

August 2017

PSNC Briefing 051/17: Clinical audit: LABA bronchodilator being used as monotherapy for the treatment of asthma without a corticosteroid inhaler

Introduction

The NHS Community Pharmacy Contractual Framework (CPCF) includes a requirement that community pharmacies undertake two clinical audits each year. NHS England determines the topic of one of the audits and pharmacy contractors are free to determine the topic of the second audit.

This audit has been developed by PSNC for use by pharmacy teams as a pharmacy-determined audit.

The focus of the audit

Every 10 seconds someone in the UK is having a potentially life-threatening asthma attack. Shockingly asthma attacks kill three people each day and the UK has amongst the highest death rates from asthma in Europe. Most tragically many of these deaths could be prevented.¹

The [National Review of Asthma Deaths](#) (NRAD), published in 2014, was the first UK-wide investigation into asthma deaths, commissioned by the [Healthcare Quality Improvement Partnership](#) on behalf of NHS England and the Department of Health. It looked at deaths from asthma between 1st February 2012 and 31st January 2013.

The NRAD found wide-ranging and widespread issues with the quality of asthma care amongst those who died. In particular, people did not receive key elements of routine care and prescribing errors were widespread. One of the key recommendations from the NRAD for medical and professional care was 'The use of combination inhalers should be encouraged. Where long-acting beta agonist (LABA) bronchodilators are prescribed for people with asthma, they should be prescribed with an inhaled corticosteroid in a single combination inhaler.'

This audit therefore aims to identify patients who have been prescribed a LABA who have not been prescribed or are not using an inhaled corticosteroid in a single combination inhaler, and to provide advice to these patients about the importance of regularly using an inhaled corticosteroid.

Formoterol and salmeterol are LABAs which are used as add-on therapy for patients whose asthma is not controlled using an inhaled short-acting β_2 agonist and standard-dose inhaled corticosteroid. They are the first choice for add-on therapy; they improve lung function and symptoms, and decrease asthma attacks.²

¹ [Asthma UK Briefing: The UK National Review of Asthma Deaths \(May 2014\)](#)

² [Medicines and Healthcare products Regulatory Agency: Asthma long-acting \$\beta_2\$ agonists: use and safety December 2014](#)

Patients who have asthma should not use an inhaled LABA, without also using a regular inhaled corticosteroid. When used alone, inhaled LABAs have been associated with a, sometimes severe, worsening of asthma in some patients. In clinical practice, it is generally considered that combination inhalers aid adherence and have the advantage of guaranteeing that the LABA is not taken without the inhaled corticosteroid.³

Please note this audit is aimed specifically at patients with asthma, as patients with chronic obstructive pulmonary disease (COPD) can be prescribed an inhaled LABA as maintenance therapy without an inhaled corticosteroid if the Forced Expiratory Volume in 1 second (FEV₁) is 50% of predicted or more.⁴

How do I undertake the audit?

1. To collect a useful sample for this audit it is suggested that data is collected over approximately **one month**.
2. You can record details of each patient who presents a prescription for a LABA (either Formoterol (*Foradil*, *Oxis*) or Salmeterol (*Serevent*) on the audit questionnaire and work through the questions with them (Annex A).
3. The data from the audit questionnaires can then be collated on the audit data collection form (Annex B).
4. If you need to refer a patient to their GP, you could consider using the template referral letter (Annex C).
5. Once you have collated the data, you can then complete the audit summary (Annex D).

Standalone copies of the documents in Annex A-D can be downloaded from psnc.org.uk/audit

Audit sample

All patients who have a prescription for a LABA inhaler for the treatment of asthma, who are not also being prescribed a corticosteroid inhaler or who are being prescribed a corticosteroid inhaler, but who are not using it.

Audit standards

Standard 1

All patients prescribed a LABA inhaler for the treatment of asthma should also be using an inhaled corticosteroid on a regular basis.

Audit standard 100%

Action points before or after the audit may include speaking to your local GPs to explain the audit and what feedback or referral they would like. Pharmacists may also want to consider offering a targeted MUR to appropriate patients, to help develop their understanding of the management of their condition and the use of their medicines.

Standard 2

All patients presenting prescriptions for a LABA for the treatment of asthma are offered verbal advice about their medicine, including the importance of regular use of an inhaled corticosteroid.

Audit standard 100%

For this audit, the intention is to identify patients who are not offered verbal advice because someone else collects the medicine or it is delivered to them (including care homes), in order that the pharmacist can ensure that appropriate advice is provided to the patient by phone or by another method.

³ [SIGN 153 British guideline on the management of asthma \(September 2016\)](#)

⁴ [National Institute for Health and Care Excellence: Chronic obstructive pulmonary disease in over 16s: diagnosis and management \(June 2010\)](#)

LABAs licensed for asthma

- Formoterol (*Foradil, Oxis*)
- Salmeterol (*Serevent*)

Corticosteroid inhalers

- Beclometasone dipropionate (*Asmabec clickhaler, Clenil Modulite, Qvar*)
- Budesonide (*Budelin Novolizer, Pumicort*)
- Ciclesonide (*Alvesco*)
- Fluticasone propionate (*Flixotide*)
- Mometasone furoate (*Asmanex*)

If you have any queries on this PSNC Briefing or you require more information, please contact [Zainab Al-Kharsan, Service Development Pharmacist](#).

