Improving respiratory outcomes in Stockport: Stockport Optimising Inhaler Technique (STOP-IT)

A Joint Working case study between Stockport Clinical Commissioning Group (CCG) and Teva UK Limited

This is a case study of how Stockport CCG participated in a local joint working initiative with the Project Group from Teva UK Limited to explore how cascading advanced knowledge of inhaler technique to healthcare professionals (HCPs) could help patients recognise their type of inhaler device and associated technique.

Project rationale

Research

Asthma and COPD are long term conditions that feature prominently in Domain 2 of the NHS Outcomes Framework 2013/2014 and National COPD and Asthma Outcomes Strategy, Department of Health.

Research has shown that:

- Patient adherence to asthma can be improved, and the likelihood of treatment success increased, by paying attention to the factors that influence patients’ willingness to participate in their treatment.¹
- 7% of healthcare professionals can demonstrate all the recognised steps in administration, including assessment of inspiratory flow using the In-Check device.²

It has been demonstrated in several areas of the UK that engaging patients that use inhalers in Medicines Use Reviews and providing HCPs with the right skills and tools to deliver these can lead to an improvement in outcomes for patients.

Whilst prescribing might be optimal, if a patient cannot use their inhaler properly, there is a risk that their lack of control will result in further treatment interventions, such as unnecessarily high inhaled corticosteroid (ICS) doses. Patients with poor control of their asthma and COPD are more likely to have exacerbations and be admitted to hospital as a consequence.

The cost of medicines waste resulting from suboptimal inhaler use is considerable. Poor control may lead to extra cost with regard to GP and nurse appointments and hospital admissions.

For these reasons Stockport CCG identified inhaler technique as an area of focus in 2014 and 2015. A part of this focus stated a desire to leave a legacy of improved knowledge relating to Inhaler Technique across general practice in Stockport CCG and cascade this knowledge to patients via primary care healthcare professionals.

Desired Outcomes

Recognising this opportunity, the objectives of this joint working initiative in Stockport CCG were to:

- Increase patients’ knowledge and confidence in managing their asthma and COPD
- Improve healthcare professionals’ knowledge and practical skills on inhaler technique

The joint working group was interested to see if and how this approach could reduce and prevent emergency hospital admissions amongst asthma and COPD patients.
Success Measures

The success of the project in meeting the desired outcomes was measured in the following ways:

- The use of patient questionnaires completed over the telephone with an accredited Advanced Inhaler Technique (AIT) enabled the trainer to highlight increased confidence in patients managing their asthma and COPD.

- Improve HCPs’ knowledge and practical skills on inhaler technique – gather feedback from HCPs before and after attending the inhaler technique training.

Joint Working Initiative with Teva UK Limited

In order to achieve these outcomes, Stockport CCG worked in collaboration with Teva UK Limited as they provided:

- Project management and communication skills
- Experience of delivering AIT with National Health Service (NHS) colleagues
- Aerosol Inhalation Monitors and associated consumables (i.e. mouthpieces and placebo canisters) for use within GP Practices

Both Stockport CCG and Teva UK Limited abided by the relevant regulatory bodies and guidance, including the ABPI Code of Practice. 3

Approach defined

The project was split into three distinct phases.

Phase 1

Stockport HCP Advanced Inhaler Technique (AIT) Accreditation

Stockport CCG to select 5 HCPs that would be suitable to be AIT accredited. The 5 were made up of various disciplines including clinicians and nurses from primary and secondary care and pharmacists working across the local health economy.

Phase 2

AIT Training support for selected GP practices

Once accredited, the 5 HCPs were tasked with delivering the AIT Training Module to a minimum of 25 and a maximum of 52 GP Practices across the CCG. It was intended that this would lead to better awareness and delivery of patient education to support patient self-management of asthma and COPD and improve health outcomes.

Phase 3

Outcomes and project evaluation

The final stage centred on HCP and patient feedback via questionnaires.

Outcomes achieved

The project succeeded in improving respiratory care by raising the importance of inhaler device technique in a consistent and informed way with healthcare professionals and patients.

Prior to the HCP inhaler technique training:

- 70% stated their confidence in instructing patients on inhaler device use was ‘average’
- 86% of respondents felt that their knowledge of the range of inhaler devices available was either ‘average’ or ‘poor’
- 59% felt that their knowledge of ‘inspiratory flow rate’ for the different available inhaler devices was ‘poor’

Positive feedback was received from healthcare professionals of the Advanced Inhaler Training

45 healthcare professionals were trained. After attending the HCP training on inhaler technique, the following percentage of healthcare professionals felt the following:

Fig 1. Percentage of healthcare professionals who agreed with the following statements

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Description</th>
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<tbody>
<tr>
<td>0</td>
<td>Their practice regarding inhaler technique would change as a result of the training</td>
</tr>
<tr>
<td>20</td>
<td>More enabled/confident in selecting an inhaler device for a patient</td>
</tr>
<tr>
<td>60</td>
<td>Their knowledge of how to instruct a patient to use their inhaler correctly has improved</td>
</tr>
<tr>
<td>100</td>
<td>Their knowledge of different types of inhaler device has improved</td>
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Patient demonstrated outcomes

11 patients reported back on the training. After receiving training from an HCP on inhaler technique as part of the project:

- 91% of patients were able to recall the difference between a Dry Powder Inhaler (DPI) and pressurised Metered-Dose Inhaler (pMDI)
- 91% of patients were able to demonstrate the correct inhaler technique for their DPI or pMDI

The aim of recruiting more than 25 practices for the project was missed, with only 6 practices being recruited for reasons outside the scope of this project. However, those 6 practices were able to demonstrate patient outcomes.
**Benefits of Joint Working with Teva UK Limited**

This project demonstrated a successful collaborative approach to address a significant issue facing the local health economy.

<table>
<thead>
<tr>
<th>Patients</th>
<th>Stockport CCG</th>
<th>Teva UK Limited</th>
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<tr>
<td>- Benefit from improved instruction on how to use their inhaler device resulting in an improved ability to use their inhaler device(s)</td>
<td>- Improved health outcomes for patients suffering with asthma and COPD</td>
<td>- Increased collaboration between Teva Respiratory and Stockport CCG</td>
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<td>- The aim was for each patient to achieve optimal use of their inhaler device leading to improved symptom and asthma and COPD control</td>
<td>- Improved understanding of inhaler devices and associated inhaler technique</td>
<td>- Improved understanding of asthma and COPD management and the use of inhalers</td>
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<td>- Improved skills of the healthcare professionals so that they are able to support patients suffering with asthma and COPD</td>
<td>- Demonstrating Joint Working capabilities for future projects</td>
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<td>- Higher quality, more consistent care achieved for asthma and COPD patients</td>
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The project improved respiratory care through improving the knowledge of healthcare professionals in relation to the types of inhaler devices available and the associated inhaler technique.

This improved the skills of the healthcare professionals so that they are able to support patients suffering with asthma.

**Joint working between Teva UK Limited and the NHS must be for the benefit of patients or the NHS and preserve patient care**

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**References**

2. Baverstock M, et al. Do Healthcare Professionals have sufficient knowledge of Inhaler Techniques in order to educate their patients effectively in their use? Thorax 2010;65:pA117[poster]
3. Department of Health. Best practice guidance for joint working between the NHS and the pharmaceutical industry, 1 February 2008