

Transforming Asthma Management in Primary Care: A Pharmacist-Led Asthma Education and Medicines Optimisation Programme

Simran Obhi: Lead PCN Clinical Pharmacist, Nuneaton and Bedworth PCN

Background

Inhaler technique is vital for optimal management of asthma, particularly when switching between device types¹; an increasingly common occurrence to reduce the carbon footprint of pMDIs.²

Amongst the 5.4 million people in the UK receiving treatment for asthma¹, many have poor inhaler technique alongside limited understanding of self-management.

Mehuys *et al.*⁴ suggests that patient education is proven to improve the level of asthma control (as assessed by the Asthma Control Test), reduce nocturnal symptoms, the use of reliever medication, and doses of unnecessary medication that may cause adverse effects.

Pharmacists are well placed to combine targeted education with clinical review and medication optimisation to improve asthma management and patient outcomes.

Details of the project

Outcomes

- Educate patients** with a diagnosis of Asthma: improve confidence in management of their condition, identifying symptoms of asthma, inhaler technique, understanding of reliever/preventer use and managing asthma attacks.
- Reduce the avoidable **carbon emissions** through encouraging choice of lower carbon inhaler alternatives where appropriate in line with then NHSEI and BMA ambitions.
- Reduce **over-prescribing of reliver inhalers**, switching to AIR and MART therapy where appropriate.
- Support experiential learning for pharmacy students, allowing them to carry out **Entrustable Professional Activities** through inhaler technique counselling, and allow them to continue their professional development of consultation skills with patients.
- Reduce pressure on general practice** through pharmacist-led out-of-hours clinics.

Method

Targeted reports

- Targeted reports of uncontrolled asthma patients were generated from EMIS and a self-booking link was sent to patients via AccuRx batch text messaging.

Part 1: Educational and interactive sessions

- The event consisted of an educational presentation and an interactive session, focused on asthma management, inhaler technique, patient choice, and environmental issues.

Before-and-after patient surveys

- A before-and-after survey, using a 10-point Likert scale, was provided to patients to identify changes in self-reported confidence in these topics.

Student involvement

- Students from De Montfort University and Aston University had direct patient contact, allowing them to refine their abilities in patient communication, shared decision-making and counselling within a healthcare setting. Feedback from students was gathered after the event.

Part 2: Out of hours follow-up clinics

- Offered out-of-hours personalised follow-up clinics to review patients, optimise treatment, and provide additional support.

Results

Patient feedback

"Very useful, learnt more about how to manage asthma by proper technique of using my inhaler"

"[The pharmacist] told me things that I hadn't heard before even though I've been asthmatic for many years"

