 1,190 | 0.72 |
| LONDON | 195,137 | 3,005 | 1.54 |
| MIDLANDS | 309,298 | 5,600 | 1.81 |
| NORTH EAST AND YORKSHIRE | 251,721 | 10,858 | 4.31 |
| NORTH WEST | 219,939 | 2,849 | 1.3 |
| SOUTH EAST | 215,000 | 2,090 | 0.97 |
| SOUTH WEST | 141,514 | 2,434 | 1.72 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Clinical Pathway** | **Total Consultations** | **Consultations without valid NHS number** | **Percentage of consultation without NHS number** |
| Acute Otitis Media | 168,390 | 3,573 | 2.12 |
| Acute Sore Throat | 473,243 | 9,744 | 2.06 |
| Impetigo | 65,316 | 1,124 | 1.72 |
| Infected Insect Bites | 180,819 | 2,549 | 1.41 |
| Shingles | 42,399 | 691 | 1.63 |
| Sinusitis | 146,880 | 2,421 | 1.65 |
| Uncomplicated UTI | 420,037 | 7,924 | 1.89 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Supplier** | **Total Consultations** | **Consultations without valid NHS number** | **Percentage of consultation without NHS number** |
| Cegedim | 47,142 | 7,262 | 15.4 |
| EMIS | 1,372,623 | 19,380 | 1.41 |
| Positive | 10,264 | 117 | 1.14 |
| Sonar | 67,055 | 1,267 | 1.89 |

Please refer to [Appendix 3](#_Appendix_3:_Data_1) for more information on data completeness in the dashboard.

## Variation in nitrofurantoin MR 100mg quantities

The [Patient Group Direction](https://www.england.nhs.uk/wp-content/uploads/2023/11/PRN01010-1a.-Urinary-tract-infection-nitrofurantoin-patient-group-direction-Pharmacy-First.pdf) for the Uncomplicated UTI Clinical Pathway states that a patients meeting the treatment gateway should be provided with a three-day supply of nitrofurantoin, either as 6 100mg modified-release capsules, or, if the 100mg MR capsule is unavailable, 12 50mg immediate-release tablets or capsules.

Analysis of the data submitted for payment reveals that quantities other than 6 (MR) or 12 (IR) have been supplied, in low volumes but on a consistent basis. The table below shows the proportion of items of nitrofurantoin 100mg modified-release capsules supplied under the pathway which have quantities other than those allowed under PGD, vs those with a quantity of 6 (50mg IR tablets and capsules are not included in this table, as they are beyond the scope of the comparator):

|  |  |  |  |
| --- | --- | --- | --- |
| **Month** | **Total items supplied** | **Percentage of items supplied with quantity of 6** | **Percentage of items supplied with quantity other than 6** |
| 202402 | 26,560 | 98.66 | 1.34 |
| 202403 | 28,982 | 98.56 | 1.44 |
| 202404 | 35,132 | 98.69 | 1.31 |
| 202405 | 37,638 | 98.81 | 1.19 |
| 202406 | 36,478 | 98.92 | 1.08 |
| 202407 | 43,217 | 98.90 | 1.10 |
| 202408 | 45,027 | 98.93 | 1.07 |
| 202409 | 46,757 | 98.98 | 1.02 |
| 202410 | 51,784 | 98.95 | 1.05 |

# Appendix 3: Data completeness and dashboard inclusion

As mentioned in the [Patient identifiable data completeness](#_Patient_identifiable_data) section in this document, no restrictions are placed on the inclusion of consultation activity where no valid NHS number has been captured for the patient. Where in the dashboard any such activity and patients appear is dependent on whether other data items, such as GP practice ODS code, age band and gender have been captured on the consultation record.

