

# **Respiratory Dashboard**

**Version: May 2019**

## **Comparator Descriptions and Specifications**

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## Background

Respiratory prescribing is highly complex, with a huge variety of inhalers and medicines available. There are several illnesses affecting the respiratory system, but the main two areas of interest for this dashboard are asthma and chronic obstructive pulmonary disease (COPD). Patients with other illnesses will be included in the results of the comparators, but the group has not considered the evidence for illnesses other than asthma and COPD.

## Purpose

The purpose of this dashboard is to allow prescribers to see some clinically appropriate comparators that have been developed by clinicians to support better prescribing. The comparators do not show 'good' or 'bad' prescribing, but allow users to see variation and identify areas of interest for further investigation and/ or patient review.

## Limitations

Historically, primary care prescribing information was derived from the reimbursement processes for dispensed medicines. However, the NHSBSA is now able to capture extra information that undoubtedly adds value to prescribing measures. The NHS number of the recipient of a medicine prescribed in primary care can now be linked to items prescribed. This development enables the data to show how many patients are prescribed a medicine or group of medicines (rather than presentation of drugs prescribed by each GP practice). In this way, we are able to demonstrate much better the quality of prescribing in key areas.

NHS number is routinely captured through the Electronic Prescription Service (EPS) with complete accuracy. Therefore, CCGs are encouraged to drive up the uptake of EPS. To support this improvement, EPS levels will be included alongside the comparators.

Information governance is very important and in the preparation of these comparators all data protection legislation and patient confidentiality has been carefully considered and adhered to. While the comparators are derived from patient level records, personal identifiable data will not be included within the reports.

Each comparator has a full specification outlining the evidence base behind the comparator; the rationale for inclusion and the data source (see Table 1 for list of comparators).

**This comparator specification document is NOT a prescribing guideline. It simply shows how the comparators were developed and the rationale behind each comparator.**

**Table 1: List of comparators**

Comparator Title
High dose ICS items as a % of all ICS items
Inhaled steroid prevention including ICS LABA
Prescribing of Montelukast
Prescribing frequency of prednisolone 5mg tablets
Prescribing of smoking cessation products inc. nicotine replacement (NRT), varenicline and bupropion
Excess SABA prescribing
Patients on triple therapy

## Prescribing data used in these comparators

Users of these comparators must be aware of the following parameters:

- Covers all items prescribed in primary care by practices and cost centres linked to CCGs. It includes acute and repeat items.
- Does not include hospital prescribing.
- Does not include medicines supplied over the counter.
- Does not include medicines supplied by NHS community services.
- Data restricted to prescription items where the NHS number could be identified for the patient.

Each comparator is derived using prescribing data and reported by month, although some figures may be based on a 12 month rolling period. Historic data is available to allow CCGs and Practices to chart their progress in addressing a particular comparator area.

All of the comparators show monthly data at Practice level (aggregated to CCG level) and are available for all patients.

**Patient counts:** Some comparators are based on a number of unique patients. This has been determined from prescriptions where the NHSBSA has been able to obtain details regarding patient NHS number and age at practice location. Where the same patient appears in the data for more than one practice location they will be counted as one patient for each of the practice locations they appear in.

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

## How to use these comparators

We envisage that the comparators will be used by CCGs in collaboration with local GP practices and with the relevant and appropriate education and training support in place.

**Data Source:** NHS Business Services Authority - based on data from the NHSBSA's data warehouse system which contains all NHS prescription data, with the exception of prescriptions which are dispensed in prisons, hospitals and private prescriptions.

Analysis is based on drugs that were reimbursed by the NHSBSA. It excludes items not dispensed and disallowed. If a prescription was issued, but not presented for dispensing or was not submitted to NHS Prescription Services by the dispenser, then it is not included in the data provided.

**Data owner & contact details:** [nhsbsa@nhs.net](mailto:nhsbsa@nhs.net)

**Time Frame:** Refreshed monthly

## **Data quality assurance**

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 indicators, one of which is the percentage Prescription Information Accuracy, the target being 99.3% and as of December 2018 prescribing, the accuracy level achieved over the latest 12 month rolling period was 99.68%.