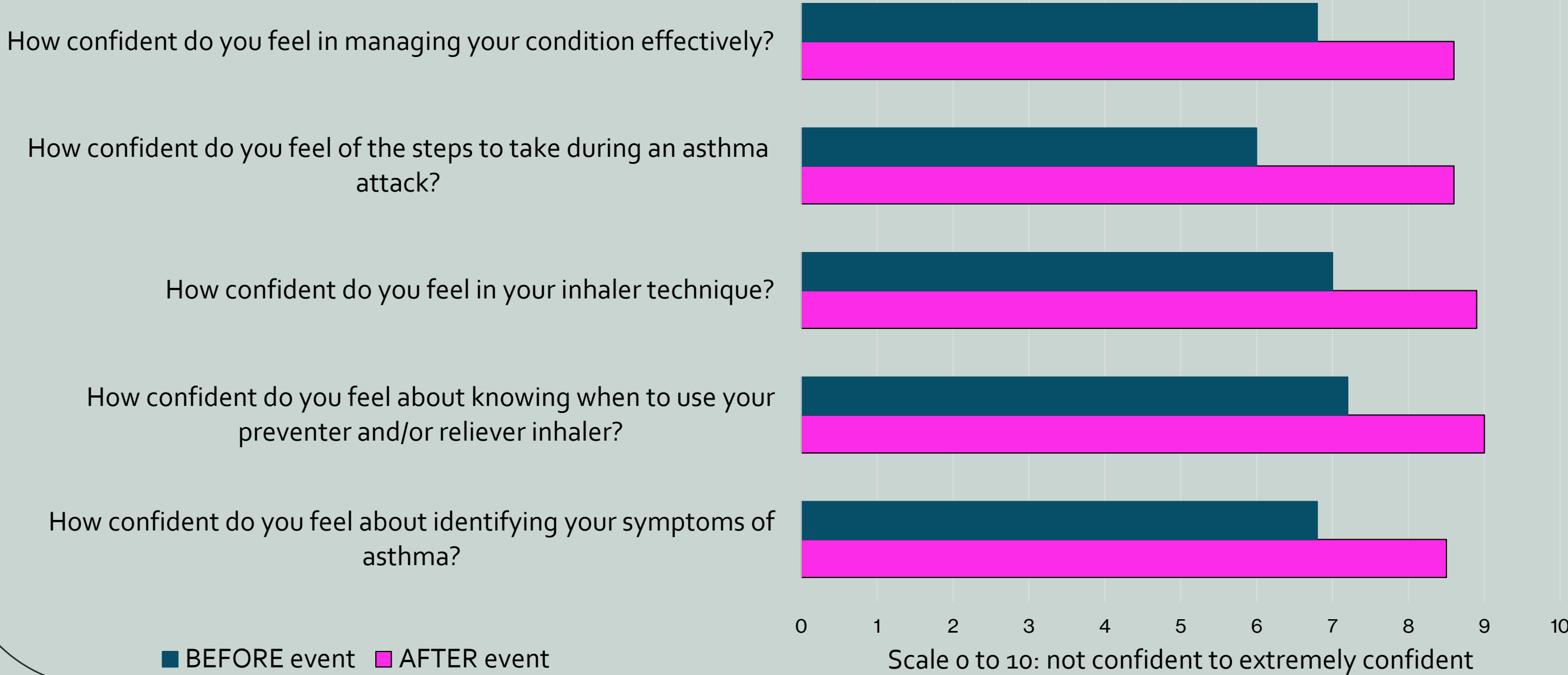
"Excellent care in terms of education and improving my technique and knowledge with regard to inhalers and asthma treatment"

"I learnt about new drugs and how it is used to replace existing medication... I am more assured that changing medication will be more advantageous."

Overall usefulness rating of education event: 9.5/10

Data from 67 patients who attended the group education event:

Figure 1: Patient feedback results



Data from 32 patients who attended the follow-up clinic:

Clinical Outcomes including Medicines Optimisation

100% assessed with In-Check device

88% Inhaler technique improved

53% medication stepped up/down

41% switched to AIR/MART therapy

38% switched to Dry Powder Inhalers

- 47% of patients stated they would have 'done nothing' had they not attended the clinic.
- 37% reported they would otherwise have booked an appointment with a practice nurse.

Student feedback

How satisfied were you with the volunteer experience? (0-10):	8.8/10
How useful did you find the clinical pre-event workshop? (0-10):	8.8/10
I had fun volunteering:	100% completely agree
The event was successful:	80% 'completely agree', 20% 'somewhat agree'

Evaluations, Limitations and Next Steps...

The programme successfully achieved its objectives across four domains:

- Clinical:** improved asthma management and medicines optimisation in line with guidance
- Environmental:** increased lower-carbon inhaler use
- Workforce:** supervised experiential learning for pharmacy students
- System:** improved practice capacity and multidisciplinary collaboration

Attendance & DNA

Education session DNA rate was 40% despite confirmation and two reminder messages. Future events will explore telephone reminders or requiring actionable responses. Clinic DNA rate was much lower at just 6%, reflecting strong ongoing engagement.

Next Phase

A group consultation model will be introduced, enabling prescribing changes immediately following education sessions to reduce attrition between learning and clinical optimisation. Delivery of online webinars will also improve patient engagement and allow reach to a wider cohort of patients.

Scalability

The model is transferable across other PCNs, aligning with national guidance, prescribing incentive schemes and sustainability targets. Evaluation data will be shared with the ICB to support wider implementation.