Annex A: Audit questionnaire


A standalone copy of the questionnaire can be downloaded from psnc.org.uk/audit

Screening questions			
Q1. What indication is the patient using the LABA inhaler for?			
<input type="checkbox"/>	Asthma - If for asthma, go to Q2.		
<input type="checkbox"/>	COPD - If for chronic obstructive pulmonary disease (COPD), the audit is not applicable as it is aimed at patients with asthma. No further questions need to be asked for this audit.		
<input type="checkbox"/>	Not known - If the patient does not know why they are taking the LABA, complete the audit and try to contact the GP practice to confirm the indication. If the LABA is being used to treat asthma, the answers can be included in the audit; if it is being used to treat COPD then the results cannot be included in the audit.		
Q2. Is the patient also using a corticosteroid inhaler?			
<input type="checkbox"/>	Yes - audit is complete, no further questions need to be asked for the audit.		
<input type="checkbox"/>	No - please complete the patient information below and the remaining questions.		
Patient information			
Patient's name		Date of birth	
GP practice		Date	
Q3. Has the patient ever been prescribed a corticosteroid inhaler?			
<input type="checkbox"/>	No	<input type="checkbox"/>	Yes, but stopped taking it as they say it wasn't helping their asthma
<input type="checkbox"/>	Yes, but stopped taking it due to side effects	<input type="checkbox"/>	Yes, but the patient has run out of their inhaler
<input type="checkbox"/>	Yes - other reason (please provide details below)		
Q4. Is the patient using the corticosteroid inhaler regularly? (using it every day as prescribed)			
<input type="checkbox"/>	Yes	<input type="checkbox"/>	Unknown
<input type="checkbox"/>	No		
Action taken			
Q5. Did you refer the patient to the prescriber?			
<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
Q6. Did you provide verbal advice to the patient about their medicine, including the importance of regular use of an inhaled corticosteroid?			
<input type="checkbox"/>	Yes	<input type="checkbox"/>	Unable to speak to patient as their medicines were delivered
<input type="checkbox"/>	No	<input type="checkbox"/>	Unable to speak to patient as representative collected their medicines
<input type="checkbox"/>	Data not recorded		

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Annex B: Audit data collection form

A standalone copy of the audit data collection form can be downloaded from psnc.org.uk/audit

Collate the answers from the audit questionnaires using a 5-bar gate approach  and then add these up to give you the totals for each question.

Q1. What indication is the patient using the LABA inhaler for?		
Asthma		Total
COPD		Total
Not known		Total
Q2. Is the patient also using a corticosteroid inhaler?		
Yes		Total
No		Total
Q3. Has the patient ever been prescribed a corticosteroid inhaler?		
No		Total
Yes, but stopped taking it due to side effects		Total
Yes, but stopped taking it as they say it wasn't helping their asthma		Total
Yes, but the patient has run out of their inhaler		Total
Yes - other reason (please provide details)		Total
Q4. Were patients using the corticosteroid inhaler regularly? (using it every day as prescribed)		
Yes		Total
No		Total
Unknown		Total
Q5. Did you refer the patient to the prescriber?		
Yes		Total
No		Total
Q6. Did you provide verbal advice to the patient about their medicine, including the importance of regular use of an inhaled corticosteroid?		
Yes		Total
No		Total
Data not recorded		Total
Unable to speak to patient as their medicines were delivered		Total
Unable to speak to patient as representative collected their medicines		Total

Annex C: Audit data summary

A standalone copy of the audit data summary can be downloaded from psnc.org.uk/audit

Audit - Data Summary

Audit period:		Total
A	Number of patients with asthma presenting prescriptions for a LABA (This total will have been captured in Q1 on the data collection form)	
B	Number of patients identified using a LABA without a corticosteroid inhaler (This total will have been captured in Q2 on the data collection form as the number of patients who answered 'No')	
C	Number of patients who were offered verbal advice about their medicine, including the importance of regular use of an inhaled corticosteroid. (This total will have been captured in Q6. on the data collection form)	

Standard 1

All patients prescribed a LABA inhaler for the treatment of asthma should also be using an inhaled corticosteroid on a regular basis.

Audit standard 100%

Standard 1 = $[B] / [A] \times 100 = \dots\dots\dots\%$

Standard 2

All patients presenting prescriptions for a LABA for the treatment of asthma are offered verbal advice about their medicine, including the importance of regular use of an inhaled corticosteroid.

Audit standard 100%

Standard 2 = $[C] / [A] \times 100 = \dots\dots\dots\%$

Three possible action points from the audit to improve practice

1.	If Standard 1 is below 100% consider talking to the local GPs and asking how they would like feedback or referral. You could consider using the template referral form.
2.	If Standard 2 is below 100% consider how you might access the patients who do not receive advice, e.g. contact them by phone, put a note on their prescription bag to ask patients to come in for a Medicines Use Review (MUR) or explore the possibility of offering them a domiciliary MUR.
3.	Consider offering a targeted respiratory MUR to all patients using a LABA inhaler (they will need to be prescribed at least one other medicine to be suitable for an MUR) to discuss whether they are being prescribed/using a corticosteroid inhaler and the risks of using the LABA inhaler without a corticosteroid inhaler.

Please record your action points for improvement here