The comparators take advantage of the developments linking the NHS number to prescription items. Currently, nearly 95% of all paper prescription items can be linked to an NHS number with an accuracy of over 99%. Age and date of birth can be linked to 73% of paper prescription items with an accuracy of 97%. As the utilisation of EPS increases, the coverage and accuracy of this data will increase.

## Respiratory Comparator Specifications

### High dose ICS items as a % of all ICS items

Section 1: Introduction / Overview		
1.1	<b>Title</b>	High dose ICS items as a % of all ICS items
1.2	<b>Definition</b>	Identifying the level of 'high dose' ICS prescribing as a percentage of prescribing for all ICS products.
1.3	<b>Reporting Level</b>	Practice level (aggregated to CCG).
1.4	<b>Numerator</b>	Total number of 'high dose' ICS items prescribed during a single month.  Please refer to <b>Appendix 2</b> (provided in a separate document) for the drug list for this numerator.
1.5	<b>Denominator</b>	Total number of all ICS items prescribed during a single month.  Please refer to <b>Appendix 2</b> (provided in a separate document) for the drug list for this denominator.
1.6	<b>Methodology</b>	Numerator divided by denominator, presented as a percentage.
Section 2: Rationale		
2.1	<b>Purpose</b>	Inhaled corticosteroids (ICS) are commonly prescribed for patients with COPD and asthma, although the risk of systemic side effects is greater when higher doses are used.  Sometimes it is appropriate to continue this high dose long-term, but often patients can be 'stepped-down' again if clinically appropriate.  This metric highlights the variation in the number of patients in each CCG / GP practice who are prescribed a high dose steroid, allowing commissioners and prescribers to see how much variation exists.
2.2	<b>Evidence and Policy Base</b>	National guidelines from NICE and BTS for asthma and COPD state that the patient should be maintained on the lowest effective dose of ICS.

## Inhaled steroid prevention including ICS LABA

Section 1: Introduction / Overview		
1.1	<b>Title</b>	Inhaled steroid prevention including ICS LABA
1.2	<b>Definition</b>	Identifying the proportion of patients receiving 5 or fewer steroid inhalers including ICS LABA products. Figures are reported for a rolling 12 month period.
1.3	<b>Reporting Level</b>	Practice level (aggregated to CCG).
1.4	<b>Numerator</b>	Number of patients receiving 5 or fewer steroid inhalers including ICS LABA products within a rolling 12 month period.  Please refer to <b>Appendix 2</b> (provided in a separate document) for the drug list for this numerator.
1.5	<b>Denominator</b>	Total number of patients receiving any prescription items for steroid inhalers including ICS LABA products (see numerator for list) within a rolling 12 month period.
1.7	<b>Methodology</b>	Numerator divided by denominator, presented as a percentage
Section 2: Rationale		
2.1	<b>Purpose</b>	Steroid-containing inhalers are used as maintenance therapy for COPD and asthma. They are most likely to be effective if taken regularly. This metric shows the number of patients who have collected 5 or fewer prescriptions for preventer medication, and who might benefit from a medication review with respect to adherence.
2.2	<b>Evidence and Policy Base</b>	Regular maintenance treatment is recommended by both NICE and BTS.

## Prescribing of montelukast

Section 1: Introduction / Overview		
1.1	<b>Title</b>	Prescribing of Montelukast
1.2	<b>Definition</b>	Identifying the proportion of prescribing for Montelukast in relation to the number of patients identified on the asthma register, based on the data available via QOF (AST003).
1.3	<b>Reporting Level</b>	Practice level (aggregated to CCG).
1.4	<b>Numerator</b>	Number of patients prescribed any Montelukast presentations.  Please refer to <b>Appendix 2</b> (provided in a separate document) for the drug list for this numerator.
1.5	<b>Denominator</b>	Number of patients on the asthma register, based on figures available from QoF (AST003).  Data for the denominator is only available as a figure for a complete financial year and is published annually in November. As the comparator is reported on a monthly basis, the same figure is used for each month within the financial year. The latest available data will be reported until a new QOF dataset is published at which point the figures will be retrospectively adjusted accordingly.  For example, the dashboard figures for Apr-17 to Mar-18 will use the QOF figures for 2016/17 until the November 2018 QOF publication at which point the figures will then be amended based on the latest available results.
1.6	<b>Methodology</b>	Numerator divided by denominator multiplied by 1,000. Presented as number of patients prescribed montelukast per 1,000 patients on the asthma register.
Section 2: Rationale		
2.1	<b>Purpose</b>	NICE recommends an early 4-8 week trial of montelukast plus low dose ICS if newly diagnosed asthma is not controlled by a low dose ICS inhaler alone (before adding a LABA).
2.2	<b>Evidence and Policy Base</b>	NICE guideline for asthma