Broadly speaking, patients and consultation activity will be included on the following basis:

* All consultations are included in the National and Community Pharmacy comparators, with no exclusions.
* Any patients without a valid NHS number will be included in all national comparators, but such patients may be undercounted (see note 1 below). At ICB and NHS region level:
  + patients without a valid NHS number but with a valid GP ODS code (see note 2 below) will appear in all ICB and region comparators, but such patients may be undercounted.
  + Consultations for patients without a valid NHS number, but with a valid GP ODS code will appear in all ICB and NHS region comparators, and be counted accurately.
  + patients without a valid NHS number but without a valid GP ODS code will not appear in any ICB and region comparators, but such patients may be undercounted.
  + Consultations for patients without a valid NHS number, but without a valid GP ODS code will not be included in any ICB and NHS region comparators.
* Patients without a valid NHS number will appear in the Community Pharmacy comparators, but such patients may be undercounted.
* All Pharmacy First consultation records have an age band and gender recorded, so all patients without a valid NHS number will appear in the Pathway by Demographic and Uncomplicated UTI Pathway comparators at national level, and those without a valid NHS number but with a valid GP ODS code will also appear in demographic and UTI comparators at ICB and region level (where they may be undercounted, in line with Note 1 below).

To further illustrate the impact of missing or invalid NHS numbers, and missing or invalid GP ODS codes, see the matrix table overleaf; this shows the degree of inclusion, and at which organisational levels a patient, consultation or item will be subject to, based upon the validity of the NHS number and GP ODS code on the consultation record.

|  |  |  |  |
| --- | --- | --- | --- |
| **Data completeness** | **Data Items** | **Has a valid NHS number** | **No valid NHS number** |
| **Has a valid GP ODS code** | Consultations and items | Includes all | Includes all |
| Patients | Includes all | Includes all, but undercounts |
| Organisational assignment | Assigned to all levels | Assigned to all levels |
| **No valid GP ODS code** | Consultations and items | Includes all | Includes all |
| Patients | Includes all | Includes all, but undercounts |
| Organisational assignment | Assigned to national and community pharmacy views only | Assigned to national and community pharmacy views only |

The following two tables show the percentage of all consultations, by the four possible categories above (i.e. valid NHS number with and without a valid GP ODS code, no valid NHS number with and without a valid GP ODS code), first by month (February – October 2024), and by ICB linked to the community pharmacy, for the whole period.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Month** | **Total consultations** | **Consultations with valid NHS number and valid GP ODS code** | **Consultations with valid NHS number and no valid GP ODS code** | **Consultations with no valid NHS number and valid GP ODS code** | **Consultations with no valid NHS number and no valid GP ODS code** |
| 202402 | 125,275 | 95.93 | 1.19 | 2.73 | 0.15 |
| 202403 | 144,389 | 96.44 | 1.42 | 2.00 | 0.15 |
| 202404 | 153,646 | 96.85 | 1.27 | 1.72 | 0.16 |
| 202405 | 168,447 | 96.96 | 1.23 | 1.61 | 0.20 |
| 202406 | 164,737 | 96.99 | 1.35 | 1.46 | 0.20 |
| 202407 | 186,190 | 96.96 | 1.33 | 1.42 | 0.29 |
| 202408 | 180,035 | 97.11 | 1.25 | 1.40 | 0.24 |
| 202409 | 175,571 | 96.95 | 1.23 | 1.50 | 0.32 |
| 202410 | 198,794 | 96.92 | 1.41 | 1.34 | 0.34 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ICB** | **Total consultations** | **Consultations with valid NHS number and valid GP ODS code** | **Consultations with valid NHS number and no valid GP ODS code** | **Consultations with no valid NHS number and valid GP ODS code** | **Consultations with no valid NHS number and no valid GP ODS code** |
| NHS BATH AND NORTH EAST SOMERSET, SWINDON AND WILTSHIRE INTEGRATED CARE BOARD | 22,677 | 98.42 | 0.30 | 1.11 | 0.17 |
| NHS BEDFORDSHIRE, LUTON AND MILTON KEYNES INTEGRATED CARE BOARD | 21,175 | 98.57 | 0.92 | 0.45 | 0.06 |
| NHS BIRMINGHAM AND SOLIHULL INTEGRATED CARE BOARD | 42,758 | 95.39 | 3.43 | 1.07 | 0.11 |
| NHS BLACK COUNTRY INTEGRATED CARE BOARD | 42,607 | 98.92 | 0.65 | 0.39 | 0.05 |
| NHS BRISTOL, NORTH SOMERSET AND SOUTH GLOUCESTERSHIRE INTEGRATED CARE BOARD | 32,798 | 96.11 | 0.96 | 2.74 | 0.19 |
| NHS BUCKINGHAMSHIRE, OXFORDSHIRE AND BERKSHIRE WEST INTEGRATED CARE BOARD | 36,916 | 93.95 | 5.14 | 0.73 | 0.19 |
| NHS CAMBRIDGESHIRE AND PETERBOROUGH INTEGRATED CARE BOARD | 20,452 | 96.41 | 2.35 | 1.00 | 0.24 |
| NHS CHESHIRE AND MERSEYSIDE INTEGRATED CARE BOARD | 79,040 | 98.02 | 0.49 | 1.33 | 0.16 |
| NHS CORNWALL AND THE ISLES OF SCILLY INTEGRATED CARE BOARD | 12,262 | 98.30 | 0.86 | 0.62 | 0.23 |
| NHS COVENTRY AND WARWICKSHIRE INTEGRATED CARE BOARD | 24,977 | 98.59 | 0.42 | 0.82 | 0.17 |
| NHS DERBY AND DERBYSHIRE INTEGRATED CARE BOARD | 27,889 | 95.92 | 0.78 | 3.19 | 0.11 |
| NHS DEVON INTEGRATED CARE BOARD | 27,190 | 98.05 | 1.42 | 0.40 | 0.13 |
| NHS DORSET INTEGRATED CARE BOARD | 16,375 | 95.24 | 0.45 | 4.18 | 0.13 |
| NHS FRIMLEY INTEGRATED CARE BOARD | 19,461 | 99.20 | 0.35 | 0.36 | 0.09 |
| NHS GLOUCESTERSHIRE INTEGRATED CARE BOARD | 16,928 | 94.40 | 4.95 | 0.54 | 0.11 |
| NHS GREATER MANCHESTER INTEGRATED CARE BOARD | 81,409 | 98.51 | 0.77 | 0.61 | 0.12 |
| NHS HAMPSHIRE AND ISLE OF WIGHT INTEGRATED CARE BOARD | 50,111 | 97.98 | 1.56 | 0.36 | 0.10 |
| NHS HEREFORDSHIRE AND WORCESTERSHIRE INTEGRATED CARE BOARD | 19,089 | 97.53 | 1.79 | 0.58 | 0.10 |
| NHS HERTFORDSHIRE AND WEST ESSEX INTEGRATED CARE BOARD | 43,210 | 98.05 | 1.52 | 0.36 | 0.07 |
| NHS HUMBER AND NORTH YORKSHIRE INTEGRATED CARE BOARD | 44,380 | 94.36 | 1.67 | 3.65 | 0.33 |
| NHS KENT AND MEDWAY INTEGRATED CARE BOARD | 49,616 | 96.73 | 1.69 | 1.39 | 0.19 |
| NHS LANCASHIRE AND SOUTH CUMBRIA INTEGRATED CARE BOARD | 59,490 | 93.97 | 4.21 | 1.54 | 0.28 |
| NHS LEICESTER, LEICESTERSHIRE AND RUTLAND INTEGRATED CARE BOARD | 32,287 | 92.23 | 2.52 | 5.05 | 0.21 |
| NHS LINCOLNSHIRE INTEGRATED CARE BOARD | 17,711 | 94.11 | 0.30 | 5.35 | 0.24 |
| NHS MID AND SOUTH ESSEX INTEGRATED CARE BOARD | 34,950 | 98.55 | 0.36 | 1.00 | 0.09 |
| NHS NORFOLK AND WAVENEY INTEGRATED CARE BOARD | 21,834 | 98.72 | 0.66 | 0.52 | 0.10 |
| NHS NORTH CENTRAL LONDON INTEGRATED CARE BOARD | 26,873 | 97.02 | 0.75 | 1.10 | 1.13 |
| NHS NORTH EAST AND NORTH CUMBRIA INTEGRATED CARE BOARD | 91,049 | 95.45 | 0.36 | 3.89 | 0.30 |
| NHS NORTH EAST LONDON INTEGRATED CARE BOARD | 50,829 | 97.73 | 1.03 | 0.68 | 0.56 |
| NHS NORTH WEST LONDON INTEGRATED CARE BOARD | 49,213 | 96.81 | 1.04 | 0.97 | 1.18 |
| NHS NORTHAMPTONSHIRE INTEGRATED CARE BOARD | 17,565 | 97.51 | 0.36 | 2.06 | 0.06 |
| NHS NOTTINGHAM AND NOTTINGHAMSHIRE INTEGRATED CARE BOARD | 33,611 | 98.77 | 0.45 | 0.63 | 0.15 |
| NHS SHROPSHIRE, TELFORD AND WREKIN INTEGRATED CARE BOARD | 15,726 | 93.27 | 6.16 | 0.48 | 0.09 |
| NHS SOMERSET INTEGRATED CARE BOARD | 13,284 | 98.54 | 0.56 | 0.72 | 0.18 |
| NHS SOUTH EAST LONDON INTEGRATED CARE BOARD | 37,982 | 98.14 | 0.82 | 0.55 | 0.49 |
| NHS SOUTH WEST LONDON INTEGRATED CARE BOARD | 30,240 | 98.14 | 0.79 | 0.70 | 0.37 |
| NHS SOUTH YORKSHIRE INTEGRATED CARE BOARD | 38,058 | 94.71 | 0.31 | 4.67 | 0.30 |
| NHS STAFFORDSHIRE AND STOKE-ON-TRENT INTEGRATED CARE BOARD | 35,078 | 98.53 | 0.89 | 0.50 | 0.07 |
| NHS SUFFOLK AND NORTH EAST ESSEX INTEGRATED CARE BOARD | 22,854 | 98.29 | 1.16 | 0.50 | 0.05 |
| NHS SURREY HEARTLANDS INTEGRATED CARE BOARD | 20,715 | 98.89 | 0.48 | 0.57 | 0.05 |
| NHS SUSSEX INTEGRATED CARE BOARD | 38,181 | 98.27 | 0.36 | 1.19 | 0.18 |
| NHS WEST YORKSHIRE INTEGRATED CARE BOARD | 78,234 | 94.82 | 0.85 | 4.23 | 0.10 |