## Prescribing frequency of prednisolone 5mg tablets

Section 1: Introduction / Overview		
1.1	<b>Title</b>	Prescribing frequency of prednisolone 5mg tablets
1.2	<b>Definition</b>	<p>Prescribing of Prednisolone 5mg tablets, to patients receiving medication to treat asthma or COPD, where the quantity prescribed per item was less than or equal to 60 tablets.</p> <p>Results identify the total number of prescription items prescribed during a rolling 12 month period, with each item relating to a quantity of 60 tablets or fewer.</p>
1.3	<b>Reporting Level</b>	Practice level (aggregated to CCG).
1.4	<b>Numerator</b>	<p>Number of patients receiving “x” (i.e. 1, 2,3...13+) number of prescription items for Prednisolone 5mg tablets over a rolling 12 month period. Prescription items are only included where the quantity prescribed was less than or equal to 60 tablets. Patients have only been included where they have also been prescribed medication to treat asthma or COPD during the reported period.</p> <p>Please refer to <b>Appendix 2</b> (provided in a separate document) for the drug lists for this numerator.</p>
1.5	<b>Denominator</b>	n/a
1.6	<b>Methodology</b>	There is no denominator for this comparator with results simply being reported based on the numerator.
Section 2: Rationale		
2.1	<b>Purpose</b>	<p>Rescue therapy for COPD and asthma usually includes an oral steroid. This metric shows the number patients using an inhaler who have received a prescription for a short course of prednisolone over the last 12 months, and groups them together by the number of prescriptions received.</p> <p>NB: not all prescriptions for short courses of prednisolone are for rescue therapy. Some of the results of this will be for the acute treatment of other medical conditions.</p>
2.2	<b>Evidence and Policy Base</b>	This comparator is based on NICE guidelines for COPD and asthma and expert opinion.

## Prescribing of smoking cessation products inc. nicotine replacement (NRT), varenicline and bupropion

<b>Section 1: Introduction / Overview</b>		
1.1	<b>Title</b>	Prescribing of smoking cessation products inc. nicotine replacement (NRT), Varenicline and Bupropion
1.2	<b>Definition</b>	Identifying the prescribing of smoking cessation products, including nicotine replacement (NRT), Varenicline and Bupropion. Results identify the total number of prescription items prescribed for any smoking cessation product (BNF section 4.10.2).
1.3	<b>Reporting Level</b>	Practice level (aggregated to CCG).
1.4	<b>Numerator</b>	Number of prescription items prescribed for any smoking cessation products. Figures restricted to patients aged 15 and over in line with the denominator figures.  Please refer to <b>Appendix 2</b> (provided in a separate document) for the drug list for this numerator.
1.5	<b>Denominator</b>	The number of patients, aged 15 and over, recorded as current smokers within the QOF dataset SMOK004.  Data for the denominator is only available as a figure for a complete financial year and is published annually in November. As the comparator is reported on a monthly basis, the same figure is used for each month within the financial year. The latest available data will be reported until a new QOF dataset is published at which point the figures will be retrospectively adjusted accordingly.  For example, the dashboard figures for Apr-17 to Mar-18 will use the QOF figures for 2016/17 until the November 2018 QOF publication at which point the figures will then be amended based on the latest available results.
1.6	<b>Methodology</b>	Numerator divided by denominator multiplied by 1,000. Presented as number of items prescribed for smoking cessation products per 1,000 recorded smokers.
<b>Section 2: Rationale</b>		
2.1	<b>Purpose</b>	The highest value intervention for both COPD and asthma is smoking cessation. Prescribing rates for stop smoking products should be increasing, to help more smokers to quit smoking.
2.2	<b>Evidence and Policy Base</b>	