Notes

1. When no NHS number can be captured, one of up to five possible dummy NHS numbers are used. This means that multiple consultation records can reuse the same dummy number, leading to potential undercounts when calculating the total number of patients for any given comparator – for example, dummy NHS number 00000000 may be associated with 100 consultations for a given set of criteria, and will be only counted as a single patient while in reality, those consultations could represent up to 100 patients.
2. As outlined in the earlier [section](#_Consultations_with_missing) in Appendix 2, GP practice ODS codes are held as captured during the consultation activity. NHSBSA report these data items without any further validation, and in some cases the data may be missing, or may not match the ODS data held in the NHSBSA data warehouse.

For the 1,497,084 consultations conducted in the period February to October 2024, 150 (0.01%) have no GP ODS code recorded, 688 (0.05%) have a dummy ODS code recorded, and 22,159 (1.48%) have an ODS code recorded which does not match the NHSBSA ODS data.

# Appendix 4: Working Group

The following people have been involved in the development of this dashboard:

Elizabeth Beech MBE - Regional Antimicrobial Stewardship Lead South-West Region, NHS England

Amanda Ridgway – Project Manager AMR & Pharmacy Integration, NHS England

Mark Gordon – Senior Information Analyst, NHS Business Services Authority

Nick O’Mahoney – BI Developer, NHS Business Services Authority

1. https://digital.nhs.uk/services/organisation-data-service [↑](#footnote-ref-2)
2. https://www.nhsbsa.nhs.uk/pharmacies-gp-practices-and-appliance-contractors/payments-and-pricing/how-we-process-prescriptions [↑](#footnote-ref-3)