## Excess SABA prescribing

Section 1: Introduction / Overview		
1.1	<b>Title</b>	Excess SABA prescribing
1.2	<b>Definition</b>	Identifying the proportion of patients prescribed preventer inhalers without antimuscarinics who were also prescribed 6 or more SABA inhalers. Figures are reported for a rolling 12 month period.
1.3	<b>Reporting Level</b>	Practice level (aggregated to CCG).
1.4	<b>Numerator</b>	No. patients prescribed 6 or more SABA inhalers in a 12 month period, who were also prescribed a preventer inhaler but not prescribed an antimuscarinic.  Please refer to <b>Appendix 2</b> (provided in a separate document) for the drug lists for this numerator.
1.5	<b>Denominator</b>	No. of patients prescribed a preventer inhaler (see numerator) but not an antimuscarinic (see numerator).
1.6	<b>Methodology</b>	Numerator divided by denominator, presented as a percentage.
Section 2: Rationale		
2.1	<b>Purpose</b>	The NRAD report highlighted that asthma patients who overused their SABA medication were at higher risk of death. This metric identifies patients who are potentially overusing SABA medication.
2.2	<b>Evidence and Policy Base</b>	

## Patients on triple therapy

Section 1: Introduction / Overview		
1.1	<b>Title</b>	Patients on triple therapy
1.2	<b>Definition</b>	Identifying the proportion of patients, receiving medication used to treat asthma/COPD, prescribed triple therapy based on receiving prescriptions for a combination of LAMA, LABA and ICS inhalers. Results presented for a 12 month rolling period.
1.3	<b>Reporting Level</b>	Practice level (aggregated to CCG).
1.4	<b>Numerator</b>	No. of patients receiving triple therapy (LAMA + LABA + ICS) within a 12 month period.  Please refer to <b>Appendix 2</b> (provided in a separate document) for the drug list for this numerator.
1.5	<b>Denominator</b>	No. of patients receiving any medication used to treat asthma/COPD within the reported 12 month rolling period.  Please refer to <b>Appendix 2</b> (provided in a separate document) for the drug list for this denominator.
1.6	<b>Methodology</b>	Numerator divided by denominator, reported as a percentage.
Section 2: Rationale		
2.1	<b>Purpose</b>	Triple therapy is the lowest value intervention according to the value pyramid developed by the London Respiratory Network. For both COPD and asthma, patients receiving triple therapy should be reviewed at least annually with a view to stepping down treatment.
2.2	<b>Evidence and Policy Base</b>	

## Appendix 1

Working group:

Name	Organisation	Role
Paul Davies	NHS BSA	Senior Innovation and Delivery Partner (Medicines)
Charlene Kirk	NHS BSA	Assistant Business Lead Pacific Programme
Margaret Dockey	NHS BSA	Prescribing Information Services Manager
Mike Morgan	NHS England	Respiratory National Clinical Director
Jonathan Underhill	NICE	Associate Director for Medicines Evidence
Jas Khambh	NHS England (RightCare)	Pharmacy Advisor
Sue Hart	AHSN for North East and North Cumbria	Respiratory Programme Lead
Anna Murphy	University Hospitals of Leicester NHS Trust	Consultant Pharmacist
Nick Beavon	Primary Care Pharmacy Association	PAG Lead/Chief Pharmacist
Toby Capstick	Leeds Teaching Hospitals NHS Trust	Lead Respiratory Pharmacist
Vince Mak	Imperial College Healthcare NHS Trust	Consultant in Respiratory and Critical Care Medicine
Eric Power	NHS England (RightCare)	Delivery Partner
Monica Mason	Regional Drug and Therapeutics Centre (RDTc)	Senior Pharmacist

Expert input provided by:

Name	Role/Organisation
	London Procurement Partnership

## Appendix 2

The drug lists for each metric are provided in a separate document available from our website at <https://www.nhsbsa.nhs.uk/epact2/dashboards-and-specifications/respiratory-dashboard>.